Coping Variables That Mediate the Relation Between Intimate Partner Violence and Mental Health Outcomes Among Low-Income, African American Women

Michelle D. Mitchell
Emory University

Gabrielle L. Hargrove
Auburn University

Marietta H. Collins
Emory University

Martie P. Thompson
Clemson University

Tiffany L. Reddick
University of West Georgia

Nadine J. Kaslow
Emory University

Coping variables that mediate the relation between intimate partner violence (IPV) and mental health outcomes among African American women were investigated. The study sample included 143 economically disadvantaged African American women ranging in age from 21 to 64 years old who were receiving services at an urban public health system. Sixty-five had experienced IPV within the past year and 78 had never

These data are drawn from a study funded by a grant from the Centers for Disease Control and Prevention/National Center for Injury Prevention and Control (Grant #R49/CCR419767–0) entitled "Domestic Violence and Child Maltreatment in Black Families" that was awarded to the last author.
Correspondence concerning this article should be addressed to: Nadine J. Kaslow, Emory University School of Medicine, Department of Psychiatry and Behavioral Sciences, Grady Health System, 80 Jesse Hill Jr. Drive, Atlanta, GA 30303; e-mail: nkaslow@emory.edu

JOURNAL OF CLINICAL PSYCHOLOGY, Vol. 62(12), 1503–1520 (2006)
© 2006 Wiley Periodicals, Inc.
Published online in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/jclp.20305
WILEY InterScience® DISCOVER SOMETHING GREAT

experienced IPV. Results indicated that (a) the IPV status—depressive symptoms link was mediated by multiple ways of coping, spiritual well-being, and social support; (b) the IPV status—anxiety symptoms link was mediated by multiple ways of coping, social support, and ability to access resources; and (c) the IPV status—parenting stress link was mediated by multiple ways of coping, spiritual well-being, and social support. Implications of these findings for clinical practice with abused women are discussed.
© 2006 Wiley Periodicals, Inc. J Clin Psychol 62: 1503–1520, 2006.

Keywords: intimate partner violence; coping; African American women; depression; anxiety; parenting stress

Among women, approximately one in three homicides are committed by intimate partners (Paulozzi, Saltzman, Thompson, & Holmgreen, 2001). Injuries sustained by women ranging in age from 15 to 44 occur because of intimate partner violence (IPV) more often than cancer, motor vehicle accidents, and violence by strangers or acquaintances (Boes, 1998). Intimate partner violence has a serious and long-term impact on the emotional and physical health of women. Compared to nonabused women, abused women are more likely to experience symptoms of depression and anxiety, as well as suicidal thoughts and low self-esteem (Campbell & Lewandowski, 1997; McCauley et al., 1995; Schornstein, 1997; Thompson, Kaslow, & Kingree, 2002; Valentine, Roberts, & Burgess, 1998).

Although IPV affects women across racial, cultural, social, economic, and educational strata, rates of intimate partner homicide and IPV are particularly high among African Americans (Bent-Goodley, 2004; Paulozzi et al., 2001), especially among those who are economically disadvantaged (Hampton & Gelles, 1994; Rennison & Welchans, 2000). African American women experience more severe abuse (El-Khoury et al., 2004; Sullivan & Rumptz, 1994) and are more likely to be revictimized by their abusers (Carlson, Harris, & Holden, 1999) than White or Latina women are.

When socioeconomic status (SES) is accounted for, ethnic differences in prevalence rates are reduced or eliminated (Crowell & Burgess, 1996; Lockhart, 1991; Rennison & Planty, 2003; Tjaden & Thoennes, 2000). Women from lower SES groups are more likely to be victimized by their partners, and are also likely have low support resources, particularly low tangible resources. Abused women often experience loss of control, and are likely unable to accrue the resources needed to deal effectively with IPV (Thompson et al., 2000). Women who are unemployed, lack financial resources, are economically dependent on their abuser, or have children from their abuser have a greater chance of experiencing re-abuse (Bybee & Sullivan, 2002; Carlson et al., 1999). African American women are disproportionately represented within the lower socioeconomic strata and are likely to suffer from IPV at high rates.

Coping refers to actions used to minimize stress. Women's styles of coping often have been investigated in relation to men's approaches to coping (Gramling, Lambert, & Pursley-Crotteau, 1998). Research conclusions generally reflect the view that women tend to use passive coping strategies that lack effectiveness in relieving stress (Moos & Billings, 1982; Pearlin & Schooler, 1978). Such a conclusion does not consider that women may choose strategies based on contextual factors that may not encourage active coping strategies. Effective coping in women may differ depending on their age, race, ethnicity, socioeconomic status, and situation/context such as experiencing IPV (Folkman, Lazarus, Pimley, & Novacek, 1987; Lykes, 1983).

Coping among abused African American women varies based on perception of abuse, womanhood, and religious beliefs about marriage. In terms of perception of abuse, qualitative research shows that some African American women distinguish between abuse and beatings, with beatings defined as severe IPV and abuse described as a benign, tolerable form of violence (not IPV) where a woman endures pushing, shoving, slapping, and verbal aggression (Bent-Goodley, 2004). Concerning perceptions of spirituality and IPV, focus group research reveals that some married women remain in an abusive relationship because they perceive leaving as breaking a covenant with God. Others perceive remaining in an abusive relationship and forgiving their partners as indications of being a strong Black woman (Banks-Wallace & Parks, 2004), a culturally idealized form of African American womanhood (Neal-Barnett, 2003; Romero, 2000). In a predominantly African American sample, a positive association was found between re-abuse and the use of direct confrontation, and/or an increased number of placating or resistive strategies for coping with violence (Goodman, Dutton, Vankos, & Wieinfurt, 2005). Therefore, African American women may be reluctant to use active forms of coping aimed at leaving the abuser.

Prayer is a preferred active coping strategy for African Americans (Mattis, 2002; McAdoo, 1995; Neighbors, Musick, & Williams, 1998). For African American women, prayer, spiritual beliefs, and relationship with God are central coping strategies (Mattis, 2002; Shorter-Gooden, 2004). Although organized religious institutions serve as sources of formal and informal support (Taylor & Chatters, 1986), many African American women are more likely to use their relationship with God and prayer to cope with stress. Abused African American women may rely on prayer because it is a culturally validated private method of coping that may be perceived as safer than direct or public forms of coping aimed at changing the balance of power, the abuser's behavior, and/or leaving the relationship (Waldrop & Resick, 2004). Some women fear the consequences of public coping strategies (e.g., seeking support from friends, family, or mental health professionals, attending places of worship) because their partners have made coercive threats that prohibit disclosure of the abuse, making private coping more acceptable (Lewis et al., 2006).

