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THE IMPACT OF ECONOMIC RESOURCES ON FEMALE SURVIVORS OF INTIMATE MALE VIOLENCE

By

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ABSTRACT

THE IMPACT OF ECONOMIC RESOURCES
ON FEMALE SURVIVORS OF INTIMATE MALE VIOLENCE

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Many women turn to domestic violence shelters for safe housing and support after being physically abused by an intimate partner because they do not have any other economic or social resources, yet there is a lack of research examining the combined impact of abuse and economic resources on women's lives after their shelter stay. The present longitudinal study examined the impact of abuse and economic resources on 225 women who stayed at a battered women's shelter. Participants were interviewed at three, nine, and fifteen months post-shelter. Descriptive, correlational, and hierarchical and logistic regression analyses were employed to develop a model for understanding two interrelated sets of relationships over time: 1) the relationship between abuse, economic resources, and women's overall psychological well-being, and 2) the relationship between women's level of economic resources, dependence on others for their economic resources, and assailant involvement.

The results showed that women who were economically independent had lower economic resources than women who were economically dependent. However, women who were economically independent were also less likely to be involved with their assailants. The results indicated that women who were involved with their assailants

experienced higher levels of continued abuse than women who were no longer involved with their assailants. Further, results showed that women who experienced further abuse reported greater dissatisfaction with their overall psychological well-being.

The concurrent and over time hypotheses that predicted women with fewer economic resources would report greater dissatisfaction with their overall psychological well-being were not supported. Further, women's level of economic resources did not mediate the relationship between abuse and psychological well-being. Economic dependence on others did, however, moderate the relationship between women's level of economic resources and involvement with their assailants at nine and fifteen months post-shelter, and across these two time periods suggesting that economic dependence was an important factor that kept women trapped in abusive relationships. Feminist theory is presented as perspective that provides a rationale for exploring the interconnectedness of gender and economic oppression in woman battering research. Implications of the findings for future research, intervention, and policy are discussed.

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INTRODUCTION

Many women who turn to domestic violence shelters for safe housing and support after being physically abused by an intimate partner do so because they do not have any other economic or social resources to utilize (Okun, 1986; Sullivan & Rumptz, 1994). Many studies on the consequences of woman battering have been conducted with convenient samples found at battered women's shelters or other community agencies (i.e., women with few resources). None of these, however, have empirically examined the impact that level of economic resources, in addition to abuse, had on women's overall psychological well-being over time. Additionally, there is a dearth of empirical, longitudinal research on the relationship between battered women's level of economic resources, economic dependence, and consequential involvement with the assailant. Feminist theory provides a rationale for research that examines the complexities of women with abusive partners' lives which, for the majority of women who have stayed at a battered women's shelter, includes not only abuse but economic hardships. The purpose of this study is twofold: to longitudinally investigate how both abuse and economic resources affect women's overall psychological well-being and to longitudinally examine how women's level of economic resources and level of economic dependence affects their ability to leave an abusive relationship.

Review of the Literature

The purpose of this review is to examine the literature that documents the frequency and seriousness of male violence against female partners in the United States, establishes the physical and psychological consequences of battering on women's lives, and documents the strong relationship between level of economic resources and battered women's psychological well-being and ability to leave an abusive relationship. This literature review is organized into five major sections. The first three sections provide the background for understanding the prevalence and effects of woman battering. Specifically, the first section of this review provides an overview of the scope of the problem of woman battering and the critical nature of intimate male violence against women. The second section of this review demonstrates the serious physical consequences of intimate male violence. The third section of this review details the equally serious psychological consequences of intimate male violence.

The fourth and fifth sections of this review provide the empirical and theoretical rationale for examining the impact level of economic resources and economic dependence have on women's lives. Specifically, the fourth section of this review focuses on the role that economic resources play in understanding and predicting women's ability to leave an abusive relationship as well as the role that economic resources play in predicting women's overall psychological well-being over time. The fifth section of this review focuses on the application of theory to this area of research and examines the major perspectives on the etiology of woman battering, suggesting

feminist theory as a perspective that provides a rationale for exploring the interconnectedness of gender and economic oppression in woman battering research.

Overview

Woman battering is pandemic. Many women are battered by men they are, or once were, involved in a relationship with. Estimates suggest that at least 2 to 4 million women are assaulted by their male partners or ex-partners each year in the United States alone (Browne, 1993; Straus & Gelles, 1990; Straus, Gelles, & Steinmetz, 1980), and between 21% and 34% of all women in the United States will be physically abused by an intimate adult partner in their lifetime (Browne, 1993; Frieze, Knoble, Washburn, & Zomnir, 1980; Koss, 1990; Stark & Flitcraft, 1988). In a nationally representative survey of couples in 1985, Straus and Gelles (1990) reported that nearly one-eighth of the husbands had carried out one or more acts of physical violence against their wives in the past year. Other research estimates that up to 50% of all wives are physically abused by their husbands (Stark & Flitcraft, 1988). As a society we have come to understand that intimate male violence against women is common; it is by no means an unusual or exceptional "family" problem, but a form of danger that is familiar, frequent, typical, and ordinary for many women.

These statistics, widely recognized to be conservative estimates (Browne, 1993; Straus & Gelles, 1988), make it clear that many women are battered by an intimate partner in their lifetime. In fact, women are more likely to be assaulted, killed, or raped by a male partner or ex-partner than by all other categories of assailants combined

(Browne & Williams, 1989; Finkelhor & Yllo, 1985; Goodman, Koss, & Russo, 1993; Koss, 1985).

An additional alarming aspect of intimate male violence against women is the substantial percentage of women who are abused and forced to remain in, or return to, violent relationships. Many women attempt to leave their assailants numerous times before being successful in escaping them permanently (Dobash & Dobash, 1979; Gelles, 1979; Gondolf, 1988; Hofeller, 1982; Strube & Barbour, 1983). A critical reason why so many women remain with or return to their assailants is lack of economic and community resources (Aguirre, 1985; Gondolf, 1988; Hofeller, 1982; Hilbert & Hilbert, 1984; Horton, Simonidis, & Simonidis, 1987; Mitchell & Hodson, 1983; Sidel, 1986; Strube & Barbour, 1986). In addition to these factors, women who are battered report many other reasons for staying with abusive men such as fear of further or worse violence, concern for their children's well-being, and assailants' promise of love and change (Dobash & Dobash, 1979; Hofeller, 1982; Strube & Barbour, 1984). Women also stay because the very agencies designed to help people in need (e.g., criminal justice, social services, health care) are largely unresponsive to requests for protection and assistance that would enable women to leave and remain free from their assailants (Dobash, Dobash, & Cavanagh, 1985; Dutton, 1987; Gelles, 1979; Stark & Flitcraft, 1988). As a result of male violence and inappropriate helping response, women's options are cut off and they become entrapped in violent homes (Stark & Flitcraft, 1988).

Remaining with an assailant or returning to an assailant can be very dangerous for women. Research indicates that violence in intimate relationships increases in severity

and frequency over time (Hilbert & Hilbert, 1984; Okun, 1986; Walker, 1985). Although women who return to their abusers are considered to be at higher risk for further violence than women who do not return, violence does not necessarily end when women are able to leave abusive relationships. Data indicate that separated and divorced women are also vulnerable to battering by their ex-partners (Stark & Flitcraft, 1988).

Physical Consequences of Woman Abuse

Evidence is convincing that many women experience abuse in intimate relationships and are often trapped in these relationships because of a range of individual and societal barriers to leaving. The definition of abuse will be important to the subsequent discussion of how intimate male violence negatively impacts women's lives as well as how other factors, such as economic resources and economic dependence, also affect women's lives. Over the last three decades there has been a near exclusive focus on physical violence in defining woman abuse (Campbell & Fischer, under review). Campbell & Fischer (under review) argue that for any definition to be inclusive of women's experiences it must include not only physical behaviors of the assailant, but also a discussion of resulting injuries, psychological violence, and sexual violence. For this study, abuse is defined as any act that is harmful to its victim and includes physical, sexual, and psychological battering. However, most of the literature reviewed herein is primarily based on the consequences of physical abuse because there has not been much research conducted on the consequences of psychological abuse.

The literature strongly supports the hypothesis that physical abuse negatively affects women's overall physical health (Browne, 1993; Dobash & Dobash, 1979,

Randall, 1990; Sullivan, Basta, Tan, & Davidson, 1992). Physical battering takes many forms ranging from pushing, grabbing, slapping, hitting with a fist or object, kicking, choking, burning, physically restraining, to stabbing and shooting (Binney, Harkell, & Nixon, 1981; Bowker, 1983; Browne, 1987, 1993; Dobash & Dobash, 1979, 1984; Hilberman & Munson, 1977-78; Sullivan et al., 1992). Research suggests that sexual abuse also occurs in at least 40% of all cases of battering (Campbell, 1989a; Finkelhor & Yllo, 1985; Hanneke, Shields, & McCall, 1986). Injuries resulting from physical and or sexual violence may include (but are not limited to) cuts, scrapes, or bruises, black eyes, soreness without bruises, torn hair, burns, loose or broken teeth, broken bones or fractures, concussions, hearing or vision impairments, internal injuries, strains, sprains, or torn ligaments, dislocated joints, pregnancy complications or miscarriage, permanent scarring, and knife or gunshot wounds (Browne, 1993; Dobash & Dobash, 1979, 1984; Sullivan et al., 1992). Women who are abused when they are pregnant face the risk of especially severe outcomes because they are less able to maneuver to escape attacks and are at risk for injuries to the fetus as well as injuries to themselves (Goodman, Koss, Fitzgerald, Russo, & Keita, 1993; Goodman, Koss, & Russo, 1993; Saltzman, 1990).

Being beaten by a male partner or ex-partner is the number one cause of serious physical injury to women in the United States (Stark & Flitcraft, 1987, 1988). A review of the medical records of 3,676 randomly selected patients seen at an urban area emergency room during a one-year period disclosed the seriousness of intimate male violence against women; Twenty-one percent of all women using emergency surgical services were there because they were abused by a male partner and over one half of all

rapes to women over the age of 30 were partner rapes (Stark, Flitcraft, Zuckerman, Grey, Robison, & Frazier, 1981). Other researchers concur that as high as 25% of emergency room visits by women are made because they have been battered by a male partner (Pagelow, 1992). Pagelow (1992) suggests that these statistics are almost certainly underestimates due to inaccurate detection or incorrect reporting by health care professionals.

Tragically, many women are injured to the point of being killed by the men who sought to control them. Browne (1993) concluded that women are more likely to be killed by their partners than by all other categories of persons combined. Browne & Williams (1993) found that more than half of all women murdered in the United States during the first half of the 1980's were killed by their male partners. Browne & Williams (1993) analyzed all criminally negligent homicides from 1976 through 1987 and found that the deaths of approximately 38,648 individuals aged 16 and above resulted when one partner killed another - 61 % were females killed by male partners and 39 % were males killed by female partners. It is important to point out, however, that most women who kill their male partners do so in self-defense (Browne, 1993).

Psychological Consequences of Woman Abuse

The literature also maintains that there is a negative relationship between physical abuse and women's overall psychological well-being (Gelles & Harrop, 1989; Goodman, Koss, Russo, 1993; Koss, 1990). Symptoms include memory loss, cognitive dissociations, sleep and appetite disturbances, chronic fatigue and tension, listlessness, somatic problems, re-experiencing of the traumatic event when exposed to associated

stimuli, thoughts of suicide, and suicide attempts (Browne, 1987; Dobash & Dobash, 1979; Dutton, 1992; Hilberman, 1980; Hilberman & Munson, 1977-78; Hoff, 1990; Jaffe, Wolfe, Wilson, & Zak, 1986; Stark & Flitcraft, 1987, 1988; Walker, 1979, 1983, 1984). Researchers further have been able to document a positive relationship between the frequency and severity of the abuse and the frequency and severity of the psychological symptoms women experience as a result (Follingstaad, Brennan, Hause, Polek, & Rutledge, 1991; Mitchell & Hodson, 1983).

Gelles & Harrop (1989) conducted a random survey of 6,002 households which yielded a nationally representative sample of battered and non-battered women. They found that women who had been physically abused reported higher levels of moderate and severe psychological distress than women who had not been physically abused. In reviewing several surveys, Koss (1990) also concluded that women who were physically abused showed higher degrees of mental health problems when compared with women who had not been physically battered. Specifically, she noted that battered women were more likely to be diagnosed with depression, alcohol and drug dependence or abuse, generalized anxiety, obsessive-compulsive disorder, eating disorders, posttraumatic stress disorder, and other psychological diagnoses than non-battered women (Koss, 1990).

Other researchers have reached similar conclusions. Sato & Heiby (1992) found that almost half of their sample (47%) reported clinically significant levels of symptoms associated with depression, leading them to conclude that women who have been physically abused may be at higher risk for depression and other symptoms of psychological distress. Gleason (1993) reported a higher prevalence of depression,

posttraumatic stress disorder, generalized anxiety disorder, psychosexual dysfunction, and obsessive compulsive disorder among 62 battered women receiving assistance from a community agency than in a national study of 10,953 randomly sampled women.

Of all of the psychological symptoms associated with battering, depression is one of the most prominent (Hilberman & Munson, 1977-78; Walker, 1984). Consistently, studies suggest that women who have been physically battered report higher rates of depression than either the general population or samples of women who have not been physically abused (American Psychiatric Association, 1987; Campbell, 1989b; Gleason, 1993; Walker, 1984). Sato & Heiby (1992) found that approximately half of their sample (47%) of women involved in battered women's groups, staying at shelters, or presenting for help at a community agency reported clinically significant rates of depression.

A longitudinal study examining the relationship between physical abuse and depression on a sample of women who had stayed at a shelter for women with abusive partners found further evidence that physical and emotional abuse are correlated with depression (Campbell, Sullivan, & Davidson, 1995). Campbell et al. (1995) found that 83% of their sample reported feelings of depression immediately after exiting the shelter and only 58% reported feelings of depression 10 weeks later. At a 6-month follow-up, 59% reported feelings of depression.

Recently, the literature on the psychological consequences of woman abuse has reported posttraumatic stress disorder (PTSD) as a diagnosis for the psychological symptoms women report after being abused. The most common trauma suggested as a necessary precursor to PTSD is very applicable to a battered woman's situation; that is, a

serious threat or harm to a person's life or physical integrity including that of their children (American Psychiatric Association, 1987). Some researchers suggest that PTSD more adequately describes the range of psychological symptoms many women who have been battered experience than other diagnoses such as depression (Browne, 1993; Goodman, Koss, Fitzgerald, Russo, & Keita, 1993; Koss, 1990; Walker, 1984). Commonly reported symptoms by women such as fear and anxiety, agitation, memory loss, reexperiencing the trauma, nightmares, and sleep disturbances can be explained within a PTSD diagnosis (Browne, 1993). The prevalence of PTSD in women who have been physically abused range from 33% (using a conservative estimate of PTSD) (Astin, Lawrence, & Foy, 1993) to 84% (Kemp, Rawlings, & Green, 1991). In both of these studies, the level of PTSD significantly correlated with the extent and severity of exposure to violence.

Another serious psychological consequence for many women who have been abused by an intimate male partner are suicidal thoughts and attempts (Gleason, 1993; Hilberman & Munson, 1977-78; King, 1981; Koss, 1990; Stark & Flitcraft, 1982, 1987; Straus & Gelles, 1987). Estimates suggest that 26% of the women who attempt suicide are victims of domestic violence (Randall, 1990). Gayford (1975) reported that 50% of a sample of women who had been battered had tried to commit suicide at least once.

Although the bulk of evidence has led researchers to conclude that a history of victimization is a strong risk factor for the development of psychological problems (Kilpatrick, Saunders, Veronen, Best, & Von, 1987), the longitudinal study of depression in women who have been battered by Campbell et al. (1995) suggests the importance of

examining the relationships over time in order to adequately understand the phenomena. For example, it is unclear whether women who have been battered suffer from actual clinical depression or whether their level of depression represents a healthy, temporary, and/or normal response to a stressful and negative life event such as physical abuse by an intimate male partner. The findings of Campbell et al. (1995) suggest that the latter may be true. Further longitudinal research is necessary to document the exact nature of the relationship (Campbell et al., 1995; Sato & Heiby, 1992).

The Impact of Economic Resources and Economic Dependence on Womens' Decisions About Leaving an Abusive Relationship and Overall Well-Being.

It is clear from a review of the literature that experiences of woman battering result in both primary and secondary psychological and physical problems and have serious detrimental effects on women's overall well-being. Of particular interest in this study is the additional impact that women's level of economic resources and economic dependence has on their psychological adjustment and decisions about staying with the assailant. Prior research on woman battering suggests that lack of economic and community resources and economic dependence impacts womens' decision process about whether to remain with an assailant thereby often serving to trap them in relationships where they are further abused (Aguirre, 1985; Carlson, 1977; Dobash & Dobash, 1979; Gelles, 1976; Greaves, Heapy, & Wylie, 1988; Hofeller, 1982; McDonald, 1989; Pagelow, 1981; Roy, 1977; Strube & Barbour, 1983, 1984). There is also a strong literature which documents that lack of economic resources has a negative impact on women's overall well-being. To further understand the relevance of economic resources

on battered women's lives, following is a review of the literature documenting the relationship between economic resources and womens' decisions about continued involvement with their assailants and a review of the literature on the significant impact level of economic resources can have on womens' overall psychological well-being.

In further trying to understand the full range of consequences of woman abuse and the process involved in ending the abuse, researchers have established that many women continue to endure physical attacks from their male partners because the alternative of separating often means living in poverty or living with considerably fewer economic resources than before the separation (Aguirre, 1985; Carlson, 1977; Dobash & Dobash, 1979; Gelles, 1976; Greaves, Heapy, & Wylie, 1988; Hofeller, 1982; McDonald, 1989; Pagelow, 1981; Roy, 1977; Strube & Barbour, 1983, 1984). The sexist economic and occupational structure in the United States limits women's alternatives when trying to escape an abusive partner (Straus, 1977). In the United States, women are more likely than men to be poor, more likely to remain poor once they enter poverty, and are increasingly likely to be left with the responsibility for children without access to the resources of the other parent (Wilson, 1987). Wilson (1987) also documented that women who were the sole provider in their homes were nearly five times as likely to be poor as men who were the sole provider in their households. Without access to good, decent paying jobs with adequate child care and health care, women are often forced to be dependent on their male partners.

Many researchers have pointed out that economic dependence on male partners is a major obstacle that prevents women from leaving abusive relationships (Aguirre, 1985;

Carlson, 1977; Dobash & Dobash, 1979; Gelles, 1976; Greaves, Heapy, & Wylie, 1988; Hofeller, 1982; McDonald, 1989; Pagelow, 1981; Roy, 1977; Strube & Barbour, 1983, 1984). Lack of money and/or employment was one of three main factors which Gelles (1976) found associated with abused women remaining with their partners. McDonald (1989) suggested that lack of employment and inadequate finances limited the alternatives available to women and increased their entrapment in abusive relationships. Hofeller (1982) found that 58% of a sample of women who had been abused remained with their assailants because of economic reasons; that is, they felt that they could not support themselves (and their children, if applicable) on their own. Strube & Barbour (1983) also found that employment and economic hardship contributed to the decision of whether to stay or leave an abusive partner. Aguirre (1985) examined four antecedent variables (previous experiences with violence, number of injuries, issues experienced during abuse, and economic dependence on husband) and determined that the only variable that influenced womens' decision whether to return to an abuser was economic dependence on him.

It is important to also consider that batterers often purposefully increase this dependence by successfully keeping many women unemployed (Shepard & Pence, 1988) and isolated from their family and friends (Mitchell & Hodson, 1983). Many batterers also threaten economic and physical reprisal against women and their children if they attempt to leave (Dobash, Dobash, & Cavanagh, 1985).

Research also suggests that the more economic resources women have (such as employment, income, material goods and services that money can buy, and level of

education), the more likely they are to seek outside intervention (Carlson, 1977), and the better their chances of leaving their assailant (Sullivan, 1991). Women with more resources can more easily afford to move or stay in a hotel, are more likely to have a number of friends or family who also have more financial resources and can assist in some way, and are more likely to have cars to leave the area if necessary.

For women without many economic resources a domestic violence shelter may be the only safe, available, and accessible place to go to when escaping an abusive man. Although battering cuts across all socioeconomic, racial, ethnic, and religious lines, women who utilize domestic violence shelters tend to be more economically impoverished than the general population (Okun, 1986; Sullivan & Rumptz, 1994). In addition to needing economic or financial resources, women who use domestic violence shelters have been found to need a variety of community resources such as housing, legal services, health care, material goods and services, and childcare (Sullivan et al., 1992).

For women who escape violence to seek refuge in a domestic violence shelter, limited economic resources are often a significant factor that not only influences whether they return to their assailants (Aguirre, 1985; Strube & Barbour, 1983), but may generally influence their overall psychological well-being as well. Research has established the strong relationship between poverty and women's psychosocial well-being. Generally, individuals with economic resources fare much better than those without, as economic resources increase the coping options in many stressful situations, including intimate male violence against women. As Dohrenwend (1978) pointed out, "other things being equal, an individual whose financial or other material resources are

strained by the demands of a stressful life event is likely to have a worse outcome than a person with adequate material resources" (p. 5). Individuals who live under high stress and have few coping resources - including women living in poverty (Belle, 1990) - are at especially high risk for negative psychological sequelae (Goodman, Koss, Russo, 1993).

Reviewing the epidemiological and ecological literature on the relationship of economic factors to psychosocial dysfunction, Seidman & Rapkin (1983) found that at both the macro- and the microlevel, indices of economic conditions (e.g., unemployment rates, social class status, common stock prices, business indicators, individual job loss, etc.) are correlated with rates of numerous psychosocial maladaptations (suicide rates, hospital admissions, outpatient treatment, etc.). As they pointed out, "economic stressors function as precursors of preconditions contributing to the prevalence and incidence of any number of psychosocial maladaptations" (Seidman & Rapkin, 1983).

Research on women and poverty suggest that lack of economic resources has both long and short term consequences for women's lives including placing them at risk for psychological and physical health problems. Belle, et al. (1982) found that low-income women have higher rates of depression and other psychological problems compared to population base rates. Studies reviewed by Belle (1990) found high levels of depressive symptoms among unemployed and socially isolated women, among poor women with responsibility for young children, and among women experiencing economic difficulties. Belle (1990) pointed out that the association between low income with psychological problems is not surprising given that poverty itself is a stressor, bringing with it persistent

undesirable chronic conditions such as inadequate housing, inadequate nutrition, dangerous neighborhoods, poor medical care, and financial uncertainties.

At the same time that poverty is a source of stress, it also undermines the social support system of the individual (Belle, 1990). Relatives and friends of poor women are themselves likely to have economic problems and to be stressed. Furthermore, poor women have to depend largely on overburdened and unresponsive societal institutions for financial, legal, health, and social services that may contribute to their diminished psychological well-being (Belle, 1990).

Because the bulk of research on woman battering is conducted with women who utilize domestic violence shelters, it seems especially relevant to decipher the relationship that level of economic resources has on women's lives as they cope with the abuse and make decisions about their future. To understand the complicated process and outcomes for women surviving abuse from their partner or ex-partner, it is necessary to examine not only the impact of abuse on women's lives, but the impact of other relevant factors such as level of economic resources and economic dependence. The feminist perspective on the etiology of woman battering provides a conceptual basis for such an analysis.

Contemporary Explanations of the Etiology of Woman Abuse

The preceding sections of this literature review documented the frequency and seriousness of male violence against female partners in the United States, established the physical and psychological consequences of battering on women's lives, and documented the strong relationship between economic resources, economic dependence,

psychological well-being, and assailant involvement. To best understand the relationship between abuse, economic resources, involvement with assailant, and psychological well-being, it is important to examine them in some theoretical context.

