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THE DEVELOPMENT OF THE SCALE OF ECONOMIC ABUSE

By

Adrienne E. Adams

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ABSTRACT

THE DEVELOPMENT OF THE SCALE OF ECONOMIC ABUSE

By

Adrienne E. Adams

Economic abuse is part of the pattern of behaviors used by abusive men to maintain power and control over their partners. The economic abuse women experience could negatively affect their economic, physical and psychological health and safety. As there currently exists no measure of economic abuse specifically, the purpose of the present study was to develop such an instrument. To that end, face-to-face interviews were conducted with 103 female survivors of intimate partner abuse. The initial version of the Scale of Economic Abuse (SEA) contained 120 items, generated based on the expert knowledge and experience of domestic abuse researchers, advocates and survivors and from a review of the literature. Participants responded to the SEA and measures of physical and psychological abuse, and economic health in order to examine the validity of the new scale. Factor analysis was used to determine the factor structure of the SEA, and correlation and regression analyses were used to assess reliability and validity. The findings of this study provide initial evidence of the reliability and validity of the SEA as an instrument to measure economic abuse as a distinct form of abuse. The SEA is an important first step toward a better understanding of the ways in which economic abuse impacts women's lives. The knowledge gained from such research can be used to design interventions that meet the unique needs of women harmed by an economically abusive partner.

In loving memory of my greatest supporter, my mom

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logistics of interviewing 103 women at a multitude of locations, at various times of the day and week, across a significant geographic area. I really could not have done it without them; well, I could have, but it would have been much more painful and probably have taken another 2 to 3 years.

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Introduction

Intimate partner abuse is a pervasive social problem that has reached epidemic proportions, affecting the lives of millions of people in the United States each year. It is estimated that 1.5 million women are physically assaulted by an intimate partner annually (Tjaden & Thoennes, 2000), and approximately 30% of women are reportedly victimized by an intimate partner at some point in their adult lives (Browne, 1993). A great deal of this abuse results in serious injury or even death. In fact, one out of three female homicide victims are killed by their intimate partners (Fox, 1998; Rennison, 2003).

To date, a great deal of research in the area of male violence against women has focused on the nature, severity and consequences of physical forms of abuse. Studies show that abusive men employ a vast array of physically abusive tactics, ranging from minor incidents involving pushing and shoving to severe forms of violence such as punching and strangulation (Sutherland, Sullivan, & Bybee, 2001). Women who endure physical assaults of this nature are often left with injuries such as black eyes, cuts, bruises, broken bones, concussions, burns, bite marks, partial loss of hearing or vision, chronic neck and back pain, and frequent headaches (Browne, 1993; Sutherland, Bybee, & Sullivan, 2002; Tjaden & Thoennes, 2000). Furthermore, the physical assaults that result in these types of injuries are not isolated incidents of abuse, but rather the violence is recurrent and escalates in severity over the course of the relationship (Anderson et al., 2003; Rhodes & McKenzie, 1998; Tjaden & Thoennes, 2000).

In addition to the study of physical violence, in more recent years there has been a growing awareness and interest in examining the prevalence and harmful effects of psychological maltreatment of women in abusive relationships. Women who are psychologically victimized by an intimate partner are subjected to acts such as verbal harassment, intense criticism, putdowns and name-calling, public humiliation, ridicule, isolation from friends and family, sexual coercion, threats of abuse and extreme possessiveness and jealousy (Browne, 1993; Follingstad, Rutledge, Berg, Hause, & Polek, 1990; Walker, 1984). Researchers have found that the effects of psychological abuse can range from lowered self-esteem to severe depression to suicide ideation or attempts (Aguilar & Nightingale, 1994; Orava, McLeod, & Sharpe, 1996; Sackett & Saunders, 1999; Vitanza, Vogel, & Marshall, 1995).

Through research and direct practice work with abused women and abusive men, it has become evident that the abuse most women endure is not limited to physical and/or psychological forms of abuse. Instead, acts of physical violence or psychological maltreatment are part of a broad system of abusive behavior used by abusive men to exert power and to maintain control over their partners (Adams & McCormick, 1982; Bancroft, 2002; Ptacek, 1998; Schechter, 1982; Yllo, 1984). The pattern of coercive control employed by abusive men can include physical, sexual, psychological and economic forms of abuse (Brewster, 2003; Pence & Paymar, 1993; Ptacek, 1997).

While much effort has gone into the study of physical and psychological abuse, one form of abuse that has been routinely reported by women with

abusive partners but has yet to receive much attention from the scientific community is economic abuse. Economic abuse involves behaviors that control a woman's ability to acquire, use or maintain economic resources, thus threatening her economic security and potential for self-sufficiency. For example, some women report that they are not allowed to earn money through employment, or that their partner interferes with their ability to hold a job (Brooks & Buckner, 1996; Browne, Salomon, Bassuk, & Raphael, 1999; Brush & Raphael, 2000; Lloyd, 1997; Lloyd & Taluc, 1999; Raphael, 1996; Shepard & Pence, 1988). Some women who are employed are expected to turn their paychecks over to their abusive partner, and others report that they receive an allowance rather than having the freedom to spend money how they see fit (Hofeller, 1982; Pence & Paymar, 1993; Shepard & Campbell, 1992). Some women with economically abusive partners are not permitted access to cash or a checking account, and some have stated that they are excluded from household financial decisions that directly affect their lives (Follingstad et al., 1990; Tolman, 1989). The use of economically abusive tactics not only limit a woman's economic freedom, but also hinder her ability to maintain or achieve economic independence (Shepard & Campbell, 1992).

