Recent research on domestic violence has sought to provide insight into the psychological consequences of such violence. A conceptual framework, which suggests that both situational and person-centered factors contribute to adjustment to violence and affect a woman's personal and social resources, was formulated to examine the impact of stress, personal resources, social support, institutional responsiveness, and coping upon the psychological health of battered women. Women (N=60) completed questionnaires within a week of their arrival at a shelter for battered women. Analyses of results indicated that increased levels of violence, minimal personal resources, lack of institutional and informal social support, and greater avoidant coping styles were related to lowered self-esteem and more severe depressive symptoms. The results suggest that stress, level of violence, and personal resources may have indirect effects upon functioning through their impact on coping responses and the availability of social support. The findings also suggest that women with fewer social contacts unaccompanied by their partner are less likely to receive supportive responses from friends. (PAS)
Battered Women: The Relationship of Stress, Support and Coping to Adjustment

Roger E. Mitchell, Ph.D.
Social Ecology Laboratory
Department of Psychiatry and Behavioral Sciences
Stanford University and Veterans Administration Medical Center
Palo Alto, CA 94304

Christine A. Hodson, Ph.D.
Tri-City Mental Health Center
3828 Glenmoor Street
Fremont, California 94536

Running Head: Battered Women


Acknowledgements: The authors wish to thank both the residents and staff members of the shelters who generously gave their time. In addition, we wish to thank Andrew Billings, Ruth Cronkite, Ben Gottlieb and Ann Peabody for providing comments on earlier drafts of this manuscript.
Abstract

This study suggests a conceptual framework for examining the impact of stress (i.e., level of violence), personal resources, social support, institutional responsiveness, and coping upon the psychological health (i.e., depression, mastery, and self-esteem) of battered women. Respondents were 60 women who had sought assistance from a shelter for battered women. Results indicated that increased levels of violence, minimal personal resources, lack of institutional and informal social support, and greater avoidant coping styles were related to lowered self-esteem and more severe depressive symptoms. Exploratory analyses suggested that stress (i.e., level of violence) and personal resources may have indirect effects upon functioning through their impact on coping responses and the availability of social support. In particular, women who had fewer social contacts unaccompanied by their partner were less likely to receive supportive responses from friends. Implications for research and practice are discussed.
Battered Women: The Relationship of Stress, Support, and Coping to Adjustment

While initial research on domestic violence has described patterns of violence within the family, and the reasons for its maintenance (Gelles, 1974; Martin, 1976; Nielsen, Eberle, Thoennes, & Walker, Note 1; Pagelow, 1981; Steinmetz & Straus, 1974; Straus & Hotaling, 1980), more recent work has tried to provide some insight into the psychological consequences of exposure to such violence (Browne, Note 2; Walker, 1979). For example, Walker (1979) has argued that women subjected to unpredictable and uncontrollable violence are more likely to succumb to a process of "learned helplessness." Such a process may decrease women's sense of mastery and self-esteem, hinder their ability to take active steps to change their situation, and result in severe psychological distress, particularly depression.

There are a number of unanswered questions, however, concerning the impact of domestic violence upon women, and the factors that might mediate its effects: (a) How do levels of stress and violence affect other aspects of women's lives, such as their maintenance of social ties and their coping styles? (b) What are the circumstances under which women are most likely to receive support from friends and family in dealing with a battering relationship? (c) Can factors such as informal social support and coping ability positively influence women's psychological health, either directly, or by lessening the stressful effects of a violent relationship? We address these issues in this paper by formulating and evaluating a model which suggests how stress, these mediating factors, and adjustment interrelate.
In examining these questions, we have applied a stress-support-coping paradigm to the examination of adjustment among battered women. This approach assumes, first, that both situational and person-centered factors contribute to adjustment. While domestic violence literature has often focused on either social or intrapsychic causes, the relationship of both sets of factors to adjustment, and to each other, need to be examined. For example, particular social networks may encourage battered women to use particular coping strategies in dealing with domestic violence, while the types of coping styles used may influence the likelihood of obtaining support. Each of these, in turn, may influence adjustment. Second, stress and violence can be seen to have effects not only upon women's immediate psychological well-being, but also upon women's personal and social resources. Stress-induced changes in individuals' life contexts (e.g., reduced social contact) may increase their vulnerability to current and future stress, as well as increase the likelihood that additional stressful events will occur (Liem & Liem, 1981). Thus, it seems important to examine how battering may influence women's functioning directly, as well as examine how domestic violence may have more subtle impact on other aspects of women's lives (e.g., coping responses, maintenance of social ties).

A Model and Background

The diagram in Figure 1 outlines the hypothesized relationships between several personal factors (i.e., personal resources, coping responses) and environmental factors (i.e., stress, social support, institutional response) and measures of adjustment (i.e., depression, mastery, and self-esteem) among battered women. For example, the diagram suggests several pathways through which stress may influence psychological functioning. Stress may not only have indirect effects on mastery, self-esteem, and depression, but it may
also have indirect effects through its impact on the availability of social support and on the types of coping responses utilized. This model draws upon previous work that has examined similar factors influencing battering in particular (Hodson, Note 3; Pagelow, 1981; Walker, 1979) and adjustment more generally (Dohrenwend & Dohrenwend, 1981a; Moos & Billings, 1982; Moos & Mitchell, 1982; Pearlin & Schooler, 1978; Pearlin, Lieberman, Menaghan, & Mullan, 1981). Below, we review evidence linking stress, personal resources, social support, institutional responsiveness, and coping to adjustment.

