

INTIMATE PARTNER VIOLENCE RESEARCH

The Protective Functions of Social Support and Coping for Women Experiencing Intimate Partner Abuse

BRITTANY E. CANADY and JULIA C. BABCOCK
University of Houston, Houston, Texas, USA

This study evaluated two alternate models exploring protective factors in the relationship between intimate partner abuse and health: one in which social support was proposed to mediate the violence-health relation, and a second in which coping was proposed to mediate this relation, while social support would moderate the abuse-coping relation. Women were administered questionnaires measuring coping, social support, violence, and health status. Relationship violence predicted mental health status only, although mental health did predict physical health. Coping was found to serve as a mediator between abuse and health. Implications for future research and clinical applications are discussed.

KEYWORDS *domestic violence, women's health, social support, coping*

Violence within an intimate relationship has long been known to harm both the physical and mental health of the victim. Attention has recently been devoted to determining how exactly intimate partner violence (IPV) operates in relation to both physical and mental health, as well as searching for variables that may protect against its harmful effects. Some studies have examined environmental or historical factors, such as childhood abuse (Coker,

Received 7 July 2007; revised 21 January, 2008; revised 23 February 2009; accepted 5 May 2009

Address correspondence to Julia C. Babcock, Department of Psychology, 126 Heyne Building, University of Houston, Houston, TX 77204-5022. E-mail: jbabcock@uh.edu

Watkins, Smith, & Brandt, 2003); others have examined intrapersonal variables, such as the victim's coping style. Studies are beginning to consider the potential of the combined effects of both the environmental factor of social support and the intrapersonal variable coping in the context of the same model. This study attempts to determine the appropriateness of these more comprehensive models by evaluating not only models looking at coping and social support independently, but also models in which both coping and social support are proposed to combine to affect the relation between IPV and women's physical and mental health.

RELATIONSHIP VIOLENCE AND HEALTH

The relation between IPV and health is well established, with evidence linking relationship violence to both poor physical and psychological well-being (Campbell, 2002). Abused women are more frequently hospitalized—especially for mental disorders, digestive problems, and injury and poisoning—and are nine times more likely to be admitted due to contusion (Kernic, Wolf, & Holt, 2000). Two-thirds of battered women believe that their physical and psychological symptoms were a direct result of relationship violence (Gerlock, 1999).

Deleterious effects on health are not limited to those directly caused by physical assault. Golding (1999) clearly established the harmful role of IPV for mental health. Relationship violence has also been linked to lower perceptions of physical health, higher levels of medical service usage, and higher levels of self-injurious behaviors besides medical problems due to injuries alone (Goodman, Koss, & Russo, 1993). Women experiencing IPV are at higher risk for serious emotional and physical health problems—including depression, anxiety, sleep problems, and various disabilities—than other women (Hathaway et al., 2000). Follingstad, Brennan, Hause, Polek, and Rutledge (1991) found only 3% of battered women reported no physical or psychological symptoms. These women recalled having better health in the years preceding the onset of violence. Additionally, severity of abuse was related to a higher number of reported symptoms and a greater change in perceived health (Follingstad et al., 1991).

While clearly having significant detrimental effects on victims' health, physical violence is not the only form of abuse to affect women's physical and psychological well-being. Coker, Smith, McKeown, and King (2002) found that both physical and psychological abuse were associated with increased reports of physical health problems. Physical violence was related to a history of chronic illness and interference with daily activities, while psychological abuse was related to chronic disease, depressive symptoms, and reports of current poor health (Coker et al., 2002). As with physical and psychological abuse, sexual assault within the context of an intimate

relationship has also been found to predict poorer physical and mental health in battered women (Campbell & Soeken, 1999). Nearly half of battered women surveyed indicated that they had been forced into sex by their partner, leading to a higher rate of gynecological problems and a higher correlation with depression than in battered women not sexually assaulted (Campbell & Soeken, 1999).