As woman battering has gained more attention over the past three decades there has been an evolution of sorts in terms of the theories social scientists use to understand this social problem. The most popular theories of woman battering have emerged from psychological/individual, sociological/family systems, and/or sociocultural/feminist perspectives. These three theoretical perspectives have not necessarily evolved chronologically, but have evolved out of different perspectives on the root causes of social problems. The basic tenets of each of the three primary perspectives on woman battering focuses on a different level of conceptualization regarding the etiology of woman battering and society's response to it. To better understand the relevance of studying the impact of economic resources and economic dependence on battered women's lives over time, all three theories are reviewed below. Each theoretical perspective is reviewed for the evidence it has to support that women's level of economic resources and economic dependence influences women's psychological well-being and decisions about leaving their assailant after exiting a battered women's shelter.

It is important to note that some researchers have chosen to work within a fourth perspective, or ecological perspective, which integrates what has been learned within each of the abovementioned three frameworks and suggests that the only way to more fully understand how individuals, families, institutions, and culture are involved in woman battering is to explore the interactions of each of these systems (Carlson, 1984;

Dutton, 1985; Sullivan, 1989). As this perspective is an integration of the primary three theoretical perspectives, it will not be reviewed here.

Individual/psychological perspective on woman abuse. Much of the early research literature on woman abuse focused on individual level variables, especially individual characteristics of women that were hypothesized to make them particularly vulnerable to and responsible for abuse. There are three major analyses within this perspective. The first analyses, and one of the earliest theories to arise in the area of woman battering, was that men batter their female partners when their female partners provoke them to do so. Gelles (1972) differentiated between victim-precipitated violence and non-victim-precipitated violence and argued that victim-precipitated violence occurs when women contribute to their assault through actions that provoke their assailant. Gayford (1978) elaborated on this theory and suggested that women are at least partially responsible for the abuse through nagging, being too quiet, being careless with money, or through doing nothing at all. This theory has been widely criticized for focusing on the victim's behavior instead of the assailants (Martin, 1979), and for ignoring the fact that often there aren't any precipitating factors to woman abuse (Dobash & Dobash, 1979; Martin, 1976; Okun, 1986).

A second analysis within the psychological or individual level theory of woman battering is that men who batter and women who are battered hold more traditional views of gender roles than men who do not batter and women who are not battered. The hypothesis is that men who batter women and women who are abused come from violent families of origin and therefore consider abuse normal, common, and unavoidable (Roy,

1977). To date, the most widely agreed upon cause of family violence cited in the woman battering literature is witnessing parental violence in one's family of origin (Carlson, 1984; Straus, 1977). Aside from being female, Hotaling and Sugarman (1986) found witnessing violence in women's family of origin to be the only consistent risk marker that predicted abuse for women. For men, three primary risk markers were identified as witnessing violence as a child, violence toward one's children, and sexually abusing one's wife. Caution should be taken, however, in interpreting these results. Some researchers suggest that witnessing abuse as a child should be viewed cautiously as a vulnerability, not a causal factor. For example, Stark and Flitcraft (1979) suggested that for every one boy who witnesses abuse and grows up to be abusive, two boys who witness abuse will not grow up to be abusive.

Hotaling and Sugarman (1986) found additional risk markers for men included occupation, education, income, lack of assertiveness, and alcoholism. Other research also concluded that alcoholism was an individual level cause of family violence and also mentioned status incompatibility (women having more personal resources than men and thereby threatening their dominant position in the family) and stress as contributors (Carlson, 1984; Dutton, 1985).

A third psychological or individual level analysis for why men batter women is that women learn to be helpless in their assaultive relationship thereby allowing the abuse to continue. Walker's (1977-78, 1979) theory of learned helplessness purports that battered women develop poor self-concepts from having been abused and consequently believe they are powerless to end or escape from their partners violence. Carlson (1984)

also suggested that women with abusive partners exhibit low self-esteem. However, other researchers have pointed out that low self-esteem was not necessarily the cause of battering but the result of battering (Campbell, 1992). Walker (1977-78, 1979) suggested that women with abusive partners need to change their cognitive set to believe their competent actions can change their life situation.

As with the other individual or psychological level theories, the learned helplessness analysis puts the blame on the victim. The barriers that women face when attempting to leave their assailants are ignored. All three analyses within this perspective fail to address how economic resources, economic dependence, lack of housing, fear for their lives and the lives of their children, lack of employment and/or education, and social pressure all contribute to a woman's entrapment in an abusive relationship. Given the societal barriers facing women such as employment discrimination, lack of adequate and affordable child care, and inadequate police protection from the abuser, it is very reasonable for a battered woman to believe that her competent actions are not enough to end the abuse.

Sociological/family systems perspective on woman abuse. The psychological or individual focus shifted in the early 1980's as the research was influenced by a large national random sample survey conducted by Straus, Gelles, and Steinmetz (1980). Their research suggested that woman battering by male partners and ex-partners was only a part of a larger problem of societal norms and mores that work to perpetuate violence in the family and should be viewed in an environmental context rather than as an individual problem. Within this perspective, generalized violence in society, using parental

violence to discipline children, violence among siblings, women's subordination, and the increasing social isolation of families are all acknowledged as contributing factors in family violence and responsible for transmitting violence from one generation to another (Carlson, 1984; Dutton, 1985; Kurz, 1993; Straus, 1977; Straus, et al., 1980).

While there is some validity to the argument that social factors contribute to violence within the family, they can only be a partial explanation for woman battering. For instance, although it is true that many cultural norms support violence within families, there also exist cultural norms that condemn such behavior (e.g., there are certainly societal expectations that violence against one's wife is unacceptable and that families should be safe, respectful, and free from violence). The sociological or family systems perspective does not adequately explain the interrelationship between these contradictory norms or how one may come to dominate over the other.

Another shortcoming with this perspective is that it focuses on violence as a result of family conflict but does not explain why so many more men than women are violent, since both are subjected to a great deal of stress at home and at work. Nor does it take into account that a great deal of battering is not precipitated by the level of conflict within the family (Dobash & Dobash, 1979; Hofeller, 1982; Okun, 1986).

Another sociological argument about the causes of woman battering is the personal resources analysis of battering. This analysis contends that men use violence to maintain power in relationships (Allen & Straus, 1980). Allen & Straus (1980) found a correlation between resources and power for working class men; that is, working class men who scored very low in resources also scored higher on the use of violence against

their partners. This suggests that in families where men have a lower level of power and resources, they will be more prone to violence in order to gain additional power. A problem with this theory is the definition of power. In this study, Allen and Straus (1980) asked couples questions pertaining to who decides what they will eat for dinner or what they will watch on television rather than about which partner had more access to actual societal resources such as a job, an income, status in the community, and various other advantages. Viewing power in this manner minimizes the very real disadvantages that the vast majority of women face in contemporary marriages compared to their husbands.

The sociological/family systems perspective on woman abuse comes closer to addressing the importance of looking at the problem of woman battering from a broader perspective, thereby including multiple forces (e.g., women's subordination, economic resources) as potentially relevant factors in causing men to batter women. But, as with the individual level perspective, the sociological/family systems theory does not adequately address the societal barriers battered women face (e.g., economic resources, economic dependence, lack of housing, fear for their lives and the lives of their children, lack of employment and/or education, and social pressure) and how these barriers impact their lives.

Feminist perspective on woman abuse. Feminist theorists and researchers who have studied woman abuse for three decades agree that violence against women belongs in a larger social context than the individual or the family (Davis, 1985; King & Bohorn, 1993; Schechter, 1982). The feminist perspective on woman abuse argues that the norm

of male dominance within our broader culture and incorporated into our formal institutions are the roots of woman battering. Men batter women because they are socialized within a patriarchal social structure in which institutional sexism contributes to the denigration and abuse of women in society (Schechter, 1982). Proponents of this perspective cite such factors as women's subordinate role in society, institutionalized sexism, traditional sex role stereotyping, and a history of male domination as reasons for why men use violence to control women and assert power in their relationships. Further, feminist theorists suggest that intimate male violence is legitimized and perpetuated by major societal institutions such as the health care, criminal justice, and social service systems through their failure to identify, help, and protect female survivors (Bowker, 1987; Kurz, 1993; Okun, 1986).

The feminist perspective is most relevant to this study in that it seeks to understand and explain the relationship between abuse and economic resources. The feminist perspective supposes that women have less power in society than men do and are economically disadvantaged and, therefore, often forced to be economically dependent on men. Feminist theory on woman battering argues that this inequitable distribution of economic resources between men and women contributes to women's economic dependence on men, limiting women's options and often forcing them to remain in abusive relationships (Corcoran, Duncan, & Hill, 1984; Dobash & Dobash, 1992; Edwards, 1985; Hofeller, 1982; Okun, 1986).

Cross cultural research supports the argument that battering is related to the economic oppression of women. Levinson (1989) found that wife-beating is more likely

in societies in which men control the family wealth. In their cross cultural research on woman abuse, Counts, Brown, & Campbell (1992) found that in most cultures, women are oppressed by men and intimate male violence against women is common. However, in cultures where women had more power, they found intimate male violence against women to be less common.

The feminist perspective further suggests that woman abuse should be categorized with other types of violence against women such as rape, incest, and pornography. Feminist theory further proposes that intimate male violence against women in the United States should be categorized with other forms of violence under capitalism such as racism and classism (Williams, 1981). Therefore, it is essential to see woman battering within the framework of misogyny, the feminization of poverty, forced homelessness, and racial discrimination. Feminist theory contends that because multiple oppressions influence womens's lives and all are rooted in the patriarchal social structure (e.g., women are oppressed because they are women but also may be oppressed because they are poor or women of color), any analyses of social problems affecting womens lives would benefit by analyzing multiple factors.

Feminist theory is more applicable to the problem of intimate male violence against women than other theoretical perspectives that address inequalities, such as conflict theory or social structuralism, because it places gender as the basis for such inequalities. Domestic violence is overwhelmingly a crime commited by men against their intimate female partners and, as such, must be understood within the context of gender.

Rationale for the Present Study

There is a considerable body of knowledge within the woman battering literature that documents the pervasiveness and seriousness of intimate male violence against women and the various negative physical and psychological outcomes that abuse (whether physical, sexual, or psychological) has on women's lives. The literature also contends that women's level of economic resources and whether they are dependent on another person for those resources plays a central role in influencing their: 1) decision about continuing involvement with their assailants (Aguirre, 1985; Carlson, 1977; Dobash & Dobash, 1979; Gelles, 1979; Greaves, Heapy, & Wylie, 1988; Hofeller, 1982; McDonald, 1989; Pagelow, 1981; Roy, 1977; Strube & Barbour, 1983, 1984), and 2) psychological well-being over time (Belle, 1990; Belle, Dill, Feld, Greywolf, Reese, & Steele, 1982; Dohrenwend, 1978; Goodman, Koss, Russo, 1993; Seidman & Rapkin, 1983).

As the literature review suggested, women who stay at domestic violence shelters tend to have fewer resources to begin with than women who do not turn to domestic violence shelters after being battered (Okun, 1986; Sullivan & Rumptz, 1994). Much of the research in the area of woman battering has been conducted with women at domestic violence shelters but has not incorporated an analysis of the impact of economic resources and economic dependence on women's lives. Therefore, the relationships researchers currently suggest between abuse and other constructs like involvement with assailant or psychological well-being may be confounded by level of economic resources or economic dependence. Russo (1990) suggests the importance of future research that

examines what variables mitigate the impact of abuse on women's lives in order to understand the factors that influence the differential outcomes of woman abuse. For example, to understand what factors affect women's psychological well-being and decisions about staying involved with the assailant. The present study contributes to the literature by empirically exploring these relationships over time in order to begin to conceptualize a model for how level of economic resources and economic dependence impacts women who have been battered by their partners or ex-partners. Research on these factors could have important implications for future theory building, intervention strategies, research, and policy decisions.

In addition to beginning to develop a model to explain the role of economic resources and economic dependence in predicting women's psychological well-being and involvement with their assailants, the present study contributes to the literature on woman battering by remedying several common methodological weaknesses that limit the causal inferences and definitive conclusions of past research. Table 1 provides a summary of the methodological limitations of the research reviewed herein that has investigated the impact of economic resources and economic dependence on women who have been battered. To date, much of the existing research has been descriptive or anecdotal in nature. That is, results are often limited to simple tabulation of frequencies and percentages. The present study employed correlational and regression analyses to further explore the relationships among key variables in this area of research.

Table 1

Methodological Limitations of Research Investigating the Impact of Economic Resources and Economic Dependence on Women Who Have Been Battered

First Author Last Name/ Year Publication	Convenient Sample	Sample Size	Purely Descriptive Analyses	Cross Sectional	Survey Type
Aguirre (1985)	yes	312	no	yes	written survey
Carlson (1977)	yes	101	yes	yes	in-person interview
Gelles (1976)	partially	80	yes	yes	in-person interview
Greaves (1988)	yes	524	yes	yes	shelter intake interview
Mitchell (1983)	yes	60	no	yes	written survey
Pagelow (1981)	yes	varied	yes	yes	written survey; in-person interview; observational data
Roy (1977)	yes	150	yes	yes	archival data
Shepard (1988)	yes	varied (81-123)	yes	yes	written survey
Strube (1983)	yes	98	no	no	in-person & phone interviews
Strube (1984)	yes	251	no	no	in-person & phone interviews
Sullivan (1994)	yes	141	no	no	in-person interviews

Most of the research to date has also been cross-sectional, and therefore limits the conclusions about the stability of the relationship between major outcome variables. Interviewing women at only one point in time while they are in shelters or immediately upon shelter exit provides only limited information about the effects of battering on women's overall well-being (Campbell et al., 1995; Sullivan, Campbell, Angelique, Eby, & Davidson, 1994). For example, the information cross-sectional studies provides can be very misleading regarding the psychological well-being of women with abusive partners. Campbell et al. (1995) and Sullivan et al. (1994) found that in a sample of shelter users, women reported much higher levels of depression immediately post-shelter than they did six months later. Although interviewing women during a crisis period can be important to our understanding of critical life events, care must be taken not to overgeneralize these findings to battered women's long-term psychological well-being. Currently, there is an insufficient amount of information known about the process women undergo over time as they attempt to escape abusive men with whom they are or have been involved with. The present study included multiple data collection points (3 months post-shelter, 9 months post-shelter, and 15 months post-shelter) to help sort out what factors influence women's decisions and psychological well-being over time.

Another weakness throughout the woman abuse literature is a lack of agreement on a single definition of abuse and differential emphasis on the dimensions of abuse (Campbell & Fischer, under review). Most often, physical battering is examined to the near exclusion of psychological and sexual battering as part of woman abuse (Finkelhor & Yllo, 1983; Follingstad et al., 1990; Russell, 1990). As there is ample evidence that

psychological and/or sexual abuse often accompany physical violence and are at least as damaging as physical violence, the definition of abuse must be expanded in our research (Browne, 1987; Campbell, 1989; Campbell & Fischer, under review; Follingstad, Brennan, Hause, Polek & Rutledge, 1991; Follingstad, Rutledge, Berg, Hause, & Polek, 1990; Frieze, 1983; Hanneke, Shields, & McCall, 1986; Hilberman & Munson, 1977-78; Pagelow, 1984; Walker, 1984). The present study incorporated physical (including one item assessing sexual abuse) and psychological abuse in the measure of abuse and documented the conceptual and empirical rationales behind the development of the scale.

In addition to the failure to longitudinally and empirically examine the impact of abuse and economic resources on women's psychological well-being and return to the assailant, there are also wide gaps in our knowledge because theory is rarely integrated with research. Becerra and Zambrana (1985) concluded that data and a research agenda are meaningless without a context in which to interpret them. To date, there is a lack of theory-informed research on the actual relationship between shelter users' economic resources, economic dependence, involvement with the assailant, further abuse, and psychological well-being over time.

Women in shelters are often both poor and battered. Their situation symbolizes the complexity of the broader patterns of institutionalized economic and sexual exploitation, political discrimination, and male domination against women which serves as the basis for woman battering. Although all women who have been abused by a male partner would share the experience of intimate male battering in common, differing

levels of economic resources or economic dependence might be factors that influence differential outcomes.

The present study contributes to the literature by presenting feminist theory as support for the importance of looking at economic resources and economic dependence within the context of woman abuse. To date, researchers have maintained a narrow definition of violence against women. In the struggle to end intimate male violence against women, many researchers focus only on male violence instead of the broader system of capitalism and its institutions that perpetuate both sexism and classism in their very structure (Williams, 1981). It is important, however, to understand abuse of impoverished women in relation to both their economic resources and gender, for each interpenetrate one another. The present study investigated woman abuse within the context of economic oppression facing women who have resided at a domestic violence shelter.

The Present Study

The present study was part of a larger ongoing study. Feminist theory and previous research findings suggest that when women leave a domestic violence shelter, both abuse and economic resources/dependence may play important roles in predicting their overall psychological well-being over time (Belle, 1990; Belle, Dill, Feld, Greywolf, Reese, & Steele, 1982; Dohrenwend, 1978; Gelles & Harrop, 1989; Goodman, Koss, Russo, 1993; Koss, 1990; Seidman & Rapkin, 1983). Research also suggests that economic resources or economic dependence on the assailant play a prominent role in predicting return to the assailant (Aguirre, 1985; Carlson, 1977; Dobash & Dobash, 1979;

Gelles, 1976; Greaves, Heapy, & Wylie, 1988; Hofeller, 1982; Pagelow, 1981; Roy, 1977; Strube & Barbour, 1983, 1984). Feminist theory supports that to more clearly understand the dynamic process involved for women post-shelter and to gain further insight into the multiple factors impacting women's psychological well-being, we must begin to examine the complexities of women's lives and examine the multiple oppressions that impact them over time (Corcoran, Duncan, & Hill, 1984; Davis, 1985; Dill, 1983; Dobash & Dobash, 1992; Edwards, 1985; Hofeller, 1982; Okun, 1986). This research was designed to explore the complex relationships between abuse, economic resources, economic dependence, involvement with the assailant, and overall psychological well-being as described by the following three objectives and specific hypotheses. Information was collected through face-to-face interviews with women at three time points: 3, 9, and 15 months after leaving a domestic violence shelter.

Research Objectives and Hypotheses

Given the lack of agreement on definitions of abuse and psychological well-being in the woman abuse literature, and the lack of measures of economic resources, the first objective was to conceptually and empirically create meaningful scales to measure these constructs. With regard to measuring abuse, the literature suggests that both physical abuse by the original assailant or any new relationship and psychological abuse by a current partner (either the original assailant or a new relationship) may contribute to an overall abuse score. Therefore, items measuring physical abuse (including physical abuse, sexual abuse, and injuries) by the original assailant or new relationship, threats, and psychological abuse by whoever women were currently in a relationship with were

combined in the present study to create an overall abuse measure. Overall quality of life and depression have been suggested as indices of overall psychological well-being and items assessing both of these constructs were combined in the present study to create an overall psychological well-being measure. Items assessing level of economic resources were combined to create an economic resources measure.

Given the lack of empirical, longitudinal studies on the relationship between abuse, level of economic resources and economic dependence, involvement with the assailant, and psychological well-being of women who were battered and resided at a domestic violence shelter, the second objective was to provide a descriptive account of abuse, women's economic resources, economic dependence, involvement with assailant, and psychological well-being. The descriptive information provides the contextual background for this exploratory model development study.

The third, and primary, objective was to examine the relationships between abuse, economic resources, economic dependence, involvement with the assailant, and psychological well-being. As the first step in examining these relationships, this research determined the correlations between the five primary variables within each time point (Time 1 = 3 months post-shelter, Time 2 = 9 months post-shelter, and Time 3 = 15 months post-shelter) and across all three time points.

As the second step in examining these relationships, the present study predicted relationships between abuse, economic resources, and psychological well-being within each of the three time periods and across time. Of particular interest were the relative strength of abuse and economic resources in predicting women's psychological well-

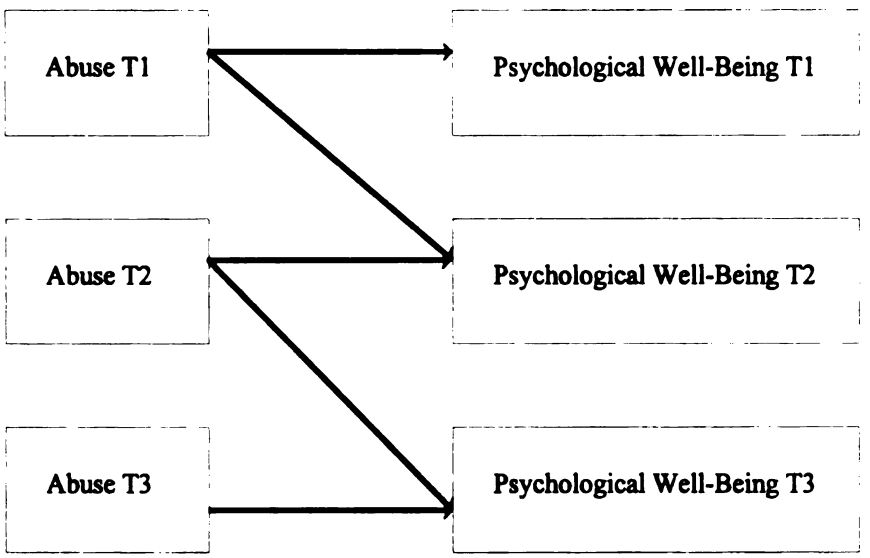
being and whether economic resources mediated the relationship between abuse and psychological well-being. The present study also explored the relationships between economic resources, economic dependence, and involvement with the assailant within Time 1, Time 2, and Time 3 and across time. Of particular interest in these analyses was whether economic dependence moderated the relationship between economic resources and involvement with the assailant.

The following specific hypotheses were tested:

Hypothesis 1: The literature and previous research suggest that abuse from intimate male partners is a major stressor that affects women's overall psychological well-being. The more severe the abuse, the lower women's psychological well-being. Figure 1 shows a heuristic model of the hypothesized relationships between abuse and psychological well-being within and across time.

Figure 1

Heuristic Model of the Hypothesized Relationships Between Abuse and Psychological Well-Being Within and Across Time



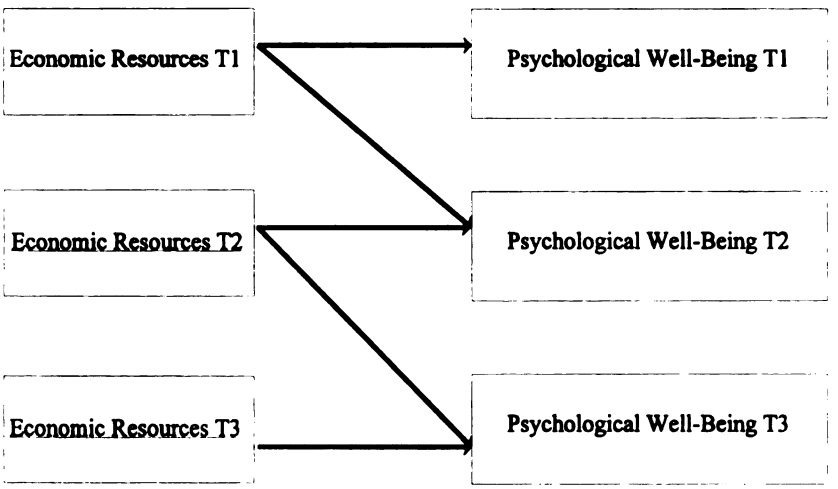
1. The experience of abuse at Time 1 has a direct negative effect on the psychological well-being of women at Time 1.
2. The experience of abuse at Time 2 has a direct negative effect on the psychological well-being of women at Time 2.
3. The experience of abuse at Time 3 has a direct negative effect on the psychological well-being of women at Time 3.
4. The experience of abuse at Time 1 has a direct negative effect on the psychological well-being of women at Time 2.
5. The experience of abuse at Time 2 has a direct negative effect on the psychological well-being of women at Time 3.

