



This is to certify that the
thesis entitled

DOES SOCIAL SUPPORT MODERATE STRESS APPRAISAL
FOR WOMEN IN ABUSIVE RELATIONSHIPS?

presented by

Sally A. Theran

has been accepted towards fulfillment
of the requirements for

M.A. degree in Psychology

Major professor

Date 12/10/99

LIBRARY
Michigan State
University

PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.
MAY BE RECALLED with earlier due date if requested.

DATE DUE	DATE DUE	DATE DUE
NOV 10 2008 110408		

DOES SOCIAL SUPPORT MODERATE STRESS APPRAISAL
FOR WOMEN IN ABUSIVE RELATIONSHIPS?

By

Sally A. Theran

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Psychology

1999

ABSTRACT

DOES SOCIAL SUPPORT MODERATE STRESS APPRAISAL FOR WOMEN IN ABUSIVE RELATIONSHIPS?

By

Sally A. Theran

Previous research on domestic violence has neglected the relationship between stress appraisal and social support. This study examined social support as a moderator of the relationship between abuse and stress appraisal. The current study was part of a larger project that interviewed 399 women, of whom 206 had been physically and psychologically abused in the six months prior to the interview. Results indicated that the experience of psychological abuse resulted in more stress appraisal than did physical abuse. In addition, while social support did not buffer the effects of abuse, a main effect was found.

ACKNOWLEDGEMENTS

I owe many thanks to my advisor, Anne Bogat, who thoughtfully guided me during the process of writing my thesis. She was compassionate, knowledgeable, and a source of constant encouragement; I could not have asked for a better advisor. I also appreciate the help and guidance of my thesis committee members, Bill Davidson and Cris Sullivan. In addition, John's commitment, support, and love were an integral part of this process. Finally, I would like thank my friends and family, both near and far, for their support.

TABLE OF CONTENTS

LIST OF TABLES	vi-vii
INTRODUCTION.....	1
Domestic Violence.....	1
Stress Appraisal	8
Social Support.....	11
Rationale	17
The relationship between stress and social support.	18
The relationship between social support and domestic violence.	19
Hypotheses	19
METHOD	21
Participants.....	21
Measures	22
Physical Abuse.....	22
Psychological Abuse	23
Social Support.....	24
Stress	24
Procedure	25
RESULTS	27
Preliminary Analyses	27
Test of the Hypotheses.....	31
DISCUSSION	34
Limitations	38
Directions for Future Research	43

APPENDICES	45
Appendix A: The Conflict Tactics Scale, Modified	45
Appendix B: The Index of Psychological Abuse Scale	47
Appendix C: The Adult Social Support Questionnaire.....	49
Appendix D: The Life Event Checklist.....	52
Appendix E: The Informed Consent Form	58
Appendix F: Tables.....	60
REFERENCES	80

LIST OF TABLES

Table I:	Abuse Status of Participants.....	61
Table II:	Descriptive Statistics for Demographics of Abused Women versus Non-Abused Women.....	62
Table III:	Pearson Product Moment Correlations for Variables: Abused Women only.....	63
Table IV:	Descriptive Statistics for Abused Women only.....	64
Table V:	Pearson Product Moment Correlations for Variables: Non-Abused Women only.....	65
Table VI:	Descriptive Statistics for Non-Abused Women only	66
Table VII:	Pearson Product Moment Correlations for Variables: All Women in the Sample	67
Table VIII:	Descriptive Statistics for All Women in the Sample.....	68
Table IX:	Most Endorsed Types of Physical Abuse and Most Frequently Occurring Types of Physical Abuse for Abused Women.....	69
Table X:	Most Endorsed Types of Psychological Abuse and Most Frequently Occurring Types of Psychological Abuse for Abused Women.....	70
Table XI:	Most Endorsed Types of Psychological Abuse and Most Frequently Occurring Types of Psychological Abuse for Non-Abused Women.....	71
Table XII:	Most Endorsed Life Events and Most Stressful Life Events for Abused Women	72
Table XIII:	Most Endorsed Life Events and Most Stressful Life Events for Non-Abused Women	73
Table XIV:	Summary of Hierarchical Regression Analysis for Frequency of Psychological Abuse and Social Support Predicting Stress Appraisal.....	74

Table XV:	Controlling for Demographics: Summary of Hierarchical Regression Analysis for Frequency of Psychological Abuse and Social Support Predicting Stress Appraisal.....	75
Table XVI:	Summary of Hierarchical Regression Analysis for Frequency of Physical Abuse and Social Support Predicting Stress Appraisal.....	76
Table XVII:	Controlling for Demographics: Summary of Hierarchical Regression Analysis for Frequency of Physical Abuse and Social Support Predicting Stress Appraisal.....	77
Table XVIII:	Summary of Hierarchical Regression Analysis for Severity of Physical Abuse and Social Support Predicting Stress Appraisal.....	78
Table XIX:	Controlling for Demographics: Summary of Hierarchical Regression Analysis for Severity of Physical Abuse and Social Support Predicting Stress Appraisal.....	79

INTRODUCTION

The goal of this study was to test the effects of social support in the lives of women in abusive relationships. Specifically, this study examined social support as a moderator of the relationship between abuse, a stressor, and amount of stress appraisal. Social support was comprised of several domains that included social companionship, advice and information, practical assistance, emotional support, and financial support. Abuse was defined as physical, psychological, and sexual abuse.

The present study attempted to determine whether socioemotional types of social support, such as companionship and emotional support, can reduce the amount of stress appraisal. Abusive relationships are associated with multiple negative consequences, so if social support reduces the amount of stress appraisal, social support can drastically affect the amount of stress experienced, and secondarily, the amount of psychological and physical distress experienced as a result of the abuse.

Domestic Violence

Recently, researchers have focused on the issue of domestic violence. Domestic violence continues to be a pervasive social and public health problem; estimates indicate that between 21 and 34 percent of all women will experience some kind of abuse from an intimate partner during their lifetime (Koss, 1990), and the current incidence rate ranges from 5 to 25 percent of women, depending on the methodology used (Campbell & Lewandowski, 1997).

Consequences of an abusive relationship involve physical injuries, physical health problems, and emotional and psychological symptoms. Injuries from an abusive relationship may involve pain, broken bones, facial trauma, and tendon or ligament

injuries (Campbell & Lewandowski, 1997). In addition, it is possible that hearing, vision, and concentration problems may be the result of undiagnosed neurological damage (Campbell & Lewandowski, 1997). One study (Sullivan, Tan, Basta, Rumptz, & Davidson, 1992) found that the three most common injuries experienced by women, six months before entering a shelter, were cuts or bruises (87%), soreness without bruises (84%), and strains or sprains (40%). In addition, a notable percentage of women experienced more severe injuries, such as broken bones (21%), internal injuries (13%), pregnancy problems or miscarriage (10%), and dislocations of bones (10%).

Physical abuse is highly correlated with physical health problems (Hilberman & Munson, 1977; Rodriguez, 1989; Warshaw, 1997). One study found that 97% of a sample of women in abusive relationships had at least one physical or psychological symptom stemming from the effects of the abuse and associated stress; these symptoms were reactions to the abuse, rather than injuries (Follingstad, Brennan, Hause, & Polek, 1991). In addition, women experienced a significant increase in physical health once abuse ended. Research also demonstrates that women in abusive relationships report significantly higher levels of somatic complaints than women not in abusive relationships (Jaffe, Wolfe, Wilson, & Zak, 1986). Therefore, it is clear that women in abusive relationships suffer not only from injuries, but also from long-term physical health problems such as back and limb problems, insomnia, pelvic pain, migraine headaches, sleep problems, and stomach aches (Eby, Campbell, Sullivan, & Davidson, 1995; Follingstad, Brennan et al., 1991; Hilberman & Munson, 1977; Jaffe et al., 1986).

Initially, research focused on traits of the individual woman that made her more vulnerable to abuse (Goodstein & Page, 1981); this victim-blaming approach later

changed to a focus on the psychological consequences of physical abuse (Campbell, Sullivan, & Davidson, 1995; Tutty, Bidgood, & Rothery, 1993). Researchers noted that psychological problems that women experienced were a result of the abuse, rather than defective characteristics of women that were the cause of the abuse (Gelles & Harrop, 1989; Holtzworth-Munroe, Smutzler, & Sandin, 1997). Psychological symptoms are as prevalent as physical symptoms in abused women; women in abusive relationships tend to be more depressed, have increased anxiety, and increased suicide attempts (Campbell & Lewandowski, 1997; Campbell et al., 1995; Gelles & Harrop, 1989; Hilberman & Munson, 1977; Jaffe et al., 1986; Mitchell & Hodson, 1983; Sato & Heiby, 1992).

One study examined a sample of women in a battered women's shelter and conducted follow-up interviews with the women upon shelter exit (Campbell et al., 1995). The researchers found that rates of depression significantly decreased over time. At shelter exit, 83% of the women had at least mild depression; six months later, only 59% of the women had at least mild depression. The rates of depression decreased even more for women who were no longer in the abusive relationship. Furthermore, it was found that feelings of powerlessness, experience of abuse, and decreased social support contributed to the depression, and that the scores on these variables at the 10-week follow-up point predicted levels of depression at the 6-month time period. Thus, abuse can engender psychological problems, such as depression and powerlessness, that damage women's feelings of control, and may serve as barriers to leaving the abusive relationship.

One shortcoming of studies that have examined the impact of physical abuse on psychological well-being is that, with the exception of Gelles and Harrop's (1989) study,

all of the researchers cited above recruited their participants from domestic violence shelters. These participants are not representative samples of the abused population at large (Kemp, Green, Hovanitz, & Rawlings, 1995), and are more likely to have financial problems (Sullivan & Rumptz, 1994). It is also possible that shelter participants could have more or less psychological problems stemming from the abusive relationship (Gelles & Harrop, 1989).

One of the studies that did use a general population sample (Gelles & Harrop, 1989) surveyed a randomly selected national sample, and found that women who reported experiencing violence and abuse were significantly more likely to report symptoms of moderate or severe psychological distress. They defined moderate psychological distress as headaches, nervousness or stress, and feelings of sadness and depression. Severe psychological distress included being overwhelmed by difficulties, feeling worthless and hopeless, not being able to cope, and feeling that nothing was worthwhile. In addition, the participants' income was negatively related to moderate and severe distress; thus, women with higher income were less likely to report experiencing moderate and severe psychological distress. However, this study had several disadvantages; because it was a cross-sectional design, it was impossible to determine if the psychological distress preceded experiences with violence or was a consequence of the experiences. Given Campbell et al.'s (1995) study, it is likely that the psychological distress was largely a consequence of the abusive relationship, because distress decreased substantially after leaving the shelter. A second shortcoming of Gelles and Harrop's (1989) study is that they did not use a control group.

The psychological symptoms resulting from physical abuse sometimes fit DSM-IV criteria for Posttraumatic Stress Disorder (PTSD). Some research has documented that women in abusive relationships suffer from PTSD (Astin, Lawrence, & Foy, 1993; Follingstad, Neckerman, & Vormbrock, 1988). As defined by the DSM-IV, PTSD involves experiencing or witnessing a threatening event, a response involving fear, re-experiencing the event (including nightmares or psychological distress at symbols that resemble the event), avoidance of stimuli associated with the trauma, and persistent symptoms of increased arousal (e.g., sleep disturbances and concentration difficulties). Rates of PTSD in women in abusive relationships range from 33% to 85%, depending on the sample used, and the protocol used to measure PTSD (Astin et al., 1993). However, the most frequently experienced psychological responses to an abusive relationship, such as depression and stress-related physical symptoms, are not related to PTSD (Woods & Campbell, 1993). In addition, researchers often assess PTSD when women are still experiencing violence and/or threats from their partner, making it impossible to adequately assess PTSD. This indicates that PTSD is not the most complete explanation for women's reactions to abusive relationships.

While the effects of physical abuse have been widely researched in the last fifteen years, researchers have only begun to examine the effects of emotional abuse. Emotional abuse also has serious psychological consequences (Campbell & Lewandowski, 1997). In fact, Marshall posited that psychological abuse is more damaging than all but the most severe violence (Marshall, 1993, as cited in Ellington & Marshall, 1997). Indeed, in a study comparing three groups of women, with psychological abuse only, psychological abuse with moderate violence, and psychological abuse with severe violence, there were

few differences among the groups, and the only differences existed between the first two groups and the third (Ellington & Marshall, 1997).