Physical, psychological, and sexual abuse clearly exert harmful effects on women's physical health. How relationship violence produces negative changes in health status and what can reduce the effects of IPV are not yet known. While whether the effect of any one type of violence is more harmful than another is uncertain, perhaps of more clinical importance is determining what factors will protect the victim from physical and mental health problems that occur following abuse. Two of the most promising and most widely studied variables are social support and coping strategies.

SOCIAL SUPPORT AND VIOLENCE

Social support is known to affect battered women; it is the most commonly studied potential protective factor for battered women (Carlson, McNutt, Choi, & Rose, 2002). Social support has been hypothesized to affect the relation between violence and negative outcomes, though researchers disagree on how it should be conceptualized in the context of models of relationship violence.

Some suggest that social support partially mediates the relation between IPV and health, indicating that partner abuse affects the social support of the victim (Coker et al., 2003). In such a model, social support is expected to be affected by abuse and in turn directly affects the outcomes of the abuse. This conceptualization of social support holds important implications for researchers and clinicians alike. If social support is itself altered by abuse, researchers must determine not only whether these changes are helpful (e.g., a woman receives support from a medical professional after being admitted to the hospital) or harmful (e.g., the batterer prevents the woman from contacting her friends and family), but also why and how these changes occur. Clinicians could take action to ensure that women experiencing abuse receive sufficient social support, and doing so would constitute a direct means of affecting the reaction to violence.

Others propose that social support functions as a moderator in the abuse-health relationship (Arias, 1999), suggesting that social support does not play a direct role in this system but instead modifies the extent of the relation between the two. An important distinction between mediation and moderation models is that moderation models indicate that low social support is not a result of abuse, but rather is independent of abuse. Because of its indirect role in determining physical and mental health outcomes in this

type of model, researchers would need to determine the methods by which social support affects health. Ways in which social support has previously been proposed to function include increasing self-esteem, educating victims about coping strategies, and changing perceptions of stressful events. Clinicians would then have the option of providing a more direct intervention in addition to being supportive of their clients.

In summary, that social support does affect battered women's health is well established, though the mechanism by which it does so is still debated. Coker and colleagues (2003) found a mediating effect for social support for both physical and mental health in abused women. Similarly, Coker, Smith et al. (2002) found that higher amounts of social support led to higher perceptions of both physical and mental health for women experiencing physical, emotional, or sexual IPV. The finding of Carlson and colleagues (2002) that social support has a buffering effect for battered women's mental health is representative of the literature, and supports the conceptualization of social support as a moderating variable. Whether social support is a mediator or a moderator is unclear, and will be addressed in the current study.

COPING

While studies such as Coker et al. (2003) have examined the effect of social support directly on health, supporting the view of social support as a partial mediator, it is possible that social support operates by influencing the coping strategies used by the victim (Heron, Twomey, Jacobs, & Kaslow, 1997; Nurius, Furrey, & Berliner, 1992). Mitchell and Hodson (1986) suggested such a relation and found a correlation between the number of people providing social support and the quality of the support received, as well as women's use of adaptive coping strategies. While numerous studies have examined the effects of both social support and coping on health (including Burgess et al., 2000), researchers are only beginning to untangle the relation between the two variables (Shen, McCreary, & Myers, 2003).

Coping is considered the process by which individuals respond to and overcome adversity, and has often been divided into problem-focused versus emotion-focused coping (Lazarus & Folkman, 1984). Problem-focused coping involves trying to solve a problem and has often been shown to be related to better mental (Clements & Sawhney, 2000) and physical health (Park & Adler, 2003) for individuals dealing with various types of problems. Much of the recent literature on coping has taken a broader perspective, focusing instead on engagement with versus disengagement from the stressor (Heckman, Kochman, & Sikkema, 2002). Engagement or problem-solving coping strategies tend to be used in situations that are perceived as controllable, while disengaging or emotion-focused coping strategies are used more often in uncontrollable situations (Clements & Sawhney, 2000;

Folkman, 1984). Domestic violence is often viewed as uncontrollable by victims (Clements & Sawhney, 2000; Jacobson, Gottman, Waltz, & Rushe, 1994), thus one would expect that women experiencing domestic violence would be more likely to use more disengaging coping strategies. Some evidence suggests that use of engagement or problem-solving methods may actually place victims of domestic violence at higher levels of risk (Lewis et al., 2006). Receiving social support may provide both an outlet for expressing emotions for victims of abuse and serve an educational function in teaching about different coping mechanisms. To incorporate both of these important perspectives, a model of coping will be used in which problem- and emotion-focused coping are viewed as components of engagement coping; this produces a three-factor representation of coping that includes problem-focused engagement, emotion-focused engagement, and disengagement (Ishler, Canady, Lonsbary, & Naus, 2006).