Hypothesis 2: The literature and previous research suggest that level of economic resources impacts women's overall psychological well-being. The lower the economic

resources, the lower women's psychological well-being. Figure 2 displays a heuristic model of the hypothesized relationships between economic resources and psychological well-being within and across time.

Figure 2

Heuristic Model of the Hypothesized Relationships Between Economic Resources and Psychological Well-Being Within and Across Time



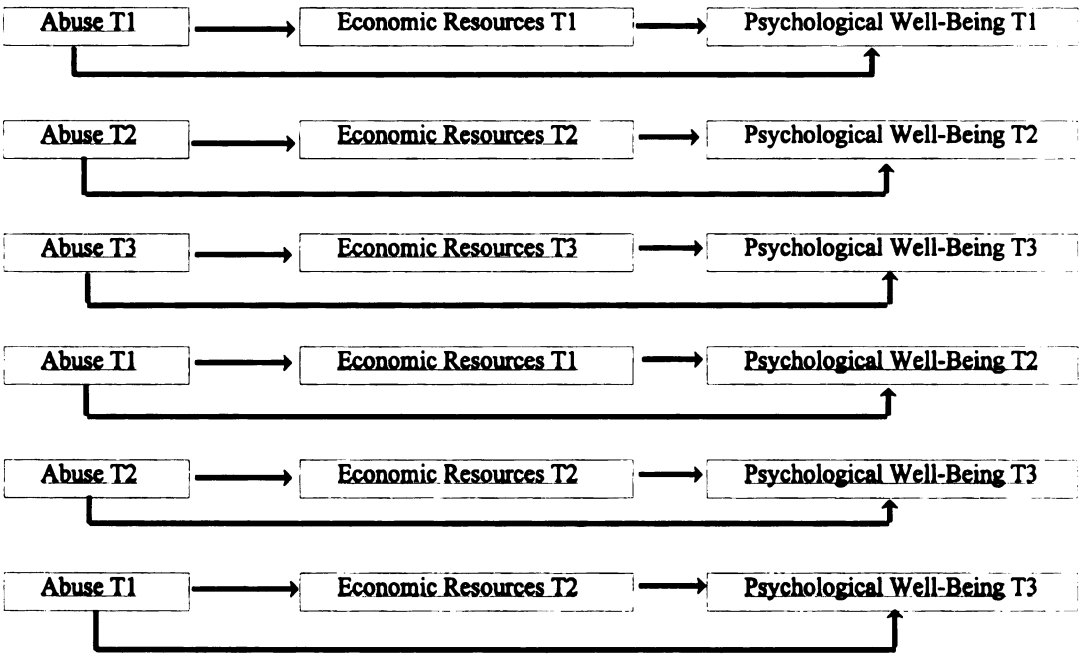
1. The level of economic resources at Time 1 has a direct positive effect on the psychological well-being of women at Time 1.
2. The level of economic resources at Time 2 has a direct positive effect on the psychological well-being of women at Time 2.
3. The level of economic resources at Time 3 has a direct positive effect on the psychological well-being of women at Time 3.
4. The level of economic resources at Time 1 has a direct positive effect on the psychological well-being of women at Time 2.

5. The level of economic resources at Time 2 has a direct positive effect on the psychological well-being of women at Time 3.

Hypothesis 3: It is hypothesized that economic resources mediate the relationship between abuse and psychological well-being. First, abuse has a direct negative impact on economic resources such that the higher the level of abuse that women experience, the fewer the economic resources they will have. Second, abuse has a direct negative impact on psychological well-being such that the higher the level of abuse that women experience, the lower their psychological well-being. Third, economic resources has a direct positive effect on psychological well-being such that the more economic resources women have, the higher their psychological well-being. Figure 3 is heuristic model of the hypothesized relationships of economic resources mediating the effect extent of abuse has on psychological well-being within and across time.

Figure 3

Heuristic Model of the Hypothesized Relationships of Economic Resources Mediating the Effect Extent of Abuse Has on Psychological Well-Being Within and Across Time



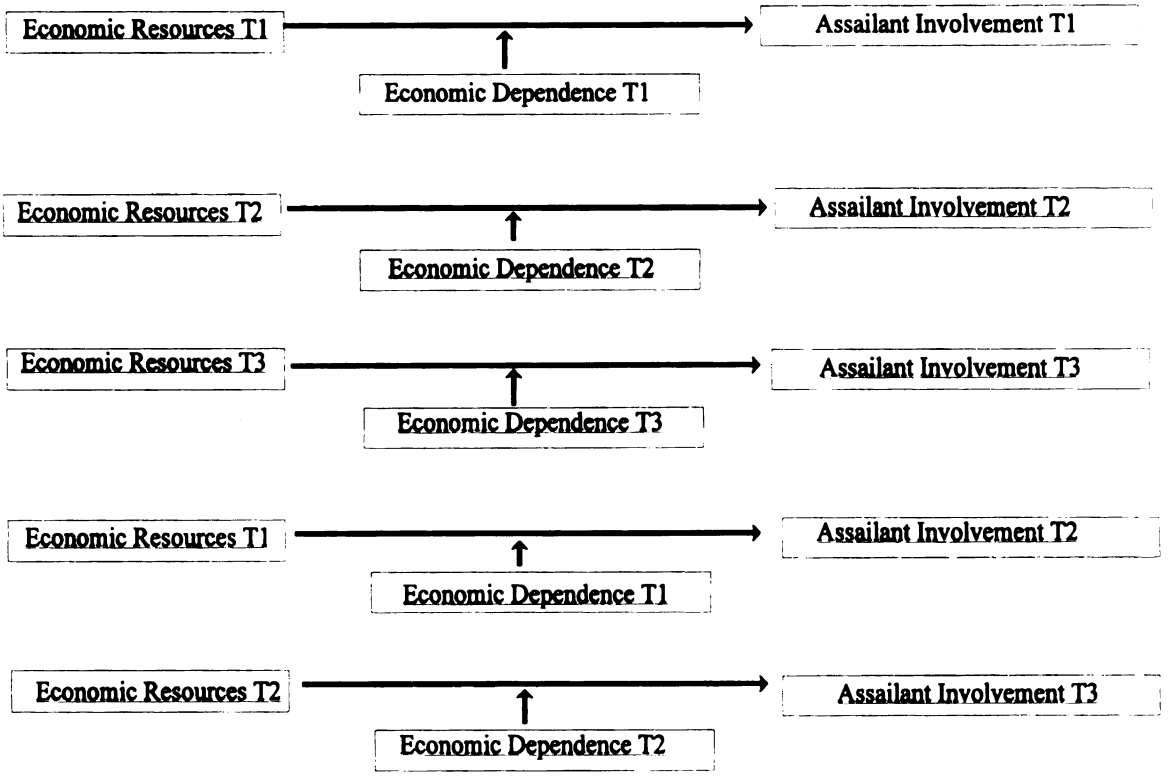
1. The level of economic resources at Time 1 mediates the relationship between abuse at Time 1 and psychological well-being at Time 1.
2. The level of economic resources at Time 2 mediates the relationship between abuse at Time 2 and psychological well-being at Time 2.
3. The level of economic resources at Time 3 mediates the relationship between abuse at Time 3 and psychological well-being at Time 3.
4. The level of economic resources at Time 1 mediates the relationship between abuse at Time 1 and psychological well-being at Time 2.
5. The level of economic resources at Time 2 mediates the relationship between abuse at Time 2 and psychological well-being at Time 3.

6. The level of economic resources at Time 2 mediates the relationship between abuse at Time 1 and psychological well-being at Time 3.

Hypothesis 4: The literature and previous research suggest that level of economic resources is related to concurrent and future involvement with assailant. Given the amount of literature that supports the contention that women report economic dependence as a primary reason for returning to their abusive partners, the relationship between economic resources and involvement with assailant is hypothesized to be moderated by whether women are economically dependent. That is, women's level of economic resources will affect whether they are involved with their assailant only if they are economically dependent for those resources. Figure 4 illustrates a heuristic model of the hypothesized relationships of economic dependence moderating the effect of economic resources on assailant involvement within and across time.

Figure 4

Heuristic Model of the Hypothesized Relationships of Economic Dependence Moderating the Effect of Economic Resources on Assailant Involvement



1. Economic dependence at Time 1 moderates the relationship between level of economic resources at Time 1 and involvement with assailant at Time 1.
2. Economic dependence at Time 2 moderates the relationship between level of economic resources at Time 2 and involvement with assailant at Time 2.
3. Economic dependence at Time 3 moderates the relationship between level of economic resources at Time 3 and involvement with assailant at Time 3.

4. Economic dependence at Time 1 moderates the relationship between level of economic resources at Time 1 and involvement with assailant at Time 2.

5. Economic dependence at Time 2 moderates the relationship between level of economic resources at Time 2 and involvement with assailant at Time 3.

METHOD

Design

The current study is part of a larger ongoing study that is the first to utilize a longitudinal, experimental design to examine the effects of an advocacy intervention on battered women's overall psychological well-being and ability to remain free from abuse over a two-year period. The larger study employed a longitudinal design with six interviews over time (pre-intervention/immediately upon shelter exit, post-intervention, and 6, 12, 18, and 24 month follow-up periods). The current study focuses on women's psychological well-being and involvement with their assailant after having been abused and staying at a shelter for women with abusive partners and not on the intervention in the larger study. Three time periods of post-shelter information were used in the present study corresponding with the post-intervention, 6 month follow-up, and 12 month follow-up interviews in the larger study.

For the purposes of this study, however, these three interviews reflect women's experiences 3 months post-shelter (Time 1), 9 months post-shelter (Time 2), and 15 months post-shelter (Time 3). Because the purpose of the present study was to begin to formulate a model for the relationship between economic resources, economic dependence, abuse, psychological well-being, and assailant involvement, it was important to interview women and measure these dimensions when the women were not in crisis. Three months post-shelter was long enough after the crisis that precipitated

their shelter stay to gain stable information on continued abuse, level of economic resources, economic dependence, and involvement with assailant. Furthermore, having a reasonably short time between leaving the shelter and this interview helped the project maintain contact with the participants, thereby improving the retention rate. Because the present study was exploratory, two follow-up time periods were chosen in order to examine the stability of the relationships and in order to determine if there were predictive relationships across time. A period of six months between interview one and interview two and between interview two and interview three was chosen because it was an adequate length of time to expect changes in the variables of interest (if there were changes across time).

Research Participants

Research participants were recruited from the Council Against Domestic Assault, a shelter for women with abusive partners located in a medium-sized Midwestern city. Women who stayed at the shelter for at least one night and who did not move out of the metropolitan area were eligible for participation in the study. Potential participants were informed that participation involved being interviewed three times after their shelter exit: 3 months post-shelter, 9 months post-shelter, and 15 months post-shelter and that they would be paid $40.00 for the first interview, $60.00 for the second interview, and $80.00 for the third interview. Potential participants were also informed that half of the women recruited for interviews would be randomly chosen to receive the free services of a trained advocate for 4-6 hours per week over ten weeks after they left the shelter to help them access needed community resources.

Of 244 women who were recruited and interviewed by the larger study immediately upon exiting the domestic violence shelter, four women refused to continue participation with the project, two were suspected to have been murdered, and three could not be located (despite intensive tracking efforts), leaving a total sample of 235 interviewed 3 months post-shelter. By the next interview 6 months later (9 months post-shelter) four more women could not be located (N=231). At the 15 month post-shelter interview, four additional women could not be located, and two were in substance abuse treatment programs and could not be interviewed (N=225). Therefore, the retention rate for the first interview (3 months post-shelter) was 96%, the retention rate for the next interview (9 months post-shelter) was 95%, and the retention rate for the 15 month post-shelter interview was 92%.

Because of the longitudinal nature of this research design and the regression analyses used to test the hypotheses, the nineteen participants discussed above who were not interviewed at every time period were dropped from the study (N = 225). On all of the demographic variables and scale scores, the nineteen participants who were not included in the final sample did not significantly differ from the 225 participants who had full data at all three time points any more than would be expected by chance. In addition, data from one woman who exhibited signs of psychological dysfunction which could have invalidated her answers to some questions was dropped as an outlier in the correlational and regression analyses (for a final N=224) but is included in descriptive reports.

Demographic and economic characteristics of participants. Table 2 shows the demographic and economic characteristics of the sample. The mean age of the sample was 28 years. Women's ages ranged from 17 years old to 61 years old. Forty-five percent of the participants were Non-Hispanic White, 44% were African American, 6% were Hispanic, and the remainder were Asian American, Native American, Arab American, or of mixed heritage. At all three time periods, three-quarters of the women had children who were currently living with them. Women reported having anywhere from one child living with them to having 7 children living with them. On average, women had two children who were currently living with them at the time of each interview.

Table 2

Demographic and Economic Characteristics of Participants at Time 1, Time 2, and Time 3 (N=225)

Demographic and Economic Characteristics	Time 1	Time 2	Time 3
Age in years (mean)	28.3 (SD 7.7)		
Race/Ethnicity			
Non-Hispanic White	45%		
African-American	44%		
Hispanic	6%		
Asian American	1%		
Other	4%		
Educational level			
Less than high school	36%		
High school grad/GED	25%		
Some college	28%		
College graduate	6%		
Trade school	4%		
Professional degree	1%		
Children living with them	76%	75%	75%
Number of children living with participant (mean)	2 (SD 1.4)	2 (SD 1.4)	2 (SD 1.5)
Annual income (mean)	$10,317 (SD 9460.9)	$10,162 (SD 8082.1)	$10,098 (SD 7083.5)
Living in poverty	72%	72%	70%
Currently employed	26%	33%	32%
Receiving governmental assistance	80%	71%	71%
Currently a student	16%	20%	20%
Type of living situation			
Rent an apartment, home, or room	81%	73%	79%
Own a home	5%	7%	5%
Stay with friends or relatives	9%	12%	9%
Other (including homeless or in an institution)	5%	8%	7%
Regular access to a car	40%	46%	51%

Upon exiting the shelter, women were asked about their educational level. Over one-third of the sample did not complete high school and did not obtain their GED. Twenty-five percent did have a high school diploma or obtain their GED. Only 6% graduated from college, but 28% had attended college for some period of time. One percent of the women pursued higher education and obtained a professional degree. Four percent of the women completed trade school.

Table 2 illustrates that participants' economic characteristics (that were measured at every time period) were very stable across all three time periods of this study. Most of the women were living below the federal poverty line with an annual income averaging just over ten thousand dollars. Less than one-third of the sample were employed, while over 71% needed to rely on governmental assistance. Few of the participants reported currently being students at any of the interviews (16% - 20%). The majority of women (73% - 81%) were renting a place to live (a room, apartment, or home), only 5% - 7% owned their own home, 9% - 12% were staying with friends or relatives, and 5% - 8% were either homeless or in an institution (e.g., jail, prison, psychiatric hospital) at any of the time periods. Between 49% and 60% of the women did not have consistent access to a car if they needed it at any time period.

The participants were demographically similar to the samples of comparable studies (e.g., Astin et al., 1993; Finn, 1985; Gondolf, 1988; Kemp et al., 1991; Mitchell & Hodson, 1983; Okun, 1986; Pagelow, 1981; Sato & Heiby, 1992). Thus, they are generally representative of women who utilize domestic violence shelters.

Procedure

Interviewer training. Interviews were conducted by highly trained undergraduate students at a large Midwestern university (Michigan State University) in exchange for college credits. Students enrolled for two consecutive terms in small groups of four to eight persons and received an average of nine weeks (the length of training remained flexible depending on the performance of the group of interviewers) of intensive training in interviewing techniques and the tenets of community research from an ecological and feminist perspective. Training was very interactive and included reading articles on woman battering and training manuals of interviewing techniques, learning and role-playing the interviews, films, and discussion of community research skills such as techniques for tracking participants.

At the conclusion of training and before interviewers were permitted to conduct actual interviews with research participants, inter-rater reliability was calculated. This involved the four to eight interviewers and supervisor(s) watching, listening to, and coding the same mock-interview (performed by two group members who simultaneously acted as interviewer/interviewee and coded). Inter-rater reliability was calculated using percent agreement. The total number of possible correct responses was totaled as the denominator (as determined by one supervisors' coding checked against an oral tape of the interview). The numerator represented the total number of responses each interviewer coded correctly. The two were divided and multiplied by 100 to determine a percent agreement score for each individual student. Due to the rigorous interviewer

training and repeated practice interviews, percent agreement scores averaged 97% across all of the terms of training and was never below 94% in any given term.

After training was complete, interviewers were assigned one or two interviews per week and they were responsible for locating the participant, setting up the interview, conducting the interview (always in the community, usually at the participant's home), coding the interview, and listening to the tape of the interview to make sure it was coded correctly. Interviewers continued to meet weekly in their small groups with one or two supervisors to discuss the interviews they completed, ask any questions, hand those interviews in, and receive new interviews to complete the next week. Weekly meetings were designed to be very interactive and supportive and were an effective way to make sure all of the interviews were done well and on time. To further ensure accuracy, interview supervisors (trained graduate students in Ecological-Community Psychology) listened to the tape recording of every interview, corrected any coding mistakes, and gave both positive and corrective feedback to the interviewers on a weekly basis.

Advocacy Intervention

Although not a focus of the present study, the larger investigation employed a randomized experimental design to evaluate the impact of an advocacy program for women with abusive partners. Because this intervention may have implications for the present study, a brief description follows. At the recruitment phase of the study, project staff administered a baseline interview and then randomly assigned women to either the experimental intervention, the Community Advocacy Project, or to the control group. Women assigned to the experimental condition worked with a trained paraprofessional

advocate 6-8 hours per week for a period of 10 weeks. Each intervention was based on the needs and circumstances of the women and all advocates were instructed to help assess the women's unmet needs, and tailor their interventions to help women access community resources that would fulfill those needs (e.g., housing, employment, legal assistance, transportation, childcare, health care, etc.).

Measures

In-person interviews were conducted with the participants in the community 3 months after women left a domestic violence shelter, and then again 6 months later (9 months post-shelter), and then again 6 months later (15 months post-shelter). In order to gain the most accurate information possible regarding the effects of abuse and economic resources on womens' overall psychological well-being and involvement with the assailant research participants were administered extensive verbal and written interviews. Table 3 describes the measurement model used in the present study. Participants were asked questions regarding: 1) level of economic resources, 2) experience of abuse, 3) psychological well-being, 4) involvement with assailant, and 5) economic dependence. All questions were asked in an oral interview except where noted.

Table 3

Measurement Model

Construct	Description of Construct	Measure
Economic Resources	level of economic resources including annual income, poverty status, access to a car, & employment status	Study Interview
Abuse	frequency of threats by original assailant and/or new relationship	Study Interview
	extent of injuries by original assailant and/or new relationship	Study Interview
	frequency of being pushed, grabbed, slapped, punched, kicked, hit with an object, choked, tied up, stabbed, shot by original assailant and/or new relationship	Straus' (1979) Conflict-Tactics Scale
	frequency of psychological abuse including ridicule, criticism, & harassment by whoever woman is currently in a relationship with	Sullivan, Parisian, & Davidson's Index of Psychological Abuse (1991)
Psychological Well-Being	perceived quality of life	revised version of Andrew & Withey's (1976) Quality of Life Measure
	depression	Radloff's (1977) CES-D
Involvement With Assailant	involvement with assailant	Study Interview
Economic Dependence	economic dependence on others	Study Interview

Economic resources. Economic resources were assessed using a 4-item scale developed for this study. Items assessed total annual income, whether the participant was classified as living in poverty (U.S. Bureau of the Census, 1990), employment status, and access to an automobile (see Appendix A). All four items were originally measured with different response categories. Three of the four variables (poverty status, employment status, and access to a car) were dichotomous and reverse coded so that a higher value indicated more resources. Annual income was a continuous variable that was already consistent with this coding direction. All of the items were standardized (z-scored), summed, and averaged to determine an economic resources scale score. Internal consistency of this scale was .63 at Time 1 (3 months post-shelter), .65 at Time 2 (9 months post-shelter), and .70 at Time 3 (15 months post-shelter) with item-total correlations ranging from .29 to .60. A concern with using economic resource information from a shelter sample was that there would not be enough variance within the sample because many women use shelters as a result of not having many other resources; i.e., most of the women are poor. However, preliminary analyses indicated that this sample was normally distributed.

Abuse. Originally, several dimensions of abuse were assessed as separate constructs. Three unique measures assessing various aspects of abuse from the original assailant or a new relationship and one unique measure assessing abuse from a current partner (either the original assailant or a new partner) were used in this study and their psychometric properties are presented below. Measures of physical abuse by the original assailant and a new relationship included a modified version of the Conflict-Tactics Scale

(CTS) (Straus, 1979) (used to assess frequency of physical abuse) and an injuries measure used to assess types of injuries women experienced from the abuse. Frequency of psychological abuse was assessed by asking how often women were threatened by their original assailant or a new relationship and by the Index of Psychological Abuse (IPA) (Sullivan, Parisian, & Davidson, 1991) which assessed the frequency of ridicule, harassment, and criticism from a current relationship (either the original assailant or a new relationship). At the first interview, 3 months post-shelter, the time reference used for all of the abuse variables was within the last ten weeks. For the second two interviews, 9 and 15 months post-shelter, the time reference was within the previous six months.

Because this study was not concerned with the effects of different types of abuse or on the differential impact of abuse by the original assailant or a new relationship, but on how any kind of abuse perpetrated by anyone women were intimately involved with affected their psychological well-being, all seven scales were eventually combined into one measure of overall abuse. The psychometric properties of the overall Abuse scale are presented at the end of this section.

Physical abuse by the original assailant and physical abuse by a new relationship were each measured independently using a modified version of Straus' (1979) Conflict-Tactics Scale Violence subscale (CTS) measuring frequency and severity of violence experienced (see Appendix B). Two items were dropped from this scale ("burned" and "drove recklessly so that you felt endangered") due to lack of variance. When the CTS was used to ask about the original assailant, the reliability of the scale was $\alpha = .91$ at

Time 1, α = .89 at Time 2, and α = .92 at Time 3. When the CTS was used to ask about a new relationship, the reliability of the measure was α = .91 at Time 1, α = .89 at Time 2, and α = .89 at Time 3. The corrected item-total correlations for both the original assailant and new relationship physical abuse (CTS) scales are listed in Table 4.

Table 4

Corrected Item-Total Correlations for the Original Assailant and New Relationship Physical Abuse Scales

Item	Corrected Item-Total Correlations					
	Original Assailant			New Relationship		
	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
Tore clothing	.55	.56	.71	.81	.53	.45
Pushed	.81	.81	.78	.83	.83	.70
Grabbed	.85	.81	.81	.80	.77	.73
Slapped	.82	.70	.79	.32	.54	.55
Hit with fist	.76	.70	.78	.80	.79	.70
Kicked	.69	.61	.62	.80	.62	.58
Threw object	.58	.54	.77	.70	.55	.88
Hit with object	.63	.49	.52	.63	.84	.70
Tried to hit	.74	.57	.53	.64	.78	.78
Choked	.55	.67	.66	.55	.57	.51
Restrained	.41	.52	.41	.80	.52	.58
Raped	.26	.50	.66	.84	.35	.60
Threat. weapon	.40	.47	.56	.74	.66	.19
Used weapon	.41	.18	.53	.80	*	*
α	.91	.89	.92	.91	.89	.89

* indicates item had zero variance

Several of the corrected item-total correlations for the physical abuse measures as well as for the overall abuse measure (discussed at the end of this section) did not clearly meet the usual requirements for item inclusion in a scale yet were kept in the scale. That is, certain items had low item-total correlations outside of the acceptable range. Because this study was longitudinal and the reliability of the measures was assessed at each time period, it was possible to determine that items with low item-total correlations at one time period did not necessarily have low item-total correlations at another time period. In order to preserve items in the scale if they had good item-total correlations within at least one time period, and therefore keep the scale consistent over time, items with low item-total correlations were not deleted.

