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Coping Among Victims of Relationship Abuse: A Longitudinal Examination

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Abstract

This longitudinal study examined the associations between relationship abuse, coping variables, and mental health outcomes among a sample of battered women obtained from shelter and nonresidential community agencies (N = 61). Sexual aggression was a stronger predictor of poorer mental health than was physical assault. Engagement coping strategies were generally predictive of positive mental health, and disengagement coping strategies were generally predictive of poorer mental health. Results highlight the complexity of the associations between different forms of relationship abuse, coping strategies, and mental health among this population.

Keywords

battered women; depression; anxiety; PTSD symptoms

The abuse of women in intimate relationships is a serious national public health problem. Approximately 1.5 million women are physically assaulted and/or raped by an intimate male partner in the United States annually (Centers for Disease Control and Prevention, 2003). These assaults are associated not only with direct (fatal and nonfatal) injuries and physical health problems but also with a range of psychosocial and mental health problems (Campbell, 2002; Koss, 1990). Although coping and the recovery environment are thought to be critical for the psychosocial adjustment of battered women (Carlson, 1997; Sullivan & Bybee, 1999), there has been a notable dearth of empirical investigations examining the relationship between different forms of coping and mental health outcomes among this population (Waldrop & Resick, 2004). Investigations that shed light on the optimal coping strategies for battered women are urgently needed to inform intervention, prevention, and advocacy efforts.

Coping is typically defined as cognitive and behavioral responses used to manage internal or external demands perceived as taxing or exceeding the person's resources (Lazarus & Folkman,

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1984). Most of the available coping studies of battered women have examined components of *problem-focused coping* and *emotion-focused coping* (Lazarus & Folkman, 1984). Problem-focused coping refers to taking active steps toward altering the source of stress. Emotion-focused coping involves attempts to manage the emotional distress accompanying a stressor.

Mitchell and Hodson (1983) examined associations between a coping measure developed by Billings and Moos (1981) and psychosocial adjustment outcomes among a shelter sample of battered women. These researchers found that both problem-focused and emotion-focused coping behaviors were associated with less severe depression and higher self-esteem and mastery. In another investigation of battered women in shelter, Arias and Pape (1999) used the Ways of Coping Checklist—Revised (Folkman & Lazarus, 1985; Forsythe & Compas, 1987) and found that greater use of emotion-focused coping was related to higher levels of symptomatology of posttraumatic stress disorder (PTSD). Problem-focused coping was not associated with this outcome. More recently, Kocot and Goodman (2003) examined relationships between problem-focused coping, assessed using three problem-focused scales of the COPE (Carver, Scheier, & Weintraub, 1989), and symptoms of PTSD and depression among a sample of court-involved battered women. Contrary to expectations, problem-focused coping was associated with higher levels of PTSD symptoms and depression, particularly among participants without supportive social networks.

Inconsistent results from investigations of problem-focused and emotion-focused coping among samples of battered women may be due to differences in the conceptualization and measurement of coping strategies across studies (Follingstad, Neckerman, & Vormbrock 1988; Waldrop & Resick, 2004). It is possible that a more fine-grained analysis would better elucidate the effects of more specific forms of problem-focused and emotion-focused coping strategies among battered women. Thus, another potentially important conceptual distinction among these coping strategies is that of engagement versus disengagement coping (Tobin, Holroyd, Reynolds, & Wigal, 1989). Engagement coping involves active attempts to manage the stressful situation. Disengagement coping refers to attempts at problem avoidance or tension reduction through escapist thoughts and behavior. Disengagement coping strategies have been shown to be associated with higher levels of hopelessness, depression, and PTSD symptoms among battered women (Clements, Sabourin, & Spiby, 2004; Kemp, Green, Hovanitz, & Rawlings, 1995). Although much less attention has focused on engagement coping among battered women and one study did not find an association between this form of coping and PTSD symptoms (Kemp et al., 1995), it is plausible that engagement forms of emotion-focused coping (e.g., expressing emotions, marshalling social support) and problem-focused coping (e.g., problem solving, cognitive restructuring) would be associated with better mental health functioning.

