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Risk and Protective Factors for Suicidal Behavior in Abused African American Women

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This study examined risk and protective factors that differentiate low-income, abused African American women ($N = 200$) who attempted suicide from those who had never made a suicide attempt. Results from multivariate analyses revealed that numerous and/or severe negative life events, a history of child maltreatment, high levels of psychological distress and depression, hopelessness about the future, and alcohol and drug problems were factors associated with attempter status. Protective factors associated with nonattempter status included hopefulness, self-efficacy, coping skills, social support, and effectiveness in obtaining material resources. Culturally competent intervention approaches for abused women should target increasing their protective factors and reducing their risk factors to decrease the likelihood that these women engage in suicidal behavior.

Researchers have begun to examine intimate partner violence (IPV) as a risk factor for suicidal behavior in women (e.g., Abbott, Johnson, Koziol-McLain, & Lowenstein, 1995; Kaplan, Asnis, Lipshitz, & Chorney, 1995; Roberts, Lawrence, O'Toole, & Raphael, 1997). Recently, this link has been studied among African American women (Kaslow et al., 2000; Kaslow et al., 1998; Kaslow, Twomey, Brooks, Thompson, & Reynolds, 2000; Manetta, 1999; Stark & Flitcraft, 1996). Although efforts have been made to determine the variables that influence the association between IPV and suicidal behavior in African American women (Kaslow et al., 1998), none of this research has focused exclusively on women in abusive relationships.

Reliable data on the experiences of women of color with IPV are sparse (Crowell & Burgess, 1996; Tjaden & Thoennes, 1998). For African American women, 6.0 of every 100,000 lose their lives to a partner or former partner, whereas for Caucasian women, 1.4 per 100,000 are victims of homicide by intimates (Crowell & Burgess, 1996). However, data on whether the prevalence of nonfatal IPV is

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higher among African Americans than other ethnic groups are contradictory. Some research suggests that IPV occurs more among African Americans than Caucasians (e.g., Hampton & Gelles, 1994; Neff, Holamon, & Schluter, 1995; Rennison & Welchans, 2000; Sorenson, Upchurch, & Shen, 1996; Straus, Gelles, & Steinmetz, 1980). Other studies, however, have failed to find evidence of differential rates of abuse by race (e.g., Asbury, 1987; Bachman & Salzman, 1994; Kanuha, 1994; Lockhart, 1991), particularly when social class is controlled (Coley & Beckett, 1988; Koss et al., 1994). Finally, some have found lower rates of IPV in African Americans as compared with Caucasians when social class was controlled (Straus & Gelles, 1990).

Until more large-scale studies stratified by race and social class are conducted, it is impossible to determine whether there are differential rates of IPV across ethnic groups when accounting for income. This said, a disproportionately high number of poor people in the United States are of African descent, and low income is related to abuse (Grisso et al., 1999; Sorenson et al., 1996). Although women across social classes experience IPV, women who live in poverty are at higher risk for negative psychological sequelae in response to being battered, and a primary variable affecting one's decision to return to an abusive partner is economic dependence on that partner (Belle, 1990).

There is limited information on the psychological profiles of African American women in response to IPV. The data suggest few differences in the psychological functioning of African American versus Caucasian women in response to IPV (Coley & Beckett, 1988). The racial differences that have emerged include (a) being embedded in a supportive network is linked with decreased abuse in African American but not in Caucasian couples; (b) abused African American women are more likely to turn to medical care facilities than to social service or law enforcement agencies, whereas the opposite pattern has been reported among Caucasian women; and (c) compared with their Caucasian counterparts, African Americans residing in battered women's shelters are more likely to be living below the poverty line and to be the sole providers for their families, less likely to have access to a car, and more likely to have more children living with them (Asbury, 1987; Coley & Beckett, 1988; Sullivan & Rumptz, 1994).

Suicide is the eighth leading cause of death in the United States (Web-Based Injury Statistics Query and Reporting System, 1999). Suicide rates differ by age, gender, race, social class, and marital status (Moscicki, 1997). There are approximately 18 attempts to every completion. Over their lifetimes, 10%–15% of individuals attempting suicide ultimately kill themselves. The estimated lifetime prevalence of suicide attempts is approximately 5% (Kessler, Borges, & Walters, 1999) and the estimated 12-month incidence of suicide attempts is approximately 1% (Crosby, Cheltenham, & Sacks, 1999). Sociodemographic risk factors for suicide attempts include being a woman, being a lesbian or gay man, being previously married, being born in a recent cohort, having a low educational level, and being unemployed (Kessler et al., 1999). Psychological factors associated with suicide attempts include psychiatric disorders (e.g., mood and anxiety disorders, substance abuse, personality disorders), hopelessness, and poor coping skills (Beautrais et al., 1996; Beck, Steer, Beck, & Newman, 1993; Clum & Febbraro, 1994). A family history of suicide, as well as a prior history of suicide ideation and attempts, has been found in individuals who attempt suicide (Kessler et al., 1999; Moscicki, 1997). Finally, social factors associated with an increased risk for suicide attempts include family conflict or stress, parental separation or loss, family violence, lack of social support, economic stress, and a drop in economic or social status (Jacobs, 1999).

The rate of completed suicides among African Americans is generally reported to be lower than among Caucasians, and African American women have the lowest completion rates across all gender, race and age groups (National Center for Health Statistics, 1998). However, it is believed that many deaths among African American women are misclassified as accidental deaths; thus, it is likely that African American women actually kill themselves at a higher rate than is currently believed to be the case (Phillips & Ruth, 1993). With regard to suicide attempts among African Americans, there exist some mixed findings. Some researchers have found lower suicide-attempt rates for African Americans than Caucasians (Moscicki et al., 1988), whereas others have found no between-group differences (Nisbet, 1996). Evidence suggests that African American women are more likely than their male counterparts to attempt suicide, a gender difference seen across racial groups. Despite the research on risk factors for suicide attempts in general, little is known about the specific risk factors for suicide attempts among African Americans, particularly African American women (Gibbs, 1997).