Also important to this decision was the argument that internal consistency may not be the best way to evaluate scales that tap "life event" sorts of constructs (Cleary, 1981). The problem with finding a satisfactory, comprehensive list of items is that scoring high on one does not necessarily mean that an individual would score high on another even though the items seem to measure the same construct (i.e., a woman who is slapped is not necessarily likely to have also been kicked or raped). Therefore, the item-total correlation for several items may be low. Clearly, more work needs to be done to determine how to best evaluate the reliability of woman abuse measures but that is beyond the scope of this study. Again, for this study, items that had low corrected item-total correlations at only one or two time periods and that rationally seemed to measure the construct were kept in the scale.

The third and fourth measures of abuse were the extent of injuries caused by the original assailant and the extent of injuries caused by a new relationship. The extent of injuries was measured using the extent of injuries score derived from a checklist of 10 dichotomously coded injuries sustained by the participants from the physical abuse (see Appendix C). If a woman had been harmed at all, as measured by the presence of at least one violent act against her, she was asked about the injuries she sustained including "cuts, scrapes, or bruises," "soreness without bruises," "burns, including rug burns," "loose or broken teeth," "broken bones or fractures," "internal injuries," "strains or sprains," "dislocated joints," "pregnancy complications or miscarriage," and "knife or gunshot wound." The scores ranged from 0 for no injuries to as high as 10 types of injuries sustained.

The fifth and sixth indicators of abuse were the frequency of threats from the original assailant and the frequency of threats from a new relationship. Threats were measured for this study with a single item, frequency of threats. This item asked women how many times the assailant "threatened you in any way, including saying or doing things that made you feel scared or in danger, whether in person, over the phone, through the mail, or through other people" with possible responses from 1 = never to 6 = more than four times a week (see Appendix D).

The seventh measure of abuse was psychological abuse from whoever the woman was currently involved with (either the original assailant or a new relationship). Psychological abuse was measured using the Index of Psychological Abuse (IPA) (Sullivan, Parisian, & Davidson, 1991) which is a 33-item measure of ridicule,

harassment, and criticism (see Appendix E). For example, women were asked to rate how often in the referent time period whoever they were currently (at the time of the interview) involved with "refused to talk to you", "tried to control your money", and "broken or destroyed something important to you" on a 4-point Likert-type scale ranging from "never" to "often." Internal consistency of this scale was .97 at Time 1 (with item-total correlations ranging from .41 to .88), .98 at Time 2 (with item-total correlations ranging from .36 to .89), and .97 at Time 3 (with item-total correlations ranging from .28 to .88).

The literature supports the fact that physical abuse, injuries, threats, and psychological abuse are all harmful to a survivor of intimate male violence and that it may be meaningful to combine these constructs to assess overall level of abuse. The present study was concerned with any abuse that may influence women's psychological well-being or economic resource level after leaving a shelter for women with abusive partners. Therefore, it was conceptually and empirically relevant to combine the following items that were originally measured on separate scales: frequency of physical abuse (including one sexual violence item) by the original assailant, frequency of physical abuse (including one sexual violence item) by a new relationship, extent of injuries from the original assailant, extent of injuries from a new relationship, frequency of threats from the original assailant, frequency of threats from a new relationship, and frequency of psychological abuse from a current relationship (either the original assailant or a new relationship). Sixty-five items from each of the original measures were standardized (z-scored), summed, and averaged to form the final overall abuse scale.

Coefficient alpha for the overall abuse scale at Time 1 was .96, at Time 2 was .95, and at Time 3 was .95. Corrected item-total correlations for the overall abuse scale are presented in Table 5.

Table 5

Corrected Item-Total Correlations for the Overall Abuse Scale

	Corrected Item-Total Correlations					
	Original Assailant			New Relationship		
Item	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
Physical Abuse						
Tore clothing	.23	.25	.46	.34	.22	.08
Pushed	.46	.46	.55	.33	.29	.16
Grabbed	.51	.40	.53	.37	.26	.17
Slapped	.36	.34	.48	.07	.20	.16
Hit with fist	.30	.39	.48	.42	.34	.18
Kicked	.25	.43	.44	.42	.20	.18
Threw object	.43	.35	.53	.37	.16	.21
Hit with object	.40	.31	.38	.34	.32	.19
Tried to hit	.36	.38	.45	.31	.28	.24
Choked	.33	.31	.41	.33	.17	.14
Restrained	.19	.26	.38	.42	.19	.18
Raped	.23	.38	.43	.36	.20	.18
Threat. weapon	.22	.30	.44	.43	.28	.07
Used weapon	.22	.17	.38	.42	*	*
Injuries	.45	.46	.55	.40	.23	.21
Threats	.32	.55	.49	.39	.35	.18

Table 5 continued

Corrected Item-Total Correlations for the Overall Abuse Scale

Item	Corrected Item-Total Correlations Current Relationship (either original assailant or new relationship)		
	Time 1	Time 2	Time 3
Psychological Abuse			
Refused talk	.49	.56	.51
Accused of affair	.61	.67	.76
Had affair	.58	.51	.50
Refused do things	.60	.68	.54
Forbid leaving	.60	.64	.50
Control money	.61	.77	.65
Control activities	.70	.78	.75
Withheld approval	.74	.74	.59
Lied	.68	.74	.64
Contradict. demands	.76	.76	.66
Called names	.73	.75	.73
Humiliated you	.82	.78	.80
Ignored anger	.71	.73	.68
Ignored other feelings	.73	.76	.74
Ridiculed in public	.65	.68	.59
Insulted beliefs	.67	.72	.76

Table 5 continued

Corrected Item-Total Correlation for the Overall Abuse Scale

Item	Corrected Item-Total Correlations Current Relationship (either original assailant or new relationship)		
	Time 1	Time 2	Time 3
Insulted race	.54	.62	.61
Insulted women	.64	.71	.68
Criticized strengths	.72	.77	.71
Criticized intelligence	.73	.77	.72
Criticized looks	.69	.64	.60
Criticized family	.66	.73	.75
Harassed family	.50	.53	.57
Discouraged family contact	.71	.70	.65
Threat. family	.57	.41	.52
Broke object	.62	.66	.64
Abused pets	.38	.32	.33
Punished kids	.53	.53	.54
Threatened take kids	.52	.48	.55
Left stranded	.49	.52	.35
Threatened end relationship	.64	.67	.58
Forced you to leave home	.70	.67	.57
Threatened suicide	.36	.44	.37
α	.96	.95	.95

* indicates item had zero variance

Psychological well-being. Two measures of psychological well-being, quality of life and depression, were used in this study and their psychometric properties are each presented below followed by a rationale for combining them into one measure of overall psychological well-being. The psychometric properties of the overall psychological well-being scale are presented at the end of this section.

Quality of life was measured using a modification of Andrews & Withey's (1976) Quality of Life measure. Nine items measuring respondents' feelings about life overall, self, personal safety, level of fun and enjoyment, responsibilities for family members, life accomplishments, independence or freedom, emotional and psychological well-being, and leisure activities were selected to predict overall quality of life (coefficient alpha = .87 at Time 1, .87 at Time 2, and .86 at Time 3 with item-total correlations ranging from .38 to .72). Response categories ranged from 1 = extremely pleased to 7 = terrible (see Appendix F).

Depression was measured using a modified version of the CES-D (Radloff, 1977), a 16-item self-report checklist of psychological distress within the general population (coefficient alpha = .92 at Time 1, Time 2, and Time 3 with item-total correlations ranging from .36 to .80). The original scale included 20 items, four of which composed a "Happy" subscale. The item-total correlations of the four items in the "Happy" subscale did not correlate with the items from the Quality of Life scale when the CES-D and Quality of Life scales were combined to form Psychological Well-Being. Therefore, these items were dropped. Respondents were asked to describe how often (1 = rarely or never to 4 = most or all of the time) they felt "I was bothered by things that usually don't

bother me," "I did not feel like eating; my appetite was poor," "I felt depressed," and "I thought my life had been a failure" (see Appendix G). This measure was the only one filled out by the respondent herself in order to offer more privacy and hopefully gain more accurate information.

Conceptually, this study was interested in women's overall psychological well-being after leaving a shelter for women with abusive partners. The literature suggested both overall quality of life and depression as indices of psychological well-being and preliminary analyses illustrated that as separate scales each were highly correlated with one another (.60 at 3 months post-shelter, .54 at 9 months post-shelter, and .51 at 15 months post-shelter). Therefore, the original measures of quality of life and depression were combined in the present study to form a Psychological Well-Being scale. Both scales were reverse coded first so that a higher score reflected greater satisfaction with one's psychological well-being (a higher score on Quality of Life reflects greater satisfaction with one's quality of life and a higher score on Depression reflects little or no depression). Responses were standardized (z-scored) and combined to form a 25-item scale with very high internal consistency and good item-total correlations (Time 1: α = .93, item-total correlations ranging from .35 to . 74; Time 2: α = .93, item-total correlations ranging from .33 to .73; and Time 3: α = .92, item-total correlations ranging from .30 to .77).

Economic dependence. Economic dependence was measured using a single item that asks "How much of your income do you directly bring into the home, rather than another adult? This includes ADC or any other government aid that you may get".

Originally, the response categories were "none of the income," "½ of the income or less," "over ½ but less than all of the income," and "all of the income" (see Appendix H). Due to lack of variance, the first three categories were collapsed to reflect "economic dependence (0)." Economic dependence refers, then, to being dependent on someone (usually the assailant) for all or part of the money that women need to live on. Women who bring in "all of the income" were coded as "economically independent (1)," meaning they were not dependent on anyone else for the money they lived on.

Involvement with assailant. Involvement with assailant was measured using a single item that asks "Are you currently involved with _____ (assailant's name)?". Women who were involved with their assailants at the time of the interview received a code of "1" and women who were not involved with their assailants received a code of "2" (see Appendix I). Because it was a categorical variable, the "2" was dummy coded to "0."

Experimental condition. Prior research with a sub-group of this sample (N=141) suggested that the experimental intervention that was part of the larger study did have a significant effect on women's social support, quality of life, and effectiveness in obtaining resources 3 months post-shelter and a significant effect on women's quality of life 9 months post-shelter (Sullivan, Tan, Basta, Rumptz, & Davidson, 1992; Sullivan, Campbell, Angelique, Eby, & Davidson, 1994). That is, women who received the services of an advocate reported being more effective in accessing resources and had higher levels of social support and overall quality of life post-intervention (3 months post-shelter) and reported continued higher quality of life six months later. Therefore,

although not a focus of the current study, experimental condition was controlled for in all of the analyses.

Data Analysis Strategy

A review of the data analysis plan is presented here. Analyses were conducted to explore the objectives and the specific hypotheses about two sets of relationships: those between economic resources, abuse, and psychological well-being and those between economic resources, economic dependence, and involvement with assailant. Descriptive statistics were conducted first to begin to examine the percentages, means, and standard deviations of the variables of interest (psychological well-being, abuse, economic resources, economic dependence, and assailant involvement) across time. Next, correlation coefficients were computed as a summary index to describe the observed strength of the associations between psychological well-being, abuse, economic resources, economic dependence, assailant involvement, and experimental condition both within and across Time 1, Time 2, and Time 3.

Hierarchical multiple regression analyses were used to examine the first set of hypotheses that stated that experience of abuse has a direct negative effect on the psychological well-being of women both within Time 1, Time 2, and Time 3 and across time (i.e., Time 1 to Time 2 and Time 2 to Time 3). In each of the five equations, experimental condition was entered first in order to control for the effects of the intervention. In the four equations where psychological well-being at Time 2 or Time 3 was the dependent variable, prior level of psychological well-being was entered next (after experimental condition). It was necessary to control for prior level of

psychological well-being because it was so highly correlated with psychological well-being at the next time period. Therefore, the analyses actually investigated the effect of abuse on change in psychological well-being. The primary independent variable of interest, abuse, was entered last in every equation.

Hierarchical multiple regression analyses were also used to examine the second set of hypotheses that stated that level of economic resources has a direct positive effect on women's psychological well-being both within Time 1, Time 2, and Time 3 and across time (i.e., Time 1 to Time 2 and Time 2 to Time 3). The order of variable entry was identical in this set of analyses. That is, in each of the five equations, experimental condition was entered first in order to control for the effects of the intervention. In the four equations where psychological well-being at Time 2 or Time 3 was the dependent variable, prior level of psychological well-being was entered next (after experimental condition). The primary independent variable of interest, economic resources, was entered last in every equation.

A series of regression models were estimated to examine the third set of hypotheses that state that women's level of economic resources mediates the relationship between extent of abuse and women's psychological well-being. Six sets of relationships were examined to understand this hypothesized relationship both within and across time. That is, within Time 1, Time 2, and Time 3 and across Time 1 and Time 2 (i.e., abuse and economic resources at Time 1 predicting psychological well-being at Time 2), across Time 2 and Time 3 (i.e., abuse and economic resources at Time 2 predicting psychological well-being at Time 3), and across all three time periods (i.e., abuse at Time

1, mediated by economic resources at Time 2, predicting psychological well-being at Time 3).

To test for mediation, three regression equations were estimated: first, regressing the mediator (economic resources) on the independent variable (abuse); second, regressing the dependent variable (psychological well-being) on the independent variable (abuse); and third, regressing the dependent variable (psychological well-being) on both the independent variable (abuse) and on the mediator (economic resources) (Baron & Kenny, 1986). Baron & Kenny propose that to establish mediation, the following conditions must hold: First, the independent variable must affect the mediator in the first equation; second, the independent variable must be shown to affect the dependent variable in the second equation; and third, the mediator must affect the dependent variable in the third equation. If these conditions all hold in the predicted direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second. Perfect mediation holds if the independent variable has no effect when the mediator is controlled.

Lastly, logistic regression was used to examine the fourth set of hypotheses and test whether the causal relation between economic resources and involvement with assailant changed as a function of economic dependence (i.e., was moderated by economic dependence). Logistic regression was conducted rather than hierarchical regression because the dependent variable, involvement with the assailant, was dichotomous (involved/not involved). The moderational hypotheses were tested within Time 1, Time 2, and Time 3 and across Time 1 and Time 2, and across Time 2 and Time

3. To test these five relationships, experimental condition was entered along with the covariates for each equation. When involvement with assailant was predicted at Time 2 or Time 3, prior involvement with assailant was not controlled for because it did not seem appropriate to measure change in involvement with assailant which was a dichotomous variable.

Each of the five statistical analyses must measure and test the differential effect of women's level of economic resources on involvement with the assailant as a function of being economically dependent on others (usually the assailant) (Baron & Kenny, 1986). Economic dependence moderates the relationship between economic resources and involvement with the assailant if the interaction term makes a significant contribution to the equation.

RESULTS

The present study was designed to examine the impact of abuse and economic resources on 225 women who had stayed at a battered women's shelter. For purposes of organization, this chapter is divided into sections to coincide with the objectives and specific hypotheses of the study. First, to provide the contextual background for examining relationships among the variables of interest, longitudinal descriptive information on psychological well-being, extent of abuse, level of economic resources, economic dependence, and involvement with the assailant are presented and discussed. Second, in order to begin to examine the interrelationships between the 5 study variables at each of the three time points, zero order correlations are presented and discussed. Third, to examine the direct effects of abuse and the direct and mediating effects of level of economic resources on women's psychological well-being, the results of hierarchical regression analyses are presented and discussed. Lastly, the results of logistic regression analyses are presented that examined the moderating effect of economic dependence on the relationship between economic resources and involvement with the assailant.

Descriptive Information

Descriptive analyses are presented here to provide the background information for understanding the hypothesized relationships about the role of economic resources in predicting women's psychological well-being and decisions about staying with their assailants. Descriptive information at each of the three time periods (including means,

standard deviations, and percentages) are provided for women's psychological well-being, experience of abuse, economic resources, economic dependence, and involvement with the assailant.

Women's psychological well-being over time. Descriptive analyses were conducted to provide information on women's satisfaction with their quality of life and level of depression over time. Table 6 shows the mean scores and standard deviations on the Quality of Life and Depression (C'S-D) measures at Time 1 (3 months post-shelter), Time 2 (9 months post-shelter), and Time 3 (15 months post-shelter). On average women reported having mostly satisfied to mixed feelings about their overall quality of life at all three time periods. Over time, however, women reported a slight increase in their satisfaction with their quality of life. Women reported some depression at each of the three time periods, indicating that they felt depressed 1-2 days per week. This finding was fairly consistent at every time period, although at Time 3 women's reported level of depression decreased slightly from Time 2.

Table 6

Descriptive Information on Psychological Well-Being Over Time

Variable	Means (N=224)		
	Time 1	Time 2	Time 3
Quality of Life[a]	4.82 (1.04)	4.97 (1.03)	4.98 (0.99)
Depression[b]	3.05 (0.70)	3.05 (0.66)	3.10 (0.69)

Note: Numbers in parentheses are the standard deviations; Time 1 = 3 months post-shelter, Time 2 = 9 months post-shelter, Time 3 = 15 months post-shelter.
[a] On a 7-point scale where 1 = terrible and 7 = extremely pleased.
[b] On a 4-point scale where 1 = most or all of the time and 4 = rarely or never.

Women's experience of abuse over time. Descriptive analyses were also conducted to provide information on the extent of abuse women experienced over time by their original assailant and by any new relationship they had been involved in since leaving the shelter. Table 7 shows the mean scores and standard deviations on the level of physical abuse, injuries, and threats from the original assailant or a new relationship, and psychological abuse from whoever (original assailant or new relationship) women were currently involved with at Time 1 (3 months post-shelter), Time 2 (9 months post-shelter), and Time 3 (15 months post-shelter).

The mean scores indicate that women experienced physical violence from their original assailants less than once a month at any of the three time periods and that the amount of physical abuse decreased slightly over time. At Time 1, 44% of the women experienced some level of physical abuse by their original assailants. Twelve months

later (at Time 3), fewer women (37%) were still experiencing physical assaults from their original assailants, although this number still represents over one-third of the sample being battered by their original assailants 15 months after leaving the shelter.

Women reported very little physical abuse from a new relationship at any of the three time periods, with most women reporting no physical abuse at all from a new relationship. At 3 months post-shelter, 95% of women reported no physical abuse from a new relationship. However, the mean scores did rise slightly at each time period, indicating that women reported experiencing more physical abuse from a new relationship as time went on. Further investigation showed that at Time 2, 10% of the women reported experiencing some physical abuse and at Time 3, 18% reported experiencing some physical abuse from a new relationship.

Table 7

Descriptive Information on Abuse Over Time

Variable	Means (N=224)		
	Time 1	Time 2	Time 3
Original Assailant			
Physical abuse[a]	1.22 (0.43)	1.21 (0.38)	1.19 (0.41)
Injuries[b]	0.60 (1.17)	0.63 (1.17)	0.55 (1.22)
Threats[a]	1.95 (1.23)	1.82 (1.17)	1.73 (1.18)
New Relationship			
Physical abuse[a]	1.02 (0.09)	1.03 (0.13)	1.07 (0.24)
Injuries[b]	0.04 (0.29)	0.08 (0.37)	0.22 (0.75)
Threats[a]	1.07 (0.44)	1.10 (0.38)	1.18 (0.63)
Psychological abuse from current relationship (either original assailant or new relationship)[c]	1.36 (0.57)	1.40 (0.62)	1.33 (0.56)

Note: Numbers in parentheses are the standard deviations; Time 1 = 3 months post-shelter, Time 2 = 9 months post-shelter, Time 3 = 15 months post-shelter.
[a] On a 6-point scale where 1 = never and 6 = more than 4 times a week.
[b] Possible range is from 0 = no injuries, to 10 types of injuries.
[c] On a 4-point scale where 1 = never and 4 = often.

At any of the three time periods, women suffered on average one type of injury (ranging from 0 to 7 different types of injuries) from their assailant in the time period

preceding the interview. However, they suffered slightly more different types of injuries at Time 2 than at Time 1. From Time 2 to Time 3 the number of types of injuries decreased. Women reported suffering fewer, between 0 and 1, different types of injuries from their new relationships (between 0 and 5). In fact, most women (98%) reported not being injured at all by the new person that they were involved with at Time 1. Not surprisingly, the number of injuries from the new relationship did increase from Time 1 to Time 3 (5 % were injured at Time 2 and 11% suffered injuries at Time 3), coinciding with the rise in level of physical abuse from the new relationship across the same time period.

Women experienced threats from their original assailants on average once a month or less. Over half of the participants were still being threatened by their assailants 3 months after leaving the shelter. Twelve percent of the women reported experiencing threats at least once or twice a week. Fewer women were threatened in any way by their original assailants at Time 2 (46%), and fewer still were threatened at Time 3 (40%). Women reported that they almost never experienced threats from their new relationship. This finding was fairly consistent across time, although the percentage of women who reported being threatened by the new person they were involved with increased slightly over time (from only 4% at Time 1 to 11% at Time 3).

The mean scores in Table 7 indicate that women reported "rarely" to "never" experiencing psychological abuse from their current partner (either the original assailant or a new relationship). However, over 46% of the participants did report some level of psychological abuse at Time 1, 54% reported being psychologically abused at Time 2,

and 50% reported experiencing psychological abuse at Time 3. This suggests that approximately half of the participants at each time period continued to endure ridicule, harassment, and criticism from the person they were involved with.

Women's level of economic resources over time. Descriptive analyses were conducted to provide information on women's level of economic resources as measured by total annual income, poverty status, access to a car, and employment status. Table 2 longitudinally describes these four variables (total annual income, poverty status, employment status, and access to a car) that composed the economic resources scale. From the table, it is obvious that there is little variance and little change over time in the level of economic resources of this sample. Almost three-quarters of the women were living in poverty (as defined by the U.S. Bureau of the Census, 1990). The mean annual income of this sample at each of the three time periods was only slightly higher than $10,000 a year. Over two-thirds of the women were unemployed at the time of the interviews. Forty percent of the women had access to a car at Time 1, 46% had access to a car at Time 2, and 51% had access to a car at Time 3.

Women's level of economic dependence on others over time. Descriptive analyses were conducted to provide information about women's level of economic dependence on others over time. Women were defined as economically independent if they were responsible for bringing in all of the income that they, and their family (if applicable), lived on. Women were defined as economically dependent if they depended on income or resources from another person (often the assailant). This could mean that another person(s) brought in all of the income or brought in a portion of it. At Time 1,

88% of the participants were economically independent; that is, solely responsible for financially supporting themselves and their family (if applicable). This percentage remained relatively constant across time. Six months later, at Time 2, 75% of the women were economically independent only to increase again at Time 3 to 79% who were economically independent. Less than one-quarter of the sample at any given time period was economically dependent on another adult.

Many of the women who were economically independent were classified this way because they brought in all of the income in the form of government assistance (such as ADC or Food Stamps). Between 71% and 80% of the women in the sample were receiving government assistance at any of the three time points. Relatedly, between 70% and 72% of the sample were living in poverty at any of the three time points. For this sample, financial independence did not necessarily mean that women had an adequate level of economic resources with which to support themselves and their families (if applicable). In fact, many of the women in this sample were classified as economically independent, yet were financially reliant on the government and were also living below the poverty level.

Of the small percentage of women who did not bring in all of the family income (between 12% and 25% of the sample at each time period), most anecdotally reported that they were economically dependent on their assailants for full or partial financial support although this was not a direct question in the interview. Other sources of income were mentioned less frequently, but included family members, friends, or a new relationship.

Involvement with the assailant over time. Descriptive analyses were conducted to provide information on the number of women who were involved with their assailants at each time period. As time progressed, fewer women remained involved with their assailants. At Time 1, 36% were still involved with their assailants, at Time 2 30% were involved with their assailants, and at Time 3 only 25% were still involved with their assailants.