When private coping fails to provide relief, abused African American women turn to public coping and prefer to seek social support from friends, rather than a formal support system (Fraser, McNutt, Clark, Williams-Muhammed, & Lee, 2002). Abused women find receiving tangible support effective (Goodman et al., 2005). Emotional support can help women make difficult decisions, such as developing and employing a safety plan, prosecuting the abuser, or seeking formal support from a domestic violence organization or a counselor/psychologist (Kocot & Goodman, 2003).

Use of multifaceted types of coping strategies demonstrates that African American women are resourceful and have the ability to determine the type of coping strategy they will employ based on the contextual factors such as the level of danger in the present situation. More active strategies are used is less volatile situations and private or nonconfrontational strategies in more violent situations. Thus, they perceive which coping responses are less likely to lead to an escalation of violence and those that are likely to be life-threatening (Lewis et al., 2006). Unfortunately, they may not be aware that the use of multiple coping strategies, whether active or nonconfrontational, is related to an increase in abuse. Therefore, employing multifaceted coping strategies is a poorer or maladaptive way of coping (Goodman et al., 2005), which may have negative emotional consequences.

African American women who seek social support may feel empowered; thus, they may use more active support strategies in their attempt to change the situation. Women who employ direct behavioral attempts to deal with IPV experience less depression, greater mastery, and enhanced self-esteem when their active coping strategies are effective

(Kocot & Goodman, 2003). Usually, when battered women seek social support, they perceive more control over the situation, and are in a better position to increase their own safety, change the power dynamic in the relationship, and not become seriously affected by IPV-related stressors.

There is limited information on types of services abused African American women seek for assistance (El-Khoury et al., 2004) and there is a complex association between race, social class, IPV severity, children in the household, and medical service utilization (Bachman & Coker, 1995; Henning & Klesges, 2002; Hutchison & Hirschel, 1998; West, Kantor, & Jasinski, 1998). Abused women, including those who are African American, use more medical, mental health, and legal services than nonabused women (Paranjape, Heron, & Kaslow, 2006; Ulrich et al., 2003). Low-income, abused women of color are most likely to talk to friends and family and least likely to use agencies or counselors followed by medical care facilities, and law enforcement (Fugate, Landis, Riordan, Naureckas, & Engel, 2005).

One major consequence of IPV is the emergence of psychological symptoms. Abused African American women report significantly higher rates of anxiety and depression than their White counterparts do (Ramos, Carlson, & McNutt, 2004). Aside from abuse, everyday stressors predict depression in African American and White abused women, suggesting that although IPV is a stressor, other psychosocial stressors also are associated with negative mental health outcomes (Campbell & Belknap, 1997). In partial explanation of reported higher levels of distress for abused African American women, societal expectations for them to be strong, reluctance to report the violence, and loyalty to the race versus the individual creates additional stress. For African American women residing within a society where institutional inequities are prevalent, the stress of involvement in an IPV relationship may be one of myriad factors contributing to feelings of pessimism, hopelessness, and helplessness, which in turn negatively impact their mental health.

Another sequelae of IPV that has begun to be examined is parenting stress (Levendosky & Graham-Bermann, 2001), although little attention has been paid to this sequela in low-income, African American women. Parenting stress is the caregiver's feeling that the role of being a parent is stressful (Levendosky & Graham-Bermann, 1998). Whereas general life stresses can include relational and economic factors, parenting stress is relevant only as it relates to the parenting role (e.g., caregiver's thoughts or feelings about her relationship with her child, perception of parenting as negatively affecting social life or partnerships, perception of efficacy in the family caregiver role; Baker, Perilla, & Norris, 2001). Parenting stress, which is influenced by social class, number of children, and relationship satisfaction (Elder, Eccles, Ardelt, & Lord, 1995; Middlemiss, 2003), has been linked to poor parenting practices, child abuse and neglect, poor psychological health (Larson, 2004), and child emotional and behavioral problems (Owen, Thompson, & Kaslow, 2006). Some findings suggest that involvement in an IPV relationship results in higher levels of parenting stress and negatively affects the parenting relationship, while others do not (Holden & Ritchie, 1991; Levendosky & Graham-Bermann, 1998). Alternately, other studies cite economic or financial strain as the predictive factor of parenting stress, particularly for single parents (Levendosky, Lynch, & Graham-Bermann, 2000). Further, some women note that being in a relationship where IPV exists could have a positive effect on parenting, citing increased empathy, attention, and caring for their children to buffer the impact of the violence (Levendosky et al., 2000).

The present study seeks to reveal ways in which coping strategies (i.e., ways of coping, spiritual well-being, social support, service utilization) mediate the association between IPV status (abused, nonabused) and mental health outcomes (i.e., depressive symptoms, anxiety symptoms, parenting stress) among economically disadvantaged African

American women. The mediator model examined posits that IPV is associated with maladaptive coping that leads to symptoms of anxiety and depression and parenting stress. It is hypothesized that specific ways of coping, spiritual well-being, social support, and service utilization will partially mediate the IPV-mental health outcomes link.

Method

Participants

The sample consisted of 143 African American women, ages 21–64, and their children, ages 8–12, for whom they were the legal guardian and with whom they had lived at least 50% of the time during the past year. Sixty-five of these women had experienced IPV within the past year; and 78 had never experienced IPV. To qualify for the IPV (IPV+) group, the female caregiver must have reported levels of violence above the cut-point on the Index of Spouse Abuse (ISA) on either the physical or nonphysical abuse subscales (Hudson & McIntosh, 1981). To qualify for the non-IPV (IPV−) group, the primary female caregiver must have reported no or low levels of IPV in the prior year according to ISA scores. Of the 255 dyads that completed the initial screening protocol in hospital waiting rooms, only 143 completed the entire protocol and thus only data from these 143 dyads are included in this report. The other 112 dyads were screened but did not complete the assessment, did not show for the assessment appointment, did not meet study inclusion criterion, or met study exclusion criteria described below.

Procedure

This investigation was undertaken at a large, comprehensive, university-affiliated, urban public health system that provides medical and psychiatric services for a primarily indigent and African American population. Prior to the initiation of data collection, the study was approved by the university institutional review board and the hospital's research oversight committee.

Recruitment. Research team members (undergraduate and graduate students, and postdoctoral fellows) recruited African American women who had presented for services in medical and emergency care clinics in the general hospital and associated children's hospital. Team members also were on call 24 hours a day to recruit potential participants identified by hospital personnel after seeking services following an IPV incident. Other recruitment efforts included community outreach to battered women's shelters and centers and rehabilitation programs.