**Stress**

Women in battering relationships experience not only the stress of discrete battering incidents, but also the strain associated with the anticipation of future battering. The psychological reactions of women to specific battering incidents have been likened to those more generally displayed by victims of trauma. Such women are likely to report increased fear, anxiety, depression and withdrawal (Browne, Note 2). Less obvious, perhaps, are the effects of apprehension about additional incidents. For example, Walker (1979) suggests a cycle theory of battering in which a tension-building phase precedes specific battering incidents. During such phases, women may experience increased fear as they try a variety of strategies to appease their partner and avoid "precipitating" another incident. As women continue to stay in the relationship, the severity and frequency of the physical and psychological abuse is likely to increase (Browne, Note 4). Since chronic marital strain and stressful events have been associated with poorer psychological adjustment among community samples more generally,
(Dohrewend & Dohrewend, 1981b; Pearlin & Schooer, 1978), one might expect that the chronic stress and tension associated with increasing abuse would result in increased levels of depression for battered women. 1

Stress may not only influence adjustment directly, but it may also have indirect effects through its impact upon coping responses and the availability of social support. Women dealing with escalating levels of violence may find it more difficult to maintain ties with friends, and to take effective steps to change their situation. This would be consistent with studies of community residents in which individuals experiencing greater numbers of negative life events were more likely to use avoidance coping, and less likely to perceive themselves as supported (Cronkite & Moos, Note 5). Thus, negative life events (e.g., battering) may increase stress, while simultaneously decreasing one's personal and social resources for effectively dealing with such current (or future) stress.

Personal Resources

While a number of personality characteristics can be seen as personal resources for those dealing with stress (e.g., Kobasa, Maddi, & Courington, 1981; Pearlin & Schooer, 1978), we chose to focus on several sociodemographic variables (i.e., education; personal income, job skills, current employment) as particularly critical ones for women dealing with a battering relationship. The absence of an independent personal income and job skills makes it much more difficult for women to leave the relationship; it is also likely to increase their feelings of apprehension and helplessness about the future even if they do finally leave (Kalmuss & Straus, 1982; Pagelow, 1981; Straus, 1977; Walker, 1979). In a more subtle fashion, women with fewer personal resources are likely to have fewer opportunities to engage in varied occupational and social roles outside the family which might increase their possi-
abilities for developing friends, obtaining more varied information about services, and ultimately, bolstering their sense of self-worth. Thus, while battering occurs across the socioeconomic spectrum (Straus, Gelles, & Steinmetz, 1980), women at the lower end of the SES ladder may be more likely to lack the resources which moderate the effects of stress (Liem & Liem, 1981).

**Institutional Responses**

Battered women are often frustrated in their efforts to obtain help from traditional institutions such as the criminal justice, legal, and mental health systems (Gelles, 1974; Martin, 1976; Walker, 1979). Police are often reluctant to involve themselves in domestic violence disputes, and when they do, they may focus more on "preserving the family" rather than on protecting the woman from further assault or informing her of legal alternatives (Straus, 1978). If a woman does seek legal aid assistance, she is likely to be turned away because her husband's income is used in calculating financial eligibility. Within the mental health field, professionals sometimes focus solely on the personality characteristics of the woman that "keep" her in the relationship, ignoring the social and economic factors that encourage such behaviors, and serve as barriers to the woman's departure. Such negative institutional responses are likely to further erode women's sense of control over their lives. There has been no empirical evidence, however, on what impact such institutional responses might have on battered women's psychological health.

**Social Support**

There is increasing evidence that social support may promote psychological health in a variety of ways. Supportive social networks may promote health directly by helping individuals to maintain valued social identities, as well as by providing material and emotional support during times of crisis so that individuals will be less likely to become ill in the face of stress.
Battered Women

(Caplan, 1974; Cobb, 1976; Gottlieb, 1981; House, 1981; Mitchell & Trickett, 1980). It has been suggested, however, that battered women are often isolated from family and friends because of their partners' efforts to keep them isolated and dependent (Hilberman & Munson, 1977-1978). In one study, battered women reported that their whereabouts were closely monitored by their partners; and that such monitoring restricted the range of places they could go (Walker, Note 6).

Even when friends are available, the battering experience may be a particularly difficult one around which to seek support. Although in need of the support of others in order to understand and actively respond to an episode of violence, a battered woman may feel uneasy, hesitant and embarrassed about approaching friends and family (Browne, Note 2). Such ambivalence and denial may make it more difficult for friends to learn of the situation, and to offer help and assistance spontaneously. If friends and family are aware of the situation, at least to some degree, the woman's apparent reluctance to "open up" may reinforce their beliefs that it is a "private" matter between husband and wife in which they should not involve themselves.

What kind of response is to be expected from others once the subject is finally broached? While family and friends may quickly rally around an individual to provide support in response to stressful, but expected, life transitions (such as birth of a child, or illness), they may be less sympathetic in response to stressful situations which arouse feelings of discomfort or disapproval (Kitson, Moir, & Mason, 1982; Wortman & Dunkel-Schetter, 1979). These negative reactions can be quite subtle. For example, individuals who feel uncomfortable when confronted by the complaints of a depressed friend may try a variety of strategies to minimize discomfort-producing "depressed" behaviors (Coates & Wortman, 1980). They may try to change the topic, to "cheer" the
person up, or to minimize the severity of the problem (e.g., by telling the person that things aren't so bad). For the battered woman, such responses would contradict her sense of the seriousness of the problem, and be likely to increase her feelings of frustration and isolation. Even when friends are initially sympathetic, some may become frustrated and impatient with the woman if their suggestions do not promptly produce the desired change. Thus, it may be important to examine the responses of network members specifically to the battering situation, in addition to women's more global reports of social activity and social support.