According to Follingstad, Rutledge, Berg, Hause, & Polek's (1990) study, the only evidence for the negative consequences of psychological abuse has been anecdotal. The anecdotal evidence indicates that psychological abuse can have devastating effects, because it is more painful, and damages self-esteem. Psychological abuse is used as a means of wielding power; it serves to control the woman, diminish her self-esteem, and keep her with the abuser. A qualitative study by Lempert (1996) indicates the importance of examining psychological as well as physical abuse. One woman said,

“The verbal attack was much more abusive [than the physical attack], I thought, much more, much more devastating... a physical attack is just physical. It's your body. Whereas a verbal attack, you know, they get into you, the person, and um, it's more emotional and psychological. I mean my face healed. But the stuff he did to my mind, it hasn't even healed to this day and it's been, you know, I've been separated from him for over a year now” (p. 285).

Follingstad et al.'s (1990) study sought to clarify the prevalence and effects of psychological abuse. Their sample consisted of 234 women with some history of physical abuse who were recruited from a variety of sources, including shelters and newspaper ads. Follingstad and her colleagues assessed six types of emotional abuse: threats of abuse, ridicule, jealousy, threats to change marital status, restriction/social isolation, and damage to joint property. Follingstad and her colleagues found that 99% of women experienced emotional abuse. The most frequently experienced form of psychological abuse was restriction/social isolation (74.4%). Jealousy (67.6%) and ridicule (64.5%) were also common. Women rated ridicule (45.7%) as the worst type of emotional abuse, followed by threats (14.9%), jealousy (12.2%) and restriction/social

isolation (10.4%). Psychological abuse is very detrimental to women in abusive relationships; 72% of the participants indicated that emotional abuse had a more severe impact on them than physical abuse. However, one significant flaw of this study is that the participants only rated the emotional abuse as to the direction of the impact on their lives: negative, neutral, or positive effect. Thus, the study lacks a richer understanding of the effects of psychological abuse on psychological well-being, and how the consequences of psychological abuse differ from those of physical abuse.

According to Follingstad et al. (1990), isolation is considered a form of psychological abuse; it was the most commonly experienced form of emotional abuse, and has harmful repercussions on a woman's independence. Other studies indicate as well that women in abusive situations can become extremely socially isolated (Forte, Franks, Forte, & Rigsby, 1996; Hilberman & Munson, 1977; Holiman & Schilt, 1991; Rynerson & Fishel, 1993). Women in abusive relationships have less social support than controls (Barnett, Martinez, & Keyson, 1996). One study (Forte et al., 1996) found that 25% of their sample had not been involved in any social activities in the previous month. Another study found similar results; 42% of couples in an abusive relationship had a social activity less than once a month, and 63% of couples had no outside activities (Rynerson & Fishel, 1993). In terms of their personal relationships, when asked to indicate the number of people that they could be with when they wanted to have fun or with whom they could discuss personal problems, 61% of women in abusive relationships reported that they had one or less person available (Mitchell & Hodson, 1983).

It has been hypothesized that friends and family may feel discomfort with the abuser's behavior, and thus tend to avoid the abuser, and by association, the woman being

abused (Dutton, Hohnacker, Halle, & Burghardt, 1994). In addition, discomfort with the issue of domestic violence may cause friends and families to try to minimize the situation, which might increase the woman's experience of isolation and frustration (Mitchell & Hodson, 1983). However, as previously noted, all of the research on psychological abuse used domestic violence shelter samples, with the exception of Follingstad et al.'s (1990) study, which used a mixed sample. It is possible that women in shelters have less access to social support than a community sample, who have other means of refuge besides shelters. Thus, domestic violence has many harmful repercussions for women's lives, and may engender large amounts of stress appraisal.

Stress Appraisal

Domestic violence acts as a chronic stressor in women's lives (Woods & Campbell, 1993). It enacts the double bind of increasing the level of stress in a woman's life, while decreasing personal and social resources for dealing with stress (Mitchell & Hodson, 1983). In addition, abuse is a stressor that threatens a woman's physical and psychological well-being (Carlson, 1997). Women in abusive relationships experience a great deal of stress; one study found that 68% of women in a shelter perceived themselves to be under a great deal of stress (Rodriguez, 1989).

Traditionally, stress has been defined as the response of the body to demands placed upon it (Spacapan, 1988). Assessment of stress has involved the existence of specific life stressors in a person's life. However, the existence of an objective stressor is less important than how stress is appraised, and stress is therefore more subjective than objective (Aldwin & Revenson, 1987). Within the realm of stress research, the

psychological literature has focused on individuals' subjective evaluations of specific life events or circumstances (Cohen, Kessler, & Underwood Gordon, 1995).

Current stress theory focuses on the cognitive process of appraisal, which pertains to the evaluation of stressors and their dimensions. According to Lazarus and Folkman's (1984) model of stress, stress is defined as the aspect of the person-environment relationship in which the person perceives something as depleting, or exceeding, resources and endangering physical and psychological well-being. Thus, this concept involves a cognitive appraisal of the stressor, because the individual has to evaluate an incident regarding its implications for physical and psychological well-being. Therefore, the subjective meaning of the event, rather than the mere existence of the event itself, is important.

Cognitive appraisal has two steps. The first step, primary appraisal, involves assessing whether or not an event is stressful. Stressful appraisals include harm or loss, threat, and challenge. Women in abusive relationships are likely to decide that the abuse is stressful, because an abusive relationship is likely to have aspects of harm or loss, threat, and challenge. The second step, secondary appraisal, is an evaluative process in which the person evaluates their resources, and determines how to respond or how to cope (Cohen et al., 1995). Again, women in abusive relationships are likely to consider different ways of handling the abusive relationship, and their options will be affected by their personal resources, including social support.

Thus, there are several steps in the stress process. First, the event occurs, followed by primary appraisal and then secondary appraisal. Next comes the stress

reaction, which can be manifested in physiological responses or psychological response. This process results in an increased risk of psychiatric and physical diseases.

Stress has serious health-related consequences. A strong association between stress and physical and psychological illness exists (Gottlieb, 1985). Physically, stress has been linked to health problems such as headaches, heart disease, heartburn, backache, childhood leukemia, heart attack, stroke, and respiratory illness (Gottlieb, 1985; Quick, Horn, & Quick, 1987). Psychologically, stress has been related to problems such as burnout, depression, schizophrenia, sexual dysfunction, and sleep disturbances (Gottlieb, 1985; Quick et al., 1987). As described earlier, women in abusive relationships frequently suffer from such illnesses, both physical and psychological, that are uncorrelated with the actual physical injuries inflicted by their abuser.

There is a positive pattern between stress and social support; as stress increases, so does the likelihood that the individual will utilize social support resources (Carveth & Gottlieb, 1979). Conversely, social support may affect functioning by reducing subjective appraisal of the stressfulness of a negative life event or strain (Kessler, Price, & Wortman, 1985; Mitchell, Billings, & Moos, 1982). Although certain life events are almost universally experienced as stressful (e.g., death of a spouse), the impact of such events are still dependent upon the individual's appraisal of the event, and her ability to cope with it. Social support can influence the appraised stressfulness of such an event (Cohen et al., 1995). Thus, social support, or the influence of significant persons, affects the appraisal of stress (Follingstad, Brennan et al., 1991).

Social Support

Social support has been defined in numerous ways. Primarily, social support is the assumption that others can be relied upon for advice, information, understanding, guidance, and support (Buunk & Hoorens, 1992). In addition, social support refers to receiving support from others once stress occurs (Gottlieb, 1983). Both of these definitions of support assume the preventive role of support against the negative effects of stress. Social support can also be viewed as a commodity that is provided by a variety of social relationships (Veiel, 1985).

In coping with stress, social support has been associated with better physical and psychological health (Cohen & Wills, 1985; Flannery & Wieman, 1989; Kessler & McLeod, 1985). Social support can act as a protective factor against stress appraisal, as well as the physical and psychological health problems caused by stress. Social support can be perceived as a resistance resource against illness, including stress-related illness (Quick et al., 1987). Because women in abusive relationships are typically socially isolated, social support can help ameliorate their isolation. In addition, positive social support from friends and family might influence a woman in an abusive relationship to seek social services or other help (Bowker, 1984).

However, it is essential that social support be positive; one study found that family members were the most frequently cited source of informal support, and that family members were rated as at least fairly helpful in 80% of the abusive incidents (Bowker, 1984). The author noted that negative social support can cause women in abusive relationships to blame themselves, or become less likely to seek help (Bowker, 1984). Women who did not share their abuse history gave reasons such as it being a

private matter, and being embarrassed (Mahlstedt & Keeny, 1993). Therefore, for women who are more reluctant to share their abuse, covertly blaming them will have serious consequences. In addition, if social support is either inadequate or judgmental, it could increase the woman's feelings of guilt and stigmatization. The quality of the social support matters; empathic responses from women's friends were positively correlated with self-esteem, while avoidance responses from friends were negatively correlated with self-esteem (Mitchell & Hodson, 1983).

Cohen and Wills (1985) provide a thorough examination of the two processes through which social support has a beneficial effect on psychological well-being. The main effect model maintains that social support has a beneficial effect regardless of the level of stress; the buffering hypothesis suggests that social support buffers and protects from the negative effects of stressful life events only under high levels of stress (DeKeseredy, 1988). In other words, the buffering model suggests that social support protects the individual from negative health outcomes, rather than enhancing health, as in the main effect model (Gottlieb, 1987).

The main effect theory of social support has been verified in numerous research studies (Bell, Leroy, & Stephenson, 1982; Duckitt & Broll, 1982; Mitchell et al., 1982). An additional study that verified the main effect model (Kemp et al., 1995) with a domestic violence sample used a shelter sample that is not representative of the general population. The buffering model has also been verified by many research studies (Aldwin & Revenson, 1987; Cohen & Hoberman, 1983; Dutton et al., 1994; Flannery & Wieman, 1989; Mitchell & Hodson, 1986). Of the previous studies mentioned that corroborate the buffering model, the two that used a domestic violence sample used non-

representative samples. Dutton and her colleagues (1994) compared women in abusive relationships to a forensic sample of women in abusive relationships who killed their spouses. The second study (Mitchell & Hodson, 1986) used a small shelter sample. Thus, there is a need for research on social support with a domestic violence sample that is more representative of the general domestic violence population.

Cohen and Wills (1985) hypothesize that in the buffering model, social support can mitigate stress at two different points in the stress continuum. The stress continuum begins with a potentially stressful event that leads to illness and/or disturbance in psychological well-being. Social support may come into play following the potential stressful event, when the appraisal process is occurring. In this manner, the individual suffering from stress will perceive that the social support will provide necessary resources that will redefine the situation, or help cope with the situation, and prevent the event from becoming as potentially stressful (Spacapan, 1988). Thus, the perception of social support, and available resources, results in the appraisal of reduced stress (Felsten & Wilcox, 1992). The second point at which social support might intercede is following the point where the event is appraised as stressful, but before the pathological response. Thus, social support might affect the impending pathological response by reducing stress, allowing for reevaluation of the situation, or providing a solution to the problem at hand.

To understand how social support affects the stress continuum, it is necessary to discuss the salient aspects of social support. Social support is defined as the qualitative aspects of a social network (Israel & Antonucci, 1987), while social networks are defined as the structure of the social support system. Research has shown that qualitative aspects of social support are better predictors of psychological well-being, and better buffers, than

quantitative aspects of social support (Cohen & Hoberman, 1983; Israel & Antonucci, 1987; Kemp et al., 1995; Wilcox, 1981). One study found that satisfaction with social support was independent of the size of the social network (Tan, Basta, Sullivan, & Davidson, 1995). Of the aforementioned studies, the two that examined the role of social support in a domestic violence population both used shelter samples (Israel & Antonucci, 1987; Tan et al., 1995).