THE PRESENT STUDY

This article attempts to untangle the complex relation between IPV and protective factors for women's health using a community sample of women, including women who were experiencing various forms of relationship aggression at the time of the study. Two models were tested, representing both the views of social support as a partial mediator and social support as a moderator impacting women's coping strategies. In both models, it was expected that all types of abuse evaluated (physical, psychological, and sexual) would be related to victims' reports of mental and physical health. The first model tested social support as a partial mediator between abuse and health. Abuse was associated with both social support and health, while social support was also related to health. In the second model, it was proposed that instead of social support, coping would partially mediate the abuse-health relationship, with use of engaging rather than disengaging strategies being related to better health. Perceived social support would moderate the relation between IPV and coping.

METHOD

Participants

Couples were recruited for the current study as part of a larger project of violent and nonviolent couples. Participants responded to local newspaper ads and flyers recruiting couples who were married or living together as if married for at least 6 months, were 18 years of age or older, and were able to speak and write English proficiently. Female partners were contacted by phone by trained undergraduate interviewers who administered the violence

subscale of the Conflict Tactics Scale (CTS; Straus, 1979) to determine eligibility in the study. Couples were invited to participate if the female reported at least one act of physical aggression by the male in the past year, or if there had been no physical violence in the relationship for at least the past 5 years and no serious violence (defined as acts such as punching, and threatening with a knife or gun) ever. Each partner was paid \$10 per hour for his or her participation.

Female participants were 53% African American, 17% Hispanic, 22% Caucasian, 2% Asian, and 6% other. The mean age was 29.78 ($SD = 9.05$), and the mean income was approximately \$33,250 ($SD = 25,810$). Average length of relationship was 5.05 years ($SD = 5.06$). Four percent of the women did not graduate from high school, while 10% completed college degrees.

Procedures

Data was collected during two assessment periods, each lasting approximately 3½ hours. Only the male attended the first session, where he completed several tasks, including completing questionnaires and a structured diagnostic interview. Both partners participated in the second session. The partners were first asked to complete a packet of questionnaires independently and were then reunited for a conflict discussion. The couples were then separated again and were administered a semistructured clinical interview regarding physical violence in their current relationship. Both members of the couple were debriefed separately, during which time risk of violence due to participation in the study was assessed and safety planning conducted. Follow-up phone calls were made to all female participants approximately 1 week after the assessment; no women reported violent incidents due to study participation, and several reported improvements in their relationships. All participants were given referrals for community resources, including counseling services and shelters.

Questionnaire Measures

PHYSICAL ABUSE AND INJURY

The Revised Conflict Tactics Scale (CTS-2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) was administered to both male and female participants separately to assess the type, severity, and frequency of IPV. The CTS-2 is a 78-item questionnaire that assesses the frequency of male-to-female and female-to-male physically, sexually, and psychologically abusive acts that have occurred in the past year. The CTS-2 contains five scales: negotiation, psychological aggression, physical assault (minor and severe), sexual coercion, and injury. Preliminary internal consistencies of the CTS-2 range from

.79 to .95 (Straus et al., 1996). In this sample, $\alpha = .90$ for the entire scale, $\alpha = .56$ for physical aggression, $\alpha = .40$ for psychological aggression, and $\alpha = .48$ for sexual coercion.