Kaslow and colleagues (Kaslow et al., 2000; Kaslow et al., 1998; Kaslow et al., 2000; Kingree, Thompson, & Kaslow, 1999; Thompson, Kaslow, Bradshaw, & Kingree, 2000; Thompson et al., 1999; Twomey, Kaslow, & Croft, 2000; Young, Twomey, & Kaslow, 2000) have shown that, compared with nonattempters, African American female suicide attempters are more likely to report global psychological distress, symptoms of posttraumatic stress disorder, hopelessness, drug abuse, relationship discord, childhood maltreatment, low levels of social support, maladaptive coping skills, low levels of self-efficacy, and poor interpersonal conflict resolution skills. In a related vein, Nisbet (1996) found that seeking and finding emotional and psychological support in friends and family members helps safeguard African American women against suicidal behavior.

Up to 80% of female suicide attempters cite an abusive relationship as a factor in their decision to attempt suicide (Stark & Flitcraft, 1996). Abused women are more likely than nonabused women to have a history of suicide attempts (e.g., Abbott et al., 1995; Bergman & Brismar, 1991; Kaplan et al., 1995; Roberts et al., 1997; Stark & Flitcraft, 1996). Of the many women at risk, it is estimated that between 35%–40% attempt suicide at some point during or after the termination of an abusive relationship. Further increasing their risk of completion, battered women are more likely (20%) than nonbattered women (8%) to make multiple attempts (Stark & Flitcraft, 1996).

Why do many abused women attempt suicide? Battered women have limited choices for coping because being in an abusive relationship makes them powerless and depressed (R. Campbell, Sullivan, & Davidson, 1995). Their abusers often have control of every aspect of their lives, including limiting their social networks and their material resources and controlling the household finances (Goodman, Koss, & Russo, 1993; Walker, 1991). As a result of feeling powerless, helpless, socially isolated, and economically dependent, it is understandable that many abused women engage in suicidal ideation and behavior to help themselves maintain a vestige of power, express their helplessness and hopelessness, get attention for their pain, and/or extricate themselves from an intolerable situation. It should be noted that such interpersonal dynam-

ics are evidenced in same-sex relationships as well as in heterosexual relationships (Renzetti, 1992).

Although few studies have examined the link between IPV and suicidal behavior in African Americans, the available data suggest an association (Kaslow et al., 2000; Kaslow et al., 1998; Kaslow et al., 2000; Manetta, 1999; Stark & Flitcraft, 1996). Stark and Flitcraft (1996) found from their review of medical records during a 1-year period that African American women who attempted suicide were more likely than their Caucasian counterparts to have a history significant for IPV (48.8% vs. 22.2%). Kaslow, Thompson, et al. (2000) found that compared with demographically comparable nonattempters, African American women who attempted suicide were 2.5 times more likely to report physical partner abuse and 2.8 times more likely to report nonphysical (emotional) partner abuse within the prior year. Kaslow et al. (1998) reported that the IPV–suicidal behavior link was mediated by psychological distress, hopelessness, and drug use and was moderated by social support.

The purpose of the present study was to compare two groups of low-income, abused African American women, one in which the women have made a suicide attempt just prior to study participation and the other in which the women have no history of suicide attempts. The goals were to identify those factors that increase abused African American women's risk for attempting suicide (risk factors) and ascertain those factors that protect abused African American women from attempting suicide (protective factors).

Method

Sample

Study participants ($N = 200$) were recruited from Grady Health System, a large, Level 1 trauma center, public urban hospital affiliated with Emory University School of Medicine (Atlanta, GA) that serves a primarily indigent and minority population. The sample consisted of two groups of African American women ages 18–59 years, all of whom had reported experiencing IPV according to their responses on the Universal Screening Tool for Domestic Violence (UST; Dutton, Mitchell, & Haywood, 1996) within the preceding year. The sample included (a) women who presented to the hospital following a nonfatal suicide attempt (attempters; $n = 100$) and (b) women who presented to the hospital for treatment of nonemergency medical problems with no reported history of suicidal behavior (nonattempters; $n = 100$).

Women were excluded from both the attempter and the nonattempter groups if they met any of the following criteria: (a) no intimate partner within the previous year according to their responses on the Screening Questionnaire (SQ; designed for this study, in which partner was defined as a person, male or female, with whom a woman was intimately involved: dating, cohabitating, or married); (b) no reported experiences of physical or nonphysical IPV within the previous year according to their responses on the UST; (c) a life-threatening medical condition in which death was imminent on the basis of their answers to the SQ and/or of reports from the medical team; (d) significant cognitive impairment, as defined by low scores on the Mini–Mental State Exam (MMSE; Folstein, Folstein, & McHugh, 1975), taking into consideration literacy levels as measured by the Rapid Estimate of Adult Literacy in Medicine (REALM; Williams et al., 1995); or (e) inability to complete the protocol (i.e., acutely psychotic or delirious). Additionally, women were excluded from the control condition if they had a history of one or more prior suicide attempts according to their responses to the SQ.

Of the 141 women referred for participation in the attempter group, 41 (29%) were excluded because they refused to participate, had not had an intimate partner within the previous year, had not experienced IPV within the previous year, had significant cognitive impairment, or were unable to complete the protocol. Of the 320 women approached to participate in the control group, 69% were excluded because they refused to participate, had at least one prior suicide attempt, had not had an intimate partner within the previous year, had not experienced any physical or nonphysical violence within an intimate relationship within the previous year, or were unable to complete the protocol. No significant age differences were found between refusers and participants in either the attempter or the control groups ($ps > .05$).

Among the 100 attempters, 63% had attempted suicide previously. Of those who reported making a prior suicide attempt, 34% had made one prior attempt, 19% had made two prior attempts, 16% had made 3 prior attempts, and 31% had made 4 or more prior attempts. Overdose was the most common method of attempting suicide (76%), followed by cutting (12%), ingestion of other poisonous substance (4%), hanging (1%), and other (7%). Overall risk-rescue ratings indicated low suicide-attempt lethality, with significant variability ($M = 27.58$; $SD = 12.51$).