Researchers have suggested that it is more important to examine perceived social support, as opposed to received social support (Buunk & Hoorens, 1992; Power, 1988). Receiving social support or help from others does not always lead to feeling supported (Rook, 1984). Wethington and Kessler (1986) noted that there were two interpretations of the stress-buffering hypothesis: that the perception of support availability is an accurate representation of actual network responses to the stressful situation, or that perception of support availability influences beliefs by modifying appraisals of the situation. They found stress-buffering for perceived support, not received support, and concluded that perceived support is more significant than received support in predicting adjustment in response to stressful life events. Wethington and Kessler (1986) noted that the perception of being supported can in itself promote health, regardless of the accuracy of that perception. In addition, the perception of being supported is not always determined by the resources of the social network.

Domains of social support include companionship, advice and information, practical assistance, emotional support, and financial support. Social companionship, or belongingness, is spending time with others in an informal way and being part of a social network; this fulfills a need for affiliation and contact (Cohen & Wills, 1985; Dutton et

al., 1994; Flannery & Wieman, 1989; Wellman & Wortley, 1990). Advice and information is when guidance and problem solving support are provided (Wills, 1985). Practical assistance involves giving services, such as child care (Wellman & Wortley, 1990; Wills, 1985). Emotional support involves behavior that reflects empathy and understanding (Bailey, Wolfe, & Wolfe, 1994). Finally, financial support involves having someone to loan or give large amounts of money (Wellman & Wortley, 1990).

Different kinds of social support have different mechanisms for decreasing stress. Research indicates that socioemotional types of social support (i.e., social companionship and emotional support) are more effective in reducing depressive symptoms than more tangible means of social support, such as practical assistance or financial support (Cohen & Hoberman, 1983; Israel & Antonucci, 1987; Tutty et al., 1993). A study examining the social support networks of cancer patients found that socioemotional was the most important type of social support (Taylor & Dakof, 1988). Research examining the efficacy of support groups for women in abusive relationships evaluated the effects of four different types of social support: tangible, appraisal, belonging, and total social support (Tutty et al., 1993). They found that, following the conclusion of the group, belonging support was the only type of support which improved significantly (Tutty et al., 1993). Thus, support groups are likely to affect women's sense of a supportive social system and affiliation, but are unable to affect perceptions of more tangible resources. In addition, one study found that affective, or emotional support, was a predictor of psychological well-being, while instrumental/practical assistance was unrelated to psychological well-being (Israel & Antonucci, 1987). Possibly, stressful experiences elicit coping requirements that are best met by socioemotional types of support. While

tangible support emphasizes the availability of external resources, socioemotional types of support emphasize the recipient's internal feelings, and how she is viewed by others (Cohen & McKay, 1984). In addition, several studies defined social support in a multi-dimensional manner with various domains as described above, but failed to report differential findings for these domains in their results and discussion sections (Flannery & Wieman, 1989; Koeske & Koeske, 1990).

For women who are in abusive relationships, it is likely that while they will need external resources to leave the abuser, it is also probable that because the abuse will have adversely affected psychological functioning, socioemotional support could be more effective in ameliorating their stress and depression. One study found that women who had been in abusive relationships expressed a greater need for understanding and emotional support than any other type of support (Mahlstedt & Keeny, 1993). Another study found that women expressed a need for socioemotional support from their friends, because the interpersonal support allowed them to increase their self-confidence, which was a precursor for leaving the abuser (Bowker, 1984). In addition, social companionship, or feelings of belonging, would be very important for someone in an abusive relationship because intimate relationships could help lessen the social isolation experienced during the relationship.

Tangible support is most effective when the offer of help is viewed by the recipient as appropriate (Cohen & McKay, 1984). Cohen and Wills (1985) postulated that the buffering model was most effective when the coping needs were met by the type of social support offered. One study found that the most effective type of social support was understanding and emotional support (Mahlstedt & Keeny, 1993). Participants

indicated that while they ultimately might be interested in advice, it was more important that people listen to them first, and that they made their own autonomous decisions. This study examined the five different domains listed above in relation to the interaction between abuse and stress.

Rationale

The relationship between stress appraisal and social support has been scarcely examined (Bailey et al., 1994), and the relationship between stress appraisal, social support, and domestic violence has never been studied. Because domestic violence engenders stress, social support could interact to ameliorate the effects of the abuse, lessen stress appraisal, and thus reduce the psychological and physical health repercussions. In this manner, social support acts as a preventative mechanism to diminish the effects of stress. Examining social support in this context would lead to more effective interventions for women in abusive relationships, such as increasing social support for women at risk of abuse, or women who have already experienced abuse and are remaining with their partners. Thus, if these women have increased access to social support, they are more likely to be empowered to leave the abusive situation, which will likely serve to lessen the intensity of the stress appraisal, thus reducing the possibilities of psychological and physical health problems.

In addition, most of the domestic violence studies have examined women in shelters; it is unlikely that these results can be generalized to all women affected by domestic violence. Women who utilize shelters are more likely to be affected by external circumstances such as poverty. Thus, the stress experienced from the abusive situation might be confounded by external variables. The use of a middle-income population, as

well as a low-income population, avoids such problems, as does the use of alternate recruiting methods.

The relationship between stress and social support. When a stressful event occurs, the immediate response is stress appraisal, followed by the response to the stress, which is sometimes pathological. As described above, researchers have typically examined what factors intercede between the stress appraisal and the pathological response to the stress to diminish the impact of the stress. However, if the relationship between the traumatic event and stress appraisal was determined, and what factors interact to diminish stress appraisal, this would be a more proactive way to reduce pathological reactions. While previous researchers have scarcely examined this approach, their results do indicate that social support can act as a buffer against the stress appraisal (Bailey et al., 1994; Felsten, 1991; Felsten & Wilcox, 1992). Specifically, satisfaction with social support affected the appraisal of a stressful situation and the total amount of stress experienced (Felsten, 1991). In addition, this was only found with persons who experienced many stressors. This study hypothesizes that social support is a moderator between abuse and stress appraisal.

In addition, the buffering model of social support, which as explained above, protects health, will be examined. In this study, the stress appraisal of women in abusive relationships will be moderated by their level of socioemotional social support. Thus, it will be demonstrated that the effects of social support are dependent upon the level of abuse, the stressor. Because women who are abused are more likely to have high stress appraisal, social support will only be effective in reducing stress appraisal for women under high levels of stress.

The relationship between social support and domestic violence. Studies have shown that as stress increases, increased levels of social support are associated with a decrease in tension and psychological symptoms (Cohen & Hoberman, 1983; Gottlieb, 1987). In a domestic violence sample, research has shown that abuse increases the experience of stress, while it decreases personal and social resources for dealing with stress. Women themselves indicate a great need for social support. One study found that 79% of women exiting a shelter mentioned social support as an aspect of their lives that they wanted to work on (Sullivan et al., 1992). In samples of women in abusive relationships, social support has been negatively correlated with depression and other negative psychological outcomes (Campbell et al., 1995; Mitchell & Hodson, 1986; Tan et al., 1995). However, all of the studies examining social support and stress in a domestic violence sample examined the interaction of stress and social support at the second point in Cohen & Wills (1985) model; no studies to date have examined the relationship between abuse and stress appraisal with social support as the moderator.

Hypotheses

The study examined the role of social support as a moderator between abuse and stress appraisal. Three hundred and ninety-nine women, half of whom had been in an abusive relationship in the previous six months, were interviewed. The following hypotheses were tested:

1. Women who are abused, regardless of the type of abuse, will report more stress appraisal in their lives than women who have not been in an abusive relationship in the last six months. A one-way ANOVA will be used to test this hypothesis.

2. For abused women, psychological abuse will result in more stress appraisal than physical abuse. A z test of difference will compare the correlation between physical abuse and stress appraisal to the correlation between psychological abuse and stress appraisal.
3. Social support will moderate the relationship between abuse and stress appraisal for frequency of psychological abuse, frequency of physical abuse, and severity of physical abuse; this will corroborate the buffering model of social support. Three multiple regression analyses will be used to test this hypothesis; a significant interaction between social support and abuse will indicate that social support functions as a moderator.
 - A. Since psychological abuse will result in more stress appraisal than physical abuse, the buffering effect of social support will be stronger for psychological abuse than for physical abuse. This will be tested by comparing the beta weights for stress appraisal in the two different equations for psychological abuse and physical abuse.

METHOD

Participants

As part of a larger research project, 399 women were recruited to participate in the current study. The larger research project, the Women's Health Study, examined the effects of various life circumstances on women's psychological well-being. The primary method of recruitment was through newspaper advertisements. Four different advertisements were placed simultaneously in three local newspapers from August 1996 to June 1997. Each of the advertisements was designed to recruit a specific profile (middle income women who had been physically abused in the past six months by an intimate partner, low income women who had been physically abused in the past six months by an intimate partner, middle income women who had not been abused in the past six months, and low income women who had not been abused in the past six months) for each wave of recruitment. Women called the Women's Health Study office, where they were screened for eligibility, which was determined by the desired participant profile, as determined by the current recruitment wave. Once women were determined to be eligible, an interview was scheduled.

Over half of the women in the study identified themselves as White/Caucasian (70%), with 17% identifying themselves as Black/African-American, 6% multiple ethnicity, 5% Hispanic/Latina, 1% Asian-Pacific, and 1% Native American. The average age of women in the study was 34 years old with a range of 37 years; the minimum age was 17 and the maximum age was 54. The majority of women (81%) had at least some high school education; 69% of women were currently employed, and 85% had been employed in the last six months. The average monthly income ranged from 0 to \$8,667;

the mean monthly income was \$2,042 and the median income was \$1500. This monthly income supported a mean number of 2.81 people, with a range of 1 - 9 people. More than half (53%) of the women interviewed had been abused by an intimate partner in the last six months.

Measures

Physical abuse. Physical abuse was conceptualized as any incident in which the woman was physically harmed by an intimate partner/ex-partner or spouse/ex-spouse. The relationship was considered intimate if the participant indicated that the partner was at least a boyfriend or a girlfriend. Physical abuse was assessed by a modified version of Straus' (1979) Conflict Tactics Scale (CTS), which contains 13 items (See Appendix A for a copy of this measure). The modified scale eliminated the verbal abuse items and separated composite items (i.e., partitioned a question asking about pushing, grabbing, or shoving into two distinct items). Participants rated the frequency of the physical abuse on a six-point scale ranging from 1 = "Never" to 6 = "More than four times a week." The frequency of abuse scale score was created by taking the mean score across the items. The coefficient alpha for this scale was .92, and the corrected item-total correlations ranged from .25 to .80.

In addition to the frequency of physical abuse, a measurement of the severity of physical abuse was also computed. The coding method for severity followed Sullivan and Bybee's (1999) method. Item scores from the CTS were recoded into severity scores, using a four-point scale where "0" indicated no physical abuse, "1" indicated moderate abuse only (tore clothing, pushed/grabbed, threw something at, slapped) at any frequency, "2" indicated low frequency (less than once a month) of severe abuse (kicked/hit with

fist, hit or tried to hit with something, drove recklessly, beat up, choked, tied up, raped, threatened with gun or knife, used gun or knife), and “3” indicated high frequency (more than once a month) of severe abuse (as previously described). Because only one person fell into the high frequency of moderate abuse, the “moderate” abuse categories were collapsed and undifferentiated by frequency. Also, before scaling, the burn item from the CTS was dropped from the severity scale due to infrequency of response.

Psychological abuse. Psychological abuse was conceptualized as any act in which the participant was emotionally hurt or harmed by an intimate partner/ex-partner or spouse/ex-spouse. The experience of psychological abuse was measured with a shortened version of the 33-item Index of Psychological Abuse (IPA) scale (Sullivan et al., 1992) (See Appendix B for a copy of this measure). The scale contained 20 items asking women to rate how often, in the past six months, they had been harassed, controlled, ridiculed, and criticized by an intimate partner. Participants rated their experiences of psychological abuse on a 4-point scale that ranged from 1 = “Never” to 4 = “Often.” The scale score was calculated as the mean frequency with which participants experienced the different forms of psychological abuse. The coefficient alpha for this scale was .93, and the corrected item-total correlations ranged from .43 to .76.

The present researcher attempted to categorize the different items on the IPA into a severity score comparable to the physical abuse severity score previously calculated. Three researchers involved in the domestic violence field sorted the items into moderate or severe abuse categories. However, the interrater reliability was only 69%. In order to obtain better interrater reliability, twelve residents of the Council Against Domestic Assault, a local shelter, categorized the items. The interrater reliability of these women

was 39%. Thus, it was determined that these items are fairly subjective, context-dependent, and it was not possible to reliably categorize their severity.