Screening. Screening involved two stages. In Stage I, female caregivers with 8- to 12-year-old children were screened by a modified version of the Universal Violence Prevention Screening Protocol (UVPSP; Dutton, Mitchell, & Haywood, 1996; Heron, Thompson, Jackson, & Kaslow, 2003). If women either reported an IPV incident in the prior year or reported that they had never experienced IPV and met study criteria, they were contacted by phone and scheduled for a $2\frac{1}{2}$- to 3-hour interview.

Stage II occurred at the outset of the onsite interview and entailed the administration of brief screening instruments to assess eligibility of each woman and child. Participants were excluded from the study during this stage if their responses revealed that they were (a) medically unstable, (b) cognitively impaired, (c) psychotic (caregivers only), or (d) of a racial/ethnic group other than African American/Black. Responses to the demographic

questionnaire were used to determine the race/ethnicity of the women. They were asked if they considered themselves African American or Black. The women's responses were also used to exclude women and children with life-threatening medical conditions. The Mini Mental State Exam (Folstein, Folstein, McHugh, & Fanjiang, 2001) and the Rapid Estimate of Adult Literacy in Medicine (Williams et al., 1995) were used to rule out women with cognitive limitations that would interfere with their capacity to complete the study protocol (MMSE scores ≤ 24 if literate or ≤ 22 if functionally illiterate). The Peabody Picture Vocabulary Test–III (PPVT-III; Dunn, Dunn, & Dunn, 1997) was used to exclude children with cognitive impairment (score < 70). A psychotic symptom screening questionnaire was used to eliminate women who were actively psychotic. If either the caregiver or the child met exclusion criterion, the assessment was discontinued and the dyad was given $5 to cover the cost of their transportation, a toy for the child, and a snack for both participants.

Assessment. A comprehensive battery was administered in separate, concurrent assessments to the caregiver and the child if they met inclusion criteria during the screening phase. For this report, only data from the caregiver assessments are included. The assessments performed by team members who were trained and supervised weekly were administered verbally given the low functional literacy levels found in adults served by the health system (Williams et al., 1995). Dyads were compensated $50 for completing the protocol. Transportation costs were covered, the child was provided an age-appropriate toy, and the caregiver and child received a snack.

Measures: Predictor Variable

The ISA (Hudson & McIntosh, 1981) categorized women as IPV+ or IPV−. The 30-item ISA, which assesses the presence and severity of physical and nonphysical symptoms of IPV, has good internal consistency reliability, as well as discriminant, content, and construct validity. The measure has two subscales: Index of Spousal Abuse–Physical, (ISA-P) and Index of Spouse Abuse–Non-Physical (ISA-NP; Cronbach alpha coefficients for the ISA-P and ISA-NP abuse subscales were .95 and .97, respectively, for the current sample). The discriminant validity for the ISA-P scale was .73 and for ISA-NP scale was .80. This tool has good psychometric properties in low income, African American samples (Campbell, Campbell, King, Parker, & Ryan, 1994; Cook, Conrad, Bender, & Kaslow, 2003; Tolman, 2001). As recommended by the scale's authors, women were categorized as IPV+ if they scored either ≥ 10 on the ISA physical subscale or ≥ 25 on the ISA nonphysical subscale. Those below the cut-point on both of these subscales were classified as IPV−.

Measures: Outcome Variables

The Symptom Checklist-90–Revised (SCL-90-R; Derogatis, 1992) is a 90-item self-report symptom inventory that indicates psychological symptom patterns using a 4-point Likert scale. It has nine subscales: somatization, obsessive–compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. The test–retest reliability ranges from .78 to .90. The Cronbach alpha coefficients for the current sample ranged from .81 to .93. Content and construct validity also have been established for the SCL-90-R. For this study, only the depression (SCL-90-R-D) and anxiety (SCL-90-R-A) subscales were used.

The 36-item Parenting Stress Index-Short Form (PSI-SF; Abidin, 1995) evaluates the parent–child stressful characteristics on a 5-point Likert scale. The PSI consists of three subscales of major sources of stressors for the parent: parental distress, parent–child dysfunctional interaction, and difficult child. The PSI has good internal consistency for the subscales of parental distress, parent–child dysfunction, difficult child, and total stress (Cronbach alpha coefficients were .80, .86, .85, and .91, respectively, for the current sample). The test–retest reliability was .85 for parental distress, .68 for the parent–child dysfunctional interaction, and .78 for difficult child subscale, and .84 for the total stress.

Measures: Hypothesized Mediators

On the 65-item Ways of Coping Scale (Folkman & Lazarus, 1986), women rate how often they have used each coping behavior in response to a given stressor. Responses are reported on a 5-point Likert scale. The scale has adequate test–retest and internal consistency reliabilities (Cronbach alpha coefficients ranged from .65 to .80 for the subscales for the current sample) and good construct and concurrent validity. Factor analysis yielded eight coping factors, which are described as emotion-focused and problem-focused factors, respectively.

The Spiritual Well-Being Scale (SWBS; Paloutzian & Ellison, 1982) taps spiritual well-being with 20 items rated via a 6-point Likert scale. This scale is not based on any formal religious or ideological orientation. In addition to providing an overall measure of spiritual well-being, there are two subscales of this measure. The Religious Well-Being (RWB) subscale measures an individual's assessment of his or her spiritual life with God. The Existential Well-Being (EWB) subscale assesses an individual's sense of life satisfaction, purpose, community, and current surroundings. The test–retest reliabilities range from .82 to .99 for the overall measure, .88 to .99 for the RWB, and .73 to .98 for the EWB. The internal consistency of the scales is good; Cronbach alpha coefficients were .90, .84, and .86 for the overall measure, RWB, and EWB, respectively, in this sample. Content and construct validity also have been established for the SWBS (Bufford, Paloutzian, & Ellison, 1991; Ellison, 1983; Ellison & Smith, 1991).

The Medical Outcomes Study Social Support Survey (MOS; Sherborne & Stewart, 1991), which is an 18-item, 5-point Likert-type self-report questionnaire, consists of four separate social support subscales (emotional/informational, tangible, affectionate, positive social interaction) and an overall functional social support index. A higher score for an individual scale or for the overall support index indicates more support. The MOS subscales have good internal consistency and test–retest reliabilities, as well as good construct validity. For this study, the internal consistency reliability for the subscales ranged from .81 to .94 and the overall index had an internal consistency reliability of 96.

The Adult Service Utilization Form (ASUF), modeled after the Service Utilization Form (Rothbard, Kuno, Schinnar, Hadley, & Turk, 1999), is a 14-item checklist designed specifically by study investigators for research projects involving women at this health system (Paranjape et al., 2006). This measure assesses the frequency of a woman's utilization of psychiatric, psychological, medical, social service, or self-help services.