Procedures

The principal investigator (PI; or her designee) was reachable by pager 24 hours a day, 7 days a week, for 18 months. This on-call availability ensured that the research team was notified immediately about all women who presented to the medical or psychiatric emergency services following a suicide attempt. On receiving a referral, the PI determined if the woman's behavior met the study criteria for a suicide attempt (i.e., self-injurious act that required medical attention and/or in which there was serious intent). This definition of suicide attempt was used to exclude women who made suicidal gestures with doubtful intent. After the PI determined that the woman had made a suicide attempt, a research team member (including undergraduate and graduate psychology students, postdoctoral fellows in clinical psychology, and graduate students in public health who had been trained in interviewing techniques and were supervised weekly) went to the hospital and, once the patient was medically stable enough to participate, recruited her for participation in the study. For the control participants, a research team member approached women seeking nonemergency medical care at one of three walk-in clinics: a general urgent care center, a women's urgent care center, and a family planning clinic. Research team members rotated through these clinics at various times of the day and various days of the week for the duration of the study. The team member explained the purpose of the study and answered any questions.

After recruiting eligible attempters and nonattempters, research team members obtained written informed consent. Then, the screening measures (SQ, UST, MMSE, REALM) were administered to determine the eligibility of the participants. Once eligibility was verified, the research team member administered questionnaires verbally to prevent confounding by the low levels of functional literacy in this population. Interviews were conducted in private designated hospital areas. Data collection consisted of a 2- to 3-hr face-to-face interview. For their participation, women were paid a $25 honorarium and provided with referrals to community agencies (e.g., domestic violence shelters, community mental health centers).

Measures

The measures are presented in the following order: background and screening, suicidal behavior, risk factors, and protective factors.

Background and Screening Measures

Demographic Data Form. The Demographic Data Form, developed by the research team to obtain key sociodemographic data, assesses age, education, number of children, employment situation, and household income.

SQ. The SQ, developed by the research team, identified those women that met the study inclusion criteria. The SQ asks about demographics

relevant to study inclusion or exclusion (i.e., relationship status, medical illnesses) and includes a checklist that briefly assesses for psychosis and sobriety. Additionally, control participants were asked if they had ever attempted suicide.

UST. The UST is a 5-item measure created by members of the George Washington University Emergency Department. It provides a quick assessment of a person's exposure to physical, sexual, and emotional abuse from an intimate partner within the past year. Specifically, women are asked whether within the past year their partner has (a) slapped, grabbed, pushed, choked, kicked, or punched them; (b) forced or coerced them to have sex; (c) threatened them with or actually used a knife or gun to scare or hurt them; (d) made them afraid that they could be physically hurt; or (e) repeatedly used words, yelled, or screamed in a way that frightened them, threatened them, put them down, or made them feel rejected. The questions were modified slightly from the original screening tool used at the George Washington Medical Center. Two similar physical abuse questions were combined into Question 1 and Question 5 was added to more fully capture emotional abuse.

Index of Spouse Abuse (ISA). The ISA (Hudson & McIntosh, 1981) is a 30-item scale that measures the severity of physical (ISA–P) and nonphysical (ISA–NP) abuse inflicted on a participant by her partner. The participant is asked to rate how often her partner engages in specific abusive behaviors on a 5-point Likert scale that varies from *never* to *very frequently*. The ISA has excellent internal consistency reliability $>.90$. The authors (Hudson & McIntosh, 1981) have reported very good discriminant validity for the subscales (.73 for physical and .80 for nonphysical abuse), as well as excellent construct and factorial validity. D. W. Campbell, Campbell, King, Parker, and Ryan (1994) tested the reliability and factor structure of the ISA with low-income African American women. They found comparable reliability and also found that the addition of a third factor explained 8% more variance in ISA scores than physical and nonphysical abuse alone. This third factor was not found in a factor analysis for the ISA data from the current sample, and thus only the ISA–P and ISA–NP factors were used in the data analysis in this study.

MMSE. The MMSE is a 30-point measure that assesses current mental status. Orientation and registration, immediate recall, concentration, naming, articulation, construction, sentence writing, and a three-stage command comprehension are all tested. Scores of $\leq$ 24/30, if literate, or $\leq$ 22/30, if functionally illiterate, indicate diffuse cognitive dysfunction.

REALM. The REALM consists of 66 medically related terms that subjects are asked to read aloud. Pronunciation and the ability to read are assessed. Scores $\geq$ 19 indicate literacy; scores $\leq$ 18 indicate functional illiteracy. The REALM correlates with other tests of achievement and literacy and mental status exam scores. It has excellent test–retest and interrater reliability.

Suicidal Behavior Measure

Risk-Rescue Ratio (Weissman & Worden, 1972) was used to measure suicide attempt lethality. The Risk–Rescue rating is a 10-item, interviewer-rated scale that yields a risk-rescue ratio score equivalent to a lethality rating. The first set of questions regarding risk factors, with a summed score ranging from 5 (*low risk*) to 15 (*high risk*), assess the level of risk involved in the attempt. The second set of questions regarding rescue factors, with a summed score ranging from 5 (*least probability of rescue*) to 15 (*most probability of rescue*), assess the probability of rescue involved in the attempt. Risk and rescue scores then are transformed into a risk–rescue ratio that ranges from 17 to 83 with higher scores indicating more lethal attempts. The scale has good interrater reliability and discriminant validity.

Risk Factor Measures

Survey of Recent Life Events: Hassles Scale (SRLE). The SRLE (DeLongis, Folkman, & Lazarus, 1988) is a survey of 53 potential negative or stressful life experiences about which participants are asked to rate, on a 4-point Likert scale, how much each was a part of their life during the past month. The SRLE has adequate psychometrics and is frequently used in stress and coping research (DeLongis et al., 1988). Cronbach's alpha for the entire scale has been reported to be approximately .90.

Childhood Trauma Questionnaire (CTQ). On the CTQ (Bernstein & Fink, 1998) participants are required to choose answers from a five-point scale ranging from *never true* to *very often true* in response to 28 questions about their childhood and adolescence. The questions are designed to assess physical, sexual, and emotional abuse, as well as physical and emotional neglect. Bernstein and Fink (1998) have demonstrated that the CTQ has satisfactory to excellent internal consistency and reliability. The highest reliability was obtained for the Sexual Abuse subscale (median Cronbach's $\alpha = .92$). The lowest reliability was obtained on the Physical Neglect subscale (median Cronbach's $\alpha = .66$). Test–retest reliability ranged from .79 to .86. They also reported good construct and content validity. For this study, only the composite measure of childhood trauma is used.

Symptom Checklist–90—Revised (SCL-90–R). The 90 item SCL-90–R (Derogatis, 1975) assesses overall psychological distress including global severity index, positive symptom distress index, and positive symptom total. Additionally, nine psychiatric symptom clusters are assessed. Test–retest and internal consistency reliabilities are very good for the overall scores and the primary symptom dimensions. Only the global severity index is used in this study.