SOCIAL SUPPORT

The Interpersonal Support Evaluation List (ISEL; Cohen & Hoberman, 1983) was used to assess perceived availability of potential social resources. The ISEL is a 40-item scale, counterbalanced for desirability, and is composed of four subscales: tangible, appraisal, self-esteem, and belonging. Internal reliabilities for the subscales are above .70, with the exception of the self-esteem scale, which was .60. Previous research has found the reliability for the total scale to be .77 (Cohen & Hoberman, 1983); in the current study, $\alpha = .91$ for the entire scale. The ISEL has been shown to correlate with other measures of social support (Cohen & Hoberman, 1983).

COPING

The Brief COPE (Carver, 1997) was used to measure coping strategies used by the female partner. The Brief COPE is a 28-item scale that measures 14 possible coping reactions adapted from the longer COPE inventory (Carver, Scheier, & Weintraub, 1989). Two items each measure substance use, denial, behavioral disengagement, humor, venting, self-blame, self-distraction, using instrumental support, using emotional support, engagement coping, planning, positive reframing, religion, and acceptance. Twenty items were administered in the current study to measure the self-distraction, engagement coping, denial, using emotional support, using instrumental support, positive reframing, planning, humor, acceptance, and religion subscales. The eight items that were excluded are related to depression and substance abuse, and therefore to mental health, creating a potential confound with the outcome. Items from engagement coping, seeking instrumental support, and planning comprised problem-focused engagement; seeking emotional support, positive reframing, humor, and acceptance formed emotion-focused engagement, and self-distraction and denial combined to form disengagement, as recommended by Ishler et al. (2006). Reliability estimates for these scales in the current sample are problem-focused engagement, $\alpha = .81$; emotion-focused engagement, $\alpha = .68$; and disengagement, $\alpha = .68$.

HEALTH

The Medical Outcomes Study Short Form-36 (SF-36; Ware & Sherbourne, 1993) was used to assess the physical and mental health of female participants. The SF-36 is a commonly used 36-item measure with eight subscales that measure: (a) limitations in physical activity due to health (physical functioning),

(b) limitations in social activities (social functioning), (c) limitations in usual role activities due to physical health (role-physical), (d) pain (bodily pain), (e) mental health, (f) limitations in usual role activities due to emotional health (role-emotional), (g) vitality, and (h) general health perceptions. Reliability estimates range from .78 for the general health perceptions subscale to .93 for physical functioning; discriminant validity of the SF-36 tends to be good (McHorney, Ware, Lu, & Sherbourne, 1994). The reliability of physical and mental component scales using the calculation system by Ware and Sherbourne, which incorporates all subscales into each component scale in varying amounts based on their correlations with the scale, is $\alpha = .78$.

Statistical Analysis

All analyses were conducted using SAS software (Version 8, SAS Institute, Inc., Cary, NC). Regression was used to evaluate the two proposed models, employing the Sobel test to determine indirect mediation effects for social support and coping in their respective models. To test social support as a moderator between abuse and coping in the second model, regression was used to test the relation between abuse and coping, then a second regression was performed with abuse, social support, and a term combining social support and abuse.

RESULTS

A total of 116 women completed the study; all but two experienced some form of relationship aggression (see Table 1; Table 2 compares means of violence, coping, and social support between physically violent versus non-violent relationships).

Abuse and Health Outcomes

Each type of abuse (physical, psychological, and sexual) was correlated to both physical and mental health outcomes. Of the three types of abuse examined, only psychological abuse was related to health outcomes, specifically mental health [$F(1,109) = 4.80, p < .05$]. Neither physical [$F(1,109) = 1.13,$

TABLE 1 Frequencies of Participants Experiencing Types of Abuse (N = 116)

Type	Frequency	Range of CTS-2 scores
Physical	101	1.00–100.00
Psychological	112	1.14–166.00
Sexual	63	14.91–17.30
No abuse	2	0

TABLE 2 Mean Scores of Women from Physically Violent and Nonviolent Relationships (N = 116)