Coping Responses

What kind of responses are women likely to use in the aftermath of a battering incident? In one of the few studies to date, Browne (Note 2) found that a large percentage of women tended to withdraw, to hide the incident from others, and to avoid seeking outside help. As Walker (Note 6) suggests, such responses may be aimed at minimizing the likelihood that the batterer will be "provoked" into another episode of violence. In addition, these coping strategies may help the woman to avoid dealing fully with the emotional impact of the incident. A reliance on avoidance-oriented coping strategies may have negative psychological consequences in the long-run, however. For example, individuals using avoidance-oriented coping strategies in response to a stressful event were more likely to develop depressive symptoms than those using cognitive or behavioral coping strategies that attempted to deal more directly with the problem (Billings & Moos, 1981). Similarly, Pearlin and Schooler (1980) found that people who use more avoidant strategies (e.g., selective ignoring) in dealing with marital strain were more likely to experience emotional distress. Thus, the way that women react to and cope with the strain of involvement in a battering relationship may have a
significant impact on their psychological health.

Adjustment

Self-esteem, mastery, and depression were chosen as the most relevant adjustment measures for two reasons. First, Walker (1979; 1981) argues that exposure to unpredictable violence within a battering relationship, coupled with early sex-role socialization, teaches women that their behaviors do not produce expected or desired outcomes. Such a cognitive set of learned helplessness is likely to diminish active coping efforts to change the situation, and ultimately result in lowered self-esteem and increased depression (Abramson, Seligman, & Teasdale, 1978). Second, Pearlin et al (1981) link the more general stress process to similar outcome variables. They suggest that ongoing stressors have a large degree of their impact through their erosion of individuals' sense of mastery and self-esteem, which can influence the emergence of depressive symptoms. Thus, one would expect that greater levels of violence within a battering relationship would lead to lowered sense of mastery and self-esteem, and greater depression.

METHOD

Sample

The sample consisted of 60 battered women who had sought assistance from one of six shelters in the San Francisco Bay area. To be included in this study, a woman must have been physically assaulted at least twice by a man with whom she had an intimate relationship. Thirty-one women were married to their assailant, and all but five were living with the batterer before coming to the shelter. The women had been in a relationship with their partners for an average of 5.4 years, and physical abuse had begun an average of 1.7 years after the start of the relationship. The average age of the women was
27.4 years. Forty-eight percent of the women were Caucasian, 44% were Black, and 8% were of other ethnic backgrounds. In terms of education, 33% had completed some high school, 32% had completed high school, and 35% had obtained at least some post high school training. While the majority of women had few independent financial resources (for example, 68% earned $4,000 or less), their partner's income was more substantial (e.g., the majority earned $12,000 or more). At the time of the last battering incident, an average of 2.1 children lived in the homes of the women who had children. Six of the women had no children.

Measures

Respondents completed a questionnaire packet containing measures of stress, personal resources, social support, institutional response, coping, and adjustment. Attempts were made to administer the questionnaire packet to respondents within a week after their arrival at the shelter. Approximately 80% of the women asked to participate agreed to do so.

Stress

As indices of stress, both the frequency and level of violence were assessed. Respondents reported the number of times they had been battered by their current partner (1 = one time, 2 = two times, 3 = three to five times, 4 = six to ten times, 5 = 11 to 15 times, 6 = more than 15 times).

Overall violence index. Level of violence was assessed by the overall violence index of the Conflict Tactics Scale (CTS), an 18-item measure assessing the degree to which reasoning, verbal aggression, and violence are used by couples in resolving intrafamily conflict (Straus, 1979). The violence subscale of the CTS contains eight items reflecting physical coercion (e.g., "Kicked, bit, or hit with a fist" and "threatened with a knife or a gun").
The instructions were modified so that women reported whether the man had ever directed violence against her (rather than whether violence had been exhibited by either member of the couple). Cronbach's alpha for the scale was .69.

**Personal Resources**

A personal resources composite measure included data about the woman's education, income, occupation at the time of the last battering incident, and occupation describing the woman's "best job". Education scores ranged from 1 (for eight or less years of education) to 10 (for five or more years of college). Income referred to the amount of money women made personally, independent of their partner's incomes. Occupational status for respondents' last job and "best job" was assessed using the Duncan Index of Socioeconomic Status (Duncan, 1961). Each of these four scores was standardized and added together to form a composite. The internal reliability of these four scores was .73.

**Social Support**

In order to examine different aspects of the social support process, five different measures of social support were constructed: contact with friends and relatives, both accompanied and unaccompanied by one's spouse; number of supporters; empathic responses of friends; and avoidance responses of friends.

- **Contact with friends and relatives (unaccompanied by partner).** Respondents were asked to report the number of times they got together with friends and relatives, unaccompanied by their partner, during the month before they last left their partner.

- **Contact with friends and relatives (accompanied by partner).** Respondents reported the number of times they got together with friends and relatives, accompanied by their partner, during the month before they left their partner.
Number of supporters. Respondents were asked how many people there were "that you could be with when you wanted to have fun or relax", and "that you could talk to about personal problems or how you were feeling." Responses to these questions were added together to form a number of supporters score.

As mentioned earlier, the level of support that individuals receive may in part be determined by the type of stressor involved (Coates & Wortman, 1980; Moos & Mitchell, 1982; Wortman & Dunkel-Schetter, 1979). Therefore, an attempt was made to assess the response of others to women's requests for assistance in dealing with the battering situation. Specifically, respondents were asked to recall the months preceding their departure from their partner, and to rate the degree to which friends displayed a variety of behaviors when the women attempted to talk with them about the battering situation (1=not at all; 4=quite a bit). The items (see Appendix A) are grouped into the following categories:

- **Empathic responses.** The three items in this scale assess the degree to which respondents were encouraged by friends to continue to discuss the battering situation (e.g., "were sympathetic") (Alpha=.84).