Previous studies of coping among battered women have relied on cross-sectional designs. This is problematic given possible reciprocal relationships between mental health difficulties and specific coping strategies and the effects of response biases (Clements et al., 2004). In addition, little to no research has examined the longitudinal relationship between intimate partner sexual aggression and mental health outcomes despite findings from cross-sectional studies indicating that this form of abuse is a stronger unique predictor of trauma symptomatology than physical assault (Bennice, Resick, Mechanic, & Astin, 2003). We attempted to address these limitations by examining the impacts of intimate partner physical assault, sexual aggression, problem-focused engagement coping, emotion-focused engagement coping, problem-focused disengagement coping, and emotion-focused disengagement coping on subsequent mental health outcomes. We expected that both physical assault and sexual aggression would longitudinally predict poorer mental health while controlling for baseline mental health. In addition, the engagement coping variables were hypothesized to be uniquely predictive of more

positive mental health, and the disengagement coping variables were hypothesized to be uniquely predictive of poorer mental health.

METHOD

Data Source and Sample

Participants were a sample of 61 women who participated in a baseline assessment and a 6-month follow-up from a larger investigation into the psychosocial functioning of those seeking help from shelters and nonresidential community agencies serving battered women. Inclusion criteria for the current study were as follows: (a) participants reported involvement in an intimate relationship with a male abuser for at least 3 months during the previous year; (b) participants reported that their most recent physical assault occurred more than 2 weeks but less than 6 months prior to baseline, to avoid the inflation of symptoms in response to very recent assaults and to minimize difficulties with recall for more distant incidents; and (c) participants reported at least two severe or four minor acts of physical assault on the Conflict Tactics Scale (Straus, 1979) during the previous year or a combination of at least one severe and two minor acts of physical assault.

Study participants were drawn from an initial pool of 142 eligible participants for whom follow-up assessments were attempted. All potential candidates who were able to provide at least one method of contact were deemed eligible for follow-up. Reasons for noninclu-sion were due mostly to the inability to contact the participant despite repeated attempts (disconnected phones, moved, no forwarding address, and so on) rather than a refusal to participate. No significant differences were found between current study participants and potentially eligible participants who were not contacted on any of the demographic or background variables. These groups also were very similar on the baseline study variables, with the only significant difference found for problem-focused disengagement coping, with included participants reporting more of these coping strategies than those who were eligible but not contacted, $t(111) = -2.87$, $p < .01$, $r = -.26$.

Participants consisted of 41 (67%) African Americans, 18 (30%) Whites, one (2%) Native American, and one (2%) Latina. The average age of women at baseline was 35.9 years (*SD* = 9.0 years), and participants had an average of 12.8 years of formal education (*SD* = 1.8 years). Twenty-five (41%) women reported a personal annual income of less than $5,000 over the previous year, 9 (15%) earned $5,001 to $10,000, 16 (26%) earned $10,001 to $20,000, 7 (12%) earned $20,001 to $30,000, and 4 (7%) earned $30,001 to $50,000. Considering total household income during the previous year, 8 (13%) participants reported earnings of less than $5,000, 7 (12%) reported $5,001 to $10,000, 17 (28%) reported $10,001 to $20,000, 11 (18%) reported $20,001 to $30,000, 10 (16%) reported $30,001 to $50,000, and 6 (10%) reported earnings of more than $50,001. Two (3%) participants were missing household income data.

During their most recent abusive relationship, 7 (12%) participants were dating the perpetrator, 25 (41%) were living with him, 20 (33%) were married to him, and 9 (15%) were divorced or separated from him. The average relationship length between the participant and the male abuser was approximately 6.8 years (*SD* = 6.4 years). Participants reported that they experienced physical force from the perpetrator for an average of 4.7 years (*SD* = 5.8 years). Eighteen (30%) of the participants were residing in a battered women's shelter, and 43 (70%) were nonresidential help seekers at baseline. Among the latter group, 11 (26%) were residing with the perpetrator. At baseline, participants reported that an average of 46.3 days (*SD* = 37.6 days) had passed since they were last physically assaulted. At the follow-up assessment, 28 women (46%) reported having seen a therapist, counselor, or other mental health professional at some point during the previous 6 months.