This unfair and unwarranted economic control can have practical implications on a woman's life. For example, literature on women's decision-making processes around leaving an abusive partner shows that many women perceive few viable alternatives to their abusive relationship and remain with their partner for a longer period of time than they would given the economic resources

to leave (Chalmers & Smith, 1984). Similarly, researchers have found that women with limited individual economic resources are more likely to return to an abusive relationship after taking steps toward leaving (Aguirre, 1985).

Despite considerable indications that abusive men use economically abusive tactics in their systematic attempts to control their partners, a measurement instrument has not been developed that allows for empirical examination of economic abuse as a distinct form of abuse. To date, researchers have examined some specific forms of economic abuse through two avenues. First, psychological abuse measures, such as the widely used Psychological Maltreatment of Women Inventory, often contain one or two items that capture economically abusive behavior. In addition to being restricted in number, these items are not intended to measure economic abuse per se, but instead are categorized as a form of dominance/isolation. Second, an instrument was recently developed to measure a specific form of economic abuse: interference with employment and education (Riger, Ahrens, & Blickenstaff, 2001). The Work/School Abuse Scale contains 24 items that capture specific abusive acts, both physical and non-physical, that prevent or hinder women's employment and/or education.

The current approach to the measure of economic abuse needs to be broadened. Abusive men may employ a broad spectrum of economically abusive tactics in their attempts to maintain dominance and control over their partner. These tactics have a detrimental impact on women's economic stability. For this reason, a measure of economic abuse that captures the range of economically

abusive tactics is needed. Without a measurement instrument, our understanding of the nature, extent and effects of economic abuse will continue to be limited. The purpose of the present study was to develop a comprehensive measure that captures the economically abusive behaviors used by men who batter. A measure of economic abuse will enable researchers to examine the nature and extent of this form of abuse, the impact it has on women's economic, physical and mental health and also examine the implications it has on women's ability to escape an abusive partner. With a richer understanding of economic abuse, we can begin to develop interventions and tailor existing programming to the unique experiences and needs of women whose financial health has been compromised by an abusive partner.

Prevalence of the Problem

In our society, intimate partner abuse is occurring at an alarming rate. According to estimates from the National Violence Against Women Survey, 4.8 million intimate partner rapes and physical assaults are perpetrated against women in the United States annually (Tjaden & Thoennes, 2000). In fact, an intimate partner is responsible for one out of every five non-fatal violent crimes committed against women, and 30% of all female murder victims are killed by an intimate partner (Fox, 1998; Greenfeld & Rand, 1998; Rennison, 2003).

Intimate partner abuse does not occur in remote segments of society, but rather against women of all ages, racial/ethnic categories and social classes (Coker, Smith, Bethea, King, & McKeown, 2000; Greenfeld & Rand, 1998; Tjaden & Thoennes, 2000). In an analysis of prevalence studies, Browne (1993)

reported that between 21% to 34% of all women are physically assaulted by an intimate partner at some point during their lifetime. For the majority of women victimized by an abusive partner, the physical attacks will occur repeatedly and take place over the course of many years (Browne, 1993; Straus & Gelles, 1990; Tjaden & Thoennes, 2000).

Nature, Severity and Consequences of Physical Forms of Abuse

There is no limit to the range of physically abusive tactics employed by men who batter. Women report being pushed, shoved, slapped, strangled, smothered, punched, kicked, bit, dragged, thrown, knocked unconscious, whipped, raped, hit with objects, threatened with a weapon, and/or shot or stabbed by their physically abusive partners (Dobash & Dobash, 1979; Gondolf & Fisher, 1988; Hofeller, 1982; Sutherland et al., 2002; Sutherland et al., 2001; Walker, 1979, 1984). Physical attacks of this nature often leave women with immediate visible injuries such as cuts, bruises, torn hair, black eyes, bloody lips or broken bones and also long term or permanent injuries such as constant fatigue, muscle cramps, stomach pain, partial loss of hearing or vision, migraine headaches, chronic back pain, broken teeth, chest pains, pelvic pain and pregnancy complications or miscarriage (Browne, 1993; Dobash & Dobash, 1979; Kerouac, Taggart, Lescop, & Fortin, 1986; Okun, 1986; Sutherland et al., 2002; Sutherland et al., 2001). The injuries women sustain often require medical attention. According to a report by the U.S. Department of Justice, 20% of all emergency room visits for trauma are due to intimate partner abuse (Rand,

1997). This same report indicated that 37% of all female patients treated in the emergency room for a violent injury were injured by an intimate partner.

In addition to the physical injuries women sustain as a result of physical assaults, ongoing experiences of physical abuse have deleterious effects on women's mental health. Consistently, researchers have found high levels of depression, post-traumatic stress symptoms, suicidality and substance abuse or dependence among women victimized by a physically abusive partner (Cascardi, O'Leary, Lawrence, & Schlee, 1995; Golding, 1999; Khan, Welch, & Zillmer, 1993; McCauley et al., 1995; Vitanza et al., 1995).