Beck Depression Inventory–II (BDI-II). The BDI-II (Beck, Steer, & Brown, 1996), a revision of the original BDI, yields scores consistent with the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; American Psychiatric Association, 1994). It is a 21-item measure with a 2-week time frame. The measure has been found to have high internal consistency reliability ($\alpha = .91$) and good convergent validity.

Beck Hopelessness Scale (BHS). The BHS (Beck, Weissman, Lester, & Trexler, 1974) measure, designed by Beck and colleagues, is comprised of 20 true–false questions that assess for negative expectancies about the future. Scores range from 0 to 20, with higher scores indicative of more hopelessness. The scale has good convergent and criterion related validity.

The Brief Michigan Alcoholism Screening Test (Brief MAST). The Brief MAST (Pokorny, Miller, & Kaplan, 1972) is a 10-question measure with a Yes/No format to assess for problems related to alcohol. Scores of $\geq$ 6 correctly identify all true-positive individuals, with misidentification occurring in 11% of cases.

The Brief Drug Abuse Screening Test (Brief DAST). The Brief DAST (Skinner, 1983) is a 20-question measure with a Yes/No format that assesses for problems related to drugs. Good internal consistency and concurrent validity have been shown. Total DAST scores are used in the analyses for this investigation.

Protective Factor Measures

Herth Hope Index (HHI). The HHI (Herth, 1992) 12-item scale is a revised version of the Herth Hope Scale and is used to assess for feelings of hope in a clinical setting. Good internal consistency and test–retest reliabilities, as well as convergent and criterion-related validity, have been reported.

Self-Efficacy Scale for Battered Women (SESFBW). The SESFBW (Varvaro & Palmer, 1993) is a 12-item form that rates on an analogue scale a woman's likelihood of being able to perform positive help-seeking actions and adaptive living skills. It has good construct validity and internal reliability.

Preliminary Strategic Approach to Coping Scale (P–SACS). The P–SACS (Hobfoll, Dunahoo, Ben-Porath, & Monnier, 1994) is a 34-item measure that assesses prosocial, antisocial, active and passive coping abilities of participants on a 5-point Likert scale. The P–SACS has good internal consistency reliability and has been shown to be valid and reliable with inner-city populations. Total P–SACS scores are used in this study.

Social Support Behaviors Scale (SSB). The SSB (Vaux, Riedel, & Stewart, 1987) is a 45-item measure of perceived availability and support

from family and friends. Five areas of support (emotional, social, practical, financial, and guidance) are delineated in 5-point Likert scale items. The SSB has good internal consistency reliability and concurrent validity. Both the Family and the Friends Social Support subscales are used in this study.

Effectiveness of Obtaining Resources Scale (EOR). The EOR (Sullivan, Tan, Basta, Rumptz, & Davidson, 1992) is used to assess, on a 4-point Likert scale, participants' perception of how successful they have been at providing for themselves in the following 11 areas: housing, material goods, education, employment, healthcare, child care, parenting skills, transportation, social support, finances, and legal resources. The EOR has adequate internal consistency reliability.

Spiritual Well-Being Scale (SWBS). The SWBS (Paloutzian & Ellison, 1982) requires participants to rate on a 6-point scale ranging from *strongly agree* to *strongly disagree* their agreement with 20 statements designed to assess their spiritual well-being. The items address both religious well-being and existential (nonreligious) well-being. Ellison (1983) has reported test–retest reliability ranging from .89 to .94 for the SWBS.

Results

Comparison of Attempters and Nonattempters on Demographics and IPV Severity

This case-control study was designed with the aim of equating attempters and nonattempters on demographics and IPV severity. Thus, differences between attempters and nonattempters on demographic variables and severity of physical and nonphysical IPV were examined before testing study hypotheses. Chi-square analyses were used to test for group differences when the demographic variable was dichotomous, and *F* tests were used when the demographic variable was continuous, as well as for the continuous measures of IPV severity. As seen in Table 1, there were no significant between-group differences on age, education, number of children, marital status, employment status, literacy level, or monthly household income. Overall, this is a sample of women in their early thirties, the majority of whom have not graduated from high school. These women tended to be unmarried and had on average two children. Less than half the sample was employed, and 80% had monthly incomes less than $1,000.00. In addition to the lack of between-group differences on demographic variables, there were no between-group differences on the measures of partner violence (ISA–P, ISA–NP). Given the lack of between-group differences on key demographic variables as well as on measures of partner violence, there was no need to use covariates for any of the subsequent analyses.

Differences Between Attempters and Nonattempters on Risk Factors

Multivariate analysis of variance (MANOVA) was used to test the hypothesis that attempters would evidence higher levels of the seven assessed risk factors compared with their nonattempting counterparts. Because the multivariate *F* was significant, $F(7, 192) = 15.66$, $p < .01$, we conducted univariate analyses of variance (ANOVA) to determine on which specific risk factors attempters and nonattempters differed. These results are presented in Table 2 and show that attempters evidenced statistically significant higher scores on all seven risk factors than did nonattempters. Specifically, compared with nonattempters, attempters reported higher levels of stressful life events, childhood trauma, psychological distress, depression, hopelessness, alcohol use, and drug use.

Table 1
Background Data for Attempters and Nonattempters

Variable	Attempters	Nonattempters	Statistical test
Age	31.1	32.8	$F(1, 200) = 1.59$
Education	11.2	11.7	$F(1, 200) = 3.12$
No. of children	2.3	1.9	$F(1, 200) = 3.05$
Marital status (% married/ cohabiting)	31.0	25.5	$\chi^2(1, N = 198) = 0.74$
Employment status (% employed)	35.0	46.5	$\chi^2(1, N = 199) = 2.71$
Monthly household income			$\chi^2(3, N = 191) = 4.12$
$0–$249	22.3	12.4	
$250–$499	24.5	26.8	
$500–$999	25.5	34.0	
$1,000–$1,999	20.2	20.6	
Literacy level (% at grade equivalent)			$\chi^2(3, N = 199) = 2.66$
3rd or below	3.0	1.0	
4th–6th	9.0	15.2	
7th–8th	37.0	34.3	
12th and above	51.0	49.5	
Index of Spouse Abuse—Nonphysical	43.4	39.5	$F(1, 200) = 1.52$
Index of Spouse Abuse—Physical	29.7	28.9	$F(1, 200) = 0.76$

Note. Sample sizes vary because of missing data.