Variable	Violent mean (SD) <i>n</i> = 101	Nonviolent mean (SD) <i>n</i> = 15
Physical violence	20.96 (25.55)	0
Psychological aggression	51.29 (36.48)	14.61 (14.05)
Sexual abuse	8.74 (15.34)	2.56 (6.55)
Social support	28.65 (8.19)	33.55 (4.48)
Engagement coping	14.92 (4.04)	16.54 (5.33)
Disengagement coping	20.73 (4.90)	19.72 (5.40)
Mental health	33.49 (11.34)	41.16 (7.55)
Physical health	39.68 (6.52)	38.53 (5.55)

ns] nor sexual abuse [$F(1,109) = 0.17$, ns] was associated with mental health in the current sample. No type of abuse evaluated was directly related to physical health (Table 3). Mental health, however, was related to physical health [$F(1,109) = 80.57$, $p < .0001$], as in Coker et al. (2003).

Because physical health was not directly related to any type of abuse, only mental health was used for analysis of mediation effects. Similarly, psychological abuse was the only type of abuse to correlate with mental health, therefore it alone was used for the following analyses.

Social Support as a Mediator or Moderator?

Because it is questionable whether social support functions as a mediator or a moderator (Coker et al., 2003; Arias, 1999), the current study proposed two alternate models: Model 1, in which social support alone mediates the abuse-health relation, and Model 2, in which social support moderates the relation between abuse and coping strategies. Social support is related to

TABLE 3 Correlations Between Social Support, Coping, Abuse, and Health (N = 114)

Variable	1	2	3	4	5	6	7	8	9
Abuse									
1 Physical	—	.71*	.50*	-.02	.05	.36*	-.30*	-.12	-.03
2 Psychological		—	.53*	.13	.22*	.32*	-.16	-.20*	.03
3 Sexual			—	-.04	.02	.14	-.23*	-.05	.02
Coping									
4 Problem-focused				—	.71*	.20*	.15	.03	-.14
5 Emotion-focused					—	.28*	.07	.04	-.11
6 Disengagement						—	-.43*	-.46*	.08
7 Social Support							—	.46*	-.17
Health									
8 Mental Health								—	-.65**
9 Physical Health									—

* $p < .05$.

TABLE 4 Regression Analysis of Social Support as a Mediator Between Abuse and Mental Health (N = 114)

Relation	<i>B</i>	<i>SE B</i>	β
Psychological abuse predicts mental health	-0.062	0.028	-0.2046*
Psychological abuse predicts social support	-0.035	0.021	-0.1599
Psychological abuse and social support predict mental health			
Psychological abuse	-0.041	0.026	-0.1361
Social support	0.5953	0.119	0.4285**

* $p < .05$ ** $p < .0001$.

several key variables, including a high correlation to mental health (see Table 3). However, the data do not support Model 1 as not all necessary regressions are significant; psychological abuse is not associated with social support (Table 4). Therefore, social support does not serve as a mediator between psychological abuse and mental health. In Model 2, social support should act as a moderator between abuse and coping. Results indicate that social support does moderate between psychological abuse and emotion-focused engagement [$F(3, 94) = 3.72, p < .014$; Table 5] but not psychological abuse and disengagement or problem-focused engagement coping.

Coping as a Mediator

Coping was tested as mediating the relation between psychological abuse and mental health. Higher levels of disengagement coping were related to psychological abuse. All necessary regressions were significant (Table 6), and results of the Sobel test did support mediation by disengagement coping (Sobel test = 2.75, $p < .01$). Disengagement coping was significantly related to both physical and psychological abuse (Table 7). Problem-focused engagement coping, however, was not significantly related to any type of

TABLE 5 Regression Analysis of Social Support as a Moderator between Psychological Abuse and Emotion-Focused Engagement Coping (N = 98)

Variable	<i>B</i>	<i>SE B</i>
Step 1		
Psychological Abuse	0.023	0.010*
Step 2		
Psychological Abuse	-0.060	0.039
Social support	-0.076	0.073
Abuse* support	0.003	0.001*

Note. $R^2 = .04$ for Step 1; $R^2 = .11$ for Step 2.

* $p < .05$.