Growing Awareness of Psychological Maltreatment

Over the course of the last decade, practitioners and researchers have been paying increasing attention to the role of psychological maltreatment in abusive relationships. One reason for this growing interest is the rate at which physical abuse and psychological abuse co-occur. Studies have shown that physically abusive relationships always involve psychological abuse. For example, Follingstad, Rutledge, Berg, Hause & Polek (1990) interviewed 234 women with a history of physical abuse and found that 99% of the women had also experienced some form of psychological abuse. Similarly, Stets (1990) found that 99% of women who reported physical abuse in their marriage were also verbally abused by their spouse. In addition to finding that physical and psychological abuse covary, Murphy & O'Leary's (1989) conducted a study of abuse in early marriage and found that a husband's use of psychological abuse was predictive of physical abuse one year later.

Psychological abuse has been broadly defined as any behavior that is harmful or intended to be harmful to the well-being of one's intimate partner (Tolman, 1992). More specifically, psychological abusive tactics include threatening behaviors (e.g., threats to physically harm or kill or threats to take away children), actions intended to degrade or damage one's self esteem (e.g., name-calling, harsh criticism or ridicule), the withholding of emotional support (e.g., emotional abandonment as a form of punishment) and strategies intended to restrict one's personal freedom (e.g., isolation from friends and family or disabling the car or stalking) (O'Leary, 1999).

Evidence suggests that psychological forms of abuse may be equally as, if not more, harmful than physical abuse. According to Follingstad and colleagues, 72% of the abused women they interviewed attested that psychological abuse had a more severe impact on them than the physical abuse. In another study, Orava, McLoed & Sharpe (1996) compared abused women and non-abused women in order to examine the effects of physical and psychological abuse on women's perceptions of control, depressive symptomatology and self-esteem. They found that abused women felt less personal power, were significantly more depressed and had lower self-esteem than the non-abused women. However, after controlling for the frequency of verbal abuse, most of the between-group differences were lost, suggesting that verbal abuse accounted for the differences between the two groups of women. Other studies examining the effects of psychological maltreatment have linked this form of abuse to an extensive range of behavioral and health outcomes such as poor physical health, substance use,

chronic disease, chronic mental illness, post-traumatic stress disorder, suicide ideation and attempts, depression, and low self-esteem (Aguilar & Nightingale, 1994; Arias & Pape, 1999; Cascardi et al., 1995; Coker et al., 2000; Katz, Arias, & Beach, 2000; Khan et al., 1993; Marshall, 1996; Sackett & Saunders, 1999; Street & Arias, 2001; Vitanza et al., 1995).

The System of Power and Control

Feminist scholars recognize that intimate partner abuse occurs in the context of a patriarchal society that fosters an ideology of male domination over women. In their classic study, entitled *Violence against Wives*, Dobash & Dobash (1979) noted, "all men see themselves as controllers of women, and because they are socialized into the use of violence, they are potential aggressors against their wives." (p.22) According to feminist researchers, victim advocates and practitioners who treat abusive men, abusive behaviors are rooted in an abuser's learned attitudes of entitlement, superiority and ownership of women, combined with the belief in the right to use physical violence in order to control their partner and maintain their dominant status (Adams & McCormick, 1982; Bancroft, 2002; Dobash & Dobash, 1979; Ptacek, 1998; Schechter, 1982).

While abusive men use physical violence as a means of control, empirical and anecdotal evidence indicates that physical abuse is simply one of the control tactics intentionally employed as a means of asserting power and maintaining control over their partners (Brewster, 2003; Dukes et al., 2002; Ptacek, 1997; Schechter & Gary, 1988). Studies show that abusers achieve power and control through a vast array of physical, sexual, psychological and economic tactics. For

instance, through focus group interviews with 200 women with abusive partners, (Pence & Paymar, 1986) Pence & Paymar (1986) developed the Power and Control Wheel, which is a framework for understanding the power and control dynamics of abusive relationships. According to their conceptualization, physical abuse is part of a larger system of power and control that includes intentional acts of isolation, emotional abuse, economic abuse, sexual abuse, intimidation, threats, using male privilege and manipulation involving the children. In other words, they found that abuse is not limited to isolated acts of physical violence or verbal degradation, but rather is a pattern of coercive control involving a variety of abusive acts that work as a system to perpetuate the woman's fear and the abuser's dominant status in the relationship.

Ptacek (1997) also documented the range of control tactics employed by abusers by randomly sampling 100 case files containing women's requests for restraining orders. The handwritten affidavits detailed in the women's own words the extent and nature of the abuse they experienced. Consistent with the model proposed by Pence & Paymar, the women recounted acts of physical and sexual violence, psychological abuse in the form of threats and intimidation and economic or resource abuse. Similarly, interviews conducted by Brewster (2003) with a community sample of 187 women who had been stalked by a former intimate partner also substantiated that abusers control their partners through a variety of means. Once again, the interviews revealed that their male partners had used physical, sexual, social, psychological and economic tactics to exercise

power and control over their partners both during their relationship and after the relationship ended.

Lack of Attention on Economic Abuse

As these studies demonstrate, abusive men make use of a wide range of abusive tactics as a means of domination and control. More specifically, the abuse women experience has been shown to include a continuum of physical, sexual, psychological and economic control tactics. While great strides have been made through the study of physical and psychological forms of abuse, little is known about the nature and consequences of economic abuse.