Differences Between Attempters and Nonattempters on Protective Factors

MANOVA and ANOVAs were used to test the hypothesis that attempters would evidence lower levels of the seven assessed protective factors compared with their nonattempting counterparts. A significant multivariate $F(7, 192) = 10.81$, $p < .01$, was followed by ANOVAs to determine the specific protective factors on which attempters and nonattempters differed. These results are presented in Table 3, and show that compared with nonattempters, attempters evidenced statistically significant lower scores on all seven of the protective factors. Specifically, attempters reported lower levels than did nonattempters on measures of hopefulness (HHI), $F(1, 199) = 51.98$, $p < .01$; self-efficacy (SESBW), $F(1, 199) = 22.76$, $p < .01$; coping skills (P–SACS), $F(1, 199) = 23.73$, $p < .01$; family support (SSB–Family), $F(1, 199) = 37.01$, $p < .01$; friend support (SSB–Friend), $F(1, 199) = 14.62$, $p < .01$; effectiveness of obtaining material resources (EOR), $F(1, 199) = 26.79$, $p < .01$; and spiritual well-being (SWBS), $F(1, 199) = 50.10$, $p < .01$. Thus, African American women with a history of IPV who attempt suicide feel more hopeless, are less efficacious, have fewer coping skills, have lower levels of social support, are less effective at obtaining material resources, and report less spiritual well-being than demographically similar African American women with a history of IPV who have never attempted suicide.

Discussion

Several interesting findings emerged from this examination of risk and protective factors that differentiated abused suicide at-

Table 2
Descriptive and Inferential Statistics for Attempters and Nonattempters on Risk Factors

Risk factor	Attempters	Nonattempters	*F*(1, 199)	Effect size
Stressful events			28.46*	
M	120.66	101.65		
95% CI	115.69–125.63	95.68–106.62		.13
Childhood trauma			38.48*	
M	67.24	51.72		
95% CI	63.75–70.73	48.23–55.21		.16
Psychological distress			46.66*	
M	2.02	1.28		
95% CI	1.88–2.18	1.13–1.44		.19
Depression			90.10*	
M	36.20	19.83		
95% CI	33.80–38.61	17.45–22.24		.31
Hopelessness			62.05*	
M	9.81	4.20		
95% CI	8.82–10.80	3.21–5.19		.24
Alcohol use			8.05*	
M	5.85	2.93		
95% CI	4.42–7.29	1.50–4.37		.04
Drug use			15.32*	
M	5.81	3.14		
95% CI	4.86–6.76	2.19–4.09		.07

Note. CI = confidence interval.
* $p < .01$.

tempters from their abused nonattempter counterparts. Specifically, low-income abused African American women are at increased risk for engaging in suicidal behavior in the face of negative life events, a history of child maltreatment, psychological distress and depression, hopelessness, and alcohol and drug abuse. In addition, low-income abused African American women who are hopeful, high in self-efficacy and the capacity to obtain resources, with adaptive coping skills, and strong social support are at reduced risk for attempting suicide. The findings are consistent with prior studies with African American women (Kaslow, Thompson, et al., 2000; Stark & Flitcraft, 1996) and add to the literature by demonstrating that the aforementioned risk factors are also found more often in abused African American women who attempt suicide than among their abused nonattempter counterparts. This study is one of the first to demonstrate that, in a specific sample of women, the presence of such protective factors as hopefulness,

Table 3
Descriptive and Inferential Statistics for Attempters and Nonattempters on Protective Factors

Protective factor	Attempter	Nonattempter	*F*(1, 199)	Effect size
Hopefulness			51.98*	
M	31.89	38.69		
95% CI	30.58–33.21	37.38–40.01		.21
Self-efficacy			22.76*	
M	67.55	79.76		
95% CI	63.98–71.12	76.19–83.33		.10
Coping			23.73*	
M	3.24	3.50		
95% CI	3.16–3.31	3.43–3.58		.11
Social support, family			37.01*	
M	2.82	3.74		
95% CI	2.61–3.03	3.53–3.95		.16
Social support, friend			14.62*	
M	2.90	3.46		
95% CI	2.69–3.10	3.25–3.66		.07
Resources			26.79*	
M	2.35	2.84		
95% CI	2.22–2.48	2.71–2.97		.12
Spiritual well-being			50.10*	
M	78.01	95.13		
95% CI	74.64–81.38	91.76–98.50		.20

Note. CI = confidence interval.
* $p < .01$.

self-efficacy, coping skills, social support, and effectiveness in obtaining material resources are associated with nonattempter status.

The finding that abused women who feel hopeful about their future and capable of affecting change are less likely to harm themselves is consistent with the learned optimism model as applied to battered women (Walker, 1994). These results also confirm the importance of social support and access to resources, two variables that have been identified by previous research as important with regard to women being able to leave abusive partners. Social support reduces social isolation and subsequently increases the likelihood that women will eventually leave their assailants (Browne, 1993; Sullivan & Bybee, 1999). Furthermore, the ability to attain needed resources, such as employment, childcare, and safe housing, has also been shown to be an important factor related to women's leaving violent partners (Sullivan & Bybee, 1999). Although these studies focus on abused women and their readiness to leave an abusive partner, there also is evidence that social support is a protective risk factor against suicide attempts (Jacobs, 1999).

Several limitations of the study should be noted. The reliance on self-report and retrospective data is problematic in that it calls into question response validity. The nature of the study prohibited corroboration of the information provided by participants. Furthermore, no clinical interviews were conducted and thus no diagnostic information is available. The cross-sectional nature of the study prohibits firm conclusions as to causation. For example, the self-reported psychosocial functioning of the suicide attempters could reflect their highly stressful crisis situation of being in the hospital immediately following a suicide attempt rather than that their difficulties actually preceded the attempt. Additionally, it is unclear the extent to which the risk and protective factors under investigation are redundant, both within and between the risk and protective factor constellations. Finally, these results are based on a specific group of African American women, and thus the generalizability of these findings are unclear. Future research should incorporate longitudinal designs to rigorously test risk and protective variables, include data from multiple informants using multiple methods, and examine risk and protective factors in diverse ethnic groups of women. In addition the use of structural equation modeling could be helpful in clarifying the distinct contribution of each risk and protective factor.