TABLE 6 Regression Analysis of Disengagement Coping as a Mediator Between Psychological Abuse and Mental Health (N = 103)

Relation	<i>B</i>	<i>SE B</i>	<i>B</i>
Psychological abuse predicts mental health	-0.064	0.030	-0.204*
Psychological abuse predicts disengagement coping	0.0248	0.007	0.317*
Psychological abuse and coping predict mental health			
Psychological abuse	-0.020	0.029	-0.066
Disengagement coping	-1.737	0.370	-0.435**

* $p < .05$ ** $p < .001$.

TABLE 7 Relation of Coping to All Abuse Types (N =110)

Type of coping and abuse	<i>B</i>	<i>SE B</i>	β
Disengagement			
Physical	0.040	0.011	0.355**
Psychological	0.023	0.007	0.317*
Sexual	0.027	0.019	0.140
Problem-focused			
Physical	-0.005	0.017	-0.030
Psychological	0.015	0.011	0.136
Sexual	-0.014	0.028	-0.050
Emotion-focused			
Physical	0.008	0.015	0.056
Psychological	0.023	0.010	0.224*
Sexual	0.006	0.026	0.023

* $p < .05$ ** $p < .001$.

abuse, and emotion-focused engagement was associated with only psychological abuse. Regarding health outcomes, neither type of engagement coping was related to physical health, and disengagement coping was negatively related only to mental health [$F(1,103) = 27.04, p < .0001$].

DISCUSSION

The findings of this study may have important implications for our understanding of the relation between domestic violence and health. Domestic violence victimization is associated with poorer mental health, and the coping strategies utilized by the victim further affect mental health. Physical health problems appear to be related to mental health status, instead of being directly caused by physical abuse. This suggests that the link between domestic violence and physical health is produced through the effect of violence on mental health, with coping strategies and potentially social support impacting mental health.

Abuse and Health

The current findings diverge from many previous studies in that abuse (physical, psychological, or sexual) was not linked to poor physical functioning. This may be due in part to sampling differences. The current study relies on a community sample with a wide range of IPV victimization histories, whereas the participants in many other studies were seeking shelter or services. Within this community sample, psychological abuse, however, was related to mental health. This is similar to the findings of Coker et al. (2003), which also demonstrated that while physical abuse had no direct effect on physical health, it did impact mental health, which in turn was related to physical health. Similarly, Sutherland, Bybee, and Sullivan (1998) found that much of the effect of violence on battered women's physical health was mediated by depression. Many previous studies examined the effects of abuse only on physical health or only on mental health, instead of examining the relation between the two. The current finding emphasizes the importance of considering both variables and indicates that physical health may be affected by factors addressed toward mental health.

Social Support

Numerous studies (including Coker et al., 2003; Coker, Smith et al., 2002) have found social support to be related to battered women's health, however, *how* social support affects mental health remains unclear. Two alternate models were tested in the present study and neither was supported by the data. This finding is puzzling, given both the vast literature illustrating the importance of social support and the fact that social support correlated significantly with many of the variables examined.

The first model tested examined social support as a mediator between psychological abuse and health. While social support was related to mental health, psychological abuse was not correlated with social support. The second model evaluated social support as a moderator in the relation between abuse and coping, and found that social support affected the relation between psychological abuse and emotion-focused engagement coping. This suggests that the more support women perceive, the more likely they are to use methods of addressing emotions produced by abusive interactions.

The Role of Coping

Based on a vast literature linking coping to both physical and mental health (including Park & Adler, 2003), coping was expected to mediate the relation between abuse and health. In contrast to prior studies, the current study found that disengagement coping, not emotion-focused coping, was related to poor mental health outcomes. This discrepant finding can be largely

explained by the differences in the approaches taken to coping, especially by considering emotion-focused strategies as engagement. Emotion-focused engagement coping strategies in the present study included factors such as humor, acceptance, seeking emotional support, and positive reframing, all of which provide abused women active ways of managing their emotional reactions to abuse. The current study suggests that while disengaging entirely from the situation is harmful to mental health, dealing with the emotions brought about by abuse is not.