- **Avoidance responses.** The six items in this scale reflect friends' attempts to not deal with the battering situation, either through avoidance (e.g., "tried to change the topic") or minimizing the problem (e.g., "pointed out the good parts of your relationship with your husband/boyfriend" or "said things weren't so bad") (Alpha=.83).

**Institutional Responses**

The response of social institutions to battered women's requests for assistance was assessed by asking respondents to complete a scale describing whether police, lawyers, and therapists with whom they had contact had taken particular actions. To construct this scale, the authors searched the spouse
abuse literature for examples of representative institutional responses (e.g., Martin, 1976; Roy, 1978), which were then categorized as helpful or not helpful. A ten-item scale for police was constructed (e.g., "They told me about other places to get help" and "They never showed up at all"), a six-item scale for lawyers (e.g., "He/She told me about my legal rights" and "She/He suggested I shouldn't press charges"), and a nine-item scale for therapists (e.g., "He/She suggested that I should change my behavior so the man would stop hitting me"). Respondents checked which behaviors they had experienced. Summary scores were derived for police, lawyer, and therapist helpfulness scales, with resulting internal reliabilities (Kuder-Richardson) of .50, .77, and .69, respectively. The three summary scores were standardized, and a summary "average helpfulness" score was derived, based upon the number of institutions actually contacted.

Coping

A measure developed by Billings and Moos (1981) to assess coping responses to stressful events was used here to assess women's responses to battering incidents. Respondents checked whether they had used any of 17 different strategies for dealing with the battering incident which occurred immediately prior to the one which precipitated leaving the relationship. Items were then grouped into Billings and Moos' (1981) three method of coping categories:

Active behavioral coping was measured by the number of "yes" responses to six action-oriented alternatives such as "talked with a friend about the situation" and "tried to find out more about the situation." These responses reflect "overt behavioral attempts to deal directly with the problem and its effects."

Active cognitive coping was measured by the number of "yes" responses to six cognitively oriented responses such as "tried to step back from the
situation and be more objective" and "Drew on my past experiences in similar situations." These responses reflect "attempts to manage one's appraisal of the stressfulness of the event."

Avoidance coping was measured by the number of "yes" responses to five alternatives indicative of avoidance, denial, or tension reduction, such as "Prepared for the worst" and "Kept my feelings to myself."

Billings and Moos (1981) reported alphas of .80, .72, and .44 for active behavioral, active cognitive, and avoidance coping, respectively.

Adjustment

Depression was assessed by the six item depression scale of the Brief Symptom Inventory (BSI), which is a shortened version of the widely used Hopkins Symptom Check List (SCL-90). The depression scale of the BSI has been shown to have high internal consistency, and to correlate highly with other measures of depression, such as the depression scales of the SCL-90-R, the MMPI, and the CES-D (Amenson & Lewinsohn, 1981; Derogatis, 1975; and Derogatis & Melisaratos, Note 7).

Mastery. The seven item mastery scale developed by Pearlin and Schooler (1978) was used in this study. Respondents were asked to rate on a 4-point scale the degree to which they agreed or disagreed with a series of statements about themselves (e.g., "Sometimes I feel that I'm being pushed around in life").

Self-Esteem. The Rosenberg Self-Esteem Scale asks individuals to rate their extent of agreement (1=strongly disagree; 4=strongly agree) with a series of statements about themselves, such as "I am able to do things as well as most other people" (Rosenberg, 1979). As used by Pearlin and Schooler (1978), this scale yields a score ranging from 1 to 4. The internal consistencies for mastery and self-esteem were .72 and .90, respectively.
RESULTS

Overview

Descriptive analyses of women's level of support and adjustment are presented first. Correlation tables are then presented which examine the personal and environmental factors that predict adjustment, social support, and coping responses. Finally, there is a description of partial correlation and regression analyses which examine: (a) the indirect effect of stress upon functioning through its impact upon coping and support; and (b) the "buffering" effect of social support and coping in lessening the maladaptive effects of stress.

Descriptive Analyses

The women in this sample showed considerably high levels of depression. The mean depression score on the BSI ($\overline{x}=2.15$) was two standard deviations above the norm for nonpatient females, and close to the mean score for psychiatric outpatients (Derogatis & Melisaratos, Note 7). Similarly, mean mastery and self-esteem scores (3.03 and 2.89, respectively) were lower than those reported for a sample of community residents ($\overline{x}=3.15$, $SD=.62$; and $\overline{x}=3.52$, $SD=.47$, respectively) who had experienced at least one stressful event or strain (Lieberman & Mullan, 1978).

In terms of social contact and social support, the women in this sample seem to be somewhat isolated. When asked to report the number of social contacts with friends or family (unaccompanied by their partner) in the month before their most recent separation, 28% of the women reported no such visits, while 24% reported only one visit. Similarly, when asked to name the number of people they could be with when they wanted to have fun or with whom they could discuss personal problems, 21% reported that they had no such person available, while 40% of the women reported only one.
Factors Related to Adjustment

As seen in Table 1, the personal and environmental factors in the model were significantly correlated with the measures of adjustment (i.e., depression, mastery, self-esteem). For example, measures of stress and coping were most strongly related to measures of depression. Less active-cognitive coping, more avoidance coping, and greater frequency and severity of violence are all associated with more severe depression. Several other variables (i.e., personal resources, institutional helpfulness, and avoidance responses of friends) were significantly, but less strongly, associated with depression. As expected, minimal personal resources, less help from institutional sources, and more avoidance responses from friends were associated with greater depression. Finally, it seems noteworthy that depression was significantly related to the number of visits with friends and family that women made unaccompanied by their partner \( r = -0.23, p < 0.05 \), but not to the number of visits that women and their partners made together \( r = 0.09, \text{n.s.} \).