Despite these methodological limitations, this study has several important implications for the field. This study represents an important next step in research on the link between IPV and suicidal behavior in women. The focus on social and economic factors that may protect women from suicide reflects a much needed contextual approach. At a minimum, social and individual factors should be considered together in terms of their influence on battered women. The primary strength of this study is that it extends previous research by examining partner abuse and suicidal behavior in a sample of demographically matched suicide attempters and nonattempters including both physical and nonphysical measures of partner violence. Furthermore, this study included a sample of low-income African American women, an understudied population. Finally, the findings from this study provide important empirical data that can be useful in guiding interventions for abused suicidal women.

At the present time, there are no published intervention programs that focus on abused, suicidal women. Clearly intervention efforts with this population need to target reducing those risk factors associated with increasing abused women's propensity to engage in suicidal behavior and bolstering those protective factors related to decreasing abused women's tendency to harm themselves. The ultimate goal of interventions should be to bolster protective factors to empower women. Increasing their choices and subsequently increasing their sense of hope for a better future will ultimately reduce their risk for suicide and increase the likelihood that they can live independent and violence-free lives.

Interventions for abused suicidal women should incorporate the empirical intervention literature for abused women that underscores the value of support groups for reducing psychological distress (Tutty, Bidgood, & Rothery, 1993), the utility of psychoeducational approaches for enhancing self-efficacy (Varvaro & Palmer, 1993), and the importance of providing advocacy services to increase access to the requisite resources and facilitate the development of strong social support networks (Sullivan & Bybee, 1999; Sullivan & Rumptz, 1994; Sullivan et al., 1992).

Intervention programs for abused suicidal women must also build on published intervention studies for suicidal persons, which highlight the value of problem solving (Lerner & Clum, 1990; Patsiokas & Clum, 1985) and of coping-skills training (Linehan, Armstrong, Suarez, Allmon, & Heard, 1991; Linehan, Tutek, Heard, & Armstrong, 1994). Although no intervention programs have specifically focused on decreasing hopelessness and increasing hopefulness, cognitive therapy interventions for depression may be adapted for this purpose, particularly if they are modified in a manner consistent with the hopelessness theory of suicidality (Cornette, Abramson, & Bardone, 2000) and/or build on notions put forth under the rubric of positive psychology (Seligman & Csikszentmihalyi, 2000). To be successful, interventions should be designed and conducted in a culturally competent manner. They must focus on treatment engagement, as many low-income African American women have multiple responsibilities and stressors that make involvement in mental health services for themselves a relatively low priority. These interventions must be conducted in a setting that is easily and typically accessed by the population being served. Intervention researchers should recognize the historical view of African American women as strong individuals who can persevere under dire circumstances to care for their families and capitalize on the strengths of the African American family and community (Heron, Twomey, Jacobs, & Kaslow, 1997). Commonly noted strengths include a strong kinship network, solid work ethic, value of achievement, deep sense of spirituality, and so forth. Thus, interventions should target strengthening these women's social support networks. Given that they have few resources, and that the ability to access resources reduces their vulnerability to suicidal behavior, interventions should also target enhancing their access to resources. Interventions are most likely to be acceptable if the therapist communicates respect and assumes the stance of a role model, educator, and/or advocate who actively interacts with the woman and demonstrates a familiarity with relevant community resources (Celano & Kaslow, 2000). It is particularly useful if these interventions are circumscribed in time, solution-oriented, and focused on the here and now (Boyd-Franklin, 1989).

References

Abbott, J., Johnson, R., Koziol-McLain, J., & Lowenstein, S. R. (1995). Domestic violence against women: Incidence and prevalence in an

emergency department population. *Journal of the American Medical Association, 273,* 1763–1767.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Asbury, J. (1987). African American women in violent relationships: An exploration of cultural differences. In R. L. Hampton (Ed.), *Violence in the Black family* (pp. 89–105). Lexington, MA: Heath.

Bachman, R., & Salzman, L. (1994). *Violence against women: Estimates from the redesigned survey* (NCJ-154348). Washington, DC: Office of Justice Programs, Bureau of Justice Statistics.

Beautrais, A. L., Joyce, P. R., Mulder, R. T., Fergusson, D. M., Deavoll, B. J., & Nightingale, S. K. (1996). Prevalence and comorbidity of mental disorders in persons making serious suicide attempts: A case-control study. *American Journal of Psychiatry, 153,* 1009–1014.

Beck, A. T., Steer, R. A., Beck, J. S., & Newman, C. F. (1993). Hopelessness, depression, suicidal ideation and clinical diagnosis of depression. *Suicide and Life Threatening Behavior, 23,* 139–145.

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Beck Depression Inventory manual* (2nd ed.). San Antonio, TX: Psychological Corporation.

Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The Hopelessness Scale. *Journal of Consulting and Clinical Psychology, 42,* 861–865.

Belle, D. (1990). Poverty and women's mental health. *American Psychologist, 45,* 385–389.

Bergman, B., & Brismar, B. (1991). Suicide attempts by battered wives. *Acta Psychiatrica Scandinavia, 83,* 380–384.

Bernstein, D. P., & Fink, L. (1998). *Childhood Trauma Questionnaire: A retrospective self-report.* San Antonio, TX: Harcourt, Brace.

Boyd-Franklin, N. (1989). *Black families in therapy: A multisystems approach.* New York: Guilford Press.

Browne, A. (1993). Violence against women by male partners: Prevalence, outcomes, and policy implications. *American Psychologist, 48,* 1077–1087.

Campbell, D. W., Campbell, J., King, C., Parker, B., & Ryan, J. (1994). The reliability and factor structure of the Index of Spouse Abuse with African-American women. *Violence and Victims, 9*(3), 259–274.

Campbell, R., Sullivan, C. M., & Davidson, W. S. (1995). Women who use domestic violence shelters: Changes in depression over time. *Psychology of Women Quarterly, 19,* 237–255.

Celano, M. P., & Kaslow, N. J. (2000). Culturally competent family interventions: Review and case illustrations. *American Journal of Family Therapy, 28,* 217–228.