Summary of descriptive information. The following is a summary of the descriptive findings that are most important and relevant to this study and that provide the background for examining bivariate and multivariate relationships among the variables of interest. Women reported feeling mostly satisfied about their overall quality of life and did not report experiencing much depression at any of the three time periods following their shelter stay. Over time, women's psychological well-being generally improved, although the mean C'S-D scores at the later time periods still reflected some level of depression. The consistency in the findings across time (although there was a slight elevation in women's psychological well-being over time) may suggest that women's psychological well-being had stabilized post-shelter.

Women reported a decrease in physical abuse from their original assailants and an increase in physical abuse from their new relationships. However, they reported more different types of injuries from their assailants 9 months post-shelter (Time 2) than they did at 3 months post-shelter (Time 1) or 15 months post-shelter (Time 3). Women reported more injuries from their new relationship with each successive time period. On average, women reported that the frequency of threats by the original assailants

decreased over time but that they experienced threats more often than physical abuse. The frequency of threats made by a new relationship increased over time. Finally, women experienced an increase in psychological abuse from their current partner 9 months after leaving the shelter and then reported that the emotional abuse decreased six months later (15 months post-shelter). Although the mean scores did not indicate that women were, on average, continuing to experience a high level of abuse, the percentages of women who were experiencing abuse were substantial and indicate that many women were still being battered over the twelve months of this study.

With regard to women's level of economic resources, the descriptive data indicate that most of the women were poor and that their level of economic resources did not change much across time. Three-quarters of the women were living in poverty; over two-thirds of them unemployed and reliant on the government or other people for support. Whether from employment, governmental aid, or from other people, womens' annual income averaged only slightly more than $10,000. For a family of three (the average family size of this sample), this was barely above the poverty line. Furthering the difficulty of their lives, between 49% and 60% reported that they did not have access to a car.

Although there was variance within the sample, it was relative to how the sample was defined in the first place. That is, the sample was women with abusive partners who stayed at a domestic violence shelter and typically had few economic resources. Within that group of impoverished women, there was a fairly normal distribution on economic

resources. However, the descriptive data support that most of the participants were still poor and had few economic resources.

Most of the women (between 75% and 80% at each time period) were economically independent from their assailants or another adult; that is, they were responsible for bringing in all of the income. At first glance, this may seem like a positive factor. However, many of the women who were economically independent were classified this way because they brought in all of the income in the form of government assistance (such as ADC or Food Stamps). The amount of money allocated to families in the form of government aid often does not cover the cost of living and it is no coincidence that, in this sample, between 70% and 72% of the women and their families were also living in poverty.

The decrease in physical abuse and threats experienced by women from their original assailants may coincide with the fact that over the twelve months of this study, more women reported no longer being involved with their original assailants. At 3 months post-shelter, many women (64%) reported not being involved with their assailants but by 15 months post-shelter, 75% of the women were not involved with their assailants. It is important to remember, however, that being uninvolved with an assailant was no guarantee that women would be safe from physical, sexual, or emotional violence.

Intercorrelations Among Psychological Well-Being, Involvement With Assailant, Abuse, Economic Resources, Economic Dependence, and Experimental Condition

The intercorrelations among the six primary study variables are presented next to provide further information on the bivariate relationships between psychological well-being, involvement with assailant, abuse, economic resources, economic dependence, and experimental condition. The zero-order correlations among the six primary study variables at Time 1, Time 2, and Time 3 are featured in Table 8. The first column lists the abbreviated version of the variable names followed by a number indicating whether the variable was measured at Time 1 (3 months post-shelter), Time 2 (9 months post-shelter), or Time 3 (15 months post-shelter).

The intercorrelations among these variables were examined to assess the relative strength of the relationships of the independent variables (abuse, economic resources, economic dependence, and experimental condition) to the dependent variables (psychological well-being and involvement with the assailant). The results of the zero-order correlations among variables are organized in the following way. First, the intercorrelations among variables across time are presented (i.e., correlations among abuse at Time 1, abuse at Time 2, and abuse at Time 3). Second, the outcome variables in this study (psychological well-being and involvement with assailant, respectively) and their intercorrelations with other study variables are presented. Third, intercorrelations among the independent variables are presented.

Table 8

Zero-Order Correlations of the Predictor and Outcome Variables in the Regression Analyses at Time 1, Time 2, and Time 3

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Psy. WB1	1.00														
2. Psy. WB2	0.58*	1.00													
3. Psy. WB3	0.56*	0.56*	1.00												
4. Econ. Res.1	-0.06	-0.01	-0.06	1.00											
5. Econ. Res.2	0.06	0.10	0.06	0.59*	1.00										
6. Econ. Res.3	0.07	0.17*	0.11	0.61*	0.75*	1.00									
7. Ext. of Abuse1	-0.31*	-0.22*	-0.21*	0.14*	0.13*	0.04	1.00								
8. Ext. of Abuse2	-0.23*	-0.36*	-0.21*	0.17*	0.11	-0.02	0.42*	1.00							
9. Ext. of Abuse3	-0.18*	-0.19*	-0.32*	0.18*	0.15*	0.07	0.47*	0.50*	1.00						
10. Inv. w/Assail.1	0.00	0.02	-0.03	0.26*	0.26*	0.21*	0.61*	0.33*	0.36*	1.00					
11. Inv. w/Assail.2	-0.09	-0.11	-0.15	0.31*	0.31*	0.19*	0.39*	0.61*	0.47*	0.63*	1.00				
12. Inv. w/Assail.3	-0.05	0.03	-0.13*	0.29*	0.28*	0.24*	0.35*	0.29*	0.43*	0.63*	0.65*	1.00			
13. Econ. Dep.1	0.06	0.07	0.06	-0.37*	-0.35*	-0.26*	-0.20*	-0.09	-0.08	-0.22*	-0.22*	-0.08	1.00		
14. Econ. Dep.2	0.04	0.04	0.08	-0.28*	-0.38*	-0.26*	-0.10	-0.19*	-0.22*	-0.22*	-0.35*	-0.26*	0.30*	1.00	
15. Econ. Dep.3	-0.09	-0.13*	0.01	-0.12*	-0.30*	-0.35*	-0.02	0.02	-0.08	-0.16*	-0.18*	-0.19*	0.20*	0.33*	1.00
16. Exp. Condition	-0.19*	-0.09	-0.07	0.04	0.03	0.10	-0.13*	0.04	0.10	0.05	0.03	0.07	0.02	-0.07	-0.03

*p<.05; N = between 222 and 224 for each correlation analysis. The abbreviated variable names refer to: Psy.WB = psychological well-being, Econ.Res. = economic resources, Ex. Of Abuse = extent of abuse, Inv. w/Assail = involvement with assailant, Econ.Dep. = economic dependence, Exp.Condition = experimental condition. The numbers at the end of the variable name refer to time periods: 1 = Time 1 (3 months post-shelter), 2 = Time 2 (9 months post-shelter), 3 = Time 3 (15 months post-shelter). The direction of coding for the dichotomous variables (10-16) is: Inv. w/Assail. 0=not involved, 1=involved; Econ. Dep. 0=economically dependent, 1=economically independent; Exp. Condition 1=experimental, 2=control.

All five variables were significantly correlated with themselves across all three time periods. The correlations among psychological well-being at Time 1, Time 2, and Time 3 ranged from .56 to .58, $p<.05$. Economic resources was significantly related at each time point (r's from .59 to .75, $p<.05$) as was extent of abuse (r's from .42 to .50, $p<.05$). Involvement with assailant was highly correlated with itself across time (r's from .63 to .65, $p<.05$) while economic dependence was less correlated (r's from .20 to .33, $p<.05$).

Several of the study variables were correlated with women's psychological well-being. The only significant correlation between economic resources and psychological well-being was found between psychological well-being at Time 2 and economic resources at Time 3 ($r=.17$, $p<.05$) suggesting that women reporting higher satisfaction with their psychological well-being 9 months post-shelter also had a higher level of economic resources 15 months post-shelter. Other than this relationship, economic resources and psychological well-being shared small correlations. Extent of abuse, however, was significantly correlated with psychological well-being concurrently and across time (with r's ranging from -.21 to -.36, $p<.05$). That is, women reporting lower levels of abuse also reported greater satisfaction with their psychological well-being. Involvement with the assailant at Time 3 was significantly related to psychological well-being at Time 3 ($r = -.13$, $p<.05$). That is, women who were involved with their assailants at Time 3 also reported lower satisfaction with their psychological well-being at Time 3. Women who reported greater satisfaction with their psychological well-being at Time 2 also were more likely to be economically dependent at Time 3 ($r = -.13$, $p<.05$). Finally, with regard to variables with significant correlations to psychological well-being, experimental condition was significantly correlated with psychological well-being at Time 1 ($r = -.19$, $p<.05$), indicating that

women in the experimental condition also reported greater satisfaction with their psychological well-being.

Table 8 also shows that several of the study variables were correlated with involvement with the assailant. As was already mentioned above, women who were involved with their assailants at Time 3 reported lower satisfaction with their psychological well-being at Time 3. Women who were involved with their assailants, however, had more economic resources (r's ranging from .19 to .31, $p<.05$) at all three time periods. There was a fairly consistent relationship between economic dependence and involvement with assailant such that women who reported being economically dependent, also reported being involved with their assailant (r's ranging from -.16 to -.35, $p<.05$). This relationship was true within and across time except that economic dependence at Time 1 did not significantly correlate with involvement with assailant at Time 3. Finally, women who were involved with their assailants also reported experiencing more abuse. Involvement with the assailant was significantly correlated with extent of abuse concurrently and across time (r's ranging from .29 to .61, $p<.05$).

Many of the independent variables in this study were correlated with one another, yet none too highly as to suggest a measurement problem. Extent of abuse at Time 1, Time 2, and Time 3 was correlated with level of economic resources at Time 1 (r's from .14 to .18, $p<.05$). That is, women reporting higher levels of economic resources at Time 1 also reported higher levels of abuse at each of the three time periods. Extent of abuse at Time 1 was also significantly related to economic resources at Time 2 ($r = .13$, $p<.05$). Participants reporting more abuse at Time 1 also reported higher levels of economic resources at Time 2. Lastly, economic resources at Time 2 was related to extent of abuse at Time 3 ($r = .15$, $p<.05$)

suggesting that women with higher levels of economic resources at Time 2 also experienced higher levels of abuse at Time 3.

Women who reported being economically dependent on someone for their financial support (most likely the assailant) also reported having a higher level of economic resources (r's ranged from -.12 to -.38, $p<.05$) at all three time periods. Economic dependence at Time 1 was also significantly correlated with extent of abuse at Time 1 ($r = -.20$, $p<.05$) suggesting that women who were economically dependent also reported higher levels of abuse. Economic dependence at Time 2 was also significantly related to reports of higher levels of abuse at Time 2 ($r = -.19$, $p<.05$) and Time 3 ($r = -.22$, $p<.05$). Finally, women in the experimental condition also reported significantly higher levels of abuse at Time 1 ($r = -.13$, $p<.05$).

Summary of the intercorrelations among psychological well-being, involvement with assailant, abuse, economic resources, economic dependence, and experimental condition. The following is a summary of the zero-order correlations that provide a background for understanding the results of the regression analyses that follow. As would be expected, there were high self-intercorrelations of variables at different time periods. That is, psychological well-being at Time 1 was highly correlated with psychological well-being at Time 2 and at Time 3. Womens level of economic resources, abuse, involvement with assailant, and economic dependence shared the same pattern of intercorrelation.

Several variables correlated with psychological well-being. First, women's psychological well-being at Time 2 was significantly related to women's level of economic resources at Time 3 and economic dependence at Time 3. That is, women who reported greater satisfaction with their psychological well-being at Time 2 reported also having a higher level of

economic resources and a greater likelihood of being dependent for those resources at Time 3. Women who reported greater satisfaction with their psychological well-being also reported less abuse at all three time periods. At Time 3, 15 months post-shelter, women who had higher psychological well-being also were less likely to still be involved with their assailants. Finally, women in the experimental condition reported greater satisfaction with their psychological well-being at the first interview, 3 months post-shelter.

There were also several significant relationships between study variables and women's involvement with the assailant. As was already mentioned above, women who were involved with their assailants at Time 3 experienced lower psychological well-being at the same time period. Interestingly and of great relevance to this study, women who were involved with their assailants had higher economic resources, were more likely to be dependent on someone (most likely the assailant) financially, and reported higher levels of abuse at all three time periods (the only exception was that involvement with the assailant at Time 3 did not significantly correlate with economic dependence at Time 1).

Finally, there were several significant intercorrelations among the independent variables: economic resources, abuse, involvement with the assailant, economic dependence, and experimental condition. There were a series of interesting relationships between level of economic resources and level of abuse. Women who reported higher levels of economic resources at Time 1 also reported higher levels of abuse at Time 1, Time 2, and Time 3 and women who reported higher levels of economic resources at Time 2, reported higher levels of abuse at Time 3. Women who reported higher levels of abuse at Time 1 reported higher levels of economic resources at Time 2.

Women who were economically dependent had higher economic resources at all three time periods. Women who were economically dependent at Time 1 also experienced more abuse at Time 1, and women who were economically dependent at Time 2 reported higher levels of abuse at Time 2 and Time 3. Lastly, women in the experimental condition experienced higher levels of abuse at Time 1.

Regressions With Psychological Well-Being as the Dependent Variable

Hierarchical regression was used to examine the strength and direction of relationships among the first set of variables of interest in this study; that is, the relationships between abuse, economic resources, and psychological well-being. The impact of abuse and economic resources (predictor variables) on women's psychological well-being were examined in three hypotheses. The first hypothesis examined the main effects of abuse on women's psychological well-being, the second hypothesis examined the main effects of economic resources on women's psychological well-being, and the third hypothesis examined the mediating effect of economic resources on the relationship between level of abuse and women's psychological well-being.

Within each hypothesis, multiple analyses were conducted to investigate the hypothesis within each time period and across time periods as stated in the Research Objectives and Hypotheses section at the end of the Chapter 1. That is, within hypothesis 1, five separate regression analyses were performed to investigate the hypothesized relationships within Time 1, within Time 2, within Time 3, across Time 1 and Time 2, and across Time 2 and Time 3. Within hypothesis 2, five separate regression analyses were also performed to investigate the hypothesized relationships within Time 1, within Time 2, within Time 3, across Time 1 and Time 2, and across Time 2 and Time 3. Finally, within hypothesis 3, six separate regression

analyses were performed to investigate the hypothesized relationships within Time 1, within Time 2, within Time 3, across Time 1 and Time 2, and across Time 2 and Time 3, and across all three time periods. The results of the three hypotheses are presented next, each in their own section.

Abuse as the predictor. The first hypothesis in this study argued that abuse from intimate male partners is a major stressor that affects women's overall psychological well-being. That is, it was hypothesized that the experience of abuse would have a direct negative effect on the psychological well-being of women. The more severe the abuse, the lower women's psychological well-being.

Table 9 shows a summary of the five hierarchical regression analyses that were used to test the hypothesis using psychological well-being as the dependent variable and abuse as the independent or predictor variable. Hypothesis 1 examined this relationship within time (i.e., abuse at Time 1 predicts psychological well-being at Time 1, abuse at Time 2 predicts psychological well-being at Time 2, and abuse at Time 3 predicts psychological well-being at Time 3) and across time (i.e, abuse at Time 1 predicts psychological well-being at Time 2 and abuse at Time 2 predicts psychological well-being at Time 3). Table 9 displays the outcome variables and predictor variables for each analysis in column one, standardized regression coefficients (the Beta weights) in column two, the corresponding t-test of the standardized Beta weight in column three, the step-wise R^2 in column four, and the overall multivariate F statistic in column five.

Table 9

Summary of Hierarchical Regression Analyses to Test Hypothesis 1: Extent of Abuse Predicting Psychological Well-Being, Controlling for Experimental Condition and Prior Level of Psychological Well-Being

Outcome and Predictors		β	t	R^2	F
Analysis 1:					
Outcome:	Psychological Well-Being Time 1				
Predictors:	Experimental Condition	- .18	- 2.32*	.03	7.94*
	Extent of Abuse Time 1	- .40	- 4.52*	.12	14.53*
Analysis 2:					
Outcome:	Psychological Well-Being Time 2				
Predictors:	Experimental Condition	.02	.34	.01	1.65
	Psychological Well-Being Time 1	.51	9.73*	.34	56.99*
	Extent of Abuse Time 2	- .29	-4.43*	.40	47.79*
Analysis 3:					
Outcome:	Psychological Well-Being Time 3				
Predictors:	Experimental Condition	.02	.27	.00	.73
	Psychological Well-Being Time2	.51	9.35*	.31	49.79*
	Extent of Abuse Time 3	-.27	-4.29*	.37	41.99*
Analysis 4:					
Outcome:	Psychological Well-Being Time2				
Predictors:	Experimental Condition	.03	.42	.01	1.65
	Psychological Well-Being Time1	.55	9.86*	.34	56.99*
	Extent of Abuse Time 1	- .07	- .85	.34	38.19*
Analysis 5:					
Outcome:	Psychological Well-Being Time3				
Predictors:	Experimental Condition	- .01	- .11	.00	.73
	Psychological Well-Being Time2	.54	9.18*	.31	49.79*
	Extent of Abuse Time 2	- .02	- .21	.31	33.06*

N = 221-224 for each analysis (due to missing data).

The results suggested that after controlling for experimental condition and prior level of psychological well-being, the standardized regression coefficient for concurrent abuse was significant. The following specific relationships were supported: the experience of abuse at Time 1 had a direct negative effect on the psychological well-being of women at Time 1 (β = -.40, p<.05), the experience of abuse at Time 2 had a direct negative effect on the psychological well-being of women at Time 2 (β = -.29, p<.05), and the experience of abuse at Time 3 had a direct negative effect on the psychological well-being of women at Time 3 (β = -.27, p<.05). The standardized regression coefficients for across time relationships (abuse at Time 1 predicting psychological well-being at Time 2 and abuse at Time 2 predicting psychological well-being at Time 3) were not significant.

It is important and interesting to note that the standardized regression coefficients for the control variables, experimental condition and prior level of psychological well-being, were also significant in some of the analyses. The standardized regression coefficient for experimental condition, entered first as a control variable, was significant in the first analysis (abuse at Time 1 predicting psychological well-being at Time 1) (β = -.18, p<.05), but not in any of the other analyses. This suggests that receiving the services of an advocate for 10 weeks (experimental condition) predicted that women would report greater satisfaction with their overall psychological well-being 3 months after leaving the shelter (which corresponded with the end of their intervention), but not at any later time period.

The other control variable, prior level of psychological well-being, was a significant predictor of later psychological well-being in analyses 2 through 5. This finding is not surprising given the high intercorrelations among women's reported psychological well-being at every time period. Summary Table 9, analysis 2, shows that women's psychological well-being at Time 1 had a direct effect on women's psychological well-being at Time 2 ($\beta = .51$, $p<.05$). In analysis 3, women's psychological well-being at Time 2 had a significant effect on women's psychological well-being at Time 3 ($\beta = .51$, $p<.05$). Table 9 further displays that the relationships were similar in analyses 4 and 5. In analysis 4, women's psychological well-being at Time 1 had a direct impact on women's psychological well-being at Time 2 ($\beta = .55$, $p<.05$) and in analysis 5, women's psychological well-being at Time 2 had a direct effect on women's psychological well-being at Time 3 ($\beta = .54$, $p<.05$).

Column four (the step-wise R^2) of Table 9 shows the amount of variance accounted for by each of the independent (or predictor) variables and column five reports the significance of the overall multivariate F statistic. In analysis 1, both experimental condition and extent of abuse at Time 1 accounted for a significant proportion of the variance in predicting psychological well-being at Time 1. Experimental condition accounted for 3% of the variance in predicting psychological well-being at Time 1 and 9% of the variance in psychological well-being at Time 1 was explained by the main effect of abuse at Time 1.

For analyses two through five, prior level of psychological well-being (entered second) accounted for the most variance (between 31% and 33%) in each equation.

Experimental condition did not account for a significant proportion of the variance in any of these hypotheses. However, after controlling for experimental condition and prior level of psychological well-being, extent of abuse also accounted for a significant amount of the variance in every equation. This further supported the hypothesis that extent of abuse had a direct effect on women's psychological well-being.

As Table 9 (analysis 2) shows, psychological well-being at Time 1 accounted for a significant (33%) proportion of the variance in predicting psychological well-being at Time 2. Extent of abuse at Time 2 accounted for an additional 6% of the variance in the equation. Similarly, in analysis 3, psychological well-being at Time 2 accounted for 31% of the variance in psychological well-being at Time 3 and an additional 6% of the variance was significantly explained by the direct effect of abuse at Time 3.

Although the standardized regression coefficients for extent of abuse in the across-time analyses (analyses 4 and 5) were not significant, the overall multivariate F statistics were. This was not due to the direct effects of extent of abuse but due, instead, to the contribution of the control variables (experimental condition in analysis 1 and prior level of psychological well-being in analyses 2 through 5). In analysis 4, psychological well-being at Time 1 accounted for 33% of the variance and extent of abuse at Time 1 did not account for any additional variance. The same was true in analysis 5; that is, extent of abuse at Time 2 did not account for any more of the variance in predicting women's psychological well-being at Time 3 than the 31% accounted for by prior level of psychological well-being.

In summary, the results supported that the experience of abuse did have a direct negative effect on women's psychological well-being when both variables were measured at Time 1, Time 2, and Time 3. That is, the more severe the abuse, the lower women's psychological well-being.

As was expected, prior level of psychological well-being predicted psychological well-being in each of the analyses and accounted for a significant proportion of the variance. However, the fact that extent of abuse had a significant R^2 over and above that of prior level of psychological well-being attests to the strength of abuse as a concurrent predictor of psychological well-being.

Abuse at an earlier time period (e.g., Time 1), however, did not predict how satisfied women were with their psychological well-being 6 months later (e.g., Time 2). These longitudinal data provide additional information that women who are abused are resilient and do not necessarily have a lower level of psychological well-being 6 months after experiencing abuse.

Economic resources as the predictor. The second hypothesis in this study argued that level of economic resources impacts women's overall psychological well-being and that the lower women's economic resources, the lower women's psychological well-being. That is, it was hypothesized that level of economic resources would have a direct positive effect on the psychological well-being of women.

A summary of the results of the five hierarchical regression analyses that were used to test the hypothesis using psychological well-being as the dependent variable and economic resources as the independent or predictor variable are displayed in Table 10.

Hypothesis 2 examined this relationship within time (i.e., economic resources at Time 1 predicts psychological well-being at Time 1, economic resources at Time 2 predicts psychological well-being at Time 2, and economic resources at Time 3 predicts psychological well-being at Time 3) and across time (i.e., economic resources at Time 1 predicts psychological well-being at Time 2 and economic resources at Time 2 predicts psychological well-being at Time 3). Identical to the previous hierarchical regression summary, Table 10 displays the outcome variables and predictor variables for each analysis in column one, standardized regression coefficients (the Beta weights) in column two, the corresponding t-test of the standardized Beta weight in column three, the step-wise R^2 in column four, and the overall multivariate F statistic in column five.

Table 10

Summary of the Hierarchical Regression Analyses to Test Hypothesis 2: Economic Resources Predicting Psychological Well-Being, Controlling for Experimental Condition and Prior Level of Psychological Well-Being

Outcome and Predictors		β	t	R^2	F
Analysis 1:					
Outcome:	Psychological Well-Being Time1				
Predictors:	Experimental Condition	- .23	- 2.79*	.03	7.94*
	Economic Resources Time 1	- .05	- .81	.04	4.29*
Analysis 2:					
Outcome:	Psychological Well-Being Time2				
Predictors:	Experimental Condition	.02	.29	.01	1.65
	Psychological Well-BeingTime1	.56	10.48*	.34	56.99*
	Economic Resources Time 2	.06	1.33	.35	38.72*
Analysis 3:					
Outcome:	Psychological Well-Being Time3				
Predictors:	Experimental Condition	-.01	-.11	.00	.73
	Psychological Well-BeingTime2	.55	9.75*	.31	49.79*
	Economic Resources Time 3	2.08	.01	.31	33.04*
Analysis 4:					
Outcome:	Psychological Well-Being Time2				
Predictors:	Experimental Condition	.02	.35	.01	1.65
	Psychological Well-BeingTime1	.57	10.55*	.34	56.99*
	Economic Resources Time 1	.02	.45	.34	37.92*
Analysis 5:					
Outcome:	Psychological Well-Being Time3				
Predictors:	Experimental Condition	- .01	- .10	.00	.73
	Psychological Well-BeingTime2	.55	9.86*	.31	49.79*
	Economic Resources Time 2	- .01	- .16	.31	33.05*

N=221-224 for each analysis (due to missing data).