The patterns of results differ somewhat for mastery and self-esteem, the other adjustment variables considered in this study. As before, active cognitive coping and avoidance coping are strongly related to mastery and to self-esteem. In contrast, the actions of friends seem to have a much stronger impact. Having a larger number of supporters and fewer avoidance responses from friends is associated with having a greater sense of mastery, while more empathic and less avoidance responses from friends are associated with higher levels of self-esteem.
Factors Related to Social Support and Coping

If adjustment is influenced by coping responses and the supportive (and nonsupportive) responses of friends, what factors are related to more effective coping and more supportive social networks? Some possible answers are suggested by Tables 2 and 3, which relate social support and coping to the variables in the model which precede them.

--- Insert Table 2 About Here ---

Social support. When are women most likely to receive supportive reactions from friends in response to their attempts to talk about the battering situation? As seen in Table 2, the intercorrelations among the support variables indicate that: (a) greater contact with friends and relatives (unaccompanied by one's partner) is significantly associated with having a larger number of supporters, and experiencing fewer avoidance and more empathic responses from friends; (b) in contrast, visiting with friends and relatives (accompanied by one's partner) is not significantly related to these variables; and (c) women who have met greater proportions of their friends through their partner are likely to have lower levels of visiting independent of their partner, and to experience higher levels of avoidance responses from friends. Table 2 also indicates some interesting patterns of results between stress, personal resources, and the support variables. Women who experience greater levels of violence and who have fewer personal resources are likely to have less contact with friends and family (unaccompanied by their partners), to report fewer people they can count on as supporters, and to experience more avoidance responses from friends.

--- Insert Table 3 About Here ---
Coping Responses. As seen in Table 3, there is a greater likelihood of individuals using avoidance coping strategies if they are experiencing increased levels of violence, have fewer personal resources, fewer numbers of supporters, and minimal contact with friends and family. Active coping strategies (i.e., those focused on dealing more directly with the problem at either the cognitive or behavioral level) were more likely to be used when women experienced positive responses from institutional sources and when women did not experience avoidance responses from friends.

Indirect Effects of Stress

The results described above indicate that social support and coping response variables are related to stress, as well as to levels of adjustment. As the level and frequency of violence increase, women are less likely to receive supportive responses from friends, and are more likely to use avoidance coping responses. To what extent does stress have an indirect effect upon functioning through its impact upon support and coping? Do support and coping still have a significant impact upon functioning after the effects of stress have been controlled for statistically? To investigate this, a series of regression analyses were performed to assess the effect of each of the coping and support variables upon adjustment (i.e., depression, mastery, and self-esteem) after controlling for stress.

The analyses indicate, with a few exceptions, that coping responses still have a significant effect upon functioning after level and frequency of violence are controlled for statistically, even though the strength of the relationships between coping and adjustment is diminished somewhat. A slightly different pattern of results emerges for the support variables. After controlling for level of violence, avoidance and empathic responses of friends are still related to women's self-esteem, and avoidance responses are still
negatively related to mastery. In contrast, support variables (i.e., avoidance responses of friends; visits with friends unaccompanied by one’s partner) are no longer significantly related to depression. Thus, these results suggest that the influence of stress upon adjustment occurs, in part, because of the influence of stress on social support and coping. As the level of violence increases, it becomes more likely that women will use avoidance coping, and that friends will be less likely to respond favorably to women’s requests for assistance.

**Moderating Effects of Social Support and Coping**

Do social-support and active coping responses "buffer" women from the maladaptive effects of stress? Similarly, do negative responses of friends and avoidance coping strategies "exacerbate" the effects of stress? Each of these questions implies a moderating role of support and coping, i.e., that they will have their strongest impact upon psychological health when women are experiencing high stress. To test for such moderating effects in this sample, hierarchical regression analyses were performed in which a stress x support (or stress x coping) interaction term was entered following the main effect of stress (i.e., times battered) and the main effect of support (or coping), for each of the adjustment variables (i.e., depression, mastery, and self-esteem). The number of significant interaction terms found did not exceed that which would have been expected by chance. The failure to find significant interaction effects in this study, however, may be due to the low statistical power afforded by the small sample size.
DISCUSSION

In the present study, we have sought to use a stress-support-coping paradigm in understanding the consequences of domestic violence. We feel that this approach has been a useful one, in that it has allowed us to: (a) describe how a variety of personal and environmental variables influence the adjustment of battered women; and (b) outline a model which suggests some potential pathways through which violence may indirectly influence personal adjustment through its impact on other characteristics of women's lives (such as coping responses and the availability of social support).

Factors Influencing Adjustment

The high depression and low self-esteem scores of the women studied here do support Walker's (1979) contentions that stressful violent relationships do have serious negative psychological consequences. As described earlier, increased frequency and severity of violence were strongly related to more severe depression and lowered self-esteem. A number of other variables, though, also contribute to the psychological adjustment of battered women. Individuals with greater personal resources, more supportive responses from formal and informal sources of help, and less avoidant coping styles are more likely to show psychological health. Personal resources (i.e., education, employment, job skills) may positively influence adjustment by decreasing women's apprehension about their ability to follow through on a decision to leave the relationship. In terms of social support, both negative and positive responses of friends have an impact on adjustment. Women's sense of self-esteem and mastery are likely to be lower if their attempts to obtain help from their informal social network are met with discomfort and avoidance on the part of friends.