Measures

The following measures were examined in the current investigation and drawn from a larger battery of instruments administered to study participants.

Relationship abuse was measured at baseline using the Conflict Tactics Scale-2 (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). For the present investigation, the 12-item Physical Assault subscale (e.g., *pushed or shoved you, grabbed you, beat you up*) was examined. Additionally, two items based on the CTS2 sexual coercion subscale were used to assess (a) the use of threats or force to coerce the victim to engage in oral or anal sex and (b) the use of threats or force to coerce the victim to engage in vaginal intercourse. Participants indicated the frequency that each abusive behavior occurred during the previous 12 months on a scale ranging from 0 (*never*) to 6 (*more than 20 times*). Each item was recoded to reflect the actual frequency of the behavior (i.e., *3 to 5 times* equals a score of 4), and total abuse scores were computed by summing the frequency scores for the items in each subscale (see Straus, 1990). CTS2 scores were log transformed to reduce skew and kurtosis.

Coping strategies were assessed at baseline with the Coping Strategies Inventory (CSI; Tobin et al., 1989). The CSI is a 72-item instrument designed to encompass the varying constructs that had emerged in the coping literature. CSI items in this study were referenced to coping with the experience of relationship abuse over the previous 2 weeks. The present study focused on the secondary subfactors of the CSI derived from a hierarchical factor analysis by Tobin et al. (1989) and include problem-focused engagement (e.g., *I worked on solving the problems in the situation*), emotion-focused engagement (e.g., *I let my emotions out*), problem-focused disengagement (e.g., *I hoped the problem would take care of itself*), and emotion-focused disengagement (e.g., *I avoided being with people*). Responses for the CSI items are given on a five-point Likert scale ranging from 0 to 4, with higher numbers indicating a greater likelihood of using the method of coping in question. Items that make up each subfactor are summed to compute total scores for each coping strategy. Internal consistency reliability estimates for the four coping subtypes ranged from .85 to .92.

Depression severity was measured at baseline and follow-up with the Beck Depression Inventory—Second Edition (BDI-II; Beck, Steer, & Brown, 1996). The BDI-II is widely used to assess the attitudes and symptoms of depression. The measure consists of 21 self-report items that correspond to the criteria of the disorder given in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) (*DSM-IV;* American Psychiatric Association, 1994). Response options range from 0 to 3 for each item and reflect increasing symptom severity. Total depression severity scores were computed by summing item scores. In the current study, the internal consistency reliability estimate for the BDI-II was .89 at baseline and .94 at follow-up.

Hopelessness was assessed at baseline and follow-up using the Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974). The BHS is a 20-item measure designed to tap negative cognitive expectations about the future, specifically pessimism and hopelessness. Participants are provided a binary response option (*true* or *false*) for each item, and item scores are summed to arrive at a total score, with higher scores indicative of greater hopelessness. The internal consistency reliability estimate for the BHS in the current sample was .89 at baseline and .93 at follow-up.

Anxiety was measured at baseline and follow-up using the state subscale of the State-Trait Anxiety Inventory (STAI-S; Spielberger, Gorsuch, & Lushene, 1970). The STAI-S has been used across a wide range of populations, cultures, and disorders to assess anxiety that one is feeling at a particular moment in time. Participants indicate the degree to which each of 20 items describes how they are feeling at the moment using a five-point Likert scale ranging from

1 (*not at all*) to 4 (*very much so*). A total score is computed by summing the 20 items, with higher scores indicating greater state anxiety. Sample items include *I am tense, I feel comfortable,* and *I am jittery.* The internal consistency reliability estimate for this measure was .93 in the current study at baseline and .96 at follow-up.