To date, economic abuse has not been systematically studied as a distinct form of abuse with its own consequences. Therefore, what is known about economic abuse is limited, typically unintended and comes from a variety of sources. For instance, a number of researchers have included a limited number of items that reflect economically abusive behaviors in their conceptualization of psychological or emotional abuse (Aguilar & Nightingale, 1994; Coker et al., 2000; Follingstad et al., 1990; Hass, Dutton, & Orloff, 2000; Hudson & McIntosh, 1981; Rodenburg & Fantuzzo, 1993; Shepard & Campbell, 1992; Sullivan, Tan, Basta, Rumpitz, & Davidson, 1992; Tolman, 1989). Examples of economic abuse can also be found in qualitative studies documenting the experiences and needs of women with abusive partners (Anderson et al., 2003; Brewster, 2003; Dobash & Dobash, 1979; Hofeller, 1982; Martin, 1976; Pagelow, 1981; Pence & Paymar, 1993; Ptacek, 1997; VonDeLinde, 2002; Walker, 1979) and in studies investigating the impact of abuse on women's ability to maintain employment

(Allard, Colten, Lalbelda, & Cosenza, 1997; Brandwein, 1999; Brush & Raphael, 2000; Curcio, 1997; Lloyd, 1997; Lloyd & Taluc, 1999; Moe & Bell, 2004; Raphael & Tolman, 1997; Riger et al., 2001; Riger, Ahrens, Blickenstaff, & Camacho, 1999; Sable, Libbus, & Huneke Diane, 1999; Shepard & Pence, 1988; Tolman & Rosen, 2001). Finally, scholars, victim advocates and practitioners working with abusive men have provided both theoretical and anecdotal evidence of economic forms of abuse (Bancroft, 2002; Davies & Lyon, 1998; Raphael, 1996; Schechter & Gary, 1988). Taken together, the information derived from these sources presents a picture of what we know about economic abuse to date.

What We Know about Economic Abuse

There is evidence throughout the literature indicating that many abusive men maintain power in their relationship by exercising economic control over their partners. In fact, economically abusive behavior is evident in some of the earliest accounts of women's experiences with abusive men. Walker (1979) recounted the experiences of women whose partners used economic deprivation as a form of control. Some women were not allowed to hold a job outside of the home, which prevented them from acquiring financial resources of their own. Some women interviewed by Walker said they were allotted a specific amount of spending money and others were reportedly denied access to money even for the basic necessities of life, such as food, rent or medicine. Similarly, Dobash & Dobash (1979) found that some women with abusive husbands were allowed limited economic freedom. In their study, women reported that allocation of

money was strictly controlled and spending was closely monitored. In many cases, the husband claimed sole responsibility for the distribution of money within the household, determined how money would be spent and in doing so often left the woman unable to pay household expenses. In another early study, Pagelow (1981) described the experience of one woman whose husband denied her money even for food for herself and their children and another woman whose husband routinely escorted her to the grocery store, monitored her shopping and then personally paid the cashier for the purchases. Other early work documenting women's experiences also describe abusive husbands who control all of the finances, closely monitor their partner's spending and/or provide their partner with little or no access to money (Hofeller, 1982; Langley & Levy, 1977; Martin, 1976; Roy, 1982). For example, having interviewed 50 women with a history of abuse, Hofeller (1982) reported that some abusive husbands demanded that their wives paychecks be handed over to them, others decided how all of the money would be allocated, and some husbands bought things for themselves while their wives and children went without necessities.

Accounts of economic abuse are not unique to these early studies. Researchers, victim advocates and practitioners who work with abusive men have continued to document the use of economic control tactics in abusive relationships. Both empirical and anecdotal evidence suggest that abusers threaten their partner's economic security and self-sufficiency by exerting control in three areas: 1) resource acquisition, 2) resource utilization and 3) resource maintenance.

Resource Acquisition

It can be argued that one's level of freedom and independence is in direct proportion to their level of economic resources. Thus, it is in the interest of an abusive man, whose goal it is to maintain power over his partner, to prevent her from acquiring economic resources of her own. There are several means through which abusive men thwart their partners' efforts to acquire resources.

Specifically, studies show that abusive men interfere with their partners' ability to obtain employment, attend school or job training programs and collect income or assets of their own.

One significant way abusive men interfere with a woman's ability to acquire resources is by preventing her from both obtaining and maintaining employment. Research indicates that abusive men often forbid, discourage or actively prevent their partners from working outside the home (Aguilar & Nightingale, 1994; Brewster, 2003; Curcio, 1997; Hudson & McIntosh, 1981; Riger et al., 1999; Sable et al., 1999; Shepard & Pence, 1988; Tolman, 1989; VonDeLinde, 2002; Walker, 1979). For example, in a study of 42 women attending a domestic violence support group, Shepard & Pence (1988) reported that 33% of the women were prohibited from working and another 59% had been discouraged from holding a job. Similarly, Riger, Ahrens, Blinkenstaff & Camacho (1999) interviewed 57 women from four shelter programs in Chicago and found that 46% of the women had been forbidden from getting a job. There is also evidence indicating that abusers actively interfere with their partners' ability to find paid employment. For example, Raphael (1996) described how abusive men

sabotage their partners efforts to find jobs by inflicting visible injuries, turning off the alarm clock, or refusing to provide childcare in order to prevent them from attending a job fair or job interviews.