Clum, G. A., & Febbraro, G. A. R. (1994). Stress, social support, and problem-solving appraisal/skills: Prediction of suicide severity within a college sample. *Journal of Psychopathology and Behavioral Assessment, 16,* 69–83.

Coley, S. M., & Beckett, J. O. (1988). Black battered women: A review of the empirical literature. *Journal of Counseling and Development, 66,* 266–270.

Cornette, M. M., Abramson, L. Y., & Bardone, A. M. (2000). Toward an integrated theory of suicidal behaviors: Merging the hopelessness, self-discrepancy, and escape theories. In T. Joiner & M. D. Rudd (Eds.), *Suicide science: Expanding the boundaries* (pp. 43–66). Boston: Kluwer Academic.

Crosby, A. E., Cheltenham, M. P., & Sacks, J. J. (1999). Incidence of suicidal ideation and behavior in the United States, 1994. *Suicide and Life Threatening Behavior, 29,* 131–140.

Crowell, N. A., & Burgess, A. W. (Eds.). (1996). *Understanding violence against women.* Washington, DC: National Academy Press.

DeLongis, A., Folkman, S., & Lazarus, R. (1988). The impact of daily stress on health and mood: Psychological and social resources as mediators. *American Journal of Psychiatry, 151,* 1132–1136.

Derogatis, L. (1975). *SCL-90–R: Administration, scoring, and procedures manual: II.* Baltimore: Clinical Psychometric Research.

Dutton, M. A., Mitchell, B., & Haywood, Y. (1996). The emergency department as a violence prevention center. *Journal of the American Medical Women's Association, 51,* 92–96.

Ellison, C. W. (1983). Spiritual well-being: Conceptualization and measurement. *Journal of Psychology and Theology, 11,* 330–340.

Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). Mini-Mental State: A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research, 12,* 189–198.

Gibbs, J. (1997). African-American suicide: A cultural paradox. *Suicide and Life-Threatening Behavior, 27,* 68–79.

Goodman, L. A., Koss, M. P., & Russo, N. F. (1993). Violence against women: Physical and mental health effects: Part I. Research findings. *Applied and Preventive Psychology, 2,* 79–89.

Grisso, J. A., Schwartz, D. F., Hirschinger, N., Sammel, M., Brensinger, C., Santanna, J., et al. (1999). Violent injuries among women in an urban area. *New England Journal of Medicine, 341,* 1899–1905.

Hampton, R. L., & Gelles, R. J. (1994). Violence toward Black women in a nationally representative sample of Black families. *Journal of Comparative Family Studies, 25,* 105–119.

Heron, R. L., Twomey, H. B., Jacobs, D. P., & Kaslow, N. J. (1997). Culturally competent interventions for abused and suicidal African American women. *Psychotherapy: Theory, Research, Practice, Training, 34,* 410–424.

Herth, K. (1992). Abbreviated instrument to measure hope: Development and psychometric evaluation. *Journal of Advanced Nursing, 17,* 1251–1259.

Hobfoll, S. E., Dunahoo, C. L., Ben-Porath, Y., & Monnier, J. (1994). Gender and coping: The dual axis model of coping. *American Journal of Community Psychology, 22,* 49–82.

Hudson, W. W., & McIntosh, S. R. (1981). The assessment of spouse abuse: Two quantifiable dimensions. *Journal of Marriage and the Family, 43,* 873–888.

Jacobs, D. G. (Ed.). (1999). *The Harvard Medical School guide to suicide assessment and intervention.* San Francisco: Jossey-Bass.

Kanuha, V. (1994). Women of color in battering relationships. In L. Comas-Diaz & B. Greene (Eds.), *Women of color: Integrating ethnic and gender identities in psychotherapy* (pp. 428–454). New York: Guilford Press.

Kaplan, M. L., Asnis, G. M., Lipshitz, D. S., & Chorney, P. (1995). Suicidal behavior and abuse in psychiatric outpatients. *Comprehensive Psychiatry, 36,* 229–235.

Kaslow, N. J., Thompson, M., Meadows, L., Chance, S., Puett, R., Hollins, L., et al. (2000). Risk factors for suicide attempts among African American women. *Depression and Anxiety, 12,* 13–20.

Kaslow, N. J., Thompson, M. P., Meadows, L. A., Jacobs, D., Chance, S., Gibb, B., et al. (1998). Factors that mediate and moderate the link between partner abuse and suicidal behavior in African American women. *Journal of Consulting and Clinical Psychology, 66,* 533–540.

Kaslow, N. J., Twomey, H., Brooks, A., Thompson, M., & Reynolds, B. (2000). Perceptions of family functioning of suicidal and nonsuicidal African American women. In S. H. Beach (Ed.), *Marital and family processes in depression: A scientific foundation for clinical practice* (pp. 141–162). Washington, DC: American Psychological Association.

Kessler, R. C., Borges, G., & Walters, E. E. (1999). Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. *Archives of General Psychiatry, 56,* 617–633.

Kingree, J. B., Thompson, M. P., & Kaslow, N. J. (1999). Risk factors for suicide attempts among low-income women with a history of alcohol problems. *Addictive Behaviors, 24,* 583–587.

Koss, M. P., Goodman, L. A., Browne, A., Fitzgerald, L. F., Keita, G. P., & Russo, N. F. (1994). *No safe haven: Male violence against women at home, at work, and in the community.* Washington, DC: American Psychological Association.

Lerner, M., & Clum, G. (1990). Treatment of suicide ideators: A problem-solving approach. *Behavior Therapy, 21,* 403–411.

Linehan, M. M., Armstrong, H. E., Suarez, A., Allmon, D., & Heard, H. L. (1991). Cognitive–behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry, 48,* 1060–1064.

Linehan, M. M., Tutek, D. A., Heard, H. L., & Armstrong, H. E. (1994). Interpersonal outcome of cognitive behavioral treatment for chronically suicidal borderline patients. *American Journal of Psychiatry, 151,* 1771–1776.

Lockhart, L. (1991). Spousal violence: A cross-racial perspective. In R. L. Hampton (Ed.), *Black family violence* (pp. 85–101). Lexington, MA: Lexington Books.

Manetta, A. A. (1999). Interpersonal violence and suicidal behavior in midlife African American women. *Journal of Black Studies, 29,* 510–522.