Social Support. The social support scale used was a modified version of Bogat, Chin, Sabbath and Schwartz's (1983) scale, the Adult's Social Support Questionnaire (See Appendix C for a copy of this measure). The scale contained eleven items that measured the participant's amount and quality of social support in five different areas. These domains of social support included: companionship, advice and information, practical assistance, emotional support, and financial assistance. Participants rated their feelings about the quantity and quality of social support that they receive from friends and family on a seven-point scale ranging from 1 = "Extremely Pleased" to 7 = "Terrible." The scale score for social support was obtained by averaging the quantity and quality scores across the five domains. In addition, there is one question about overall social support. A factor analysis supported the use of one social support scale score. The coefficient alpha for the social support scale score was .90. The corrected item-total correlations ranged from .55 to .77.

Stress. The stress scale used was the Life Event Checklist (Reischl, Eby, & Ramanathan, 1992) (See Appendix D for a copy of this measure). This 50-item list involves varying dimensions of stressful life events: intimate relationships, family, finances, work, school, and legal issues. Participants were asked if the stressful event occurred within the past six months, and then indicated, on a five-point scale ranging from 1 = "Not at all Stressful" to 5 = "Extremely Stressful," how stressful it was for them. The scale score equals the mean stressfulness rating across endorsed items. The coefficient alpha for this scale, .77, was expected to be moderately low since the various

stressful life events in a person's life need not be related. The corrected item-total correlations ranged from $-.02$ to $.53$.

Procedure

The interviewers were undergraduate females who either received college credit or an hourly wage for their participation. The interviewers were involved in a 10-week training course that used reading and discussion assignments related to women's health and interview skills. Interviewers were further trained through role plays and mock interviews. The interviewers were graded according to the quality of the interviews, and received weekly feedback reports on their performance level. Interviewers were allowed to do interviews once they had achieved 95% reliability on a mock interview with project staff. Interrater reliability was also calculated after approximately every tenth interview by having a second interviewer listen to the audiotaped interview and completing the interview protocol. Interrater reliability ranged from $.91$ to $.97$, and averaged $.94$.

Interviewers met the participant at either her home or at the American Red Cross. The interviewer explained the procedure, and reminded the participant that the interview was completely confidential, no identifying information would be attached to the interview, and that she could decline to do any part of the interview without penalty. After the participant signed an informed consent form (see Appendix E), the interviewer administered the oral part of the interview. This part of the interview lasted 60 minutes to 4.5 hours (mean = 90 minutes). Next, the participant completed the written self-administered section of the interview. Upon completing the second part of the interview,

the participant was paid \$30.00 for her participation. All participants received a Women's Health Project business card and a sheet detailing community resources.

RESULTS

This study utilized a large sample size ($n = 399$) for most of the analyses; thus, conservative significance levels were used (i.e., $p < .05$).

Preliminary Analyses

For several of the hypotheses, women were separated into “abused” or “non-abused” categories. Women were considered abused if they had endorsed at least one item from both the CTS and IPA scales (see Table I). A total of 206 women were in the abused category, and 193 women were in the non-abused category.

Abused and non-abused women differed on several demographic variables (see Table II). The overall distribution of ethnic background for abused women and non-abused women was significantly different, $\chi^2(6, N = 399) = 16.43$. Abused women were more likely to be African-American and Latina than the non-abused women. Abused women were significantly younger than the non-abused women [$F(1,397) = 12.85$], although the age difference was less than three years. The educational level of abused and non-abused women also differed, $\chi^2(7, N = 399) = 83.02$. Abused women were less likely to have a bachelor’s degree than the non-abused women. Abused women were less likely to be employed in the last six months, and less likely to be currently employed [$\chi^2(2, N = 399) = 4.37$ and $\chi^2(2, N = 399) = 13.24$, respectively].

Overall, the marital status of abused and non-abused women was significantly different, $\chi^2(8, N = 399) = 44.22$. Abused women were less likely to be married and living with their spouse or divorced from a spouse; they were more likely to be separated from a spouse, living with a girl/boyfriend, or not living with a girl/boyfriend (see Table II). Abused women had significantly less monthly income than non-abused women

[$F(1,397) = 60.13$]; this was a difference of approximately \$1,171 per month. Abused and non-abused women both supported the same average number of persons ($M = 2.81$), and their average number of children was not significantly different ($M = 1.92$ and $M = 1.68$, respectively). Finally, although both abused women and non-abused women experienced psychological abuse, abused women had a significantly higher frequency of psychological abuse than non-abused women [$M = 2.28$ and $M = 1.41$, respectively; $F(1,332) = 222.43$].

To determine whether abused and non-abused women differed in their satisfaction with social support, a one-way analysis of variance was conducted with abuse status as the independent variable and social support as the dependent variable. Results were significant [$F(1,395) = 36.01$], indicating that abused women ($M = 3.46$) were significantly more dissatisfied with their social support than were non-abused women ($M = 2.78$). Higher scores indicate greater dissatisfaction with the quantity and quality of social support. In addition, η was .29, which according to Cohen (1988) is between a medium and large effect size.

For the abused women in the sample, frequency of psychological abuse had significant positive correlations with frequency of physical abuse ($r = .61$), amount of stress appraisal ($r = .26$), and social support ($r = .16$). These were all significant at $p < .05$. Frequency of physical abuse was significantly correlated with frequency of psychological abuse, as stated above, and was also significantly correlated with amount of stress appraisal ($r = .22$). Amount of stress appraisal was significantly correlated with social support ($r = .23$) at $p < .05$ (see Tables III and IV).

For the non-abused women in the sample, frequency of psychological abuse was significantly correlated with all of the other variables. Frequency of physical abuse was not applicable, since no women experiencing physical abuse were classified as non-abused. Amount of stress appraisal was significantly correlated with frequency of psychological abuse, as described above, and with social support ($r = .16$) (see Tables V and VI).

Preliminary analyses on all of the women in the study revealed several significant relationships between variables. Frequency of psychological abuse, amount of stress appraisal, and social support were all positively correlated with each other, with correlations ranging from .22 to .61. These correlations were all significant at $p < .05$. Frequency of physical abuse was only significantly correlated with frequency of psychological abuse ($r = .61$) and amount of stress appraisal ($r = .22$). These were both significant at $p < .05$ (see Tables VII and VIII).

For abused women, the most frequently endorsed type of physical abuse was “pushed or shoved you,” the second was “grabbed you,” and the third was “threw something at you” The most frequently occurring type of physical abuse was “grabbed you,” the second was “drove recklessly, so that you felt scared or endangered,” and the third was “pushed or shoved you” (see Table IX).

When severity of physical abuse was calculated, 13 women had experienced moderate physical abuse, 88 women experienced low frequency of severe physical abuse, and 105 experienced high frequency of severe physical abuse.

For abused women, the most frequently endorsed type of psychological abuse was “tried to control your activities,” the second and third were “ignored or made light of your

anger” and “lied to you or deliberately misled you,” and the fourth was “called you names.” The most frequently occurring types of psychological abuse were “lied to you or deliberately misled you,” and “tried to control your money,” the third was “tried to control your activities,” and the fourth was “called you names” (see Table X).

For non-abused women, the most frequently endorsed type of psychological abuse was “ignored or made light of your anger,” the second was “criticized your family or friends to you,” and the third was “lied to you or deliberately misled you.” The most frequently occurring type of psychological abuse was “discouraged your contact with family or friends,” the second was “tried to force you to leave your home,” and the third and fourth were “threatened to hurt your family or friends” and “threatened to commit suicide when he/she was angry with you” (see Table XI).

For abused women, the most frequently endorsed life event was “increased arguments with spouse or partner,” the second was “had less money than usual,” and the third was “separated or ended long-term committed relationship.” The most stressful life event, on average, was “victim of a violent crime or serious assault,” the second was “arrested or convicted of a serious crime,” and the third was “serious illness or injuries” (see Table XII). It should be noted that the most stressful life event was “death of a partner or spouse” with a mean stressfulness rating of 5.00. However, since only one participant endorsed this item, it does not represent the overall sample.

For non-abused women, the most frequently endorsed life event was “had less money than usual,” the second was “started a new job or experienced a change in current job,” and the third was “serious illness or injuries happen to other family members.” The most stressful life event, on average, was “victim of a violent crime or serious assault,”

the second was “learned her partner or spouse was unfaithful,” and the third was “children taken away or threatened with having children removed from the home” (see Table XIII). It should be noted that the most stressful life events, on average, were “miscarriage or stillbirth” and “arrested or convicted of a serious crime” with mean stressfulness ratings of 5.00. However, since only three participants endorsed the former item, and one endorsed the latter item, they do not represent the overall sample.

Test of the Hypotheses

To test the first hypothesis, that women who were abused, regardless of the type of abuse, would report more stress appraisal in their lives than women who have not been in an abusive relationship in the last six months, a one-way analysis of variance was conducted with abuse status as the independent variable and stress appraisal as the dependent variable. Results were significant [$F(1,395) = 30.55$], indicating that abused women ($M = 3.68$) reported more stress appraisal than did non-abused women ($M = 3.26$). In addition, η was .27, which according to Cohen (1988) is between a medium and large effect size.

To test the second hypothesis, that for abused women, the experience of psychological abuse would result in more stress appraisal than physical abuse, a z test of difference was completed. This involved comparing the correlation between physical abuse and stress appraisal ($r = .22$) to the correlation between psychological abuse and stress appraisal ($r = .33$). The z score was -2.04, outside the critical value of ± 1.96 . When the correlation coefficients were translated into Fisher's Z , $q = .224 - .343 =$

-.119, which according to Cohen (1992) is a small effect. Thus, there was a significant difference in predicting stress appraisal from physical abuse versus psychological abuse, and psychological abuse was a better predictor of stress appraisal.

To test the third hypothesis, that social support would moderate the relationship between abuse and stress appraisal for frequency of psychological abuse, frequency of physical abuse, and severity of physical abuse, three different multiple regression analyses were used. In addition, since there were significant demographic differences between the abused and non-abused women, these regression analyses were all controlled for race, income, and education level.

The first multiple regression analysis used frequency of psychological abuse and social support as the independent variables, stress appraisal as the dependent variable, and the product of psychological abuse and social support as the interaction term (see Table XIV). Findings revealed no buffering effect. However, there was a significant main effect for social support ($\Delta R^2 = .03$, $\Delta F = 13.14$) The second multiple regression analysis used the same variables as the first, and controlled for demographics. While a buffering effect was not found, there was a significant main effect for social support ($\Delta R^2 = .03$, $\Delta F = 11.22$) (see Table XV).

The third multiple regression analysis used frequency of physical abuse and social support as the independent variables, stress appraisal as the dependent variable, and the product of physical abuse and social support as the interaction term (see Table XVII). Findings revealed no buffering effect. However, there was a significant main effect for social support ($\Delta R^2 = .03$, $\Delta F = 14.67$) The fourth multiple regression analysis used the same variables as the third, and controlled for demographics. While a buffering effect

was not found, there was a significant main effect for social support ($\Delta R^2 = .03$, $\Delta F = 13.09$) (see Table XVII).

The fifth multiple regression analysis used severity of physical abuse and social support as the independent variables, stress appraisal as the dependent variable, and the product of physical abuse and social support as the interaction term (see Table XVIII). Findings revealed no buffering effect. However, there was a significant main effect for social support ($\Delta R^2 = .03$, $\Delta F = 14.00$) The sixth multiple regression analysis used the same variables as the fifth, and controlled for demographics. While a buffering effect was not found, there was a significant main effect for social support ($\Delta R^2 = .03$, $\Delta F = 12.44$) (see Table XIX).

DISCUSSION

The present study had two main purposes. The first was to examine the role of social support as a moderator between abuse and stress appraisal. As previously stated, the relationship between abuse and stress appraisal, with social support as a moderator, had never been examined prior to this study. Because abuse engenders stress, it was hypothesized that social support would act as a moderator to reduce levels of stress appraisal for women experiencing high levels of abuse.