In recent years, a growing amount of attention has also been given to the effects of abuse on women's ability to maintain employment. Studies show that abusive men use a variety of tactics to interfere with their partner's ability to sustain employment. For example, women interviewed by Riger, Ahrens & Blickenstaff (2001) reported that their partners had interfered with their efforts to go to work by sabotaging their cars, threatening or physically restraining them, failing to show up to care for their children, stealing their car keys or money, or refusing to give them a ride to work. These tactics as well as others such as withholding medication, preventing sleep, cutting her hair, hiding her cloths, and inflicting injuries have been reported elsewhere (Brandwein & Filiano, 2000; Brewster, 2003; Lloyd, 1997; Lloyd & Taluc, 1999; Moe & Bell, 2004; Raphael, 1996).

Abusive men also interfere with their partner's ability to maintain employment by harassing them at work. Studies show that women in abusive relationships commonly experience on the job harassment. Abusive men reportedly show up at their partners' place of employment, harass them with telephone calls throughout the workday or harass their coworkers (Lloyd, 1997; Lloyd & Taluc, 1999; Raphael, 1996; Riger et al., 2001).

The impact of an abusive partner's interference has been examined. Evidence suggests that the women miss workdays, lose hours at work, or lose

their job as a result of their partner's interference. Sable et al (1999) interviewed 404 women receiving support through AFDC and found that 19.1% had missed work because of their partners, 17.8% were unable to do their work well because of their partners and 14.6% lost their jobs because of their partners. Shepard & Pence (1988) also reported on the effects of abuse on women's employment and found that out of 71 working women 55% had been absent from work because of abuse, 62% had been late for work or had to leave work early and 24% had lost their jobs because of abuse.

In addition to preventing their partners from working, studies show that abusive men also interfere with their partners' efforts to take part in self-improvement activities aimed at increasing their marketability in the labor force and heighten their chance of obtaining a decent job. In one study, Tolman (1989) found that 62% of the women in his sample had partners who did not want them to go to school or engage in other self-improvement activities. In another study, 50% of the women reported that their abusive partners had discouraged them from going to school, while 24% stated that they had been prohibited from getting an education (Shepard & Pence, 1988). Similar rates were found by Riger et al (1999), who reported that 25% of the women stated their abusive partner had forbidden them from going to school and Anderson et al (2003) who found that 22.7% of the women in their sample reported that their partners had tried to keep them from going to school. Finally, in a larger scale study of 846 AFDC recipients, Curcio (1997) found that 39.7% of women in abusive relationships reported that their partner had actively tried to prevent them from obtaining

education or training. This was three times the rate reported by non-abused women.

In addition to the interference women experience as they attempt to obtain an education, job skills and/or employment, evidence suggests that abusive men also prevent women from acquiring income and assets by other means. For example, even if a woman is employed, her partner may demand that she hand over her paycheck, thus preventing her from having money of her own (Hofeller, 1982). Furthermore, abusive men may hinder a woman from acquiring money of her own by interfering with the receipt of other forms of support such as child support, public assistance, disability payments or education-based financial aid (Brewster, 2003; Moe & Bell, 2004; Ptacek, 1997). In addition to income interference, some abusive partners prevent women from acquiring assets by refusing to put their names on the deeds to their houses or the titles of their cars, or by not allowing women to have cars of their own (Brewster, 2003).

Resource Utilization

In our society, money is a source of power (Pahl, 1983). Thus, controlling a woman's use of economic resources is a means of accomplishing the goal of maintaining power in an abusive relationship. Studies show that abusive men often exert power by assuming control over their partners' use of economic resources (Anderson et al., 2003; Brewster, 2003; Davies & Lyon, 1998; Dobash & Dobash, 1979; Hofeller, 1982; Martin, 1976). More specifically, abusive men exercise power by controlling how resources are distributed and by monitoring how they are used.

Women in abusive relationships often report that their partners strictly limit their access to household resources. Some women are denied access to money even for necessities such as food, while others report that they are allotted a specific amount of money to be spent on household necessities and nothing more (Anderson et al., 2003; Coker et al., 2000; Davies & Lyon, 1998; Follingstad et al., 1990; Hofeller, 1982; Hudson & McIntosh, 1981; Pagelow, 1981; Pence & Paymar, 1993; Schechter & Gary, 1988; Tolman, 1989; VonDeLinde, 2002; Walker, 1979). Women also report that rather than being able to use money as necessary, their partners give them an allowance or make them ask for money when it is needed (Lloyd, 1997; Lloyd & Taluc, 1999; Pence & Paymar, 1993; Shepard & Campbell, 1992). Furthermore, studies show that abusive men hide jointly earned money, prevent their partners from having access to joint bank accounts, lie about shared assets and withhold information about their finances (Brewster, 2003; VonDeLinde, 2002) (Coker et al., 2000; Pence & Paymar, 1993; Schechter & Gary, 1988; VonDeLinde, 2002).