Results

Data Analytic Strategy

Chi-square analyses for nominal data and one-way analysis of variance (ANOVA) tests for ordinal data were conducted to examine between group differences on key demographic

variables. To determine whether the relation between IPV and mental health outcomes is mediated by coping variables, mediation was tested in accordance with the recommendations of Baron and Kenny (1986) and Holmbeck (1997). For mediation to be examined, significant relationships must be found between (a) experiencing IPV as measured by the ISA (predictor variable) and coping strategies as assessed by the WOC, SWBS, MOS, and ASUF (hypothesized mediators); (b) African American women's coping strategies (hypothesized mediators) and their mental health functioning and parenting stress as ascertained via the SCL-90-R-D, SCL-90-R-A, and the PSI (outcome variables); and (c) experiencing IPV (predictor variable) and African American women's mental health functioning and parenting stress (outcome variables). To ascertain the association between IPV status (predictor) and the hypothesized mediators, a series of analyses of variance (ANOVAs) were performed with IPV status (IPV+, IPV−) as the independent variable and the hypothesized mediators as the dependent variables. Correlational analyses, using Pearson product-moment correlations, were conducted to determine if the mediators and outcomes were associated, as all of these variables were continuous. To ascertain the association between IPV status (predictor variable) and the outcome variables, a series of ANOVAs were conducted with IPV as the independent variable and the outcomes as the dependent variables. If these associations were found and the prerequisite criteria for mediation were met, then a z test of indirect paths based on Sobel's work (Sobel, 1982, 1988) was used to ascertain if the association between the predictor (IPV) and the outcome (mental health symptoms, parenting stress) was significantly reduced by controlling for the mediator variable (coping).

Sample Descriptives

Table 1 reports descriptive statistics separately for the IPV+ ($n = 65$) and IPV− ($n = 78$) groups, as well as for the total sample. In the total sample, there were 143 African American women, aged 22–52, most of whom did not graduate high school. Most of the women were unmarried, unemployed, and poor. A significant percentage of the sample was homeless. The women had an average of approximately three children. Taken together, this demographic picture reflects the fact that the women in the sample are low-income and are economically disadvantaged. In addition, a high percentage of the women had been hospitalized for a psychiatric illness and/or received substance abuse treatment.

Chi-square analyses and ANOVAs examining between group differences on key demographic variables revealed differences on the following variables: number of abusive relationships, $F(1,140) = 8.37, p < .01$; homelessness, $\chi^2 = 6.53, p < .05$; social security/social security disability, $\chi^2 = 4.93, p < .05$; partner income, $\chi^2 = 8.60, p < .01$; and psychiatric hospitalizations, $\chi^2 = 14.99, p < .01$. The IPV+ women reported more prior abusive partners, more homelessness, and were more often receiving federal assistance, whereas the nonabused women were more likely to report a history of psychiatric hospitalizations. Because these were not defined a priori as variables that would serve as potential covariates for subsequent analyses, group differences on these demographics are noted but not used in the analyses. There were no differences on any other major demographic variables of interest.

Testing Prerequisite Criteria for Mediation

ANOVAs comparing IPV+ and IPV− women on the various coping strategies yielded significant degrees of freedom on six of the eight WOC subscales (ps $< .01$), with the

Table 1
Background Data for Study Participants

	IPV+		IPV-		Total sample	
Variable	*M*/Freq	*SD*/%	*M*/Freq	*SD*/%	*M*/Freq	*SD*/%
Mean age (in years)	32.12	6.33	32.38	7.03	32.27	6.699
Mean years of education	11.98	2.14	11.89	1.74	11.93	1.928
Mean partners in past year	1.52	.75	1.51	1.92	1.52	1.500
Mean abusive relationships	.95	.57	.48	1.21	.70	.996
Mean children	3.55	1.70	3.32	1.85	3.43	1.78
Mean people in household	5.32	2.57	4.74	1.89	4.99	2.23
Currently married/cohabitating (%)	18	28.1	29	37.1	47	33.1
Currently employed (%)	19	29.7	31	40.3	50	35.5
Currently homeless (%)	15	23.1	6	7.8	21	14.8
Ever receive psychiatric treatment (%)	17	26.6	3	3.8	20	14.1
Ever receive substance abuse treatment (%)	8	12.5	7	9.0	15	10.6
Ever involved in legal system (%)	31	47.7	25	32.1	56	39.2
Incarcerated in jail or prison (%)	27	87.1	18	69.2	45	78.9
Income (%)						
Monthly individual income						
0–499	31	48.5	35	45.5	66	46.8
500–999	24	37.5	21	27.3	45	31.9
1000–1999	8	12.5	18	23.4	26	18.4
>2000	1	1.6	3	3.9	4	2.8
Temporary assistance for needy families (%)	20	30.8	15	19.5	35	24.6
Food stamps (%)	34	52.3	37	48.1	71	50
Social Security/Social Security Disability (%)	17	26.2	9	11.7	26	18.3
Child support (%)	22	33.8	22	28.6	44	31.0
Current partner provides income (%)	7	10.8	24	31.2	31	21.8
Parents provides income (%)	6	]9.4	8	10.4	14	9.9

Note. Sample sizes vary because of missing data.

exception of positive reappraisal and seeking social support. Results also revealed significant between-group differences on the following mediators: SWBS, MOS, and ASUF (Criterion 1). These data indicated that women in the IPV+ group reported significantly poorer coping, lower spiritual well-being, less social support, and more difficulties accessing resources than their nonabused counterparts. See Table 2 for ANOVA findings.

As shown in Table 3, six of the WOC subscales, as well as the SWBS, MOS, and ASUF were correlated significantly with all three outcome variables. Two WOC subscales (planful problem-solving, positive reappraisal) were correlated significantly with depression and anxiety subscale scores, but not parenting stress. One of the WOC subscales (seeking social support) was correlated significantly with parenting stress and anxiety, but not depression. Thus, less adaptive coping, low levels of spiritual well-being and social support, and difficulties accessing resources were associated with more parenting stress and symptoms of anxiety and depression. See Table 3 for correlational analyses.

ANOVAs conducted with IPV as the independent variable and the outcomes as the dependent variables indicated that abused women reported significantly more depressive symptoms, anxiety symptoms, and parenting stress (Criterion 3). See Table 2 for additional ANOVA findings.

Table 2
Group Differences for All Variables Used in Analysis of Variance Analysis of Variance Results for Coping Variables Regressed on Intimate Partner Violence (IPV) Group (Criterion 1)

Coping strategy	*F*	*df*
Confrontive coping	17.63**	1,140
Distancing	9.17**	1,140
Accepting responsibility	14.86**	1,140
Escape avoidance	17.48**	1,140
Planful problem solving	7.71**	1,140
Positive reappraisal	2.17	1,140
Self-controlling	10.74**	1,140
Seeking social support	2.40	1,140
Spiritual well-being total	12.29**	1,141
Social support total	29.03**	1,141
Service utilization total	7.11**	1,141

Analysis of Variance Results for Mental Health Outcome Variables and IPV Status (Criterion 3)

Mental health outcome	*F*	*df*
Depressive symptoms	54.78**	1,141
Anxiety symptoms	27.93**	1,141
Parenting stress	22.64**	1,141

*$p < .05$. **$p < .01$.