Many variables can affect the use and the effectiveness of coping strategies. Nurius and colleagues (1992) propose a number of factors that may impact the ability of battered women to cope with abuse, such as poor self-esteem and depression. Similarly, Clements and Sawhney (2000) found that attributions about control over the battering, hopelessness, and dysphoria can also affect how abused women cope. Additionally, different coping strategies may be more useful in different situations, and people may change the coping strategies they use over time. For example, Clements and Sawhney suggest that problem-focused strategies may be most helpful in situations in which the victim has some form of control over the abuse, but emotion-focused coping may be the best option in uncontrollable situations. In light of the current findings, it appears that, while in this sample, abused women were most likely to use disengagement coping strategies, those same methods of coping were detrimental to their mental health.

Both a strength and a limitation of the current study is the use of both physically violent and nonviolent couples in the analysis. This provides statistical advantages in supplying a wide range of CTS-2 scores. However, not all women experienced all types of abuse. Women who experience different types of abuse may use different coping strategies. Additionally, no corroborating evidence of physical or mental health was obtained (e.g., medical records, diagnoses), thus measures of health were limited to self-report. Also of concern is the low reliability estimates obtained for CTS-2 measures. Another limitation is the cross-sectional nature of the data. Only longitudinal data can determine the specific temporal relationship between the variables discussed. However, the variables addressed have been examined extensively in the research and clinical literature, and have been incorporated into models in ways that are consistent with previous research findings.

Despite the limitations, these findings provide important information about potential protective factors for domestic violence and how they function. Social support has consistently been shown to have a positive impact on the mental health of abuse victims, a conclusion supported by the current study, and may function as a moderator in the relation between abuse and some types of coping. Coping is an integral part of the victim's response to abuse; by learning which types of coping techniques lead to the best outcomes, as well as what can increase the use of these techniques, we can better serve victims of domestic violence.

Both coping and social support are promising areas of research and intervention. Future studies should focus on clarifying aspects of social support that are harmed by domestic violence or contribute to good mental health. The function of coping strategies in uncontrollable situations should be understood by clinicians working with victims of intimate partner abuse. Clinicians and researchers alike should be reminded that many variables besides social support and coping affect the link between intimate partner abuse and health. These are only two, albeit important, aspects of this complex system.

REFERENCES

- Arias, I. (1999). Women's responses to physical and psychological abuse. In X. B. Arriaga & S. Oskamp (Eds.), *Violence in intimate relationships* (pp. 139–162). Thousand Oaks, CA: Sage Publications.
- Burgess, A. P., Carretero, M., Elkington, A., Pasqual-Marsettin, E., Lobaccaro, C., & Catalan, J. (2000). The role of personality, coping style, and social support in health-related quality of life in HIV infection. *Quality of Life Research, 9*, 423–437.
- Campbell, J. C. (2002). Health consequences of intimate partner violence. *The Lancet, 359*, 1331–1336.
- Campbell, J. C., & Soeken, K. L. (1999). Forced sex and intimate partner violence: Effects of women's risk and women's health. *Violence Against Women, 5*(9), 1017–1035.
- Carlson, B. E., McNutt, L., Choi, D. Y., & Rose, I. M. (2002). Intimate partner abuse and mental health: The role of social support and other protective factors. *Violence Against Women, 8*(6), 720–745.
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine, 4*(1), 92–100.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*, 267–283.
- Clements, C. M., & Sawhney, D. K. (2000). Coping with domestic violence: Control attributions, dysphoria, and hopelessness. *Journal of Traumatic Stress, 13*(2), 219–240.
- Cohen, S. & Hoberman, H. M. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology, 13*(2), 99–125.
- Coker, A. L., Smith, P. H., McKeown, R. E., & King, M. J. (2002). Frequency and correlates of intimate partner violence by type: Physical, sexual, and psychological battering. *American Journal of Public Health, 90*(4), 553–559.
- Coker, A. L., Watkins, K. W., Smith, P. H., & Brandt, H. M. (2003). Social support reduces the impact of partner violence on health: Application of structural equation models. *Preventive Medicine, 37*, 259–267.
- Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology, 46*(4), 839–852.