Besides limiting the resources women have access to, abusive men also exert economic control by dictating and closely monitoring how resources are used. For example, women report that they are told exactly how money can be spent, and some women are even required to account for every dollar they spend, either verbally or by bringing back receipts (Aguilar & Nightingale, 1994; Davies & Lyon, 1998; Dobash & Dobash, 1979). Women have also reported that their partners escort them to the store in order to monitor what is spent (Pagelow, 1981).

In addition to controlling how money is spent, some abusive men also dictate and monitor their partners' use of transportation. Some women are prevented from using their cars or their shared transportation, while others have their access to transportation restricted (Ptacek, 1997; Rodenburg & Fantuzzo, 1993). One common way abusive men restrict their partners' use of transportation is by taking the car keys or disabling the car (Martin, 1976; Rodenburg & Fantuzzo, 1993). All of these tactics are instrumental in an abusive man's efforts to control his partner's ability to make use of her own or their shared economic resources.

Resource Maintenance

Not only do women in abusive relationships struggle to make use of acquired resources, but many also face the challenge of attempting to maintain their economic resources. Having the ability to sustain an adequate level of resources runs counter to an abusive man's goal of having power and control over his partner. Therefore, abusive men interfere with women's abilities to maintain their level of economic resources by employing control tactics that deplete women's available resources. This can occur in a variety of way, including stealing their money, generating costs and generating debt.

One way abusive men have been shown to deplete their partner's available resources is by stealing their money (Anderson et al., 2003; Lloyd, 1997; Lloyd & Taluc, 1999; Pence & Paymar, 1993; Rodenburg & Fantuzzo, 1993; Schechter & Gary, 1988). Anderson et al (2003) reported on the frequency of stealing among a sample of 485 women who sought services from a domestic

violence advocacy program. They found that 38% of the women interviewed reported that their partner stole money from them. According to anecdotal reports from victim advocates, abusive men steal money from their partners through a variety of means. For example, an abusive man may take money from his partner's purse or wallet, steal her checkbook or ATM card and use it without permission, gamble with her money or their shared money, or he may demand that her money be put into a joint bank account so he can spend it freely.

Women in abusive relationships also have a difficult time maintaining their economic resources when their partners engage in behaviors that generate costs. For example, research shows that abusive men steal, damage or destroy their partners' possessions or household items (Brewster, 2003; Follingstad et al., 1990; Pearson, Thoennes, & Griswold, 1999; Ptacek, 1997; Rodenburg & Fantuzzo, 1993). They may also cause damage to their apartment or house or their car (Davies & Lyon, 1998; Rodenburg & Fantuzzo, 1993). Furthermore, women have also reported that their partner had their heat, electricity or phone turned off (Anderson et al., 2003; Rodenburg & Fantuzzo, 1993). These tactics deplete women's level of economic resources in two ways; they not only lose the property they once had, but they also incur the costs to replace or repair the damage.

Finally, the control tactics employed by abusive men have been shown to interfere with a woman's ability to maintain their economic resources by generating debt in her name. Research suggests that some abusive men refuse to pay rent or make mortgage payments or refuse to pay other bills (Brewster,

2003; Davies & Lyon, 1998; Ptacek, 1997). Another way abusive men have been shown to generate debt for their partners is by obtaining credit cards in both names or by using her credit card without her permission (Brewster, 2003). Thus, women in abusive relationships are at risk for accruing personal debt when shared resources are under her name or both names. In other words, abusive men often take advantage of such a situation and use it as a means of threatening their partner's economic stability.

Why is Economic Abuse a Problem?

Economic abuse is a problem because of the effects that it has on women's economic health, physical safety and potentially their psychological well-being. More specifically, an abuser who controls a woman's ability to acquire, utilize and maintain economic resources limits the resources she has available. By limiting the economic resources to which a woman has access, the abuser is fostering economic dependence and threatening her short-term and long term economic security and mental health. While the relationships between economic abuse and women's economic, physical and psychological health have not been empirically examined, the link between a woman's economic resources and economic dependence on her abusive partner has been established.

Studies show that about half of the women who take steps toward leaving their abusive partner end up returning to the relationship at least once (Aguirre, 1985; Snyder & Scheer, 1981; Strube, 1988). Researchers have spent decades examining the process of leaving an abusive relationship in an effort to identify factors influencing the decision to leave or stay with an abusive partner. Among

the variables that have been examined, researchers have consistently identified economic dependence as a critical obstacle for many women attempting to leave an abusive partner (Aguirre, 1985; Gondolf & Fisher, 1988; Johnson, 1992; Okun, 1988; Strube & Barbour, 1983, 1984).

In one study, Aguirre (1985) collected data from 312 women in 15 shelters in order to assess the factors that contribute to a woman's decision to return to an abusive partner after taking steps toward leaving. It was discovered that economic dependence, operationalized as the husband being the sole source of income, significantly predicted the decision women made when exiting the shelter. In fact, 84% of the women who reported that they were economically dependent on their partner planned to return to the relationship, while 82% of those who reported that their partner was not their sole source of income planned to separate from their abusive partner. In this study, women who were economically dependent on their partners for their income almost always returned to the relationship, while those women with their own income almost always terminated the relationship.

Similarly, Rusbult & Martz (1995) interviewed 100 women on intake into a shelter program and then followed up 3, 6 and 12 months later to assess whether they had returned to their abusive partner. They found that women with greater individual economic resources were more likely to live independently of the abuser at follow-up. More specifically, education, employment status, income level, availability of an independent source of income, available money, the

amount of money they had on hand and available transportation were all resources that were significantly related to women's relationship status.