Moscicki, E. K. (1997). Identification of suicide risk factors using epidemiologic studies. *Psychiatric Clinics of North America, 20,* 499–517.

Moscicki, E. K., O'Carroll, P., Rae, D. S., Locke, B. Z., Roy, A., & Regier, D. A. (1988). Suicide attempts in the Epidemiologic Catchment Area Study. *The Yale Journal of Biology and Medicine, 61,* 259–268.

National Center for Health Statistics. (1998). *National Vital Statistics Report.* (Vol. 47, No. 9). Washington, DC: Department of Health and Human Services.

Neff, J. A., Holamon, B., & Schluter, T. D. (1995). Spousal violence among Anglos, Blacks, and Mexican Americans: The role of demographic variables, psychosocial predictors and alcohol consumption. *Journal of Family Violence, 10,* 1–21.

Nisbet, P. A. (1996). Protective factors for suicidal Black females. *The American Association of Suicidology, 26,* 325–341.

Paloutzian, R. F., & Ellison, C. W. (1982). Loneliness, spiritual well-being and the quality of life. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research, and therapy* (pp. 224–237). New York: Wiley-Interscience.

Patsiokas, A. T., & Clum, G. A. (1985). Effects of psychotherapeutic strategies in the treatment of suicide attempters. *Psychotherapy, 22,* 281–290.

Phillips, D. P., & Ruth, T. E. (1993). Adequacy of official suicide statistics for scientific research and public policy. *Suicide and Life-Threatening Behavior, 23,* 307–319.

Pokorny, A., Miller, B., & Kaplan, H. (1972). The Brief MAST: A shortened version of the Michigan Alcohol Screening Test. *American Journal of Psychiatry, 129,* 342–345.

Rennison, C. M., & Welchans, S. (2000). *Intimate partner violence* (No. 178247). Washington, DC: U.S. Bureau of Justice.

Renzetti, C. (1992). *Violent betrayal: Partner abuse in lesbian relationships.* Newbury Park, CA: Sage.

Roberts, G. L., Lawrence, J. M., O'Toole, B. I., & Raphael, B. (1997). Domestic violence in the Emergency Department: I. Two case-control studies of victims. *General Hospital Psychiatry, 19,* 5–11.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55,* 5–14.

Skinner, H. (1983). The Drug Abuse Screening Test. *Addictive Behaviors, 7,* 363–371.

Sorenson, S. B., Upchurch, D. M., & Shen, H. (1996). Violence and injury in marital arguments: Risk patterns and gender differences. *American Journal of Public Health, 86,* 35–40.

Stark, E., & Flitcraft, A. (1996). *Women at risk: Domestic violence and women's health.* Thousand Oaks, CA: Sage.

Straus, M. A., & Gelles, R. J. (1990). *Physical violence in American families: Risk factors and adaption to violence in 8,145 families.* New Brunswick, NJ: Transaction.

Straus, M. A., Gelles, R., & Steinmetz, S. K. (1980). *Behind closed doors: Violence in the American family.* Garden City, NY: Anchor Press.

Sullivan, C. M., & Bybee, D. I. (1999). Reducing violence using community-based advocacy for women with abusive partners. *Journal of Consulting and Clinical Psychology, 67,* 43–53.

Sullivan, C. M., & Rumptz, M. H. (1994). Adjustment and needs of African-American women who utilized a domestic violence shelter. *Violence and Victims, 9,* 275–286.

Sullivan, C. M., Tan, C., Basta, J., Rumptz, M., & Davidson, W. (1992). An advocacy intervention program for women with abusive partners: Initial evaluation. *American Journal of Community Psychology, 20,* 309–332.

Thompson, M. P., Kaslow, N. J., Bradshaw, D., & Kingree, J. B. (2000). Child maltreatment, PTSD, and suicidal behavior among African American females. *Journal of Interpersonal Violence, 15,* 3–15.

Thompson, M. P., Kaslow, N. J., Kingree, J. B., Puett, R., Thompson, N. J., & Meadows, L. (1999). Partner abuse and posttraumatic stress disorder as risk factors for suicide attempts in a sample of low-income, inner-city women. *Journal of Traumatic Stress, 12,* 59–72.

Tjaden, P., & Thoennes, N. (1998). *Prevalence, incidence, and consequences of violence against women: Findings from the National Violence Against Women Survey.* Washington, DC: National Institute of Justice/Centers for Disease Control and Prevention.

Tutty, L. M., Bidgood, B. A., & Rothery, M. A. (1993). Support groups for battered women: Research on their efficacy. *Journal of Family Violence, 8,* 325–343.

Twomey, H., Kaslow, N. J., & Croft, S. (2000). Childhood maltreatment, object relations, and suicidal behavior in women. *Psychoanalytic Psychology, 17,* 313–335.

Varvaro, F., & Palmer, M. (1993). Promotion of adaption in battered women: A self-efficacy approach. *Journal of the American Academy of Nurse Practitioners, 5,* 264–270.

Vaux, A., Riedel, S., & Stewart, D. (1987). Modes of social support: The Social Support Behaviors Scale. *American Journal of Community Psychology, 15,* 209–237.

Walker, L. E. (1991). Post-traumatic stress disorder in women: Diagnosis and treatment of battered women syndrome. *Psychotherapy: Theory, Research, Practice, Training, 28,* 21–29.

Walker, L. E. (1994). *Abused women and survivor therapy: A practical guide for the psychotherapist.* Washington, DC: American Psychological Association.

Web-Based Injury Statistics Query and Reporting System (WISQARS). (1999). *Leading causes of death.* Retrieved January 31, 2002, from http://inside.cdc.gov:81/sample/ncipc/wisqars/leadcause.html

Weissman, A. D., & Worden, J. W. (1972). Risk-rescue rating and suicide assessment. *Archives of General Psychiatry, 26,* 553–560.

Williams, M., Parker, R., Baker, D., Parikh, N., Pitkin, K., Coates, W., & Nurss, J. (1995). Inadequate functional health literacy among patients at two public hospitals. *Journal of the American Medical Association, 274,* 1677–1682.

Young, S., Twomey, H. B., & Kaslow, N. J. (2000). Suicidal behavior in African American women with a history of childhood maltreatment. In T. Joiner (Ed.), *Suicide science: Expanding boundaries* (pp. 221–240). Boston: Kluwer Academic.

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