PTSD symptoms were examined at baseline and follow-up with the Posttraumatic Diagnostic Scale (PDS; Foa, Cashman, Jaycox, & Perry, 1997). The PDS was designed to serve as a tool for the diagnosis of PTSD according to *DSM-IV* criteria (American Psychiatric Association, 1994) and as a measure of PTSD symptom severity. In addition to an initial trauma screening question, the PDS contains 17 items addressing how frequently each symptom was bothersome to the respondent in the past month. Sample items include *having bad dreams or nightmares about the event* (reexperiencing), *trying not to think about, talk about, or have feelings about the traumatic event* (emotional numbing), and *being jumpy or easily startled* (hyperarousal). Responses range from 0 (*not at all or only one time*) to 3 (*five times or more a week or almost always*), and the 17 items are summed to compute a composite PTSD symptom severity score. The internal consistency reliability estimate for the PDS was .90 at baseline in this study and . 95 at follow-up.

Procedure

On initial contact, all potential participants completed a telephone screen to determine study eligibility based on the previously described criteria. Eligible participants who elected to participate were scheduled for two baseline appointments approximately 2 weeks after the initial screening appointment, usually within several days of each other. During the first visit, women completed measures on a laptop computer in order to reduce the likelihood that discussing their traumatic experiences would inflate their report of trauma-related symptoms. After the completion of these measures, participants completed interviews conducted by clinicians with extensive training and experience with working with people who have experienced trauma. Participants completed several additional questionnaires on a laptop computer during their second visit. Participant tracking procedures for the 6-month follow-ups included monthly phone contacts to maintain contact and obtain the most updated contact information. Participants completed the follow-up interviews at the research site with trained clinicians. During this session, participants were readministered the outcome measures via laptop computer in the same manner as in the initial baseline session.

A number of safety procedures were employed in this study. Interviewers inquired about participants' safety, and women were provided with safety planning information and referrals for clinical services. Throughout the study, no phone messages were left for participants, and no mail was sent to the residences of participants in order to ensure safety. As an additional precaution, security equipment was installed at the research site to protect participants if her abuser followed her to the site. Additionally, each woman had an opportunity to discuss the impact of her study participation with her interviewer and completed an instrument designed to assess her experience with the study (see Griffin, Resick, Waldrop, & Mechanic, 2003).

RESULTS

Table 1 presents descriptive statistics for the study variables. Participants reported experiencing an estimated average of 63 physically assaultive behaviors and 8 acts of sexual aggression during the previous year at baseline, indicating considerable abuse victimization. Average scores on the composite coping measures ranged from 49 to 55, with somewhat higher engagement coping and slightly lower disengagement coping relative to one previous study of undergraduates reporting prior sexual assault (Santello & Leitenberg, 1993). Mean scores on the mental health variables at baseline and follow-up were generally comparable to or higher

than those found among other studies of severely abused women, and suggest the presence of substantial abuse-related symptomatology (Clements et al., 2004;Weaver & Etzel, 2003).

Intercorrelations among the predictor variables examined in this study are presented in Table 2. A significant positive association was found between physical assault and sexual aggression victimization, with this relationship in the medium range of magnitude (see Cohen, 1988). Of the two relationship abuse measures, only sexual aggression was significantly associated with coping. Specifically, sexual aggression was positively associated with problem-focused disengagement coping, and its relationship with emotion-focused disengagement coping was marginally significant. These associations fell within the small to medium range of magnitude. Not surprisingly, the two forms of engagement coping and the two forms of disengagement coping were highly intercorrelated. Further, problem-focused engagement coping was significantly positively associated with both problem-focused disengagement coping (large effect) and emotion-focused disengagement coping (medium to large effect). Finally, emotion-focused engagement coping was significantly positively associated with problem-focused disengagement coping, with a medium to large effect found.