Testing for Mediation

For those hypothesized mediators that met the prerequisite criteria for mediation, Sobel's test of indirect effects was used to determine if these hypothesized mediators accounted

Table 3
Correlations Between Coping Variables and Mental Health Outcomes Variables (Criterion 2)

Variable	Depression	Anxiety	Parenting stress
1. Confrontive coping	.476**	.443**	.304**
2. Distancing	.401**	.333**	.263**
3. Accepting responsibility	.405**	.390**	.234**
4. Escape avoidance	.577**	.519**	.307**
5. Planful problem solving	.281**	.283**	.059
6. Positive reappraisal	.169*	.209*	.087
7. Self-controlling	.386**	.311**	.303**
8. Seeking social support	.163	.184*	.194*
9. Spiritual well-being total	−.386**	−.256**	−.388**
10. Social support total	−.412**	−.332**	−.371**
11. Service utilization total	.268**	.315**	.176*

*$p < .05$. **$p < .01$.

for the associations between IPV and the three outcome variables. Sobel's test was only performed for those subscales WOC subscales that met all prerequisite criteria for testing mediation for the outcome variables in question. The SWBS, MOS, and ASUF all met the prerequisite criterion for testing mediation; therefore, Sobel's test of indirect effects was conducted to ascertain the mediational role of these variables in the association between the predictor and three outcome variables.

Sobel's test of the indirect effects indicated that several WOC variables significantly mediated the association between IPV and depressive symptoms. These included distancing, $z(139) = 2.39$, $p < .05$, $\beta = .14$; accepting responsibility, $z(139) = 2.62$, $p < .01$, $\beta = .16$; escape avoidance $z(139) = 3.54$, $p < .01$, $\beta = .29$; confrontive coping, $z(139) = 3.10$, $p < .01$, $\beta = .21$; and self-controlling, $z(139) = 2.41$, $p < .05$, $\beta = .13$. In addition, Sobel's tests of the indirect effects of SWBS $z(139) = 2.45$, $p < .01$, $\beta = .14$, and MOS, $z(139) = 2.62$, $p < .01$, $\beta = .18$, were significant for depressive symptoms. Thus, various ways of coping, spiritual well-being, and access to resources appear to play a significant mediating role between IPV status and depressive symptoms (7 of 9; 77% of the links).

Sobel's test of indirect effects indicated that several WOC variables significantly mediated the association between IPV and anxiety. These included distancing, $z(139) = 2.15$, $p < .05$, $\beta = .11$; escape avoidance, $z(139) = 3.37$, $p < .01$, $\beta = .27$; confrontive coping, $z(139) = 3.03$, $p < .01$, $\beta = .21$; and self-controlling, $z(139) = 2.07$, $p < .05$, $\beta = .11$. Further, Sobel's test of indirect effects of MOS, $z(139) = 2.15$, $p < .05$, $\beta = .15$, and ASUF, $z(139) = 1.96$, $p < .05$, $\beta = .10$, were significant for symptoms of anxiety. Thus, various ways of coping, levels of social support, and efforts to access resources appear to play a significant mediating role between IPV status and anxious symptoms (6 of 9; 66% of the links).

Sobel's test of indirect effects indicated that several variables of the WOC significantly mediated the association between IPV and parenting stress. These included escape avoidance, $z(139) = 2.13$, $p < .05$, $\beta = .08$; confrontive coping, $z(139) = 2.11$, $p < .05$, $\beta = .08$; and self-controlling, $z(139) = 2.06$, $p < .05$, $\beta = .07$. In addition, Sobel's tests of the indirect effects of MOS, $z(139) = 2.68$, $p < .01$, $\beta = .12$, and SWBS, $z(139) = 2.58$, $p < .01$, $\beta = .10$, were significant for parenting stress. Thus, various ways of coping, social support, and spiritual well-being appear to play a moderate mediational role in the link between IPV status and parenting stress (5 of 9; 55% of the links).

Discussion

This is the first study to examine the associations among abuse status, coping processes, and mental health outcomes among low-income, African American women. Consistent with predictions, the abused women in the present sample have lower levels of spiritual well-being and endorse less social support compared to their nonabused counterparts. Contrary to predictions, they access resources that are more formal. This likely reflects the fact that they have more needs for medical, mental health, and social services. Additionally, as hypothesized, these maladaptive coping patterns were associated with higher levels of depressive and anxious symptoms and greater levels of parenting stress. Further, as expected, those low-income, African American women who acknowledged being abused had more symptoms of depression and anxiety and endorsed higher levels of parenting stress. Finally, a diverse array of coping strategies employed by these women served a mediational role in the association between IPV and mental health outcomes. Specifically, economically disadvantaged, abused, African American women who report less adaptive ways of coping, lower levels of spiritual well-being and social support, and more efforts to access formal resources were more likely to exhibit symptoms of depression

and anxiety and to endorse elevated levels of parenting stress. Findings indicate that women in abusive relationships attempted to use both confrontational and passive coping, which may be maladaptive, given that use of a greater number of coping strategies has been shown to be related to higher rates of abuse (Goodman et al., 2005).

Findings are consistent with studies that indicate that abused women are less likely to utilize adaptive ways of coping (Kaslow et al., 2002; Meadows, Kaslow, Thompson, & Jurkovic, 2005). They also have lower levels of spiritual well-being (Kaslow et al., 2002; Meadows et al., 2005) and social support (Sullivan, Tan, Basta, Rumptz, & Davidson, 1992; Thompson et al., 2000) than do their nonabused peers. Further, they have a need to access more resources than do IPV− women, a result found by other investigators (Bergman, Brismar, & Nordin, 1992; Sansone, Wiederman, & Sansone, 1997; Ulrich et al., 2003). Our own research reveals that they are most likely to use more mental health services than nonabused women (Paranjape et al., 2006). Problems with effective coping may be particularly salient for women who are economically disadvantaged and victims of IPV. Their available options for coping are fewer because use of active forms of coping may decrease the safety of these women and possibly their children (Waldrop & Resick, 2004). Further, they have fewer tangible resources than do economically advantaged women, making them more likely to feel a loss of control and more fearful of consequences that may follow use of active coping strategies.