The second purpose of this study was to examine the role of physical abuse versus psychological abuse as contributors to stress appraisal. It was hypothesized that psychological abuse would result in more stress appraisal than would physical abuse, because research demonstrates that psychological abuse often has more negative repercussions than does physical abuse (Campbell & Lewandowski, 1997; Follingstad et al., 1990).

The current study has a unique sample, demographically, in that the women were recruited from the community, and represented a middle-income sample. Thus, the results from this study are generalizable to the community, and to the general population.

Very few studies on domestic violence have included community populations. In addition, not all of these studies reported the demographic characteristics of their participants (Gelles & Harrop, 1989); if they did, they only reported the racial composition of their samples, as opposed to including other demographic variables. The abused women in the current sample are more likely to be African-American or Latina than the women in other community studies (Follingstad et al., 1990; Kemp et al., 1995).

Participants from shelters are less likely to be representative of the population at large; they are likely to over-represent the African-American population and to have lower incomes. This is evident when comparing the demographics of the abused women from the current study to the participants in shelter sample studies. In this study, 22.8% of the abused women were African-American, compared to approximately 44% of participants from shelter studies (Mitchell & Hodson, 1983; Sullivan, Campbell, Angelique, Eby, & Davidson, 1994).

Women in abusive relationships from the current study had higher incomes than women in shelter studies; women in the current study had an average monthly income of \$1,476 versus \$1,179 and \$983 in other studies (Jaffe et al., 1986; Sullivan et al., 1994). In addition, women in abusive relationships from the current study had a much lower unemployment rate of 25.7% versus 82% of women in a shelter study (Sullivan et al., 1994). Women in the current study were more educated than women in shelter studies; 28.6% of women in the current study had a high school diploma or less versus one study which found that 65% of a shelter sample had a high school diploma or less (Mitchell & Hodson, 1983).

Thus, this study adds to the current literature by focusing on a population that has been previously neglected due to the difficulty in recruitment. Despite the limited means of recruiting, and the mostly Caucasian sample, this study has a population that is more representative of the general population than previous studies, and that has an income that is above poverty level.

It is important that networks of social support consist of support other than friends and family. Using data from the current study, Sutherland (1999)¹ noted that women could rely on friends and family for general types of support, but when they asked for help related to the partner's violence, they were less likely to receive the type of support that they needed. Some support would be provided on a conditional basis or in a judgmental fashion, which is not helpful or supportive to the woman. This is consistent with research that demonstrates that social support is not always positive (Cohen & Wills, 1985), and that the source of social support must be considered (Taylor & Dakof, 1988). Negative social support can cause women in abusive relationships to be less likely to seek help (Bowker, 1984), or if the social support is judgmental, it can cause women to feel more guilt and stigmatization.

Interestingly, while women in abusive relationships reported more stress appraisal in their lives than women not in abusive relationships, frequency of psychological abuse, frequency of physical abuse, and severity of physical abuse did not differentially affect their stress appraisals. That is, women with higher levels of satisfaction with social support had less stress appraisal than women with lower levels of satisfaction with social support, regardless of the level of abuse experienced. Thus, the hypothesized buffering model of social support was not supported. Rather, the direct effects model of social support, which stipulates that social support is helpful regardless of the level of abuse, was supported for social support. This has been corroborated in previous research studies (Aneshensel & Stone, 1982; Bell et al., 1982; Kemp et al., 1995; Koeske & Koeske,

¹ Due to Sutherland's (1999) age restrictions, her dataset was comprised of 397 women.

1990; Power, 1988), and with researchers who have found consistent support for direct effects (Mitchell et al., 1982). One researcher noted that despite the “inherent attractiveness of the buffering model” (Terry, 1989, p. 170), it was likely that social support had direct effects on well-being.

Interestingly, results from another study that utilized the same dataset as the current study indicated that social support did not moderate the effects of stress on psychological well-being (Sutherland, 1999). Instead, she found that social support had a direct effect upon psychological well-being. This result is relevant to the second stage of Cohen and Wills’ (1985) stress continuum.

Other researchers have found direct effects for practical support (e.g., Cohen & Hoberman, 1983; Powers, 1988), while researchers have consistently found buffering effects for socioemotional support (Israel & Antonucci, 1987). However, it is essential to note that all of the above research used psychological well-being as an outcome measure, as opposed to stress appraisal.

As indicated earlier, there has been little research assessing the effects of social support on stress appraisal (Mitchell et al., 1982; Felsten, 1991). The one study to examine this process found buffering effects for social support on stress appraisal (Felsten, 1991). However, because Felsten used male undergraduates for his participants, it is difficult to generalize results to women in abusive relationships from his study. In addition, Felsten did not use standardized measures of social support or stress appraisal, and did not assess different domains of social support as has been customary in social support research. Thus, due to his restricted sample and unstandardized measures, it is difficult to compare results from Felsten’s study with the results from the current study.

It is also interesting that psychological abuse had a stronger relationship with stress appraisal than did physical abuse, although this was a small effect. This is corroborated by researchers who have suggested that psychological abuse is at least as important as physical abuse in affecting women's levels of functioning (Rollstin & Kern, 1998). Abusive relationships vary dramatically in terms of levels of psychological and physical abuse (Follingstad, Laughlin, Polek, Rutledge, & Hause, 1991). In the current study, women in abusive relationships experienced greater frequency of psychological abuse than of physical abuse. Interestingly, of the 193 women who were recruited for not having been physically abused in the six months prior to the interview, 66% sustained psychological abuse. This speaks to the pervasiveness of psychological abuse in relationships.

The distinction between the effects of psychological abuse and physical abuse is important for understanding the differential experiences that women have in abusive relationships. Psychological abuse and physical abuse often co-occur, as was demonstrated in the current study. However, this study demonstrated that psychological abuse and physical abuse affect stress appraisal in different ways. Other researchers have found that psychological and physical abuse are different phenomena (e.g., Stets, 1990).

Limitations

One limitation of this study is the different demographic backgrounds of the women in abusive relationships versus the women in non-abusive relationships. Although this study is unusual in utilizing a non-shelter sample, which can thus be more generalized to the population at large, it would have been optimal, statistically, had the participants been better matched according to their backgrounds. However, given that

national statistics indicate that women of all races are equally likely to be at risk for domestic violence, and that studies that utilize shelter populations over-represent minorities, the current study is an improvement on past studies partners (Bachman, 1994; Bachman & Saltzman, 1995).

In addition, national statistics indicate that women with lower education and family income levels were more likely to be victimized by intimate partners than women who had graduated from college and had higher family incomes (Bachman, 1994; Bachman & Saltzman, 1995). Thus, while the abused women in the current study may not perfectly match the non-abused women in this study, they are reflective of the national profiles of women in abusive relationships.

This study employed a cross-sectional design. While this design is convenient for many reasons (e.g., time, money), it is optimal to utilize a longitudinal or prospective design. A longitudinal study would allow the study of the effects of social support upon stress appraisal over a period of time, and allow the researcher to examine how changing resources in a woman's life affect her stress level and differing social support levels. In addition, one researcher suggested that there is a greater likelihood for confounding between stress and resource measures in a cross-sectional study (Terry, 1989), and thus such a design results in a less accurate test for stress-buffering effects of social support.

Both the current study and Felsten's (1991) study examined stress appraisal by asking the participants to rate the stressfulness of major and minor life situations. However, while the questionnaire used in the current study has the advantage of listing many possible life situations that may relevant to a woman in an abusive situation, it may serve to both minimize her experiences when faced with a long list of life crises that have

not happened to her, and overwhelm her when presented with a long list of life crises that have occurred in the last six months.

An alternate method of stress appraisal is the Perceived Stress Scale (PSS) which measures the degree to which situations in one's life are perceived as stressful (Cohen, Kamarck, & Mermelstein, 1983). This scale involves rating how often the participant felt a certain way in the last month, e.g., "how often have you been upset because of something that happened unexpectedly," and "how often have you felt difficulties were piling up so high that you could not overcome them." This scale has been validated (Cohen & Williamson, 1988) and a shorter 10-item version has been used in other studies to assess the degree to which life situations are perceived as stressful (Cohen, Tyrrell, & Smith, 1993). A review chapter on stress appraisal and its measurement cited the PSS as the only empirically validated measure of stress appraisal (Monroe & Kelley, 1995).

It is also debatable if the concept of stress appraisal as an outcome measure is conducive to a buffering model of social support. Perhaps stress appraisal is not robust enough of an outcome measure to be able to be differentiated by women's abuse levels. Or, perhaps the concept of social support buffering the effects of abuse on stress appraisal is infeasible. In the timeline and continuum proposed, social support would intercede at the point of crisis to lessen stress appraisal for abused women. While satisfaction with socioemotional and financial social support did lessen stress appraisal for all women, in the buffering model, the social support would intercede following the abusive event, to affect stress appraisal. Perhaps it is this part of the stress-social support model that is faulty.

Another limitation of this study is the social support instrument used. The majority of the social support research has found more than one factor of social support (e.g., Cohen & Hoberman, 1983; Israel & Antonucci, 1987). One possible reason for this measure having one factor of social support is that the different domains overlapped. It is likely that practical assistance could tap into the same resources as financial support, and that emotional support and social companionship are similar constructs as well. Other measures (e.g., Cohen & Hoberman's ISEL) have more clearly differentiated domains of social support.

It seems likely that the relevance of social support is based upon need. Research does indicate that social support functions best when the type of social support meets the coping requirements (Cohen & Hoberman, 1983). In addition, women in abusive relationships had significantly less income than women not in abusive relationships, and perhaps these women have differing needs for social support.

In order to help women in abusive relationships, researchers need to determine what kind of social support can help the most. Research has found that women in abusive relationships have specific needs. One study on the effectiveness of social service programs for women in abusive relationships found that direct financial aid and modeling were useful to women, and were essential aspects of an effective social service program (Donato & Bowker, 1984). These researchers also noted that direct aid and modeling were not available in traditional service agencies. Thus, specifying the social support needs of women in abusive relationship can provide better care.

The conceptualization of psychological abuse is difficult, and it is unfortunate that the severity of psychological abuse could not be determined for this sample. However, it

is worth noting that, in general, the conceptualization of psychological abuse is difficult. It is very subjective to measure the severity of an item from the Index of Psychological Abuse, such as “left somewhere with no way to get home” when the rater is unaware where the woman was left, how far from home she was, and if she had the resources to get home. This can be contrasted to an item from the Conflict Tactics scale, such as “slapped you with an open hand” which is less subjective and context-dependent. In fact, the difficulty in parsing out severity for the items on the IPA is indicative of the very nature of psychological abuse: it is difficult to understand, comprehend, and categorize. In part, this is why psychological abuse is so detrimental to women’s well-being.

There is perhaps only one other researcher (Marshall, 1992) who has attempted to examine the severity of psychological abuse. Marshall criticized the creators of the Conflict Tactics Scale for determining the severity of the items themselves, as opposed to piloting the items with a large sample. Marshall argues that psychological abuse is very complex, and in a series of studies that surveyed both college undergraduates and members of the community, determined that there are nine factors of violence, three of which are psychological. These nine factors are: threats of mild, moderate, and serious violence, actual mild, minor, moderate, and serious violence, and sexual violence. Marshall’s definition of psychological abuse is exemplary in that she acknowledges that psychological abuse may be very subtle, and may target perceptions, thoughts, and feelings that undermine a woman’s sense of self (Marshall, 1996). Her inclusive definition of psychological abuse goes beyond the concept of overt, observable actions used by other researchers (e.g., Stets, 1990). Marshall’s study addresses the issue of

measuring severity, in that she proves that rather than suggesting that the severity of psychological abuse cannot be measured, it takes a large representative sample to do so.

Directions for Future Research

Future research should continue to address the validity and reliability of stress appraisal as an outcome with social support as moderator. While the results of this study did not support the hypothesis of social support as moderator of abuse on stress appraisal, future research should continue to examine the social support-stress appraisal relationship. This is only the second study that has examined such a relationship; thus, researchers need to look at this relationship with various factors in addition to abuse, and with diverse populations.

The findings that women in abusive relationships had significantly less social support than women not in abusive relationships, and that social support reduced stress appraisal, indicate that more research needs to investigate what exactly about social support is important, and how social support is utilized. Future research should examine the existence of different domains of social support. In addition, it would be helpful to have a social support measure that is more specific for women in abusive relationships. In addition, it would be helpful to consider the source of social support, and how that affects satisfaction with various types of social support. Research has found that the helpfulness of specific types of social support varies with the source; for example, while emotional support was helpful regardless of the source, information and advice were helpful from caregivers, but not from family or friends (Taylor & Dakof, 1988).