Partial associations between the baseline predictor variables and follow-up mental health outcome variables are presented on Table 3. In each of these analyses, the baseline level of the mental health variable of interest was controlled for in order to examine the unique longitudinal prediction of mental health symptoms. Sexual aggression was significantly and uniquely positively associated with both hopelessness and anxiety, with these associations falling in the medium range of magnitude. The effects of both physical assault and sexual aggression on depression severity were marginally significant, with these effect sizes falling within the small to medium range. Marginally significant negative partial associations were found between problem-focused engagement coping and hopelessness and emotion-focused engagement coping and anxiety, with these associations falling within the small to medium range of magnitude. Partial associations between emotion-focused disengagement coping and all the mental health outcomes were positive, with marginally significant associations with depression severity, hopelessness, and anxiety. All these associations were in the small to medium range.

DISCUSSION

Intimate partner sexual aggression was generally a stronger longitudinal predictor of poorer mental health than physical assault, consistent with cross-sectional studies of battered women focusing on trauma-related symptomatology (Bennice et al., 2003). A lack of clinical attention and devotion of positive coping resources to sexual violence may account for significant longitudinal relationships between this form of abuse and mental health functioning (see Bergen, 1996). The pattern of findings obtained in this study are consistent with the notion that physical assault may lead to more positive engagement forms of coping, while sexual aggression may have led to poorer mental health in part because of an increase in disengagement coping behaviors. It is also possible that differences found between the two abuse measures can be explained in part by the nature of the sample (i.e., battered women) and their lower variability on physical assault victimization. Regardless, study results emphasize the importance of increased screening for intimate partner sexual violence and education efforts for battered women and service providers with respect to the deleterious impacts of this form of abuse (Bennice et al., 2003).

Previous studies examining emotion-focused and problem-focused coping have reported inconsistent findings regarding the relative effectiveness of these strategies (Arias & Pape, 1999; Kocot & Goodman, 2003; Mitchell & Hodson, 1983). Such inconsistencies may be attributable to the use of different measures and conceptualizations of these two coping constructs. Current study results suggest that in addition to the examination of emotion-focused

and problem-focused coping, the distinction between engagement versus disengagement coping assists in the understanding the potentially helpful or harmful strategies that battered women may utilize.

Both of the engagement forms of coping (problem focused and emotion focused) evidenced marginally significant negative associations with mental health outcomes when controlling for baseline mental health, suggesting that these forms of coping lead to improvements in mental health. Roughly comparable partial associations were obtained across these two coping variables. Problem-focused engagement strategies, including problem solving and cognitive restructuring, have been frequently advocated for by researchers and clinicians working with battered women, (Arias & Pape, 1999; Mitchell & Hodson, 1983). These behaviors may be particularly critical with respect to the termination of abusive relationships, the acquisition of tangible resources, and the enlistment of assistance from the legal system. Emotion-focused engagement strategies, which include the expression of emotions and the marshaling of social support, may serve to reduce feelings of social isolation and gain access to important social resources (Carlson, 1997; Mitchell & Hodson, 1983; Sullivan, 1991). Social support has been associated with better mental health functioning (Kemp et al., 1995; Kocot & Goodman, 2003), and intervention and advocacy efforts for battered women often focus on the enhancement of social networks (Carlson, 1997; Sullivan, 1991).

Consistent with some prior research (Clements et al., 2004; Kemp et al., 1995), disengagement coping strategies appeared to increase risk for the development of mental health problems. These findings take on increased importance in light of findings that battered women use a number of disengagement strategies in an effort to cope with their abuse (Follingstad et al., 1988). Although disengagement coping may temporarily allow battered women to avoid dealing with the abuse, use of these strategies may have serious negative long-term consequences (Kemp et al., 1995; Walker, 1991). Emotion-focused disengagement strategies, including self-criticism and social withdrawal, exerted a particularly deleterious impact. In addition to reducing access to important resources and increasing abuse exposure, these strategies are likely to lead to more negative mental health outcomes through their relationship with increased feelings of guilt and shame (Dutton, Burghardt, Perrin, Chrestman, & Halle, 1994; Street & Arias, 2001).