Examination of study means indicated that economically disadvantaged women who were not abused used passive coping strategies less than abused women further suggesting that contextual factors, such as threat to safety and feeling loss of control, have a role in the coping strategies employed by the women. As reported by Thompson and colleagues (Thompson et al., 2000), women who are not financially independent or have children by their abusers are more likely to be abused repeatedly and less likely to obtain resources needed to make them feel more in control of the abuse or efficacious enough to secure their own safety and that of their children. Abused women in this study also employed resistive forms of coping, suggesting that women may employ a variety of coping strategies when attempting to deal with a given stressor. Unfortunately, as women increase the number of strategies for coping with violence, whether they use placating strategies (i.e., tactics aimed at changing the abuser's behavior without challenging power or control) or resistive strategies (i.e., tactics aimed at changing the abusers behavior and power), re-abuse increases (Goodman et al., 2005).

Our data indicate that maladaptive ways of coping, low levels of spiritual well-being and social support are associated with elevated psychological distress and parenting stress, which is in keeping with the extant literature (Kaslow et al., 2002; Kocot & Goodman, 2003). It could be that employing active/resistive strategies placed them more at risk of abuse and re-abuse (Goodman et al., 2005), which in turn increased their vulnerability to psychological distress and challenges with parenting. Examination of the coping strategies utilized by the IPV+ women provides a clearer understanding of why they reported more symptoms of depression and anxiety and parenting stress, despite varied efforts of managing abuse. The IPV+ women were more likely to use confrontive coping, distancing, accepting responsibility, escape avoidance, self-controlling, and adult service utilization. Although confrontive coping is an active form of coping, within the context of an abusive relationship confrontive coping may place a woman at risk for more abuse (Goodman et al., 2005). Women in the sample may have learned that active coping makes the abuse worse, making passive coping appear to be a better option. Furthermore, the inability to exert control of the situation directly may result in the increased symptoms of depression and anxiety and parenting stress. The IPV+ women were more likely to use distancing as a coping strategy. Examples of distancing are acting as if an abuse incident

did not occur, not permitting oneself to think about the abuse, refusing to think about the abuse as a serious problem, and trying to find something positive about the situation. Women who use distancing can tell themselves that they are not being abused and they may be in denial about the severity of the abuse. A woman who uses distancing may also focus on the good times in the relationship. Although distancing may not increase the abuse the same way as confrontive coping, it does little to empower the woman to gain more control in the relationship or secure her safety and that of her children. This may make her feel more helpless and have lower self-esteem, which in turn may render her more vulnerable to symptoms of anxiety and depression, as well as parenting stress.

Abused women who use accepting responsibility as a coping strategy may blame or criticize themselves when they are abused. They may believe that they somehow caused the abuse and may try to be apologetic when the abuser accuses her of engaging in a behavior that caused the abuse. This coping strategy was only associated with depressive symptoms among the IPV+ women. Accepting responsibility may be more likely to evoke negative thoughts about themselves and their ability to maintain a healthy relationship.

Women in abusive relationships who use escape-avoidance are likely to employ a variety of tools to help them escape or avoid the pain of the abusive relationship. Examples are overeating, using illicit or prescription drugs, sleeping, fantasizing about the relationship improving, and hoping that somehow the relationship improves. Women who use escape-avoidance may or may not use social support, may feel a loss of control and like the IPV+ women in this study, experience depression, anxiety, and parenting stress.

The IPV+ women were more likely to use self-controlling as a coping strategy. Women who use this strategy may be more prone to trying to solve the problem alone and likely to experience re-abuse. Self-controlling is a coping strategy where a person attempts to solve a problem on one's own without involving others, attempting to approach the situation in a calm manner, trying not to be offensive, and carefully thinking about what one would say. This active coping strategy may work in situations where there is equal power. In an abusive relationship, the abusive partner could possibly be threatened by this approach and may become more abusive. The woman may experience more abuse and not have a support system because she relied solely on herself. Among our sample of women, self-controlling was associated with depression, anxiety, and parenting stress.

Abused women were more likely than were nonabused women to endorse high levels of service utilization, and the use of such services was associated with anxiety and parenting stress. This finding may seem counter intuitive; however, Fraser (Fraser et al., 2002) indicates that many abused African American women prefer to seek social support from friends, rather than a formal support system. This suggests that formal support systems to not provide services that are helpful or effective.

The IPV+ women were less likely than IPV− women to use spirituality and social support as coping strategies. This is unfortunate; as these coping methods are likely to be associated with feelings of self-control and mastery, and not with symptoms of depression and anxiety or with parenting stress. There is much evidence for the benefits of social support for women who have experienced IPV. However, there is little research on spiritual well-being or prayer in the IPV literature. Prayer is a private, yet active form of coping that may help the women maintain a sense of inner strength they may feel that they get guidance and support without being at risk for re-abuse. Spirituality or prayer consistent with the woman's belief system is an internal resource that can be encouraged, particularly among African American women. Women with a sense of inner strength are likely to feel that they can have a life outside of the abusive relationship, making them more resilient to IPV.

The findings that ways of coping, spiritual well-being, social support, and ability to access resources mediate the association between IPV status and mental health outcomes and parenting stress suggest that these mediators should be intervention targets. Thus, it is imperative that mental health professionals not only focus on the nature of the women's abuse experience but also address their attempts at coping. Interventions should target helping abused women to identify and utilize a few effective coping strategies that fit with their particular situation and level of comfort in using the strategies. Treatment programs, support groups, and other providers of social support can help IPV+ women employ empowering coping strategies built on resiliencies. It would be optimal for interventions to guide women in building and utilizing internal resources and an external support network in addition to helping them safely leave abusive relationships. Helping women ascertain sources of external support they prefer to use, such as religious leaders, mental health providers, shelters, and support groups reduces isolation. Identifying personal strengths can help women begin to feel a sense of control and mastery in life.

The study findings need to be considered in light of a number of limitations. One disadvantage of this study is the cross-sectional design. Future studies should examine the coping strategies and their role in mental health outcomes across time. A second potential limitation relates to the generalizability of the findings. Although the results of this study will generalize well to Southern economically disadvantaged African American women, they may not generalize to high socioeconomic status (SES) African American women or other women from different races, ethnic/cultural groups, SES, or other regions of the United States and abroad. Furthermore, mental health outcomes are based on self-report measures, thus symptoms and not the disorders have been studied. Thus, the results may not generalize to individuals with clinical depression and anxiety.

Despite the aforementioned limitations, this investigation adds to the sparse literature on IPV and coping among African American women. This study is beneficial because two groups of economically disadvantaged African American women were compared rather than comparing women to men, which has been so common in the coping literature. Thus, this study adds information about a specific subset of women, namely low-income abused African American women, and shows the role of contextual factors in determining the use of coping strategies. Furthermore, within the violence literature, more research on IPV among African American women is needed given that this is a high-risk group. Furthermore, the beneficial role of spirituality was explored in coping and should be examined more in depth in future studies. It is a particularly relevant construct to examine within the African American community. Finally, the mediational analyses indicate that coping, spiritual well-being, social support, and accessing resources may be a crucial focus of interventions for abused, African American women.