As previously described, Marshall's (1992) Violence Against Women Scale is an excellent first step toward understanding the various dimensions of psychological abuse

and the implications of severity of psychological abuse. However, the effects of psychological abuse on women still needs to be explored. This study determined that psychological abuse was more of a contributor to stress appraisal than was physical abuse. This highlights the importance of psychological abuse in a relationship, and emphasizes the fact that while psychological abuse is a prevalent factor in abusive relationships, we still do not understand how psychological abuse and physical abuse differentially affect women.

Appendices

Appendix A: The Conflict Tactics Scale, Modified

Now I have a list of different types of violence women have experienced from their ex-partners (or current partners, as applicable). I wonder if you could tell me, as best as you can remember, how many times in the last six months _____ did any of the following things to you:

NEVER1
 ONCE A MONTH OR LESS2
 2 OR 3 TIMES A MONTH.....3
 ONCE OR TWICE A WEEK4
 3 OR 4 TIMES A WEEK.....5
 MORE THAN 4 TIMES A WEEK..6
 (not applicable)8
 (refused to answer).....9

- A. How often did he/she break your glasses or tear your clothing _____
- B. Pushed or shoved you _____
- C. Grabbed you _____
- D. Slapped you with an open hand _____
- E. Hit you with a fist..... _____
- F. Kicked you _____
- G. Threw something at you..... _____
- H. Aside from throwing, how often did he/she hit you with an object..... _____
- I. Tried to hit you with an object _____
- J. Drove recklessly, so that you felt scared or endangered _____
- K. Choked you _____
- L. Burned you _____
- M. Tied you up or physically restrained you in some way _____
- N. Beat you up _____
- O. Forced any sexual activity you didn't want to happen..... _____
- P. Threatened you with a gun or knife _____
- Q. Used a gun or knife against you _____

Appendix B: The Index of Psychological Abuse Scale

I have a list of some things some people do to annoy or hurt their ex (or current) partners. These are emotional kinds of things that can happen in any relationship. Could you tell me how often in the last six months _____ did any of these things to annoy or hurt you?

- 1 = NEVER
- 2 = RARELY
- 3 = SOMETIMES
- 4 = OFTEN
- 8 = not applicable
- 9 = (refused to answer)

- A. How often has he/she accused you of having or wanting other sexual relationships..... _____
- B. Told you about other sexual relationships he/she wanted or was having in order to hurt you..... _____
- C. Tried to control your money _____
- D. Tried to control your activities..... _____
- E. Lied to you or deliberately misled you..... _____
- F. Called you names..... _____
- G. Ignored or made light of your anger..... _____
- H. Ridiculed or criticized you in public..... _____
- I. Criticized your family or friends to you..... _____
- J. Harassed your family or friends in some way..... _____
- K. Discouraged your contact with family or friends..... _____
- L. Threatened to hurt your family or friends _____
- M. Used threats to try and have sex with you..... _____
- N. Broken or destroyed something important to you..... _____
- O. Abused or threatened to abuse pets to hurt you _____
- P. Punished or deprived the children when he/she was angry with you..... _____
- Q. Threatened to take the children away from you _____
- R. Left you somewhere with no way to get home _____
- S. Threatened to end the relationship if you didn't do what he/she wanted..... _____
- T. Tried to force you to leave your home _____
- U. Threatened to commit suicide when he/she was angry with you _____

Appendix C: The Adult Social Support Questionnaire

Now I'm going to ask you some questions about how you feel about the kind of support and how you feel about the amount of support that you get from friends and family.

- 1 = EXTREMELY PLEASED
- 2 = PLEASED
- 3 = MOSTLY SATISFIED
- 4 = EQUALLY SATISFIED AND DISSATISFIED
- 5 = MOSTLY DISSATISFIED
- 6 = UNHAPPY
- 7 = TERRIBLE
- 9 = refused to answer

The first couple of questions have to do with companionship.

In general, how do you feel about the amount of companionship that you have? ... _____

In general, how do you feel about the quality of companionship that you have? _____

Okay, thanks. Now I'm going to ask you about a different kind of help that you may receive from others called "advice and information." This means being able to count on folks to provide you with advice and information about personal matters, such as problems with your children, spouse, or dealing with a personal situation. It can also be getting advice and information about resources, such as finding a job or a place to stay, where to find furniture and or other material goods, and things like that.

In general, how do you feel about the amount of advice and information that you receive? _____

In general, how do you feel about the quality of advice and information that you receive? _____

The next couple of questions have to do with another type of support called "practical assistance," for example, people you can count on to help you get things or do things. These are people that you can count on to be dependable when you need help, or that you can count on to do a favor for you, like take you someplace you need to go, watch your kids, loan or give you small amounts of money or something you need.

In general, how do you feel about the amount of practical assistance that you receive? _____

In general, how do you feel about the quality of practical assistance that you receive? _____

- 1 = EXTREMELY PLEASED
- 2 = PLEASED
- 3 = MOSTLY SATISFIED
- 4 = EQUALLY SATISFIED AND DISSATISFIED
- 5 = MOSTLY DISSATISFIED
- 6 = UNHAPPY
- 7 = TERRIBLE
- 9 = refused to answer

Now I'd like to ask you about the "emotional support" that you receive. This can mean being able to count on someone to listen to you when you want to talk about something personal, or feeling that there are people in your life who really care about you.

In general, how do you feel about the amount of emotional support that you receive?

In general, how do you feel about the quality of emotional support that you receive?

This last group of questions have to do with the "financial assistance" you may receive or have available to you. This can mean being able to count on someone to loan or give you large amounts of money when you need it. For example, this would be people who could help you pay monthly bills if you were to lose part or all of your income.

In general, how do you feel about the amount of financial assistance that is available to you?.....

Sometimes, people may provide financial assistance when you need it, and they do it in a way that makes you feel good. Other times, people may provide financial assistance in a way that makes you feel inadequate or bad. In general, how do you feel about the quality or appropriateness of financial assistance that is available to you?

Appendix D: The Life Event Checklist

Now, I'd like to ask you about different events that may have happened to you in the last six months. Sometimes our current stress level can influence the way we think and feel about an event that happened a while ago. To help you remember how you felt at the time the event occurred, I'd like you to tell me when it occurred. Then, thinking back to that date, tell me how upsetting or stressful the event was for you. These are the answers I'd like you to use. Again, some of these may not apply to you, but to be consistent, we need to ask them of everyone. If they do not apply to you, please let me know.

1 = NOT AT ALL STRESSFUL
 2 = A LITTLE STRESSFUL
 3 = MODERATELY STRESSFUL
 4 = VERY STRESSFUL
 5 = EXTREMELY STRESSFUL
 8 = not applicable

	MO/YR	STRESS RATING
I'd like to start with a few questions about your serious relationships. In the last six months have you:		
A. Started a serious dating relationship?	___/___	_____
B. Ended a serious dating relationship?	___/___	_____
C. Married or started a long-term committed relationship?	___/___	_____
D. Separated or ended a long-term committed relationship?	___/___	_____
E. Reconciled a martial or romantic relationship?	___/___	_____
F. Had increased arguments with your spouse or partner?	___/___	_____
G. Moved to a new town or neighborhood?	___/___	_____
H. Learned that your partner or spouse was unfaithful to you (i.e., was having an affair)?	___/___	_____

1 = NOT AT ALL STRESSFUL
 2 = A LITTLE STRESSFUL
 3 = MODERATELY STRESSFUL
 4 = VERY STRESSFUL
 5 = EXTREMELY STRESSFUL
 8 = not applicable

	MO/YR	STRESS RATING
In the last six months have you:		
I. Had an affair?	___/___	_____
J. Had a serious argument with a friend or neighbor?	___/___	_____
K. Started any kind of classes at school? This includes adult learning, community education, community college, etc.....	___/___	_____
L. Stopped attending school?.....	___/___	_____
M. Started a new job or experienced a big change in your current job?	___/___	_____
N. Has your spouse or partner started a new job or experienced a big change in their current job?.....	___/___	_____
O. Been fired or laid off from your job?	___/___	_____
P. Has your partner or spouse been fired, laid off, or quit their job?	___/___	_____
Q. Had new troubles with your boss or other people at work?	___/___	_____
R. Retired?	___/___	_____
S. Had your partner or spouse retire?	___/___	_____
T. Quit your job?	___/___	_____

1 = NOT AT ALL STRESSFUL
 2 = A LITTLE STRESSFUL
 3 = MODERATELY STRESSFUL
 4 = VERY STRESSFUL
 5 = EXTREMELY STRESSFUL
 8 = not applicable

	MO/YR	STRESS RATING
Okay, let's talk a bit about your family. In the last six months have you:		
U. Had or adopted a child?	___/___	_____
V. Had trouble with your partner's or spouse's family members?	___/___	_____
W. Had trouble with one of your family members (not your partner or spouse)?	___/___	_____
X. Had a new person move into your home?	___/___	_____
Y. Had any serious illness or injuries?	___/___	_____
Z. Had any serious illness or injuries happen to your partner or spouse?	___/___	_____
AA. Had any serious illness or injuries happen to your partner or spouse?	___/___	_____
BB. Had any serious illness or injuries happen to any other family members?	___/___	_____

1 = NOT AT ALL STRESSFUL
 2 = A LITTLE STRESSFUL
 3 = MODERATELY STRESSFUL
 4 = VERY STRESSFUL
 5 = EXTREMELY STRESSFUL
 8 = not applicable

	MO/YR	STRESS RATING
In the last six months have you:		
CC. Had a miscarriage or stillbirth?	___/___	_____
DD. Found out that you're unable to have children?	___/___	_____
EE. Started menopause?	___/___	_____
FF. Had any sexual difficulties?	___/___	_____
GG. Experienced the death of a child?	___/___	_____
HH. Experienced the death of a partner or spouse?	___/___	_____
II. Experienced the death of another close family member?	___/___	_____
JJ. Experienced the death of a close friend?	___/___	_____
KK. Experienced the death of a pet?	___/___	_____
These next questions have to do with your finances.		
In the last six months have you:		
LL. Had less money than usual?	___/___	_____
MM. Taken on a major purchase?	___/___	_____
NN. Started receiving public assistance?	___/___	_____
OO. Had your utilities shut off?	___/___	_____
PP. Been without phone service?	___/___	_____

1 = NOT AT ALL STRESSFUL
 2 = A LITTLE STRESSFUL
 3 = MODERATELY STRESSFUL
 4 = VERY STRESSFUL
 5 = EXTREMELY STRESSFUL
 8 = not applicable

	MO/YR	STRESS RATING
Finally, let's talk about your legal status.		
In the last six months have you:		
QQ. Been involved in a lawsuit or any legal action?	___/___	_____
RR. Had your driver's license taken away by the police or court?	___/___	_____
SS. Been a victim of violent crime or theft?	___/___	_____
TT. Been a victim of violent crime, such as rape or assault?	___/___	_____
UU. Been arrested or convicted of a serious crime?	___/___	_____
VV. Received a jail sentence or probation?	___/___	_____
WW. Been released from jail?	___/___	_____
XX. Had your children taken away from you or been threatened with having your children removed from your home?	___/___	_____

Appendix E: The Informed Consent Form

PARTICIPANT AGREEMENT MSU WOMEN'S HEALTH PROJECT

The Women's Health Project is a research study conducted through Michigan State University designed to better understand the different aspects of women's physical and emotional health. You will be interviewed one time, for which you will be paid \$30.00. It is expected that the interview will take approximately two hours. We feel it is important to know exactly what you are agreeing to, so it is outlined below:

1. My involvement in this research study has been fully explained to me and I am volunteering to participate. I realize that I may discontinue my participation at any time without penalty.
2. I agree to be interviewed by the Women's Health Project. I understand that I will be paid \$30.00 for completing the interview. I understand that I will be asked questions about the social support I receive, abuse experienced (if applicable), and my physical health, including questions about drug and alcohol use and at-risk sexual behavior. I understand I may choose not to answer certain questions without penalty.
3. I understand that any information I provide to anyone involved with the Women's Health Project will be held in the **strictest confidence** and that my anonymity will be protected. I understand this to mean that anyone involved with the project may not disclose my participation in the project in any way.
4. I understand that I may receive results of this project, if I desire, after its completion by calling or writing the Women's Health Project (whose business I've received).