Future investigations should include intrapersonal, resource, and contextual factors and their joint impact on mental health with different forms of coping. For example, recent research has found perceptions of control over relationship abuse to be associated with mental health outcomes among battered women (Clements et al., 2004). Based on the general coping literature suggesting the importance of matching coping behaviors to the controllability of the situation (Roth & Cohen, 1986; Vitaliano, DeWolfe, Maiuro, Russo, & Katon, 1990), one might expect problem-focused engagement coping to be particularly effective when perceived control is high. Researchers should also examine predictors of different forms of coping to better understand factors that may lead to the use of specific coping strategies among this population.

The modest sample size of the current investigation may have provided insufficient power to detect statistically significant associations. Larger sample longitudinal studies are needed to replicate current study findings and to investigate the possible moderating effects of the coping variables of interest on outcomes. Relatedly, the attrition rate in this study was relatively high, although similarities between those who were contacted at follow-up and those who were not on demographic, background, and other study variables mitigate this concern somewhat. Another limitation was the use of a sample of battered women obtained from shelter and nonresidential community agencies. It is possible that these women engaged in higher levels of engagement coping than the general population of battered women since they were selected

in part on the basis of their help-seeking behavior. The degree to which current study findings can be generalized to other, non–help-seeking battered women has yet to be determined.

With these cautions in mind, the current investigation sheds some light on the mental health impact of sexual aggression and on the effects of different coping behaviors used by battered women. Differential associations involving the coping measures of interest point to the intricacy of the relationship between coping and subsequent mental health adjustment among this population. Additional theory-guided longitudinal examinations attempting to further explicate this complexity are needed among both help-seeking and community samples of battered women. Such work will likely prove critical in informing efforts to lessen the impact of relationship abuse on women and their families.

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TABLE 1

Descriptive Statistics for Study Variables

Variable	*M*	*SD*	Range
Baseline			
Physical assault	63.36	63.96	2–256
Sexual aggression	8.44	14.81	0–50
Problem-focused engagement	55.43	14.38	18–84
Emotion-Focused engagement	51.51	14.15	18–79
Problem-focused disengagement	54.85	13.16	18–78
Emotion-focused disengagement	48.61	16.24	18–90
Depression severity	26.00	10.93	1–53
Hopelessness	8.13	5.24	0–19
Anxiety	52.51	10.83	27–74
PTSD symptoms	28.80	10.93	5–48
Follow-up			
Depression severity	19.61	12.90	0–53
Hopelessness	6.97	5.89	0–20
Anxiety	45.44	11.90	26–71
PTSD symptoms	19.14	13.54	0–51

TABLE 2

Intercorrelations Among Predictor Variables

Variable	1	2	3	4	5	6
Physical assault	—					
Sexual aggression	.31**	—				
Problem-focused engagement	.21	−.10	—			
Emotion-focused engagement	.07	−.05	.63***	—		
Problem-focused disengagement	.16	.25**	.62***	.39***	—	
Emotion-focused disengagement	.20	.22*	.39***	.10	.67***	—

* $p < .10$.

** $p < .05$.

*** $p < .01$.

TABLE 3

Partial Associations Between Baseline Predictor Variables and Follow-Up Mental Health Outcomes

Variable	Depression Severity	Hopelessness	Anxiety	PTSD Symptoms
Physical assault	.23*	.07	.17	.12
Sexual aggression	.24*	.36**	.39**	.16
Problem-focused engagement	.04	−.24*	−.19	−.03
Emotion-focused engagement	.01	−.08	−.22*	−.13
Problem-focused disengagement	.17	−.06	.07	.04
Emotion-focused disengagement	.21*	.21*	.24*	.18

Note. The baseline levels of the mental health outcomes were controlled for in each analysis. Physical assault and sexual aggression scores were log transformed to normalize the distributions.

* $p < .10$.

** $p < .01$.