The results suggested that after controlling for experimental condition and prior level of psychological well-being, the standardized regression coefficients for economic resources were not significant in any of the concurrent or across time analyses. Therefore, the hypothesis that level of economic resources would have a direct positive effect on the psychological well-being of women within time and across time (Time 1 to Time 2 and Time 2 to Time 3) was not supported. The standardized regression coefficients for the control variables, experimental condition and prior level of psychological well-being, however, were significant in some of the analyses. The standardized regression coefficient for experimental condition, entered first as a control variable, was significant in the first analysis (economic resources at Time 1 predicting psychological well-being at Time 1) (β = -.23, p<.05), but not in any of the other analyses. Again, this suggested that receiving the services of an advocate for 10 weeks post-shelter (experimental condition) predicted that women would report greater satisfaction with their overall psychological well-being 3 months after leaving the shelter (which corresponded with the end of their intervention), but not at any later time period.

The other control variable, prior level of psychological well-being, was a significant predictor of later psychological well-being in analyses 2 through 5. Summary Table 10 (analysis 2) shows that women's psychological well-being at Time 1 had a significant effect on women's psychological well-being at Time 2 (β = .56, p<.05). In analysis 3, women's psychological well-being at Time 2 had a direct effect on women's psychological well-being at Time 3 (β = .55, p<.05). In analysis 4, women's

psychological well-being at Time 1 had a direct impact on women's psychological well-being at Time 2 ($\beta = .57$, $p<.05$) and in analysis 5, women's psychological well-being at Time 2 had a direct effect on women's psychological well-being at Time 3 ($\beta = .55$, $p<.05$).

Column four (the step-wise R^2) of Table 10 shows the amount of variance accounted for by each of the independent (or predictor) variables and column five reports the significance of the overall multivariate F statistic. Although none of the standardized regression coefficients for level of economic resources were significant, the overall multivariate F statistics were. This was not due to the direct effects of level of economic resources but due, instead, to the contribution of the control variables (experimental condition in analysis 1 and prior level of psychological well-being in analyses 2 through 5). In analysis 2, psychological well-being at Time 1 accounted for 33% of the variance and economic resources at Time 2 only accounted for an additional 1% of the variance. In analysis 3, psychological well-being at Time 2 accounted for 31% of the variance and economic resources at Time 3 did not account for any additional variance. The same was true in analyses 4 and 5. That is, psychological well-being at Time 1 accounted for 33% of the variance and level of economic resources at Time 1 did not account for any additional variance in analysis 4. In analysis 5, the level of economic resources at Time 2 did not account for any more of the variance in predicting women's psychological well-being at Time 3 than the 31% accounted for by prior level of psychological well-being.

In summary, the results did not support the hypothesis (either within or across time) predicting that women's level of economic resources would have a direct positive

effect on the psychological well-being of women. The results did not support previous research which suggested that level of economic resources would impact women's overall psychological well-being such that women with lower economic resources would also experience lower quality of life and more depression. The lack of variance in the sample (almost all of the women were poor) was a serious confound that may explain why this relationship was not supported.

As in the first hypothesis examining the direct effects of abuse on women's psychological well-being, the results of this set of analyses provide further evidence for the importance of controlling for prior level of psychological well-being and, therefore, looking at change in psychological well-being over time. Prior level of psychological well-being was a significant predictor of psychological well-being and accounted for a significant amount of the variance in all five hierarchical regression analyses.

Economic resources as the mediator. The third hypothesis in this study argued that level of economic resources would mediate, or help to explain why or how women's experience of abuse affected their psychological well-being. Results of a series of regression models using psychological well-being as the outcome, abuse as the independent variable, and economic resources as the mediator within and across time are displayed in Tables 11 - 16. Each table displays the series of regression analyses used to test the hypothesis within, or across, different time periods. For example, Table 11 shows the analyses used to examine the mediating relationship within Time 1, Table 12 shows the analyses used to examine the mediating relationship within Time 2, and so on. Three regression equations, recommended by Baron & Kenny (1986), are displayed in each

table to test the mediating relationships. The format of each of these tables is similar to the preceding two hierarchical regression tables and also display the outcome and predictor variables in column one, standardized regression coefficients (the Beta weights) in column two, the corresponding t-test of the standardized Beta weight in column three, the step-wise R^2 in column four, and the overall multivariate F statistic in column five.

As a reminder, the third hypothesis was tested both within time and across time. The first analysis, displayed in Table 11, examined whether economic resources at Time 1 mediates the relationship between abuse at Time 1 and psychological well-being at Time 1. The second analysis, shown in table 12, examined whether economic resources at Time 2 mediates the relationship between abuse at Time 2 and psychological well-being at Time 2. The third within time analysis examine whether economic resources at Time 3 mediates the relationship between abuse at Time 3 and psychological well-being at Time 3, as shown in Table 13. The other analyses examined the mediating relationship proposed in the third hypothesis across time. The fourth analysis (Table 14) examined the linkages of the mediational model for economic resources at Time 1 mediating the effect extent of abuse at Time 1 had on psychological well-being at Time 2. Table 15 displays the fifth analysis that examines whether economic resources at Time 2 mediates the effect extent of abuse at Time 2 had on psychological well-being at Time 3. The last analysis of hypothesis 3 examined whether economic resources at Time 2 mediated the relationship between abuse at Time 1 and psychological well-being at Time 3 and is shown in Table 16.

After controlling for experimental condition and prior level of psychological well-being, the linkages in each of the mediational models were tested. The following criteria were used to test each mediational hypothesis (Baron & Kenny, 1986). Perfect mediation holds when the independent variable (abuse) has no effect when the mediator (economic resources) is controlled. Therefore, abuse must affect economic resources in the first equation, abuse must affect psychological well-being in the second equation, and economic resources must affect psychological well-being in the third equation. The effect of abuse on psychological well-being must be less in the third equation than in the second equation. The results of the regression equations used to test hypothesis 3 within and across time are presented below, followed by an overall summary of findings.

Table 11 displays a summary of the three regression equations used to test the linkages of the mediational model for economic resources at Time 1 mediating the effect extent of abuse at Time 1 has on psychological well-being at Time 1. In equation one, after controlling for experimental condition, extent of abuse emerges as a significant predictor of economic resources ($\beta = .21$, $p<.05$). However, the direction of the relationship was opposite that which was predicted. That is, the results showed that the more abuse women experienced, the higher their level of economic resources. The change in R^2 associated with the step involving extent of abuse was not statistically significant.

In equation two, after controlling for experimental condition, extent of abuse was related to psychological well-being ($\beta = -.40$, $p<.05$) in the predicted direction. That is, the more abuse women reported, the lower their overall psychological well-being. In this

equation, the regression weight for experimental condition was also statistically significant (β = -.18, p<.05) suggesting that women in the experimental condition experienced more abuse. The change in R^2 associated with the step involving experimental condition and extent of abuse was also statistically significant; that is, both experimental condition and extent of abuse at Time 1 accounted for a significant proportion of the variance in predicting psychological well-being at Time 1. Experimental condition accounted for 3% of the variance in predicting psychological well-being at Time 1 and 9% of the variance in psychological well-being at Time 1 was explained by the main effect of abuse at Time 1.

In equation three, economic resources did not significantly affect psychological well-being, thereby suggesting that economic resources does not mediate the relationship between abuse and psychological well-being at Time 1. Although economic resources did not predict psychological well-being, the regression weights for experimental condition (β = -.18, p<.05) and extent of abuse (β = -.39, p<.05) at Time 1 were statistically significant. Again, experimental condition significantly accounted for 3% of the variance in the equation and extent of abuse at Time 1 and economic resources at Time 1 together accounted for 9% of the variance.

Table 11

Summary of the Hierarchical Regression Analyses to Test Hypothesis 3: Economic Resources at Time 1 Mediating the Effect Extent of Abuse at Time 1 Has on Psychological Well-Being at Time 1

Outcome and Predictors	β	t	R^2	F
Equation 1:				
Outcome: Economic Resources T1				
Predictors: Experimental Condition	.02	.25	.00	.28
Extent of Abuse T1	.21	2.06*	.02	2.26
Equation 2:				
Outcome: Psychological Well-Being T1				
Predictors: Experimental Condition	-.18	-2.32*	.03	7.94*
Extent of Abuse T1	-.40	-4.52*	.12	14.53*
Equation 3:				
Outcome: Psychological Well-Being T1				
Predictors: Experimental Condition	-.18	-2.31*	.03	7.94*
Extent of Abuse T1	-.39	-4.44*		
Economic Resources T1	.55	- .23	.12	9.66*

N=224; T1 = 3 months post-shelter, T2 = 9 months post-shelter, T3 = 15 months post-shelter .

Table 12 displays a summary of the three regression equations used to test the linkages of the mediational model for economic resources at Time 2 mediating the effect extent of abuse at Time 2 has on psychological well-being at Time 2. In equation one, after controlling for experimental condition, extent of abuse does not significantly affect economic resources.

In equation two, after controlling for experimental condition and Time 1 psychological well-being, extent of abuse was related to psychological well-being (β = -

.29, $p<.05$). That is, the more abuse women experienced at Time 2, the lower their psychological well-being at Time 2. Extent of abuse accounted for a significant portion of the variance in this equation (6%), even though prior level of psychological well being was also a significant predictor ($\beta = .51$, $p<.05$) and accounted for a large, and significant, amount of the variance (33%).

In equation three, however, after controlling for experimental condition and Time 1 psychological well-being, economic resources did not significantly predict psychological well-being. The regression weights for prior level of psychological well-being ($\beta = .51$, $p<.05$) and extent of abuse ($\beta = -.31$, $p<.05$) were significant. Prior level of psychological well-being was a significant predictor and accounted for 33% of the variance, with extent of abuse and economic resources together adding another 7%. Both control variables (experimental condition and prior level of psychological well-being) and both predictors (extent of abuse and economic resources) accounted for 41% of the variance. Again, because the results of equation one and equation three did not satisfy the mediational criteria as proposed by Baron & Kenny (1986), economic resources did not mediate the relationship between abuse and psychological well-being at Time 2.

Table 12

Summary of the Hierarchical Regression Analyses to Test Hypothesis 3: Economic Resources at Time 2 Mediating the Effect Extent of Abuse at Time 2 Has on Psychological Well-Being at Time 2

Outcome and Predictors	β	t	R^2	F
Equation 1:				
Outcome: Economic Resources T2				
Predictors: Experimental Condition	.04	.42	.00	.23
Extent of Abuse T2	.16	1.66	.01	1.50
Equation 2:				
Outcome: Psychological Well-Being T2				
Predictors: Experimental Condition	.02	.34	.01	1.65
Psychological Well-Being T1	.51	9.73*	.34	56.99*
Extent of Abuse T2	-.29	-4.44*	.40	47.79*
Equation 3:				
Outcome: Psychological Well-Being T2				
Predictors: Experimental Condition	.02	.24	.01	1.65
Psychological Well-Being T1	.51	9.59*	.34	56.99*
Extent of Abuse T2	-.31	-4.69*		
Economic Resources T2	.09	2.00	.41	37.33*

N = 222-223 for each analysis (due to missing data); T1 = 3 months post-shelter, T2 = 9 months post-shelter, T3 = 15 months post-shelter.

Table 13 shows that the pattern of results for the three regression equations used to test the linkages of the mediational model for economic resources at Time 3 mediating the effect extent of abuse at Time 3 has on psychological well-being at Time 3 are identical to those within Time 2 (see Table 12). After controlling for experimental

condition in the first equation, the results showed that extent of abuse did not significantly affect economic resources.

In equation two, after controlling for experimental condition and Time 2 psychological well-being, extent of abuse was related to psychological well-being (β = -.27, p<.05). That is, the more abuse women experienced at Time 2, the lower their psychological well-being at Time 3. Extent of abuse accounted for a significant portion of the variance in this equation (6%), even though prior level of psychological well being was also a significant predictor (β = .51, p<.05) and accounted for a substantial amount of the variance (31%).

As the third equation in Table 13 shows (after controlling for experimental condition and Time 2 psychological well-being), however, economic resources did not significantly predict psychological well-being. The regression weights for prior level of psychological well-being (β = .50, p<.05) and extent of abuse (β = -.27, p<.05) were significant. Both control variables (experimental condition and prior level of psychological well-being) and both predictors (extent of abuse and economic resources) accounted for 37% of the variance. Psychological well-being significantly accounted for 31% of the variance and extent of abuse and economic resources together accounted for an additional 6% of the variance. However, economic resources did not mediate the relationship between abuse and psychological well-being at Time 3 because the results of equation one and equation three did not satisfy the mediational criteria as proposed by Baron & Kenny (1986).

Table 13

Summary of the Hierarchical Regression Analyses to Test Hypothesis 3: Economic Resources at Time 3 Mediating the Effect Extent of Abuse at Time 3 Has on Psychological Well-Being at Time 3

Outcome and Predictors	β	t	R^2	F
Equation 1:				
Outcome: Economic Resources T3				
Predictors: Experimental Condition	.14	1.43	.01	2.33
Extent of Abuse T3	.09	.93	.01	1.60
Equation 2:				
Outcome: Psychological Well-Being T3				
Predictors: Experimental Condition	.02	.27	.00	.73
Psychological Well-Being T2	.51	9.35*	.31	49.79*
Extent of Abuse T3	-.27	-4.29*	.37	41.99*
Equation 3:				
Outcome: Psychological Well-Being T3				
Predictors: Experimental Condition	.01	.22	.00	.73
Psychological Well-Being T2	.50	9.08*	.31	49.79*
Extent of Abuse T3	-.27	-4.31*		
Economic Resources T3	.02	.44	.37	31.42*

N = 221-224 for each analysis (due to missing data); T1 = 3 months post-shelter, T2 = 9 months post-shelter, T3 = 15 months post-shelter.

Similar to the preceding analyses that examined the within time mediating relationships, none of the across time mediating relationships proposed in hypothesis 3 supported a mediating relationship. Table 14 displays a summary of the regression analyses used to test whether economic resources at Time 1 mediates the effect extent of abuse at Time 1 has on psychological well-being 6 months later (Time 2). Although

abuse was a significant predictor of economic resources (β = .21, p<.05) in equation one, abuse did not significantly relate to psychological well-being in equation two, nor did economic resources significantly predict psychological well-being in equation 3. Therefore, Baron & Kenny's (1986) mediational criteria were not met and it can be concluded that economic resources at Time 1 did not mediate the relationship between abuse at Time 1 and psychological well-being at Time 2.

However, prior level of psychological well being was a significant predictor of psychological well-being in equations 2 and 3 (β = .55, p<.05) and significantly accounted for 33% of the variance in both equations. In the third equation, extent of abuse at Time 1 also had a direct negative effect on psychological well-being at Time 2 (β = -.07, p<.05). Psychological well-being accounted for 33% of the variance in equation 2 and equation 3. Extent of abuse and economic resources only accounted for an additional 1% of the variance in equation 3.

Table 14

Summary of the Hierarchical Regression Analyses to Test Hypothesis 3: Economic Resources at Time 1 Mediating the Effect Extent of Abuse at Time 1 Has on Psychological Well-Being at Time 2

Outcome and Predictors		β	t	R^2	F
Equation 1:					
Outcome:	Economic Resources T1				
Predictors:	Experimental Condition	.02	.25	.00	.28
	Extent of Abuse T1	.21	2.06*	.02	2.26
Equation 2:					
Outcome:	Psychological Well-Being T2				
Predictors:	Experimental Condition	.03	.42	.01	1.65
	Psychological Well-Being T1	.55	9.86*	.34	56.99*
	Extent of Abuse T1	-.07	- .85	.34	38.19*
Equation 3:					
Outcome:	Psychological Well-Being T2				
Predictors:	Experimental Condition	.03	.41	.01	1.65
	Psychological Well-Being T1	.55	9.85*	.34	56.99*
	Extent of Abuse T1	-.07	- .92*		
	Economic Resources T1	.03	.56	.35	28.63*

N=222-224 for each analysis (due to missing data); T1 = 3 months post-shelter, T2 = 9 months post-shelter, T3 = 15 months post-shelter.

Table 15 illustrates the mediational model for economic resources at Time 2 mediating the effect extent of abuse at Time 2 has on psychological well-being at Time 3. After controlling for experimental condition and prior level of psychological well-being, none of the equations contain the significant relationships that were necessary to support this mediational analysis. That is, abuse at Time 2 did not have a direct negative impact

on economic resources at Time 2, abuse at Time 2 did not have a direct negative impact on psychological well-being at Time 3, and economic resources at Time 2 did not have a direct positive effect on psychological well-being at Time 3.

Consistent with other findings, the regression weight for prior level of psychological well-being in equations two and three were significant (β = .54 and .55, respectively, $p<.05$) and responsible for the significant overall F statistic. In both equations, psychological well-being accounted for 31% of the variance which was also the total variance accounted for in each of the equations. That is, extent of abuse (in equation 2) and extent of abuse and economic resources (in equation 3) did not account for any additional variance.

Table 15

Summary of the Hierarchical Regression Analyses to Test Hypothesis 3: Economic Resources at Time 2 Mediating the Effect Extent of Abuse at Time 2 has on Psychological Well-Being at Time 3

Outcome and Predictors	β	t	R^2	F
Equation 1:				
Outcome: Economic Resources T2				
Predictors: Experimental Condition	.04	.42	.00	.23
Extent of Abuse T2	.16	1.66	.01	1.50
Equation 2:				
Outcome: Psychological Well-Being T3				
Predictors: Experimental Condition	-.01	-.11	.00	.73
Psychological Well-Being T2	.54	9.18*	.31	49.79*
Extent of Abuse T2	-.02	-.21	.31	33.06*
Equation 3:				
Outcome: Psychological Well-Being T3				
Predictors: Experimental Condition	-.01	-.10	.00	.73
Psychological Well-Being T2	.55	9.06*	.31	49.79*
Extent of Abuse T2	-.01	-.19*		
Economic Resources T2	-.01	-.13	.31	24.69*

N = 221-223 for each analysis (due to missing data); T1 = 3 months post-shelter, T2 = 9 months post-shelter, T3 = 15 months post-shelter.

Table 16 displays the final set of equations used to test the mediational model across all three time points (economic resources at Time 2 mediating the effect extent of abuse at Time 1 has on psychological well-being at Time 3). In equation one, extent of abuse at Time 1 was significantly related to economic resources at Time 2 ($\beta = .21$, $p<.05$) but did not account for a significant portion of the variance in the equation (2%).

The results that were necessary to support the mediational relationship in the second two equations were not significant. Therefore, economic resources at Time 2 did not mediate the relationship between extent of abuse at Time 1 and psychological well-being at Time 3.

However, the regression weight for psychological well-being at Time 2 was significant ($\beta = .53$, $p<.05$) in both equation two and equation three and prior level of psychological well-being accounted for 31% of the variance. The regression weight for extent of abuse at Time 1 in equation three was also significant ($\beta = -.12$, $p<.05$), although extent of abuse and economic resources only accounted for an additional 1% of the variance. The overall multivariate F statistic was significant but only because of the influence of controlling for prior level of psychological well-being.

Table 16

Summary of the Hierarchical Regression Analyses to Test Hypothesis 3: Economic Resources at Time 2 Mediating the Effect Extent of Abuse at Time 1 has on Psychological Well-Being at Time 3

Outcome and Predictors	β	t	R^2	F
Equation 1:				
Outcome: Economic Resources T2				
Predictors: Experimental Condition	.02	.23	.00	.23
Extent of Abuse T1	.21	1.95*	.02	2.02
Equation 2:				
Outcome: Psychological Well-Being T3				
Predictors: Experimental Condition	.00	.07	.00	.73
Psychological Well-Being T2	.53	9.41*	.31	49.79*
Extent of Abuse T1	-.12	-1.56	.32	34.22*
Equation 3:				
Outcome: Psychological Well-Being T3				
Predictors: Experimental Condition	.00	.06	.00	.73
Psychological Well-Being T2	.53	9.28*	.31	49.79*
Extent of Abuse T1	-.12	-1.55*		
Economic Resources T2	.00	.09	.32	25.55*

N = 221-223 for each analysis (due to missing data); T1 = 3 months post-shelter, T2 = 9 months post-shelter, T3 = 15 months post-shelter.

In summary, the within time and across time analyses of the hypothesis that women's level of economic resources would mediate the relationship between abuse and psychological well-being were not substantiated. Economic resources did not mediate this relationship at any of the time points. Interestingly, the direction of the hypothesized relationship between abuse and economic resources was wrong. The results suggest that

women who experience higher levels of abuse at Time 1 also have higher levels of resources at Time 1 and Time 2. This is contrary to hypothesis 3 that proposed that women who experience higher levels of abuse would have lower levels of resources because assailants would undermine their employment by harassing them at work or injuring them to the point of missing work, isolate them from community resources, and drain the family resources. Instead, for the women in this sample, there is a relationship between higher levels of abuse and higher level of economic resources.

Regressions With Assailant Involvement as the Dependent Variable

Logistic regression was used to examine the strength and direction of relationships among the second set of variables of interest in this study; that is, the relationships between women's level of economic resources and involvement with the assailant as moderated by economic dependence. The literature and previous research suggest that women's level of economic resources are related to concurrent and future involvement with the assailant. That is, women stay with, or return to, their assailants because they lack the economic and community resources to maintain the same standard of living on their own. Relatedly, previous research also suggests that women stay with or return to their assailants because they are economically dependent on them. Therefore, the relationship between economic resources and involvement with the assailant was hypothesized to be moderated by whether women were economically dependent. That is, women's level of economic resources would affect whether they were involved with their assailant only if they were economically dependent for those resources.

The ability of economic dependence to moderate the relationship between economic resources and involvement with assailant was hypothesis 4 in the Research Objectives and Hypotheses section of Chapter 1. This final hypothesis was tested within the three time periods, across Time 1 and Time 2, and across Time 2 and Time 3 (5 separate analyses). Logistic regression was used to predict involvement with the assailant because it was a dichotomous variable. Of primary interest was whether the interaction between economic resources and economic dependence was significant.

A summary of the results of each of the five logistic regression equations are featured in Table 17. The first column displays the outcome variable and the predictor variables. The second column (with the heading B) features the logistic coefficient which can be interpreted as the amount of change in the log odds of assailant involvement that is associated with a one-unit change in the independent variable. The third column is labeled Exp(B) and is the relative effect on odds ratio. The fourth column presents the Wald statistic which is a z-test on the regression weight (B) and has a chi-square distribution. The fifth column, R, features the partial correlation between each independent variable and assailant involvement. The last line of each hypothesis in Table 17 features the Model-Chi Square which is the test for overall R^2. It explains whether the group of predictors significantly predicts involvement with assailant.