The results also suggest some ways in which stress and personal resources
may influence adjustment indirectly by affecting some other aspects of women's lives. For example, greater levels of violence are associated with a greater likelihood that women will experience nonsupportive responses from friends. This may occur because increased violence causes women to decrease their degree of social contact, thereby limiting their ability to maintain supportive ties, and/or because friends feel reluctant to involve themselves in situations where there is a high level of domestic violence. Increasing frequency and severity of violence are also associated with greater use of avoidance coping, which is associated with more severe depression, lowered self-esteem, and decreased mastery. Thus, episodes of violence may influence adjustment not only through their immediate traumatic effects, but also through their deleterious impact on women's coping and social resources.

In a contrasting manner, personal resources may also influence adjustment indirectly through their impact on social support and coping. Women with greater personal resources report having more contact with, and more supportive responses from, friends. Increased education, income, and job skills may make it easier for women to gain access to non-marital social roles which provide opportunities for developing friendships outside of the marital context. This may also lead to the development of more "loose-knit" and less tightly-bounded social networks, which are likely to put women in touch with more diverse channels of information about formal and informal sources of support (Wellman, 1981).

Factors Related to Social Support

Why do some women receive more supportive responses from friends than others? Are there factors besides level of violence that might influence support? The results suggest a possible link between the structure of women's social ties and their supportiveness: i.e., the more that women's social ties overlap with their
partners, the more difficulty women may have in obtaining support in dealing with the battering situation. For example, women who have met a larger proportion of their friends through their partners, and who have fewer social contacts unaccompanied by their partners, are more likely to encounter friends who respond to their help-seeking efforts by avoiding the issue, or minimizing its seriousness. This may be because individuals who are friends of the man as well as the woman may be reluctant to involve themselves in "taking sides" in a marital dispute. These results seem consistent with a study of separated and divorced women which found that friendships dependent upon the link between the couple were least likely to persevere through the separation process. Friends of the woman who were also spouses of their husband's friends and business associates were more likely to be unavailable to the women as sources of support (Wilcox, 1981). For battered women in tightly knit social networks, then, separation from their husbands may also mean the disruption of the major portion of their social ties. Thus, an examination of women's social networks may be useful in understanding the availability of social support.

**Limitations**

Given the exploratory nature of this study, these results have to be interpreted with some caution. First, the cross-sectional design of the study allows for alternative explanations of several findings. For example, severity of depression may influence support, as well as support influencing depression. Women who are depressed may be more likely to underestimate the degree of support they receive as one way of explaining, or making sense of, their current distress (Gore, 1981). In addition, their depressed behavior may increase the likelihood of their alienating sources of support (Coates & Wortman, 1980). Similarly, informal and institutional help may be associated with more active
coping because women who use more effective coping responses may be better able to demand more adequate service from criminal, legal and mental health systems, as well as obtain more supportive responses from friends. Thus, while the paths in the model presented earlier are unidirectional, we recognize that these processes are likely to be reciprocal.

Second, the self-selected nature of the sample makes it difficult to know the generalizability of the findings. For example, are women who seek help from shelters more likely to have experienced negative responses from institutional and informal sources to their requests for assistance? Are the deleterious consequences of violence upon psychological health equally strong among women who do not seek assistance from shelters? While early psychodynamically oriented writings tended to focus on the "abnormality" of battered women who sought assistance, more recent investigators have argued strongly that the experiences of women seeking refuge in shelters are typical of large numbers of battered women who can not be accommodated in current overcrowded shelters (Walker', 1981). Nevertheless, such issues can be clarified only through the difficult process of examining such questions among women in non-refuge settings (e.g., Straus, Gelles, & Steinmetz, 1980).

Implications for Practice

While the practitioner is not likely to be surprised by the fact that stress, support and coping are related to depression, such findings help to remind us of their importance. In working with the victims of trauma such as rape or spouse abuse, one may overlook symptoms of depression when dealing with women's more urgent concerns about security and safety (Atkeson, Calhoun, Resick, & Ellis, 1982). An explicit discussion of how the variables represented in the model can increase or decrease vulnerability to depression may help women understand and
deal with these pressures. For example, therapists might use social network analysis to help women understand how social ties maintained primarily through their partners are less likely to provide assistance in dealing with the battering.

These results also have implications for the evaluation of services for battered women (e.g., shelters and refuges). Discussions of the effectiveness of such services have typically focused upon the degree to which they increase women's resolve to leave the battering relationship. In one follow-up study of women two months after their brief residence at a shelter, though, more than half had returned to living with their assailant (Snyder & Scheer, 1981). Rather than considering these women "treatment failures," one might look more broadly at the impact of shelter programs on women's subsequent levels of social contact, coping responses, and sense of mastery and self-esteem. Although they have returned to the battering relationship, some women may be more readily able to mobilize support and leave were a subsequent violent episode to occur. Similarly, one might examine changes in support and functioning variables to determine which programs (or elements of programs) were most effective in helping those women who do decide to leave the battering relationship. An examination of only subsequent living arrangements (i.e., residing or not residing with the batterer) masks such differences.