References

Abidin, R. R. (1995). Parenting Stress Index (3rd ed.). Odessa, FL: Psychological Assessment Resources.

Bachman, R., & Coker, A. L. (1995). Police involvement in domestic violence: The interactive effects of victim injury, offender's history of violence, and race. Violence and Victims, 10, 91–106.

Baker, C. K., Perilla, J. L., & Norris, F. H. (2001). Parenting stress and parenting competence among Latino men who batter. Journal of Interpersonal Violence, 16, 1139–1157.

Banks-Wallace, J., & Parks, L. (2004). It's all sacred: African American women's perspectives on spirituality. Issues in Mental Health Nursing, 25, 25–45.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51, 1173–1182.

Bent-Goodley, T. B. (2004). Perceptions of domestic violence: A dialogue with African American women. Health and Social Work, 29, 307–316.

Bergman, B., Brismar, B., & Nordin, C. (1992). Utilization of medical care by abused women. British Medical Journal, 305, 27–28.

Boes, M. E. (1998). Battered women in emergency rooms: Emerging roles for the ER social worker and clinical nurse specialist. In A. R. Roberts (Ed.), Battered women and their families: Intervention strategies and treatment programs (2nd ed.; pp. 205–209). New York: Springer.

Bufford, R. K., Paloutzian, R. F., & Ellison, C. W. (1991). Norms of the Spiritual Well-Being Scale. Journal of Psychology and Theology, 19, 56–70.

Bybee, D. I., & Sullivan, C. M. (2002). The process through which an advocacy intervention resulted in positive change for battered women over time. American Journal of Community Psychology, 30, 103–132.

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, 259–274.

Campbell, J. C., & Belknap, R. A. (1997). Predictors of depression in battered women. Violence Against Women, 3, 271–294.

Campbell, J. C., & Lewandowski, L. A. (1997). Mental and physical health effects of intimate partner violence on women and children. Psychiatric Clinics of North America, 20, 353–374.

Carlson, M. J., Harris, S. D., & Holden, E. W. (1999). Protective orders and domestic violence: Risk factor for re-abuse. Journal of Family Violence, 14, 205–226.

Cook, S. L., Conrad, L., Bender, M., & Kaslow, N. J. (2003). The internal validity of the Index of Spouse Abuse in African American women. Violence and Victims, 18, 641–657.

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

Derogatis, L. (1992). SCL-90-R: Administration, scoring, and procedures manual: II. Townson, MD: Clinical Psychometric Research.

Dunn, L. M., Dunn, L. M., & Dunn, D. M. (1997). Peabody Picture Vocabulary Test–Third edition manual. Circle Pines, MN: American Guidance Service.

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.

Elder, G. H., Eccles, J. S., Ardelt, M., & Lord, S. (1995). Inner-city parents under economic pressure: Perspectives on the strategies of parenting. Journal of Marriage and Family, 57, 771–784.

El-Khoury, M. Y., Dutton, M. A., Goodman, L. A., Engel, L., Belamaric, R. J., & Murphy, M. (2004). Ethnic differences in battered women's formal help-seeking strategies: A focus on health, mental health, and spirituality. Cultural Diversity and Ethnic Minority Psychology, 10, 383–393.

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

Ellison, C. W., & Smith, J. (1991). Toward an integrative measure of health and well-being. Journal of Psychology and Theology, 19, 35–48.

Folkman, S., & Lazarus, R. S. (1986). The dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. Journal of Personality and Social Psychology, 50, 992–1003.

Folkman, S., Lazarus, R. S., Pimley, S., & Novacek, J. (1987). Age differences in stress and coping processes. Psychology and Aging, 2, 171–184.

Folstein, M. F., Folstein, S. E., McHugh, P. R., & Fanjiang, G. (2001). Mini-Mental State Examination. Odessa, FL: Psychological Assessment Resources.

Fraser, I. M., McNutt, L.-A., Clark, C., Williams-Muhammed, D., & Lee, R. (2002). Social support choices for help with abusive relationships: Perceptions of African American women. Journal of Family Violence, 17, 363–375.

Fugate, M., Landis, L., Riordan, K., Naureckas, S., & Engel, B. (2005). Barriers of domestic violence help-seeking: Implications for intervention. Violence Against Women, 11, 290–310.

Goodman, L. A., Dutton, M. A., Vankos, N., & Wieinfurt, K. (2005). Women's resources and use of strategies as risk and protective factors for re-abuse over time. Violence Against Women, 11, 311–336.

Gramling, L. F., Lambert, V. A., & Pursley-Crotteau, S. (1998). Coping in young women: Theoretical introduction. Journal of Advanced Nursing, 28, 1082–1091.

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.

Henning, K. R., & Klesges, L. M. (2002). Utilization of counseling and supportive services by female victims of domestic abuse. Violence and Victims, 17, 623–636.

Heron, S. L., Thompson, M. P., Jackson, E. B., & Kaslow, N. J. (2003). Do responses to an intimate partner violence screen predict scores on a comprehensive measure of intimate partner violence in low-income Black women? Annals of Emergency Medicine, 42, 483–491.

Holden, G. W., & Ritchie, K. L. (1991). Linking extreme marital discord, child rearing, and child behavior problems: Evidence from battered women. Child Development, 62, 311–327.

Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. Journal of Consulting and Clinical Psychology, 65, 599–610.

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

Hutchison, I., & Hirschel, J. (1998). Abused women: Help-seeking strategies and police utilization. Violence Against Women, 4, 436–456.

Kaslow, N. J., Thompson, M. P., Okun, A., Price, A., Young, S., Bender, M., et al. (2002). Risk and protective factors for suicidal behavior in abused African American women. Journal of Consulting and Clinical Psychology, 70, 311–319.

Kocot, T., & Goodman, L. A. (2003). The roles of coping and social support in battered women's mental health. Violence Against Women, 9, 1–24.

Larson, N. C. (2004). Parenting stress among adolescent mothers in the transition to adulthood. Child and Adolescent Social Work Journal, 21, 457–477.

Levendosky, A., & Graham-Bermann, S. (1998). The moderating effects of parenting stress on children's adjustment in woman-abusing families. Journal of Interpersonal Violence, 13, 383–397.

Levendosky, A., & Graham-Bermann, S. (2001). Parenting in battered women: The effects of domestic violence on women and their children. Journal of Family Violence, 16, 171–192.