- Follingstad, D. R., Brennan, A. F., Hause, E. S., Polek, D. S., & Rutledge, L. L. (1991). Factors moderating physical and psychological symptoms of battered women. *Journal of Family Violence, 6*(1), 81–95.
- Gerlock, A. A. (1999). Health impact of domestic violence. *Issues in Mental Health Nursing, 20*, 373–385.
- Golding, J. M. (1999). Intimate partner violence as a risk factor for mental disorders: A meta-analysis. *Journal of Family Violence, 14*(2), 99–132.
- Goodman, L. A., Koss, M. P., & Russo, N. F. (1993). Violence against women: Physical and mental health effects. Part I: Research findings. *Applied & Preventive Psychology, 2*, 79–89.
- Hathaway, J. E., Mucci, L. A., Silverman, J. G., Brooks, D. R., Mathews, R., & Pavlos, C. A. (2000). Health status and health care use of Massachusetts women reporting partner abuse. *American Journal of Preventive Medicine, 19*(4), 302–307.
- Heckman, T. G., Kochman, A., & Sikkema, K. J. (2002). Depressive symptoms in older adults living with HIV disease: Application of the Chronic Illness Quality of Life Model. *Journal of Mental Health and Aging, 8*(4), 267–279.
- Heron, R. L., Twomey, H. B., Jacobs, D. P., & Kaslow, N. J. (1997). Culturally competent interventions for abused and suicidal African-American women. *Psychotherapy: Theory, Research, Practice, Training, 34*(4), 410–424.
- Ishler, M. E., Canady, B. E., Lonsbary, C., & Naus, M. J. (2006). Incorporating engagement with problem and emotion-focused coping: A new perspective. Poster presented at the American Psychological Society Annual Convention, New York.
- Jacobson, N. S., Gottman, J. M., Waltz, J., & Rushe, R. (1994). Affect, verbal content, and psychophysiology in the arguments of couples with a violent husband. *Journal of Consulting and Clinical Psychology, 62*(5), 982–988.
- Kernic, M. A., Wolf, M. E., & Holt, V. L. (2000). Rates and relative risk of hospital admission among women in violent intimate partner relationships. *American Journal of Public Health, 90*(9), 1416–1420.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: International Universities Press.
- 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*(4), 340–354.
- McHorney, C. A., Ware, J. E., Lu, J. F. R., & Sherbourne, C. D. (1994). The MOS 36-item Short-Form Health Survey (SF-36): III. Tests of data quality, scaling assumptions, and reliability across diverse patient groups. *Medical Care, 32*(1), 40–66.
- Mitchell, R. E., & Hodson, C. A. (1986). Coping and social support among battered women: An ecological perspective. In S. E. Hobfoll (Ed.), *Stress, social support, and women* (pp. 153–169). Washington, DC: Hemisphere Publishing Corporation.
- Nurius, P. S., Furrey, J., & Berliner, L. (1992). Coping capacity among women with abusive partners. *Violence and Victims, 7*(3), 229–243.
- Park, C. L., & Adler, N. E. (2003). Coping style as a predictor of health and well-being across the first year of medical school. *Health Psychology, 22*(6), 627–631.
- Shen, B. J., McCreary, C. P., & Myers, H. E. (2003). Independent and mediated contributions of personality, coping, social support, and depressive symptoms to

- physical functioning outcome among patients in cardiac rehabilitation. *Journal of Behavioral Medicine*, 27(1), 39–62.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and the Family*, 41(1), 75–88.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17(3), 283–316.
- Sutherland, C., Bybee, D., & Sullivan, C. (1998). The long-term effects of battering on women's health. *Women's Health: Research on Gender, Behavior, and Policy*, 4(1), 41–70.
- Ware, J. E., & Sherbourne, C. D. (1993). The MOS 36-item short-form health survey (SF-36): I. Conceptual framework and item selection. *Medical Care*, 30(6), 473–483.

Copyright of *Journal of Aggression, Maltreatment & Trauma* is the property of Haworth Press and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.