In a large-scale study of women seeking services from a shelter program, Gondolf & Fisher (1988) also assessed the relationship between economic dependence and a woman's decision to leave an abusive relationship. Once again, it was discovered that women with individual economic resources were significantly more likely to plan to live on their own following exit from a shelter program. More specifically, women with their own income, transportation and childcare were significantly more likely to plan to live independently of the abuser after leaving the shelter.

Evidence clearly indicates that dependence on an abusive partner for economic resources is strongly related to a woman's decision to remain in or leave an abusive relationship. Based on what we know about economic abuse, we can theorize that economic abuse plays a role in developing this dependence. Economic abuse affects a woman's level of individual economic resources, thereby fostering economic dependence. Economic dependence has been shown to predict the status of an abusive relationship. That is, women with greater independent economic resources are more likely to live independently of their abusers, whereas women who are reliant on their partners for economic resources are more likely to remain in abusive relationships. Therefore, it follows that women who experience economic abuse are likely to have fewer individual economic resources on leaving their abusive relationship, which limits their

options and places them at risk for returning to the abuser, further threatening their physical safety and psychological well-being.

The lack of economic resources that economic abuse creates not only fosters economic dependence on an abuser, but also threatens a woman's short-term and long-term economic health, and possibly her mental health. For women with limited economic resources, leaving an abusive relationship often means having to face an uncertain economic future. Studies show that many women feel trapped in abusive relationships because they lack the economic resources to support themselves and their children. In fact, one study found that close to 93% of women surveyed reported that they had wanted to leave an abusive partner before they ultimately did, and many of those women cited lack of economic resources for independent living as a reason for staying (Chalmers & Smith, 1984). More specifically, women with abusive partners report a lack of resources needed for day-to-day survival such as money, housing, childcare and transportation (Chalmers & Smith, 1984; Short et al., 2000). On top of that, many do not have the job skills or the wage earning power to support themselves or their children (Labell, 1979). As one woman who was not allowed to work during her twenty-year relationship stated, "How am I supposed to get a job to support my family with no skills, no experience and no references" (VonDeLinde, 2002, p. 4)? Women's options are further limited when their credit has been destroyed by an abusive partner, making it almost impossible to secure necessary resources, such as housing (Correia, 2001; Melbin, Sullivan, & Cain, 2003). Many women who do escape an abusive relationship experience a decrease in their standard

of living once they leave and end up living in poverty, on government assistance or homeless (Barnett & LaViolette, 1993; Davis, 1999).

By leaving women with inadequate resources to meet daily needs, economic abuse may indirectly affect women's physical and psychological health. Studies have shown a strong relationship between the conditions of poverty and poor physical and psychological health (Brown & Moran, 1997; Lynch, Kaplan, & Shema, 1997; Stronks, Van de Mheen, Van den Bos, & Mackenbach, 1997). Low-income women who endure chronic sources of stress such as substandard housing, inadequate food and unstable income have been shown to be at increased risk for depression, anxiety, chronic health problems and poor general physical health (Dunn & Hayes, 2000; Hall, Williams, & Greenberg, 1985; McCallum, Arnold, & Bolland, 2002; McLeod & Kessler, 1990; Stronks, Van de Mheen, & Mackenbach, 1998). Similarly, the health of women with an economically abusive partner may be compromised as they endure the stress associated with chronic economic deprivation and exploitation. This applies not only to women in economically abusive relationships, but also to women who have left their abusive partners but who are struggling to make ends meet on what few resources they have available.

Measuring Economic Abuse

Given what we know about economic abuse and the potentially damaging effects this form of abuse has on women's lives, the current approach to measuring economic abuse is not sufficient. Economic abuse has been largely conceptualized as a form of psychological abuse (Tolman, 1992) and measures

of psychological abuse frequently include a limited number of items that tap economic abuse. For example, the widely used Psychological Maltreatment of Women Inventory (PMWI; Tolman, 1989) contains the following five items that capture economically abusive behavior: 1) My partner did not allow me to work; 2) My partner was stingy in giving me money to run our home; 3) My partner used our money or made important financial decisions without talking to me about it; 4) My partner did not want me to go to school or do other self-improvement activities; and 5) My partner acted irresponsibly with our financial resources.

Economic abuse items are also included in Rodenburg & Fantuzzo's (1993) Measure of Wife Abuse, which is designed to measure physical, sexual, psychological and verbal abuse. The following seven of the fifteen items contained in the psychological abuse subscale capture economic abuse: 1) your partner harassed you at work; 2) your partner took your wallet leaving you stranded; 3) your partner disabled your car; 4) your partner took your car keys, 5) your partner turned off the electricity; 6) your partner stole food or money; and 7) your partner stole your possessions. Similarly, Shepard & Campbell (1992) developed a measure of psychological and physical abuse that included a limited number of economically abusive behaviors in the psychological abuse subscale. The Abusive Behavior Inventory contains the following three items that capture economic abuse: 1) prevented you from having money for your own use; 2) put you on an allowance; and 3) stopped you or tried to stop you from going to work or school.