**Implications for Research**

One issue raised by this study is the relative utility of different approaches to investigating social support processes. In this study, measures of support that were closely related to the stress at hand (i.e., willingness of friends to talk about the battering situation) were more strongly related to adjustment than were more global measures of support (i.e., number of supporters).
or social activity (i.e., numbers of visits with friends and family). This finding seems consistent with the arguments of investigators who have recently emphasized the specificity in stress-support-adjustment relationships (Gottlieb, 1981; Mitchell, Billings, & Moos, in press). Nevertheless, we feel that there should be an interplay between attempts to look at the more general and the more specific aspects of social networks. Our understanding of support processes will benefit from investigations of both: (a) the types of support that are most effective in dealing with particular types of stressful events or situations; and (b) the more general characteristics of social networks that are important in determining when these more specific types of support are most likely to be provided. In this study, the overlap between husbands' and wives' social ties seemed to work against women's ability to gain support from friends in dealing with the battering situation.

A final issue involves the integration of analyses at the individual and social level. Although this study has focused upon analyses of stress, coping, and support at the level of the individual, we recognize the importance of linking such processes to their broader sociocultural context. For example, to what extent is the reluctance of friends to involve themselves in helping a woman deal with a battering situation related to more traditional views of sex-roles and marriage (e.g., the "privacy" of the husband-wife relationship)? To what extent is the relative isolation of some women from social contacts enhanced by a social structure which increases demands (e.g., child-rearing responsibilities) and reduces opportunities (e.g., unequal pay for equal work) for women? As we begin to understand the way individuals cope with domestic violence, it is important that we also appreciate the way individuals' options are influenced by broader social forces. As Pearlin and Schooler (1979) state: "In a climate where it
may be politically fashionable to ignore the connections between social problems and personal problems, we should resist the temptation of trying to explain psychological distress solely in terms of coping failures or breakdowns of support systems" (p. 205). Future research should examine how social structures constrain and limit the options available to battered women, as well as the psychosocial processes that determine how effectively women will use those resources that are available to them for coping with their situations.
Reference Notes


5. Cronkite, B. C., & Moos, R. H. The role of predisposing and mediating factors in the stress-illness relationship. Unpublished manuscript, Social Ecology Laboratory, Department of Psychiatry and Behavioral Sciences, Stanford University and Veterans Administration Medical Centers, Palo Alto, California, 1982.


7. Derogatis, L. R., & Melisaratos, N. The Brief Symptom Inventory: An introductory report. Unpublished manuscript, Johns Hopkins University School of Medicine, Baltimore, Maryland, 1982.
REFERENCES


Battered Women


Snyder, D.K., & Scheer, N.S. Predicting adjustment following brief residence at a shelter for battered women. *American Journal of Community Psychology*, 1981, 9, 559-566.


Footnotes

1 While there certainly may be non-battering related sources of stress in women's lives, the level and frequency of violence experienced by women is seen as a major indicator of stress. In fact, battering incidents may precipitate the occurrence of negative life changes that are more typically measured by life event scales; for example, absences at work because of batterings could lead to trouble with supervisors, and eventually loss of job.

2 Although the term "supporters" is used to describe the number of people the woman sees as available for "socializing" or for talking about "personal problems", we recognize the complexity involved in categorizing multidimensional relationships as supportive or non-supportive. As Wellman (1981) points out, individuals seek a variety of support and exchange functions in their relationships with each other. Any network member can be a source of both support and stress, depending upon the context and the supportive function being considered. Nonetheless, our intent here is to obtain some global estimate of the supportive capacity of the woman's network (i.e., number of supporters) that can be contrasted with the more specific responses of network members to the woman's help-seeking efforts regarding the battering situation.

3 Of the 60 women in the sample, 45 had contacted the police, 26 had contacted therapists, and 17 had contacted lawyers. All of the women had contacted at least one of the above service systems.

4 High scores on self-report measures of depressive symptoms do not necessarily reflect the presence of a diagnosable clinical depression (Lewinsohn & Teri, 1982). Nonetheless, such scores are likely to indicate considerable psychological distress.
Such cross-sectional analyses as these need to be complimented with more longitudinal analyses that examine the processes of support over time.

In this study, women were asked to report on the reactions of friends to their first, as well as their more recent attempt to discuss the battering situation. Initial responses of friends were significantly more likely to involve avoidance and minimization of the problem, and less likely to involve a recommendation to contact the police or a lawyer.

Interpretation of these results is difficult however, since it is not known whether: (a) the reactions of friends change over time; (b) women become more selective in seeking out more responsive friends for assistance; or (c) both of the above. More longitudinal analyses might address such issues.
Table 1
Correlations Among Personal and Environmental Factors and Adjustment Variables

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th>Mastery</th>
<th>Self-Esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stress</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times battered</td>
<td>.42&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.12</td>
<td>-.31&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Level of violence</td>
<td>.31&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.16</td>
<td>-.20</td>
</tr>
<tr>
<td><strong>Personal Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite of woman's income, education, and occupational status</td>
<td>-.29&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.29&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.40&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Institutional Response</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite of helpfulness of police, lawyers, and therapists</td>
<td>-.25&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.13</td>
<td>.10</td>
</tr>
<tr>
<td><strong>Social Support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathic responses of friends to discussing battering</td>
<td>-.10</td>
<td>.24</td>
<td>.28&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Avoidance responses of friends to discussing battering</td>
<td>.26&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.40&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.45&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Contact with friends and family (unaccompanied by partner)</td>
<td>-.23&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.26&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.21</td>
</tr>
<tr>
<td>Contact with friends and family (accompanied by partner)</td>
<td>.09</td>
<td>.17</td>
<td>.19</td>
</tr>
<tr>
<td>Number of supporters</td>
<td>-.15</td>
<td>.27&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.15</td>
</tr>
<tr>
<td><strong>Coping Responses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active-cognitive coping</td>
<td>-.42&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.49&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.44&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Active-behavioral coping</td>
<td>-.25&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.33&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.31&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Avoidance coping</td>
<td>.38&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.36&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.50&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note: Ns vary due to missing data.