OPTIONAL:

5. I agree to have the interview tape recorded to ensure accuracy of information. I understand that I can request that the tape recording be stopped at any time. I also understand that this cassette tape will be held in the strictest of confidence, that my name or any identifying information will not be recorded or marked on the tape, and that it will be destroyed after completion of the research study.
YES ___ NO ___

Participant Signature

Project Staff

Date

Appendix F: Tables

Table I

Abuse Status of Participants

	<u>Abuse Status</u>			
	<u>Abused Women</u>		<u>Non-Abused Women</u>	
	Physical abuse	Psychological abuse	Physical abuse	Psychological abuse
N	206	206	0	128
% of total	52%	52%	-	32%

Total N = 399

Note: A total of 206 women experienced physical abuse, and a total of 334 women experienced psychological abuse.

Table II

Descriptive Statistics for Demographics of Abused Women versus Non-Abused Women

	Abused Women	Non-Abused Women
Ethnic Background*		
African-American	22.8%	10.4%
Caucasian	62.1%	78.8%
Latina	6.8%	3.1%
Asian-Pacific	1.0%	1.0%
Native-American	0.5%	1.0%
Other	6.8%	5.7%
Age*		
Mean age	32.89	35.64
Educational Level*		
High School graduate or less	28.6%	8.8%
Some college/trade school	61.6%	46.7%
Bachelor's degree	6.8%	30.1%
Post-Bachelor's degree	2.9%	13.5%
Employed in last six months*		
Yes	81.1%	88.6%
Currently employed**		
Yes	74.3%	89.5%
Marital Status*		
Married, living together	17.5%	38.9%
Married, separated	13.6%	4.1%
Divorce	12.6%	18.1%
Girl/boyfriend living together	15.0%	6.2%
Girl/boyfriend not living together	16.5%	10.9%
Dating not girl/boyfriend	4.4%	3.6%
Not currently dating anyone	15.5%	16.6%
Other	4.9%	1.5%
Income*		
Mean monthly income	\$1,476	\$2,647
Median monthly income	\$1,200	\$2,400
People supported by income		
Average number of people	2.81	2.81
Number of children		
Average number of children	1.92	1.68
Psychological Abuse*		
Mean frequency of psych. abuse	2.28	1.41

* $p < .05$

Table III

Pearson Product Moment Correlations for Variables; Abused Women only

Variables	2	3	4
1. Frequency of Psychological Abuse	.61*	.26*	.16*
2. Frequency of Physical Abuse	-	.22*	.07
3. Amount of Stress Appraisal		-	.23*
4. Social Support			

* $p < .05$

Table IV

Descriptive Statistics for Abused Women only

Variables	Minimum	Maximum	Mean	SD
1. Frequency of Psychological Abuse	1.18	3.79	2.28	.56
2. Frequency of Physical Abuse	1.06	5.18	1.80	.72
3. Amount of Stress Appraisal	2.00	5.00	3.68	.66
4. Social Support	1.00	6.60	3.46	1.20

Table V

Pearson Product Moment Correlations for Variables: Non-Abused Women only

Variables	2	3	4
1. Frequency of Psychological Abuse	-	.19*	.41*
2. Frequency of Physical Abuse	-	-	-
3. Amount of Stress Appraisal		-	.16*
4. Social Support			

* $p < .05$

Table VI

Descriptive Statistics for Non-Abused Women only

Variables	Minimum	Maximum	Mean	SD
1. Frequency of Psychological Abuse	1.05	3.35	1.41	.44
2. Frequency of Physical Abuse	-	-	-	-
3. Amount of Stress Appraisal	1.00	5.00	3.26	.82
4. Social Support	1.00	6.30	2.77	1.04

Table VII

Pearson Product Moment Correlations for Variables: All Women in the Sample

Variables	2	3	4
1. Frequency of Psychological Abuse	.61*	.33*	.35*
2. Frequency of Physical Abuse	-	.22*	.07
3. Amount of Stress Appraisal		-	.26*
4. Social Support			-

* $p < .05$

Table VIII

Descriptive Statistics for All Women in the Sample

Variables	Minimum	Maximum	Mean	SD
1. Frequency of Psychological Abuse	1.05	3.79	1.95	.67
2. Frequency of Physical Abuse	1.06	5.18	1.80	.72
3. Amount of Stress Appraisal	1.00	5.00	3.48	.77
4. Social Support	1.00	6.60	3.13	1.18

Table IX

Most Endorsed Types of Physical Abuse and Most Frequently Occurring Types of Physical Abuse for Abused Women

Pushed or shoved you	93%
Grabbed you	88%
Threw something at you	61%

Grabbed you	3.12
Drove recklessly	3.07
Pushed or shoved you	3.00

Table X

Most Endorsed Types of Psychological Abuse and Most Frequently Occurring Types of Psychological Abuse for Abused Women

Tried to control activities	93%
Ignored or made light of your anger	92%
Lied to you or deliberately misled you	92%
Called you names	91%

Lied to you or deliberately misled you	3.44
Tried to control your money	3.44
Tried to control activities	3.43
Called you names	3.41

Table XI

Most Endorsed Types of Psychological Abuse and Most Frequently Occurring Types of Psychological Abuse for Non-Abused Women

Ignored or made light of your anger	52%
Criticized your family or friends to you	44%
Lied to you or deliberately misled you	31%

Discouraged contact with family or friends	3.13
Tried to force you to leave your home	3.11
Threatened to hurt your family or friends	3.00
Threatened to commit suicide when he was angry with you	3.00

Table XII

Most Endorsed Life Events and Most Stressful Life Events for Abused Women

Increased arguments with partner	72%
Had less money than usual	68%
Separated or ended long-term relationship	57%

Victim of a violent crime/serious assault. (54%)	4.71
Arrested or convicted of a serious crime (9%)	4.67
Serious illness or injuries (33%)	4.56

Table XIII

Most Endorsed Life Events and Most Stressful Life Events for Non-Abused Women

Had less money than usual	52%
Started a new job or experienced a change in current job	45%
Serious illness or injuries to family members	30%

Victim of a violent crime/serious assault (3%)	4.60
Learned partner/spouse was unfaithful (5%)	4.30
Children taken away or been threatened with having children removed from the home (3%)	4.17

Table XIV

Summary of Hierarchical Regression Analysis for Frequency of Psychological Abuse and Social Support Predicting Stress Appraisal (N = 395)

Variables	<u>B</u>	<u>SE B</u>	<u>β</u>	<u>ΔR²</u>
Frequency of Psychological Abuse	.24	.04	.30*	.09*
Social Support	.12	.03	.18*	.03*
Psych. Abuse x Social Support	.00	.03	-.02	.00

*p < .05

Table XV

Controlling for Demographics: Summary of Hierarchical Regression Analysis for Frequency of Psychological Abuse and Social Support Predicting Stress Appraisal (N = 395)

Variables	<u>B</u>	<u>SE B</u>	β	ΔR^2
Race, Income, and Education Level				.04*
Race	.00	.03	.01	
Income	.00	.00	-.10	
Education Level	-.01	.03	-.14*	
Frequency of Psychological Abuse	.22	.04	.27*	.06*
Social Support	.11	.03	.17*	.03*
Psych. Abuse x Social Support	.00	.03	.00	.00

* $p < .05$

Table XVI

Summary of Hierarchical Regression Analysis for Frequency of Physical Abuse and Social Support Predicting Stress Appraisal (N = 395)

Variables	<u>B</u>	<u>SE B</u>	β	ΔR^2
Frequency of Physical Abuse	.22	.04	.30*	.09*
Social Support	.12	.03	.19*	.03*
Physical Abuse x Social Support	.00	.03	-.07	.00

*p < .05

Table XVII

Controlling for Demographics: Summary of Hierarchical Regression Analysis for Frequency of Physical Abuse and Social Support Predicting Stress Appraisal (N = 395)

Variables	<u>B</u>	<u>SE B</u>	<u>β</u>	<u>ΔR²</u>
Race, Income, and Education Level				.04*
Race	.00	.03	.01	
Income	.00	.00	-.10	
Education Level	-.01	.03	-.14*	
Frequency of Physical Abuse	.20	.04	.27*	.06*
Social Support	.12	.03	.24*	.03*
Physical Abuse x Social Support	.00	.03	-.06	.00

* p < .05

Table XVIII

Summary of Hierarchical Regression Analysis for Severity of Physical Abuse and Social Support Predicting Stress Appraisal (N = 395)

Variables	<u>B</u>	<u>SE B</u>	<u>β</u>	<u>ΔR²</u>
Severity of Physical Abuse	.13	.02	.30*	.09*
Social Support	.12	.03	.19*	.03*
Physical Abuse x Social Support	.00	.02	-.07	.00

*p < .05

Table XIX

Controlling for Demographics: Summary of Hierarchical Regression Analysis for Severity of Physical Abuse and Social Support Predicting Stress Appraisal (N = 395)

Variables	<u>B</u>	<u>SE B</u>	<u>β</u>	<u>ΔR²</u>
Race, Income, and Education Level				.04*
Race	.00	.03	.01	
Income	.00	.00	-.10	
Education Level	-.01	.03	-.14*	
Severity of Physical Abuse	.11	.02	.26*	.05*
Social Support	.01	.02	.22*	.03*

*p < .05

REFERENCES

- Aldwin, C.M., & Revenson, T.A. (1987). Does coping help? A reexamination of the relation between coping and mental health. Journal of Personality and Social Psychology, 53, 337 - 348.
- Aneshensel, C.S., & Stone, J.D. (1982). Stress and depression: A test of the buffering model of social support. Archives of General Psychiatry, 39(12), 1392-1396.
- Astin, M.C., Lawrence, K.J., & Foy, D.W. (1993). Posttraumatic stress disorder among battered women: Risk and resiliency factors. Violence & Victims, 8(1), 17 - 28.
- Bachman, R. (1994). Violence against women: A national crime victimization survey report (U.S. Department of Justice Publication No. NCJ-145325). Washington, DC: U.S. Department of Justice.
- Bachman, R., & Saltzman, L. (1995). Violence against women: Estimates from the redesigned survey (U.S. Department of Justice Publication No. NCJ-154348). Washington, DC: U.S. Department of Justice.
- Bailey, D., Wolfe, D.M., & Wolfe, C.R. (1994). With a little help from our friends: Social support as a source of well-being and of coping with stress. Journal of Sociology and Social Welfare, 21(2), 127 - 152.
- Barnett, O.W., Martinez, T.E., & Keyson, M. (1996). The relationship between violence, social support, and self-blame in battered women. Journal of Interpersonal Violence, 11(2), 221 - 233.

Bell, R.A., LeRoy, J.B., & Stephenson, J.J. (1982). Evaluating the mediating effects of social support upon life events and depressive symptoms. Journal of Community Psychology, 10(4), 325 - 340.

Bogat, G.A., Chin, R., Sabbath, W., & Schwartz, C. (1983). The Adult's Social Support Questionnaire (Technical Report 2). East Lansing: Michigan State University.

Bowker, L.H. (1984). Coping with wife abuse: Personal and social networks. In Roberts, A.R. (Ed.), Battered Women and their Families: Intervention Strategies and Treatment Programs. Springer Publishing, New York, pp. 168 - 191.

Buunk, B.P., & Hoorens, V. (1992). Social support and stress: The role of social comparison and social exchange processes. British Journal of Clinical Psychology, 31(4), 445 - 457.

Campbell, J.C., & Lewandowski, L.A. (1997). Mental and physical health effects of intimate partner violence on women and children. Psychiatric Clinics of North America, 20(2), 353 - 374.

Campbell, R., Sullivan, C.M., & Davidson, W.S. (1995). Women who use domestic violence shelters: Changes in depression over time. Psychology of Women Quarterly, 19(2), 237- 255.

Carlson, B. (1997). A stress and coping approach to intervention with abused women. Family Relations, 46(3), 391-298.