Levendosky, A., Lynch, S. M., & Graham-Bermann, S. (2000). Mothers' perceptions of the impact of women abuse on their parenting. Violence Against Women, 6, 247–271.

Lewis, C. S., Griffing, S., Chu, M., Jospitre, T., Sage, R. E., Madry, L., et al. (2006). Coping and violence exposure as predictors of psychological functioning in domestic violence survivors. Violence Against Women, 12, 340–354.

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

Lykes, M. B. (1983). Discrimination and coping in the lives of Black women. Journal of Social Issues, 39, 79–100.

Mattis, J. (2002). Religion and spirituality in the meaning making and coping experiences of African American women: A qualitative analysis. Psychology of Women Quarterly, 26, 309–321.

McAdoo, H. P. (1995). Stress levels, family health patterns, and religiosity in middle- and working-class African American single mothers. Journal of Black Psychology, 21, 424–449.

McCauley, J., Kern, D. E., Kolodner, K., Dill, L., Schroeder, A. F., DeChant, H. K., et al. (1995). The "battering syndrome": Prevalence and clinical characteristics of domestic violence in primary care internal medicine patients. Annals of Internal Medicine, 123, 737–746.

Meadows, L. A., Kaslow, N. J., Thompson, M. P., & Jurkovic, G. J. (2005). Protective factors against suicide attempt risk among African American women experiencing intimate partner violence. American Journal of Community Psychology, 36, 109–121.

Middlemiss, W. (2003). Poverty, stress, and support: Patterns of parenting behavior among lower-income Black and lower-income White mothers. Infant and Child Development, 12, 293–300.

Moos, R. H., & Billings, A. G. (1982). Conceptualizing and measuring coping resources and processes. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects (pp. 212–230). New York: Free Press.

Neal-Barnett, A. (2003). Soothe your nerves: The Black woman's guide to understanding and overcoming anxiety, panic, and fear. New York: Fireside Books.

Neighbors, H. W., Musick, M. A., & Williams, D. R. (1998). The African American minister as a source of help for seniors' personal crisis: Bridge or barrier to mental health care? Health Education and Behavior, 25, 759–777.

Owen, A. E., Thompson, M. P., & Kaslow, N. J. (2006). The mediating role of parenting stress in the relation between intimate partner violence (IPV) and child adjustment. Journal of Family Psychology, 20.

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.

Paranjape, A., Heron, S., & Kaslow, N. J. (2006). Utilization of services by abused, low income, African American women. Journal of General Internal Medicine, 21, 189–192.

Paulozzi, L. J., Saltzman, L. E., Thompson, M. P., & Holmgreen, P. (2001). Surveillance for homicide among intimate partners—United States, 1982–1998. Morbidity and Mortality Weekly Report, 50, 1–16.

Pearlin, L. L., & Schooler, C. (1978). The structure of coping. Journal of Health and Social Behavior, 19, 2–21.

Ramos, B. M., Carlson, B. E., & McNutt, L.-A. (2004). Lifetime abuse, mental health, and African American women. Journal of Family Violence, 19, 153–164.

Rennison, C. M., & Planty, M. (2003). Nonlethal intimate partner violence: Examining race, gender, and income patterns. Violence and Victims, 18, 433–443.

Rennison, C. M., & Welchans, S. (2000). Intimate partner violence (No. NCJ-178247). Washington DC: Department of Justice.

Romero, R. E. (2000). The icon of the strong Black woman: The paradox of strength. In L. C. Jackson & B. Greene (Eds.), Psychotherapy with African American women (pp. 225–238). New York: Guilford Press.

Rothbard, A. B., Kuno, E., Schinnar, A. P., Hadley, T. R., & Turk, R. (1999). Service utilization and cost of community care for discharged state hospital patients: A 3-year follow-up study. American Journal of Psychiatry, 156, 920–927.

Sansone, R. A., Wiederman, M. W., & Sansone, L. A. (1997). Health care utilization and history of trauma among women in a primary care setting. Violence and Victims, 12, 165–172.

Schornstein, S. L. (Ed.). (1997). Domestic violence and individual health care: What every professional needs to know. Thousand Oaks, CA: Sage.

Sherborne, C. D., & Stewart, A. C. (1991). The MOS Social Support Survey. Social Science Medicine, 32, 705–714.

Shorter-Gooden, K. (2004). Multiple resistance strategies: How African American women cope with racism and sexism. Journal of Black Psychology, 30, 406–425.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equations models. In S. Leinhart (Ed.), Sociological methodology (pp. 290–312). San Francisco: Jossey-Bass.

Sobel, M. E. (1988). Direct and indirect effect in linear structural equation models. In J. S. Long (Ed.), Common problems/proper solutions: Avoiding error in quantitative research (pp. 46–64). Beverly Hills, CA: Sage.

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., 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.

Taylor, R. J., & Chatters, L. M. (1986). Patterns of informal support to elderly Black adults: Family, friends, and church members. Social Work, 31, 432–438.

Thompson, M. P., Kaslow, N. J., & Kingree, J. B. (2002). Risk factors for suicide attempts among African American women experiencing recent intimate partner violence. Violence and Victims, 17, 283–295.

Thompson, M. P., Kaslow, N. J., Kingree, J. B., Rashid, A., Puett, R., Jacobs, D., et al. (2000). Partner violence, social support, and distress among inner-city African American women. American Journal of Community Psychology, 28, 127–143.

Tjaden, P., & Thoennes, N. (2000). Full report of the prevalence, incidence, and consequences of violence against women: Findings from the National Violence Against Women Survey (No. 93-IJ-CX-0012). Washington DC: National Institute of Justice, Office of Justice Programs.

Tolman, R. (2001). The validation of the Psychological Maltreatment of Women Inventory. In K. D. O'Leary & R. D. Maiuro (Eds.), Psychological abuse in violent domestic relations (pp. 47–59). New York: Springer.

Ulrich, Y. C., Cain, K. C., Sugg, N. K., Rivara, F. P., Rubanowice, D. M., & Thompson, R. S. (2003). Medical care utilization patterns in women with diagnosed domestic violence. American Journal of Preventive Medicine, 24, 9–15.

Valentine, P. B., Roberts, A. R., & Burgess, A. W. (1998). The stress crisis continuum: Its applications to domestic violence. In A. R. Roberts (Ed.), Battered women and their families: Intervention strategies and treatment programs (2nd ed., pp. 29–57). New York: Springer.

Waldrop, A. E., & Resick, P. A. (2004). Coping among adult female victims of domestic violence. Journal of Family Violence, 19, 291–302.

West, C. M., Kantor, G. K., & Jasinski, J. L. (1998). Sociodemographic predictors and cultural barriers to help-seeking behavior by Latino and Anglo American battered women. Violence and Victims, 13, 361–375.

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