Table 17

Summary of Logistic Regression Analyses to Test Hypothesis 4: Economic Dependence as a Moderator of Economic Resources on Psychological Well-Being

Outcome and Predictors	B	Exp(B)	Wald Statistic	R
Analysis 1:				
Outcome: Involvement with Assailant T1				
Predictors: Experimental Condition	.17	1.19	.35	.00
Economic Resources T1	.35	1.42	.48	.00
Economic Dependence T1	-1.11	.33	4.28*	-.09*
Econ. Res. T1 X Econ. Dep. T1	.38	1.46	.45	.00
Model Chi-Square: 20.05*				
Analysis 2:				
Outcome: Involvement with Assailant T2				
Predictors: Experimental Condition	-.05	.94	.03	.00
Economic Resources T2	2.00	7.39	13.41*	.21*
Economic Dependence T2	-.96	.38	5.01*	-.11*
Econ. Res. T2 X Econ. Dep. T2	-2.07	.13	10.31*	-.18*
Model Chi-Square: 46.99*				
Analysis 3:				
Outcome: Involvement with Assailant T3				
Predictors: Experimental Condition	.17	1.18	.24	.00
Economic Resources T3	1.65	5.20	10.33*	.19*
Economic Dependence T3	.07	1.07	.01	.00
Econ. Res. T3 X Econ. Dep. T3	-1.56	.21	6.88*	-.14*
Model Chi-Square: 24.07*				

Table 17 continued

Summary of Logistic Regression Analyses to Test Hypothesis 4: Economic Dependence as a Moderator of Economic Resources on Psychological Well-Being

Outcome and Predictors	B	Exp(B)	Wald Statistic	R
Analysis 4:				
Outcome: Involvement with Assailant T2				
Predictors: Experimental Condition	.12	1.13	.15	.00
Economic Resources T1	.71	2.03	1.57	.00
Economic Dependence T1	-.90	.41	2.69	-.05
Econ. Res. T1 X Econ. Dep. T1	.19	1.21	.10	.00
Model Chi-Square:24.25*				
Analysis 5:				
Outcome: Involvement with Assailant T3				
Predictors: Experimental Condition	.15	1.16	.19	.00
Economic Resources T2	1.32	3.76	9.32*	.17*
Economic Dependence T2	-.56	.57	1.67	.00
Econ. Res. T2 X Econ. Dep. T2	-1.11	.33	4.07*	-.09*
Model Chi-Square:26.74*				

N = 221-224 for each analysis (due to missing data); T1 = 3 months post-shelter, T2 = 9 months post-shelter, T3 = 15 months post-shelter; $p<.05$.

The first analysis within hypothesis 4 stated that economic dependence at Time 1 moderates the relationship between level of economic resources at Time 1 and involvement with the assailant at Time 1. After controlling for experimental condition, there was a main effect for economic dependence at Time 1 predicting involvement with the assailant (B = -1.11; Wald = 4.28, $p<.05$) such that women who were economically dependent were more likely to also be involved with their assailants. However, there was

no interaction between economic resources and economic dependence. Therefore, the results did not provide support for the moderational hypothesis.

The Model Chi-Square was significant (Model $\chi^2 = 20.05$, $p<.05$) in this equation meaning that this group of predictors (experimental condition, economic resources at Time 1, economic dependence at Time 1, and the interaction of economic resources at Time 1 by economic dependence at Time 1) were able to significantly predict involvement with assailant at Time 1. In addition, this group of predictors was overall able to correctly classify the involvement status of 68.3% of the participants.

The second analysis in hypothesis 4 stated that economic dependence at Time 2 moderates the relationship between level of economic resources at Time 2 and involvement with the assailant at Time 2. After controlling for experimental condition, there was a significant main effect of economic resources at Time 2 on Involvement with Assailant at Time 2 (B = 2.00; Wald = 13.41, $p<.05$). That is, women with higher economic resources were more likely to be involved with their assailants. Economic dependence, too, directly impacted involvement with assailant (B = -.96; Wald = 5.01, $p<.05$) such that women who were economically independent were more likely to be involved with their assailants.

Interestingly, the interaction between economic resources at Time 2 and economic dependence at Time 2 was significant (B = -2.07; Wald = 10.31, $p<.05$) providing evidence for the moderational hypothesis. To help understand this moderating effect, Figure 5 shows a plot of economic dependence at Time 2 as a moderator of the relationship between level of economic resources at Time 2 and the log odds of

involvement with the assailant at Time 2. Women's standardized scores on level of economic resources are plotted on the x-axis. The log odds that women would be involved with their assailants are plotted on the y-axis. The probability scores were converted to logits (ln ($\pi(x)$ / 1 - $\pi(x)$) before they were plotted in order to obtain a linear plot. As the legend shows, the line with shorter dashes represents women who were economically independent and the line with longer dashes represents women who were economically dependent.

Figure 5

Economic Dependence at Time 2 as a Moderator of the Relationship Between Level of Economic Resources at Time 2 and the Log Odds of Involvement With the Assailant at Time 2

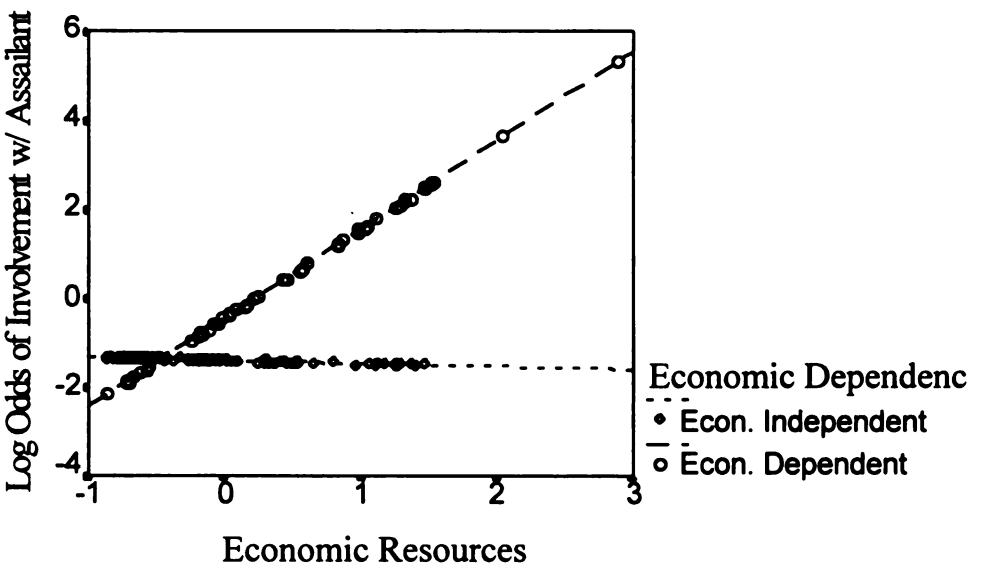


Figure 5 confirms the hypothesis and illustrates that when women were economically dependent at Time 2, the relationship between economic resources at Time 2 and involvement with assailant at Time 2 was positive. When women were economically independent (i.e., not dependent on anyone else for the money they live

on), the relationship between economic resources at Time 2 and involvement with assailant at Time 2 was near-zero. As in the first analysis, the Model Chi-Square was significant (Model $\chi^2 = 46.99$, $p<.05$) in this equation meaning that this group of predictors (experimental condition, economic resources at Time 2, economic dependence at Time 2, and the interaction of economic resources at Time 2 by economic dependence at Time 2) were able to significantly predict involvement with assailant at Time 2. This group of predictors was able to correctly classify the involvement status of 78.8% of the participants.

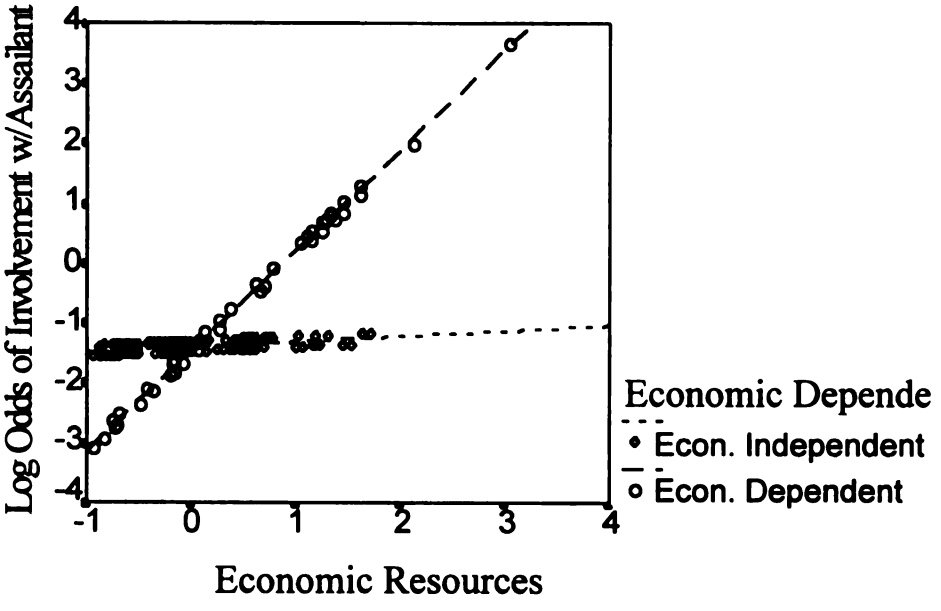
The third analysis of hypothesis 4 explored whether economic dependence at Time 3 moderates the relationship between level of economic resources at Time 3 and involvement with the assailant at Time 3. After controlling for experimental condition, there was a significant main effect of economic resources at Time 3 on Involvement with Assailant at Time 3 (B = 1.65; Wald = 10.33, $p<.05$). That is, women with higher economic resources were more likely to be involved with their assailants. Economic dependence, in this equation, did not independently impact involvement with assailant. The interaction between economic resources at Time 3 and economic dependence at Time 3, however, was significant (B = -1.56; Wald = 6.88, $p<.05$) providing evidence for the moderational hypothesis.

To help understand this moderating effect, Figure 6 shows a plot of economic dependence at Time 3 as a moderator of the relationship between level of economic resources at Time 3 and the probability of involvement with the assailant at Time 3.

The plot of economic dependence at Time 3 in Figure 6 is very similar to the plot of economic dependence at Time 2 in Figure 5. Figure 6 confirms the hypothesis and shows that when women were economically dependent at Time 3, the relationship between economic resources at Time 3 and involvement with assailant at Time 3 was positive. When women were economically independent (i.e., not dependent on anyone else for the money they live on), the relationship between economic resources at Time 3 and involvement with assailant at Time 3 was not affected.

Figure 6

Economic Dependence at Time 3 as a Moderator of the Relationship Between Level of Economic Resources at Time 3 and the Log Odds of Involvement With the Assailant at Time 3



The Model Chi-Square was significant (Model $\chi^2 = 24.07$, $p<.05$) in this equation meaning that this group of predictors (experimental condition, economic resources at Time 3, economic dependence at Time 3, and the interaction of economic resources at

Time 3 by economic dependence at Time 3) were able to significantly predict involvement with assailant at Time 3. This group of predictors was able to correctly classify the involvement status of 78.7% of the participants.

The fourth analysis of hypothesis 4 examined whether economic dependence at Time 1 moderates the relationship between level of economic resources at Time 1 and involvement with the assailant at Time 2. After controlling for experimental condition, there were no statistically significant main effects for economic resources at Time 1 or economic dependence at Time 1 and no interaction effect between economic resources at Time 1 and economic dependence at Time 1. Therefore, the results did not provide support for the moderational hypothesis. Once again, however, this group of predictors (experimental condition, economic resources at Time 1, economic dependence at Time 1, and the interaction of economic resources at Time 1 by economic dependence at Time 1) were able to significantly predict involvement with assailant at Time 2 (Model χ^2 = 24.25, $p<.05$) in this analysis meaning that this group of predictors were able to significantly predict involvment with assailant at Time 2. This group of predictors was able to correctly classify the involvement status of 74.4% of the participants.

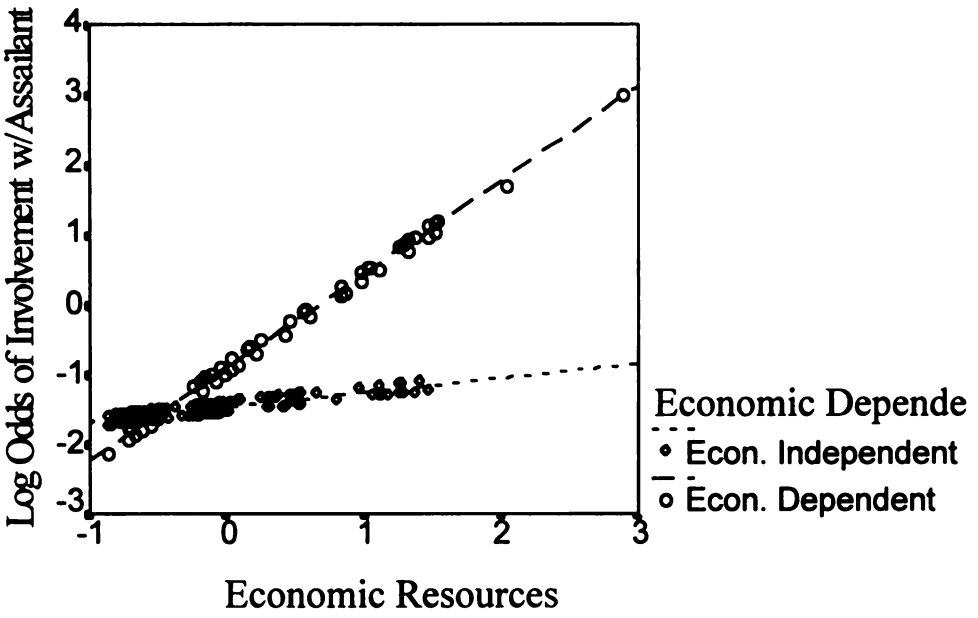
The fifth, and last, analysis of hypothesis 4 examined whether economic dependence at Time 2 moderates the relationship between level of economic resources at Time 2 and involvement with the assailant at Time 3. After controlling for experimental condition, there was a significant main effect of economic resources at Time 2 on Involvement with Assailant at Time 3 (B = 1.32; Wald = 9.32, $p<.05$). That is, women with higher economic resources were more likely to be involved with their assailants.

Economic dependence, in this equation, did not impact involvement with assailant. The interaction between economic resources at Time 2 and economic dependence at Time 2, however, was significant (B = -1.11; Wald = 4.07, $p<.05$) providing evidence for the moderational hypothesis.

Figure 7 displays a plot of economic dependence at Time 2 as a moderator of the relationship between level of economic resources at Time 2 and the probability of involvement with the assailant at Time 3 to help describe this interaction effect. The plot of economic dependence in Figure 7 displays the same pattern of results as the plots of economic dependence in Figures 5 and 6. Figure 7 confirms the hypothesis and shows that when women were economically dependent at Time 2, the relationship between economic resources at Time 2 and involvement with assailant at Time 3 was positive. When women were economically independent (i.e., not dependent on anyone else for the money they live on), the relationship between economic resources at Time 2 and involvement with assailant at Time 3 was near-zero. The Model Chi-Square was significant (Model $\chi^2 = 26.74$, $p<.05$) in this last equation also, meaning that this group of predictors (experimental condition, economic resources at Time 2, economic dependence at Time 2, and the interaction of economic resources at Time 2 by economic dependence at Time 2) were able to significantly predict involvement with assailant at Time 3. This group of predictors was able to correctly classify the involvement status of 78.8% of the participants.

Figure 7

Economic Dependence at Time 2 as a Moderator of the Relationship Between Level of Economic Resources at Time 2 and the Log Odds of Involvement With Assailant at Time 3



A significant number of findings were significant in the logistic regression analyses used to test hypothesis 4. First, economic dependence moderated the relationship between economic resources and involvement with the assailant at Time 2. Second, economic dependence moderated the relationship between economic resources and involvement with the assailant at Time 3. And third, economic dependence at Time 2 moderated the relationship between economic resources at Time 2 and involvement with the assailant at Time 3. These interactions suggest that when women were economically dependent on someone for the money they live on, their level of economic resources had a positive relationship with the probability that they would be involved with their assailant. In other words, the probability of women's involvement with their assailant

increased as their levels of economic resources increased. When women were economically independent there was no relationship between level of economic resources and the probability that women would be involved with their assailants. That is, the probability of women's involvement with their assailant did not change based on their level of economic resources.

DISCUSSION

The primary objective of the present research was to explore how level of economic resources and economic dependence impacts women who have been battered and stayed at a domestic violence shelter. More specifically, to look at how both abuse and level of economic resources affects women's psychological well-being and to investigate the role of economic dependence and level of economic resources in predicting involvement with the assailant. The results of this investigation support previous research suggesting that being abused by an intimate male partner negatively impacts women's psychological well-being at concurrent time periods (Gelles & Harrop, 1989; Goodman, Koss, Russo, 1993; Koss, 1990). This study did not, however, support the predicted positive relationship between women's level of economic resources and women's psychological well-being either within or across time. Women's level of economic resources also did not appear to explain, or mediate, the relationship between level of abuse and psychological well-being.

Economic dependence overwhelmed the effects of economic resources in the current study and emerged as a critical factor. This study showed that women who were economically dependent (i.e., either partially or fully reliant on another person for the money they needed to live on) had a higher level of economic resources than women who were economically independent. However, this study also intimates that economic dependence increased the odds that women would be involved with their assailants (r's

ranging from -.16 to -.35, $p<.05$). Women who were involved with their assailants experienced higher levels of continued abuse than women who were no longer involved with their assailants (r's ranging from .29 to .61, $p<.05$). Finally, results showed strong direct effects of concurrent abuse on women's psychological well-being; that is, women who experienced further abuse reported greater dissatisfaction with their overall psychological well-being (r's ranging from -.21 to -.36, $p<.05$).

Economic dependence moderated the relationship between women's level of economic resources and involvement with the assailant at 9 months post-shelter, 15 months post-shelter, and across these two time periods. The interaction effects suggest that it was not the level of economic resources that women had, but being economically dependent on someone else for financial stability that kept women trapped in abusive relationships. That is, if women were economically independent, their level of economic resources did nothing to predict involvement with assailant. If women were economically dependent, however, their level of economic resources did affect their odds of being involved with their assailant. Women who were dependent and had a high level of economic resources were more likely to be involved with their assailants than women who were dependent and had a low level of economic resources.

The Experience of Abuse and Women's Psychological Well-Being

Participants in this study were originally recruited because they had been physically battered and stayed at a domestic violence shelter. Although, on average, women did not report continuing to experience high levels of abuse, the percentages of women who were still experiencing abuse 3, 9, and 15 months post-shelter were

substantial and indicate that many women were still being battered over the fifteen month period after they left the shelter.

The results of this investigation affirm previous studies suggesting that the experience of abuse negatively impacts women's psychological well-being (e.g., Astin et al., 1993; Cascardi & O'Leary, 1992; Follingstad et al., 1991; Gelles & Harrop, 1989; Houskamp & Foy, 1991; Kemp et al., 1991; Mitchell & Hodson, 1983; Sato & Heiby, 1992). Women who were continually physically and emotionally abused by their partners or ex-partners were more likely to have lower psychological well-being at 3, 9, and 15 months post-shelter. Experience of abuse, however, did not predict how women felt about their psychological well-being six months in the future. The six month time lag in- between interviews may have been too long to detect a causal relationship.

Level of Economic Resources and Women's Psychological Well-Being

It was hypothesized, because poverty itself is a stressor and brings with it persistent undesirable conditions such as inadequate housing, inadequate nutrition, dangerous neighborhoods, poor medical care, and financial uncertainties (Belle, 1990; Belle et al, 1982; Dohrenwend, 1978), that women with lower economic resources would also have lower psychological well-being. However, the results of this study did not substantiate a relationship between level of economic resources and the psychological well-being of women with abusive partners.

The failure to find significant direct effects of economic resources on women's psychological well-being within or across time may be due to several factors. Even though there was a fairly normal distribution on economic resources, the distribution was

within a very restricted range. That is, most of the women were economically impoverished and had few economic resources so that the group differences were between women who were somewhat poor, women who were poor, and women who were really poor. This lack of variance is not surprising because women who use battered women's shelters tend to be without other economic and/or social resources (Okun, 1986; Sullivan & Rumptz, 1994; Sullivan et al., 1992), but it is a limitation of current study that may have influenced some of the findings.

Relatedly, this lack of variance in women's level of economic resources was fairly constant over time. Some research suggests that it may be the change, or relative drop, in the standard of living that women face when leaving an abusive partner that may be the critical dimension of economic resources that would affect their well-being (Greaves, Heapy, & Wylie, 1988). Follow-up analyses in the present study looking at change in level of economic resources across time as a predictor of psychological well-being did not produce different results than looking at absolute level of economic resources. Again, this most likely was true because there were no significant drops, on average, in women's standard of living so change in economic resources was not possible to assess. Because women in this sample had a low level of economic resources to begin with (most were living in poverty), there was less room for change in level of economic resources.

The failure to find significant direct effects of economic resources on women's psychological well-being may also be due to the measure used to assess economic resources. The Economic Resources scale was a new measure with previously untested reliability and validity. The Economic Resources scale used in this study was composed

of four items assessing absolute level of resources and included income, poverty level, employment, and access to a car. Absolute measures of level of economic resources, such as this, may be systematically misleading in assessing the vulnerability and ambivalence battered women feel about their situation (Greaves, Heapy, & Wylie, 1988). Perhaps more critical to assess would be a broader and more applicable range of economic resource variables (e.g., child care, health care, transportation), and the degree to which each of those economic resources were tied to the assailant.

Another reason for the lack of relationship between women's level of economic resources and psychological well-being within and across time may be that the direct effects of economic resources were overwhelmed by other interrelated factors such as economic dependence.

Economic Resources as a Mediator of the Relationship Between the Experience of Abuse and Women's Psychological Well-Being

The fact that there was little variance on economic factors within this sample may also account for why economic resources did not mediate the relationship between extent of abuse and psychological well-being. For the mediational relationship to hold true, it was hypothesized that not only would extent of abuse directly affect psychological well-being, but also that extent of abuse would affect level of economic resources, and level of economic resources would in turn affect women's psychological well-being. A discussion of each of the components necessary to indicate a mediational model are presented below to try to understand why the predicted relationships did not hold true.

The first relationship that was required to hold true in order to support the mediational model was that women who experienced more abuse would also report having fewer resources. The literature supported the hypothesis that abusive men directly and indirectly negatively affect women's economic standing. That is, abusive men may make women miss work or harass them at work to the point of being fired, thereby negatively affecting their employment status. Women who are battered may be physically injured or depressed, thus affecting their ability to go to work or to a social service agency (if they are on government assistance). Abusive men may run up household bills that are in the women's name as punishment or break household items and tear clothing in violent attacks which also negatively affects women's level of economic resources. Additionally, assailants may take the car and leave women stranded or purposefully sabotage women's attempts to return to school.

However, this study did not provide evidence that women who experienced more abuse would also report having fewer resources. In fact, at 3 months post-shelter the opposite was true. That is, women who experienced more abuse also reported having more economic resources. Conceptually, this finding can be explained in light of some of the findings from this research. In this study, women who had more economic resources were also more likely to be economically dependent (most likely on their assailant) for those resources and were more likely to be involved with the assailant, therefore being more likely to experience further abuse. Therefore, it is possible that because of the high correlations between economic resources and involvement with assailant, that

involvement with the assailant was really responsible for the finding that women who reported more abuse also reported having more economic resources.

The second relationship that needed to be significant in order to support the mediational model was that women who experienced more abuse would also report having lower psychological well-being. Examined concurrently, extent of abuse did predict women's level of psychological well-being such that women who reported higher levels of abuse at either 3, 9, or 15 months post-shelter also reported lower satisfaction with their psychological well-being at the same time period. As previously discussed, however, this relationship did not hold up across time periods.

The final component necessary to support economic resources as a mediator between extent of abuse and psychological well-being was that economic resources needed to have a direct, positive effect on psychological well-being. Again, as was discussed earlier, this relationship was not substantiated possibly due to the lack of variance and change over time in the level of economic resources in the sample, measurement problems, and the possible confound of economic dependence. Due to the fact that several components necessary to establish a mediational relationship were not found, it was clear that economic resources did not mediate the relationship between abuse and psychological well-being either concurrently or across time.