Carveth, W.B., & Gottlieb, B.H. (1979). The measurement of social support and its relation to stress. Canadian Journal of Behavioral Science, 11(3), 179 - 188.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum.

- Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 155-159.
- 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.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 385-396.
- Cohen, S., Kessler, R.C., & Underwood Gordon, L. (1995). Strategies for measuring stress in studies of psychiatric and physical disorders. In S. Cohen, R.C. Kessler, & L. Underwood Gordon, (Eds.), Measuring Stress: A Guide for Health and Social Scientists (pp. 3-26). New York: Oxford University Press.
- Cohen, S., & McKay, G. (1984). Social support, stress, and the buffering hypothesis: A theoretical analysis. In A. Baum, J.E. Singer, & S.E. Taylor (Eds.), Handbook of Psychology and Health: Vol. 4 (pp. 253-268.). Hillsdale, NJ: Erlbaum.
- Cohen, S., Tyrrell, D.A.J., & Smith, A.P. (1993). Negative life events, perceived stress, negative affect, and susceptibility to the common cold. Journal of Personality and Social Psychology, 64(1), 131-140.
- Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the United States. In S. Spacapan & S. Oskamp (Eds.), The Social Psychology of Health (pp. 31 – 67). Newbury Park, CA: Sage.
- Cohen, S. & Wills, T.A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98(2), 310 - 357.
- DeKeseredy, W.S. (1988). Women abuse in dating relationships: The relevance of social support theory. Journal of Family Violence, 3(1), 1 - 13.

Donato, K.M., & Bowker, L.H. (1984). Understanding the helpseeking behavior of battered women: A comparison of traditional service agencies and women's groups. International Journal of Women's Studies, 7, 99 - 109.

Duckitt, J.H., & Broll, T. (1982). Life event stress, social support, and health. Human Sciences Research Council, 8(4), 377 - 383.

Dutton, MA., Hohnacker, L.C., Halle, P.M., & Burghardt, K.J. (1994). Traumatic responses among battered women who kill. Journal of Traumatic Stress, 7(4), 549 - 564.

Eby, K.K., Campbell, J.C., Sullivan, C.M., & Davidson, W.S. (1995). Health effects of experiences of sexual violence for women with abusive partners. Health Care for Women International, 16, 563-576.

Ellington, J.E., & Marshall, L.L. (1997). Gender role perceptions of women in abusive relationships. Sex Roles, 36(5/6), 349-369.

Felsten, G. (1991). Influences of situation-specific mastery beliefs and satisfaction with social support on appraisal of stress. Psychological Reports, 69, 483-495.

Felsten, G., & Wilcox, K. (1992). Influences of stress and situation-specific mastery beliefs and satisfaction with social support on well-being and academic performance. Psychological Reports, 70, 291-303.

Flannery, R.B., & Wieman, D. (1989). Social support, life stress, and psychological distress: An empirical assessment. Journal of Clinical Psychology, 45, 867 - 872.

Follingstad, D., Brennan, A.F., Hause, E.S., Polek, D.S (1991). Factors moderating physical and psychological symptoms of battered women. Journal of Family Violence, 6(1), 81 - 95.

Follingstad, D.R., Laughlin, J.E., Polek, D.S., Rutledge, L.L., & Hause, E.S. (1991). Identification of patterns of wife abuse. Journal of Interpersonal Violence, 6, 187-204.

Follingstad, D.R., Neckerman, A.P., & Vormbrock, J. (1988). Reactions to victimization and coping strategies of battered women: The ties that bind. Clinical Psychology Review, 8(4), 373 - 390.

Follingstad, D.R., Rutledge, L.L., Berg, B.J., Hause, E.S., Polek, D.S. (1990). The role of emotional abuse in physically abusive relationships. Journal of Family Violence, 5(2), 107 - 120.

Forte, J.A., Franks, D.D., Forte, J.A., Rigsby, D. (1996). Asymmetrical role-taking: Comparing battered and nonbattered women. Social Work, 41(1), 59 - 73.

Gelles, R.J., & Harrop, J.W. (1989). Violence, battering, and psychological distress among women. Journal of Interpersonal Violence, 4(4), 400 - 420.

Goodstein, R.K., & Page, A.W. (1981). Battered wife syndrome: Overview of dynamics and treatment. American Journal of Psychiatry, 138(8), 1036 - 1044.

Gottlieb, B.H. (1983). Social support as a focus for integrative research in psychology. American Psychologist, 38, 278 - 287.

Gottlieb, B.H. (1985). Social networks and social support: An overview of research, practice, and policy implications. Health Education Quarterly, 12(1), 5 - 22.

- Gottlieb, B.H. (1987). Using social support to protect and promote health. Journal of Primary Prevention, 8, 49 - 70.
- Hilberman, E., & Munson, K. (1977). Sixty battered women. Victimology, 2, 460 - 470.
- Holiman, M., & Schilt, R. (1991). Aftercare for battered women: How to encourage the maintenance of change. Psychotherapy, 28(2), 345 - 353.
- Holtzworth-Munroe, A., Smutzler, N., Sandin, E. (1997). A brief review of the research on husband violence. Aggression and Violent Behavior, 2(2), 179-213.
- Israel, B. & Antonucci, T. (1987). Social network characteristics and psychological well-being: A replication and extension. Health Education Quarterly, 14(4), 461 - 481.
- Jaffe, P., Wolfe, D.A., Wilson, S., & Zak, L. (1986). Emotional and physical health problems of battered women. American Journal of Psychiatry, 31, 625 - 629.
- Kemp, A., Green, B.L., Hovanitz, C., & Rawlings, E.I. (1995). Incidence and correlates of posttraumatic stress disorder in battered women. Journal of Interpersonal Violence, 10(1), 43 - 55.
- Kessler, R.C., & McLeod, J.D. (1985). Social support and mental health in community samples. In S. Cohen & S.L. Syme, (Eds.), Social Support and Health (pp. 219 - 240). New York: Academic Press.
- Kessler, R.C., Price, R.H., & Wortman, C.B. (1985). Social factors in psychopathology: Stress, social support, and coping processes. Annual Review of Psychology, 36, 531-572.

Koeske, G.F., & Koeske, R.D. (1990). The buffering effect of social support on parental stress. American Journal of Orthopsychiatry, 60, 440 - 451.

Koss, M.P. (1990). The women's mental health research agenda: Violence against women. American Psychologist, 45(3), 374-380.

Lazarus, R.S., & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.

Lempert, L.B. (1996). Women's strategies for survival: Developing agency in abusive relationships. Journal of Family Violence, 11(3), 269 - 289.

Mahlstedt, D. & Keeny, L. (1993). Female survivors of dating violence and their social networks. Feminism & Psychology, 3(3), 319 - 333.

Marshall, L.L. (1992). Severity of the violence against women scales. Journal of Family Violence, 7(2), 103-121.

Marshall, L.L. (1996). Psychological abuse of women: Six distinct clusters. Journal of Family Violence, 11(4), 379-409.

Mitchell, R.E., Billings, A.G., & Moos, R.H. (1982). Social support and well-being: Implications for prevention programs. Journal of Primary Prevention, 3(2), 77 - 98.

Mitchell, R.E., & Hodson, C.A. (1983). Coping with coping domestic violence: Social support and psychological health among battered women. American Journal of Community Psychology, 11(6), 629 - 654.

Mitchell, R.E., & Hodson, C.A. (1986). Coping and support among battered women: An ecological perspective. In S.E. Hobfoll, (Ed.), Stress, Support, and Women (pp. 153 - 169). New York: Hemisphere Publishing.

Monroe, S.M., & Kelley, J.M. (1995). Measurement of stress appraisal. In S. Cohen, R.C. Kessler, & L. Underwood Gordon, (Eds.), Measuring Stress: A Guide for Health and Social Scientists (pp. 122-147). New York: Oxford University Press.

Power, M.J. (1988). Stress-buffering effects of social support: A longitudinal study. Motivation and Emotion, 12(2), 197 - 204.

Quick, J.D., Horn, R.S., & Quick, J.C. (1987). Health consequences of stress. Behavior Management, 8, 19 - 36.

Reischl, T.M., Eby, K.K., & Ramanathan, C.S. (1992). Life Event Checklist. East Lansing, MI: Michigan State University.

Rodriguez, R. (1989). Perceptions of health needs by battered women. Response, 12(4), 22 - 23.

Rollstin, A.O., & Kern, J.M. (1998). Correlates of battered women's psychological distress: Severity of abuse and duration of the postabuse period. Psychological Reports (82), 387-394.

Rook, K.S. (1984). Research on social support, loneliness, and social isolation: Toward an integration. Review of Personality and Social Psychology, 5, 239 - 264.

Rynerson, B.C., & Fishel, A.H. (1993). Domestic violence prevention training: Participant characteristics and treatment outcomes. Journal of Family Violence, 8(3), 253 - 266.

Sato, R.A., & Heiby, E.M. (1992). Correlates of depressive symptoms among battered women. Journal of Family Violence, 7(3), 229 - 245.

Spacapan, S. (1988). Psychosocial mediators of health status: An introduction. In S. Spacapan & S. Oskamp (Eds.), The Social Psychology of Health (pp. 17-29).

Newbury Park, CA: Sage.

Stets, J.E. (1990). Verbal and physical aggression in marriage. Journal of Marriage and the Family, 52, 501-514.

Straus, M.A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. Journal of Marriage and the Family, 41, 75-88.

Sullivan, C.M., & Bybee, D.I. (1999). Reducing violence using community-based advocacy for women with abusive partner. Journal of Consulting and Clinical Psychology, 67(1), 43-53.

Sullivan, C.M., Campbell, R., Angelique, H., Eby, K.K., & Davidson, W.S. (1994). An advocacy intervention program for women with abusive partners: Six-month follow-up. American Journal of Community Psychology, 22(1), 101 - 122.

Sullivan, C.M., Tan, C., Basta, J., Rumptz, M. & Davidson, W.S. (1992). An advocacy intervention program for women with abusive partners: Initial evaluation. American Journal of Community Psychology, 20(3), 309 - 332.

Sullivan, C.M., & Rumptz, M.H. (1994). Adjustment and needs of African-American women who utilized a domestic violence shelter. Violence & Victims, 9(3), 275 - 286.

Sutherland, C.A. (1999). Investigating the effects of intimate partner violence on women's health. Unpublished doctoral dissertation, Michigan State University, Michigan.

Tan, C., Basta, J., Sullivan, C.M., & Davidson, W.S. (1995). The role of social support in the lives of women exiting domestic violence shelters: An experimental study. Journal of Interpersonal Violence, 10(4), 437 - 451.

Taylor, S.E., & Dakof, G.A. (1988). Social support and the cancer patient. In S. Spacapan & S. Oskamp (Eds.), The Social Psychology of Health (pp. 95-116). Newbury Park, CA: Sage.

Terry, D.J. (1989). Coping resources and adaptation: Main or buffering effects? Australian Journal of Psychology, 41(2), 159-173.

Tutty, L.M., Bidgood, B.A., & Rothery, M.A. (1993). Support groups for battered women: Research on their efficacy. Journal of Family Violence, 8(4), 325 - 343.

Veiel, H.O. (1985). Dimensions of social support: A conceptual framework for research. Social Psychiatry, 20, 156 - 162.

Warshaw, C. (1997). Intimate partner abuse: Developing a framework for change in medical education. Academic Medicine, 72(Suppl. 1), S26 - S37.

Wellman, B., & Wortley, S. (1990). Different strokes for different folks: Community ties and social support. American Journal of Sociology, 3, 558 - 588.

Wethington, E., & Kessler, R.C. (1986). Perceived support, received support, and adjustment to stressful life events. Journal of Health and Social Behavior, 27, 78 - 89.

Wilcox, B.L. (1981). Social support, life stress, and psychological adjustment: A test of the buffering hypothesis. American Journal of Community Psychology, 9(4), 371 - 386.

Wills, T.A. (1985). Supportive functions of interpersonal relationships. In S. Cohen & S.L. Syme, (Eds.), Social Support and Health (pp. 219 - 240). New York: Academic Press.

Woods, S.J., & Campbell, J.C. (1993). Posttraumatic stress in battered women: Does the diagnosis fit? Issues in Mental Health Nursing, 14, 173-186.

MICHIGAN STATE UNIV. LIBRARIES



31293020801126