<sup>a</sup>p ≤ .05  <sup>b</sup>p ≤ .01  <sup>c</sup>p ≤ .001
Table 2

Correlations among Stress, Personal Resources, and Social Support Variables

<table>
<thead>
<tr>
<th></th>
<th>Empathic Responses of Friends</th>
<th>Avoidance Responses of Friends</th>
<th>Contact with Friends and Family (unaccompanied by partner)</th>
<th>Contact with Friends and Family (accompanied by partner)</th>
<th>Number of Supporters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times battered</td>
<td>-.04</td>
<td>.33&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.23</td>
<td>-.02</td>
<td>-.14</td>
</tr>
<tr>
<td>Level of violence</td>
<td>-.18</td>
<td>.35&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.42&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.07</td>
<td>-.30&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Personal Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite of income, education, and occupational status</td>
<td>.45&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.33&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.39&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.07</td>
<td>.38&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Social Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of friends met through partner</td>
<td>-.18</td>
<td>.41&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.25&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.22</td>
<td>-.05</td>
</tr>
<tr>
<td>Empathic responses of friends</td>
<td>---</td>
<td>-.44&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.40&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.15</td>
<td>.15</td>
</tr>
<tr>
<td>Avoidance responses of friends</td>
<td>---</td>
<td>-.32&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.21</td>
<td>.19</td>
<td></td>
</tr>
<tr>
<td>Contact with friends and family (unaccompanied by partner)</td>
<td>---</td>
<td>.12</td>
<td>.44&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact with friends and family (accompanied by partner)</td>
<td>---</td>
<td>---</td>
<td>.02</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Ns vary due to missing data. <sup>a</sup>p ≤ .05  <sup>b</sup>p ≤ .01  <sup>c</sup>p ≤ .001
Table 3

Correlations Among Coping Variables and Personal and Environmental Factors

<table>
<thead>
<tr>
<th></th>
<th>Active-Cognitive Coping</th>
<th>Active-Behavioral Coping</th>
<th>Avoidance Coping</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stress</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times battered</td>
<td>-.09</td>
<td>.20</td>
<td>.35&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Level of violence</td>
<td>-.04</td>
<td>-.10</td>
<td>.35&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Personal Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite of income, education, and occupational status</td>
<td>.08</td>
<td>.20</td>
<td>-.48&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Institutional Response</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite of helpfulness of police, lawyers, and therapists</td>
<td>.31&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.25&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.16&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Social Support</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathic responses of friends to discussing battering</td>
<td>.16</td>
<td>.23</td>
<td>-.04</td>
</tr>
<tr>
<td>Avoidance responses of friends to discussing battering</td>
<td>-.37&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.28&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.23</td>
</tr>
<tr>
<td>Contact with friends and family (unaccompanied by partner)</td>
<td>.16</td>
<td>.12</td>
<td>-.40&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Contact with friends and family (accompanied by partner)</td>
<td>.10</td>
<td>.21</td>
<td>-.10</td>
</tr>
<tr>
<td>Number of supporters</td>
<td>-.04</td>
<td>.06</td>
<td>-.32&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note: Ns vary due to missing data.

<sup>a</sup><sub>p ≤ .05</sub>

<sup>b</sup><sub>p ≤ .01</sub>

<sup>c</sup><sub>p ≤ .001</sub>
Figure Caption

Figure 1: A conceptual Framework of the Determinants of Adjustment Among Battered Women
Stress (ie, Level of Violence), Personal Resources, Social Support, Institutional Responsiveness, Coping Responses, Psychological Health
Reactions of Friends to Women's Attempts to Discuss the Battering Situation

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Empathic Responses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were sympathetic</td>
<td>2.58</td>
<td>1.20</td>
</tr>
<tr>
<td>Urged you to talk about how you felt</td>
<td>2.56</td>
<td>0.98</td>
</tr>
<tr>
<td>Met with you more often</td>
<td>2.14</td>
<td>1.12</td>
</tr>
<tr>
<td>Total scale score</td>
<td>2.43</td>
<td>0.97</td>
</tr>
<tr>
<td><strong>Avoidance Responses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seemed uncomfortable talking about it</td>
<td>2.16</td>
<td>1.09</td>
</tr>
<tr>
<td>Became annoyed when you didn't accept his/her advice</td>
<td>2.02</td>
<td>1.18</td>
</tr>
<tr>
<td>Saw less of you</td>
<td>1.91</td>
<td>1.13</td>
</tr>
<tr>
<td>Tried to change the topic</td>
<td>1.86</td>
<td>1.15</td>
</tr>
<tr>
<td>Pointed out the good parts of your relationship with your husband/boyfriend</td>
<td>1.56</td>
<td>0.86</td>
</tr>
<tr>
<td>Said things weren't so bad</td>
<td>1.44</td>
<td>0.88</td>
</tr>
<tr>
<td>Total scale score</td>
<td>1.83</td>
<td>0.78</td>
</tr>
<tr>
<td><strong>Advocacy Responses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urged you to call a lawyer or police</td>
<td>2.03</td>
<td>1.15</td>
</tr>
<tr>
<td>Offered you a place to stay</td>
<td>2.00</td>
<td>1.22</td>
</tr>
<tr>
<td>Urged you to see a counselor</td>
<td>1.79</td>
<td>1.15</td>
</tr>
</tbody>
</table>

\[ a \text{ 1=not at all; 2=a little; 3=moderately; 4=quite a bit.} \]

\[ b \text{ Because of low internal consistency scores, a scale for these items was not constructed.} \]