The Impact of Economic Resources and Economic Dependence on Womens' Decisions About Remaining Involved With Their Assailant

One of the most interesting findings in this study was that economic dependence moderated the relationship between economic resources and involvement with assailant 9

months post-shelter, 15 months post-shelter, and across these two time periods. That is, women's level of economic resources affected whether they were involved with their assailants only if they were economically dependent at the time. If women were not economically dependent, their level of economic resources did little to predict whether they were involved with their assailants. For example, if women brought in all of the money that they lived on (regardless of whether it was $200.00 a month or $2,000.00 a month), their level of economic resources did not influence whether they would be involved with their assailant. However, if women were economically dependent for all or part of their income, their level of economic resources did influence whether they would be involved with their assailant.

That is, women who were economically dependent and had a higher level of economic resources also had greater odds of being involved with their assailant. Women who were economically dependent and had lower levels of economic resources had lower odds of being involved with their assailant. In simple terms, dependent women with higher levels of economic resources would be more likely to be involved with their assailants because they would have more to lose if they left. Dependent women with lower levels of economic resources would have less to lose. Therefore, this study does not support that economic entrapment is most severe for women with fewer economic resources. The results are contrary to the widespread presumption that the more resources women have (such as employment, income, material goods and services that money can buy, and level of education) the more likely they are to leave their assailant.

This research lends evidence that the relationship between economic resources and involvement with the assailant is more complicated than that.

This study suggests (and replicated at different time periods) that it is not level of economic resources, but economic dependence, that keeps women trapped in abusive relationships. In a sample where almost three-quarters of the women were living in poverty, any extra money that women received from an outside source (such as the batterer or family member) was very important to preserve. When women were reliant on the assailant for some or all of the income, it is understandable why the decision to end the relationship would be a difficult one. The decision to endure continued abuse versus the potential for a reduction in already precious economic resources places women in double jeopardy; a situation in which society will blame them for making either of these difficult choices.

Other factors also enter into the decision making process. Economic dependence is often reinforced by considerations of the impact of the separation on children (Greaves, Heapy, & Wylie, 1988). Over three-quarters of this sample had children living with them. When women were economically dependent, the decision to leave and experience a significant negative change in standard of living becomes more difficult when it involves the disruption of the children, and is further exacerbated the more children women have.

Unfortunately, when economically dependent women make the choice to preserve their economic status and continue involvement with their assailant, it may lead to further abuse and, therefore, lower overall psychological well-being. This study found that

women who were involved with their assailants had higher economic resources, were more likely to be dependent on someone (most likely the assailant) financially, and also experienced higher levels of abuse at all three time periods (the only exception was that involvement with the assailant 15 months post-shelter did not significantly correlate with economic dependence 3 months post-shelter). Fifteen months after leaving the shelter, women were involved with their assailants also reported lower psychological well-being.

It is of importance to note the possible implications of the measure of economic resources in these analyses. The concern with adequate variance is especially relevant in these analyses where it could be hypothesized that the variance was different for economically dependent women and economically independent women. That is, there may be more variance in the level of economic resources among women who were economically dependent, whereas most of the women who were economically independent were on government assistance (a fixed, low level of economic resources). However, it may speak to the strength of the relationships in these analyses that significant relationships were still detected regardless of the restriction of range in the sample.

The findings of the present study provide support for an economic dependence analysis of woman battering, as suggested by feminist theory. The results lend empirical support to the feminist theory on woman battering which posits that the inequitable distribution of economic resources between men and women contributes to women's economic dependence on men, limiting women's options and often forcing them to remain in abusive relationships (Corcoran, Duncan, & Hill, 1984; Dobash & Dobash,

1992; Edwards, 1985; Hofeller, 1982; Okun, 1986). Illustrations of the sexist economic and occupational structure in the United States are plentiful. Research has shown that women who are employed in the same jobs as men get paid less, women have less access to higher education, women receive less economic return for their education than men, and women are vastly under represented at the top levels of power and authority. At the same time, women are more likely than men to be living in poverty (Wilson, 1987). All of these factors serve to control women's options, make women economically dependent on men, and trap them in abusive relationships.

Limitations of the Current Study

Although some of the methodological limitations of prior studies were remedied in this investigation, this study still has several shortcomings in common with past research. Because of the difficulties in recruiting women with abusive partners to participate in research, most of the research to date, including this study, has relied on samples of women staying in battered women's shelters or seeking emergency/crisis assistance at a community-based agency. This sampling is problematic because studies using these convenient samples are restrictive in terms of the overall conclusions one can draw about woman battering since women who use shelters or community-based agencies are not representative of all women who are battered (McDonald, 1989). Women who were abused by their partners and were able to leave their partners, at least temporarily, and seek shelter or emergency assistance may be different from women who are battered and do not seek those services. Therefore, the sample may be biased toward women who have experienced more severe violence, women who might have experienced negative

responses from other sources of support, women who share certain demographic or economic characteristics (e.g., poor, living in an urban area, etc.), and women who were able to leave and undergo the potentially positive outcomes of leaving and receiving help at a shelter. Generalizations of the findings of this study, therefore, are limited to women who have resided at shelters. More studies need to be conducted that use samples who were not recruited from a battered women's shelter. It is important to challenge ourselves to begin to examine the issues of intimate male violence in the general population even though participant recruitment may be more difficult.

The limitations of using a shelter sample tie in with another limitation of the current study; that is, the lack of variability in the economic resources of the sample. In order to more fully examine the impact of economic resources and dependence, research must be conducted with a sample represented by women with various levels of economic resources. A sample more representative of all women who have experienced intimate male violence would allow researchers to assess the degree to which women's level of economic resources were tied to their assailant as well as the change in level of economic resources when women leave their assailant.

Another limitation of the current study is that data are based on self-reports. Thus, response bias and other sources of shared method variance may have contributed to the correlations or lack of relationships among the variables. Multiple methods of measuring outcomes are needed. The correlational nature of the data are also of concern, despite using a longitudinal, multivariate design, because it still leaves the

results open to validity threats from competing hypotheses. It also raises the issue of the existence of potentially bidirectional relationships.

A further limitation of this study was that it measured economic dependence differently than other studies. The current study assessed economic dependence on "others" which usually included the original assailant but also may have included other people (e.g., a new partner, family member, friend). All of the other studies that assessed economic dependence focused specifically on economic dependence from the assailant. Therefore, the findings of this study regarding economic dependence are not directly comparable to the findings of past research.

Finally, the findings from this study may have been limited because the six month time periods between interviews may have been too long for causal mechanisms to be evident. For example, psychological well-being may be influenced by more immediate causal processes. There is a need to share this information so that we can begin to determine the effects and implications of various time lags used in documenting causal effects in related areas of research.

Implications for Future Work

The present study adds to what we know about the process involved for women after their exit from a shelter for women with abusive partners. More specifically, the present study contributes to our understanding of the impact of economic resources and economic dependence on battered women's psychological well-being and decisions about being involved with their assailant over the fifteen months after leaving a battered women's shelter. This research supports earlier work that highlights economic

dependence as a critical factor that limits women's choices and keeps women trapped in abusive relationships. The current study goes further to illustrate a general pattern of interconnected relationships that are rather disturbing. That is, women who have higher economic resources are more likely to be dependent and involved with their assailants and more likely to be experiencing abuse and have lower psychological well-being.

Intervention. The present study clearly indicates the need for abuse prevention and intervention programs. Many women in this sample continued to experience abuse 15 months after having stayed at a shelter for women with abusive partners and this abuse negatively impacted their psychological well-being. Interventions that bring the community together to form a comprehensive response to batterers and their victims are necessary in order to see a decrease in the level of intimate male violence against women.

Clearly, the present study also illustrates that economic dependence is a critical variable that indirectly negatively impacts the lives of women who have stayed at a domestic violence shelter. We need to design interventions at various levels that move women toward economic independence. Advocacy strategies and other interventions that move women and girls toward economic independency would be effective starts. Such programs should not be targeted only toward women who had already been battered but should be for all women and girls. Programs that allow women to get an education or stay in school are critical as are efforts to provide women with access to good, decent paying jobs with adequate child care and health care. At the same time, we need to do early intervention with girls in school (to keep girls in school and support the education of girls).

We also need to educate community-based service providers (including health care providers, police, social service workers, judges, prosecutors) about the impact of economic dependence so that they would better understand the complexities involved in women's lives. For example, sometimes leaving an abusive partner may mean choosing a much lower standard of living (or even poverty) for women and their children which would have important implications for community-based service providers (Sullivan et al., 1994). It is important for service providers to understand all of the factors that are relevant to women's decision making-process and overall well-being in order to most effectively serve women's needs.

At a broader level, it is also crucial to simultaneously focus on examining and influencing the economic systems that contribute to women's dependence on men. One of the most obvious examples of economic inequality between men and women is the disparity in pay rates for equal work. Currently, women earn less money than men for performing the same job responsibilities. As long as this is accepted, we are making a statement that women are worth less than men and are placing women in the vulnerable, and sometimes dangerous, situation of being economically dependent on men. Policy changes implementing equal pay for equal work are essential for remedying this inequality that leads to dependence.

Another example of how we can intervene at a broader level to influence the economic systems that contribute to women's dependence on men is through welfare reform. Current proposed changes in welfare reform may have devastating implications for battered women's lives if they go through. Many women need to apply for

government assistance when fleeing an abusive partner. We do not know exactly what portion of the welfare rolls is made up of survivors of domestic violence but knowledgeable estimates suggest that it may be half to three-quarters of the female welfare recipients that are also survivors of woman abuse. This suggests that the cycle of dependency that needs to be stopped is not so much one of the dependence on government assistance as one of dependence on abusive men.

Reforms that make welfare harder to get and worth less when you get it will only serve to increase women's dependence on men and trap them in abusive relationships. Welfare benefits have been shrinking for the past two decades, to a level (a little less than $400 a month per family, on average) that forces many recipients into financial reliance on any man who can help pay for the groceries or clothes for the children. Residency requirements effectively bar women from fleeing their abusers from one state to another and work requirements will discourage women who cannot afford child care from escaping her assailant.

Crafting welfare policy as if woman battering doesn't exist will prevent many women from leaving abusive relationships. The present study demonstrates that economic dependence is a critical factor in keeping women trapped and we must work against any policies that would increase women's dependence rather than decrease women's dependence.

Research. Empirical and theoretical evidence point to the importance of examining the interconnection between level of economic resources and economic dependence and physical and emotional battering of women in future research. The

design of this research study and the complex nature of the relationships suggest many directions for intervention and future research. Specifically, future research should build from the significant relationships from this study to suggest a model of the factors that trap women in abusive relationships and negatively impact their psychological well-being.

Future research should include further analysis of the relationship between economic resources and abuse by collecting information from women who are more representative (represent various economic levels) on the impact of economic resources, dependence, and abuse on women's lives. Need to do research with women of higher economic resources because this study suggested that women who are economically dependent and have a higher level of economic resources have the greatest odds of staying with their assailants and experiencing further abuse. It would also be interesting to understand the impact of economic dependence on all women's decisions about staying in or leaving a relationship regardless of whether they had been abused.

A great deal of work must also be done to refine measures to assess the constructs of economic resources and economic dependence. The economic resources scale used in this study was new and had previously untested reliability and validity. The lack of findings with regard to economic resources may be due to the items used to assess the construct. Historically, women's level of economic resources has been linked with men's level of economic resources. Future studies should consider assessing a broader range of items that may be more applicable to women's lives and critical to determining women's

level of economic resources. For example, child care, transportation, and health care may be relevant dimensions for women's level of economic resources.

In addition to assessing a broader range of items that may be more applicable to women's lives, it would be important to assess to what degree access to these resources were tied to the assailant. This information in turn could be used to develop a related economic indicator assessing relative change in economic resources. Future research should also assess whether it is economic dependence on anyone or economic dependence on the assailant that is important.

More research must be done to refine measures to assess the construct of abuse. It may be important, in future research, to focus on the nature of the relationship of the abuser. In the present study, abuse by anyone was assessed, either an original assailant or a new relationship. Most past research has only looked at physical abuse by the original assailant; however, abuse in a new relationship may be important to assess as well when measuring outcomes like psychological well-being.

Future research may also benefit from examining psychological abuse from the original assailant or a new relationship. In the present study, only women who were currently in a relationship were asked about the frequency of psychological abuse they experienced from whoever they were currently involved with. Women anecdotally reported, however, that they continued to experience psychological abuse from their original assailants even if they were no longer involved with them. Again, when assessing outcomes such as psychological well-being it may be important to capture any emotional abuse from anyone that may impact women's psychological well-being.

It is also critical that the field of woman battering engage in dialogue about what defines woman abuse. Previous work suggests that our definitions need to be more comprehensive than just physical battering and that the effects of psychological and sexual abuse are just as devastating to women. It is important that future research is specific about the definition of abuse that is operationalized and that it be as comprehensive as possible.

It would also be important for future research to investigate other ways to assess the reliability of scales that tap "life events" sorts of constructs such as abuse since internal consistency is inconsistent with the notion of independently occurring life events (e.g., perhaps comprehensiveness and relevance of life event inventories are more important than internal consistency) (Cleary, 1981). The problem with finding a satisfactory, comprehensive list of items is that scoring high on one does not necessarily mean that an individual would score high on another even though the items seem to measure the same construct (i.e., a woman who is slapped is not necessarily likely to also have been raped or kicked). Clearly more work needs to be done to determine how to best evaluate the reliability of woman abuse measures.

Theory. Finally, the present study has implications for the application of feminist theory to economic dependence and woman battering. By further application of feminist theory, a better understanding of abusive relationships will be attained. This study provides empirical evidence for further examining the impact of multiple oppressions on women's lives since all are rooted in the patriarchal social structure. It provides evidence that intimate male violence against women should be categorized with other forms of

violence under capitalism in the United States such as classism and racism. For example, this study suggests the importance of research that examines the role of marriage in keeping women economically dependent on their intimate male partners and of research that investigates potential race differences in level of economic dependence and level of economic resources. Feminist theory also provides support for future cross-cultural research that investigates the impact of economic dependence on women with abusive partners.

APPENDICES

APPENDIX A

Items That Compose the Economic Resources Scale

ITEMS THAT COMPOSE THE ECONOMIC RESOURCES SCALE

1. Would you mind telling me how much money you live on each month, including ADC, food stamps, and rent money if you receive government aid? (Monthly income is multiplied by 12 to calculate annual income)

   (WRITE EXACT AMOUNT)....._____

2. Are you employed right now?

   YES.....1
   NO.....2
   (not applicable).....8

3. Do you have regular access to a car?

   YES.....1
   NO.....2
   (not applicable).....8

4. Is participant living above or below the federal poverty line? This is calculated by assessing total annual income and the number of people in the family including the woman herself, the assailant (if the income supports him), and any children living with the family (U.S. Census, 1990). (*We did not ask participants this question; instead we calculated it ourselves)

   ABOVE FEDERAL POVERTY LINE.....1
   BELOW FEDERAL POVERTY LINE.....2

*All of these items were standardized (z-scored).

APPENDIX B

Revised Conflict-Tactics Scale

REVISED CONFLICT-TACTICS SCALE

Now I have a list of different types of violence that women have experienced from their partners and ex-partners. I wonder if you could tell me how many times in the last 6 months _____ has done any of the following things to you: (USE PINK CARD #3)
1 = NEVER
2 = ONCE A MONTH OR LESS
3 = 2 OR 3 TIMES A MONTH
4 = ONCE OR TWICE A WEEK
5 = 3 OR 4 TIMES A WEEK
6 = MORE THAN 4 TIMES A WEEK
8 = (not applicable); 9 = (refused to answer)

How often did he break your glasses or tear your clothing....._____
Pushed or shoved you....._____
Grabbed you....._____
Slapped you with an open hand....._____
Hit you with a fist....._____
Kicked you....._____
Threw something at you....._____
Aside from throwing, how often did he hit you with an object....._____
Tried to hit you with an object....._____
Drove recklessly, so that you felt scared or endangered....._____
Choked you....._____
Burned you....._____
Tied you up or physically restrained you in some way....._____
Beat you up....._____
Forced sexual activity....._____
Threatened you with a gun or knife....._____
Used a gun or knife on you....._____

APPENDIX C

Injuries Measure

INJURIES MEASURE

Now I am going to go through a list of injuries and ask you yes or no if you sustained these injuries in the last six months. Did you sustain:

	YES	NO	N/A
Cuts, scrapes, bruises	1	2	8
Soreness without bruises	1	2	8
Burns, including rug burns	1	2	8
Loose or broken teeth	1	2	8
Broken bones or fractures	1	2	8
Internal injuries	1	2	8
Strains or sprains	1	2	8
Dislocated joints	1	2	8
Pregnancy complications or miscarriage (NO PREGNANCY = 8)	1	2	8
Knife or gunshot wound	1	2	8
Permanent scarring	1	2	8
Any other injuries I haven't mentioned (Specify)	1	2	8

APPENDIX D

Threats Measure

THREATS MEASURE

How many times in the last 6 months has _____ threatened you in any way? By that I mean said or did things that made you feel scared or in danger, whether in person, over the phone, through the mail, or through other people. (SHOW PINK CARD #3)

1 = NEVER
2 = ONCE A MONTH OR LESS
3 = 2 OR 3 TIMES A MONTH
4 = ONCE OR TWICE A WEEK
5 = THREE OR FOUR TIMES A WEEK
6 = MORE THAN FOUR TIMES A WEEK
8 = (not applicable)
9 = refused to answer

APPENDIX E

Index of Psychological Abuse (IPA)

INDEX OF PSYCHOLOGICAL ABUSE (IPA)

Now I'd like to go through a list of some things some men do to annoy or hurt their partners and ex-partners. These are more the emotional things. Using this card (SHOW YELLOW CARD #2) could you tell me, to the best of your recollection, how many times in the last 6 months _____ has done any of these things to annoy or hurt you?

1 = NEVER
2 = RARELY
3 = SOMETIMES
4 = OFTEN
8 = not applicable (i.e., no children, no pets)
9 = refused to answer

How often has he refused to talk to you....._____
How often has he accused you of having or wanting other sexual relationships....._____
Told you about other sexual relationships he wanted or was having in order to hurt you....._____
Refused to do things with you that you wanted to do....._____
Forbid you to go out without him....._____
Tried to control your money....._____
Tried to control your activities....._____
Withheld approval, appreciation, or affection as punishment....._____
Lied to you or deliberately misled you....._____
Made contradictory demands or requests of you....._____
Called you names....._____
Tried to humiliate you....._____
Ignored or made light of your anger....._____
Ignored or made light of your other feelings....._____
Ridiculed or criticized you in public....._____
Ridiculed or insulted your most valued beliefs....._____
Ridiculed or insulted your religion, race, heritage, or class....._____
Ridiculed or insulted women as a group....._____
Criticized your strengths, or those parts of yourself which you are or once were proud of....._____
Criticized your intelligence....._____
Criticized your physical appearance and/or sexual attractiveness....._____
Criticized your family or friends to you....._____
Harassed your family or friends in some way....._____
Discouraged your contact with family or friends....._____

Threatened to hurt your family or friends....._____
Broken or destroyed something important to you....._____
Abused or threatened to abuse pets to hurt you (NO PETS =8)....._____
Punished or deprived the children when he was angry at you (NO KIDS = 8)....._____
Threatened to take the children away from you (NO KIDS = 8)....._____
Left you somewhere with no way to get home....._____
Threatened to end the relationship if you didn't do what he wanted....._____
Tried to force you to leave your home....._____
Threatened to commit suicide when he was angry at you....._____

Threatened to hurt your family or friends....._____
Broken or destroyed something important to you....._____
Abused or threatened to abuse pets to hurt you (NO PETS =8)....._____
Punished or deprived the children when he was angry at you (NO KIDS = 8)....._____
Threatened to take the children away from you (NO KIDS = 8)....._____
Left you somewhere with no way to get home....._____
Threatened to end the relationship if you didn't do what he wanted....._____
Tried to force you to leave your home....._____
Threatened to commit suicide when he was angry at you....._____

APPENDIX F

Quality of Life Measure

QUALITY OF LIFE MEASURE

In this section of the interview, I want to find out how you feel about various parts of your life. Please tell me the feelings you have now -- taking into account what has happened in the last 6 months, or since about _____, and what you expect in the near future. (HAND PARTICIPANT GREEN RESPONSE CARD #1)

On this card are the answers that I'd like you to give me. I'll be asking you about a list of things. After I ask you each question, please tell me what phrase on this card gives the best summary of how you feel: either "EXTREMELY PLEASED," "PLEASED," "MOSTLY SATISFIED," "EQUALLY DISSATISFIED AND SATISFIED," "MOSTLY DISSATISFIED," "UNHAPPY," OR "TERRIBLE," depending on how you feel about that part of your life.

If you feel that a question doesn't apply to you, just tell me.

1 = EXTREMELY PLEASED
2 = PLEASED
3 = MOSTLY SATISFIED
4 = MIXED (MOSTLY SATISFIED AND DISSATISFIED)
5 = MOSTLY DISSATISFIED
6 = UNHAPPY
7 = TERRIBLE
8 = NOT APPLICABLE
9 = NO ANSWER (EXPLAIN WHY!)

1. First, a very general question. How do you feel about your life overall?..._____
2. In general, how do you feel about yourself?..._____
3. How do you feel about your personal safety?..._____
4. How do you feel about the amount of fun and enjoyment you have?..._____
5. How do you feel about the responsibilities you have for members of your family?..._____
6. How do you feel about what you are accomplishing in your life?..._____
7. How do you feel about your independence or freedom -- that is, how free you feel to live the kind of life you want?..._____
8. How do you feel about your emotional and psychological well-being?..._____
9. How do you feel about the way you spend your spare time?..._____

APPENDIX G

Revised CES-D (Depression Measure)

REVISED CES-D (DEPRESSION MEASURE)

Below is a list of the ways you might have felt or behaved in the last week. We would like to know how often you have felt any of these ways in the past week. Please circle the number that best describes how often you felt this way.

1 = RARELY OR NEVER (LESS THAN ONE DAY)
2 = SOME OR A LITTLE (1-2 DAYS)
3 = OCCASIONALLY (3-4 DAYS)
4 = MOST OR ALL THE TIME (5-7 DAYS)

During the past week:

1. I was bothered by things that usually don't bother me.....1.....2.....3.....4
2. I did not feel like eating; my appetite was poor.....1.....2.....3.....4
3. I felt that I could not shake off the blues even with help from my family or friends.....1.....2.....3.....4
4. I had trouble keeping my mind on what I was doing.....1.....2.....3.....4
5. I felt depressed.....1.....2.....3.....4
6. I felt that everything I did was an effort.....1.....2.....3.....4
7. I thought my life had been a failure.....1.....2.....3.....4
8. I felt fearful.....1.....2.....3.....4
9. My sleep was restless.....1.....2.....3.....4
10. I talked less than usual.....1.....2.....3.....4
11. I felt lonely.....1.....2.....3.....4
12. People were unfriendly.....1.....2.....3.....4
13. I had crying spells.....1.....2.....3.....4
14. I felt sad.....1.....2.....3.....4
15. I felt that people dislike me.....1.....2.....3.....4
16. I could not "get going".....1.....2.....3.....4

APPENDIX H

Economic Dependence Item

ECONOMIC DEPENDENCE ITEM

How much of this income do you directly bring into the home, rather than another adult? This includes ADC and any other government aid you may get. Would you say:

NONE OF THE INCOME.....1
½ OF THE INCOME OR LESS.....2
OVER ½ BUT LESS THAN ALL OF THE INCOME.....3
ALL OF THE INCOME.....4

APPENDIX I

Involvement With Assailant Item

INVOLVEMENT WITH ASSAILANT ITEM

Are you currently involved with _____ (initial assailant)?

YES.....1
NO.....2
(Assailant deceased).....0

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