The Index of Spouse Abuse (ISA; Hudson & McIntosh, 1981) and the Index of Psychological Abuse (IPA; Sullivan, Parisian, & Davidson, 1991) also include economic abuse items. The ISA asks women to respond to two items that reflect economic abuse ("My partner is stingy in giving me enough money to run our home" and "My partner feels that I should not work or go to school"), while the IPA asks women if their partner tried to control their money.

In addition to the conceptualizations of abuse that contain economic abuse items, Riger, Ahrens & Blickenstaff (2001) recently developed a measure of work/school interference, which is one specific form of economic abuse. The Work /School Abuse scale (W/SAS) is a 12-item measure designed to assess the degree to which an abusive partner interferes with his partner's ability to attend school or maintain employment. Six of the twelve items assess the use of tactics that prevent women from going to work or school (e.g., sabotage the car) and six items assess the use of tactics intended to make women leave work or school (e.g., comes to work or school to harass you).

Rationale for the Current Study

Economic abuse, defined as behaviors that control a woman's ability to acquire, use and maintain economic resources, has been shown to be part of the pattern of abusive behaviors used by men in order to maintain power and control over their partner. Furthermore, the economic abuse women experience has been shown to take various forms and could potentially have negative effects on women's economic, physical and psychological health and safety. However, current conceptualizations of abuse that include economic abuse are not

sufficient for assessing the potential impact of economic abuse on women's lives. Therefore, the purpose of the present study was to develop a measurement instrument that can be used to assess economic abuse.

Method

Measurement Development

Items for the Scale of Economic Abuse (SEA) were derived from numerous sources, including the domestic violence literature and the expert knowledge and experience of domestic violence researchers, advocates and survivors. Specifically, items were developed from a review of both quantitative and qualitative studies that captured women's experiences with abusive partners and from theoretical and anecdotal literature that described the control tactics used by abusive men. In addition, five measures of psychological abuse (PMWI, ISA, IPA, ABI and MWA) and the Interference with Work/School Scale were examined for items that tapped economic abuse. Items were also generated with the assistance of three domestic violence advocates from a local domestic violence shelter program and two prominent domestic violence researchers. In addition, twelve survivors contributed to the development of the SEA items. I met individually with three women, two in their homes and one at the shelter where she was residing, and also with nine women attending a domestic violence support group. Each of the women completed an initial measure and suggested changes and additional items. This extensive process resulted in a 120-item measure.

Procedure

Interviewer Training

Quantitative and qualitative data were collected through face-to-face structured interviews with women receiving residential and/or non-residential services through these five organizations. Five female undergraduate students, all of whom had gone through 50 hours of domestic violence intervention training, were trained to conduct the interviews. Interviewer training took place over six three-hour weekly sessions. During the first session, the research team members were introduced to the layout and content of the interview protocol; that is, each section of the interview was explained and the meaning of individual items was discussed. Next, basic interviewing skills and techniques were discussed and practiced. At the end of the session, each team member was provided with blank interview protocols and asked to conduct and record at least two practice interviews before the following session. The second and third sessions were primarily devoted to practicing the interview. At the start of the sessions, the practice interviews they were asked to conduct over the previous week were reviewed and problems were discussed. The remainder of the training session was used for one-on-one role playing and open discussion of problems or concerns that arose. The fourth session was devoted to a discussion of the emotionality of interviewing. In preparation for the discussion, the research team members were asked to read select chapters from the book *Emotionally Involved* (Campbell, 2002). Dr. Rebecca Campbell met with the research team and discussed how to deal with a range of emotional responses that participants may

have to the interview questions. Time was also spent talking about the interviewers' own fears and concerns about interviewing and how they would deal with their own emotional reactions during and after interviews. For the fifth training session, each interviewer met with me individually for a practice interview and individualized feedback. Also during the fifth week, the research team members paired up and conducted an additional practice interview. The final training session was used to test inter-interviewer reliability. One of the research team members and I role-played an interview, while the other four interviewers recorded my responses on their own protocols. The ratio of accurate recordings to the total number of items was calculated and 98% agreement had been reached.

Recruitment

Participant recruitment and data collection took place at five domestic violence shelter programs throughout a Midwestern state. These organizations offer shelter, residential and non-residential advocacy and counseling services to women who have experienced intimate partner abuse. Participants learned of the study through three mechanisms. First, we provided program staff with an informational flyer describing the project so that they could inform their clients about the project and direct those who were interested in further information to the research assistants. Second, informational flyers were posted throughout the facilities informing women of the study. Third, due to the extensive 50-hour training the research assistants received, each service provider viewed the research team as trained volunteers in their organization. Thus, the research

team was to make initial contact with program clients while protecting their confidentiality. Therefore, research team members informed women of the study and invited them to participate. During recruitment, participants were assured that their decision to participate in the study would have no impact on their receipt of services from the agency; the informational flyers and details provided by the research assistants all included this assurance. Furthermore, it should be noted that given that the initial hours after leaving one's home and entering a shelter program can be an emotionally and physically exhausting time, we did not talk with shelter residents about this study until they had been in shelter at least 24 hours.

After learning of the study, those women who were interested in participating were free to talk with a member of the research team for more information and/or to schedule a time for an interview. The research team was available to provide information about the study and schedule interviews at regularly scheduled times throughout data collection. Specifically, in our weekly team meeting the research team designated blocks of time during the upcoming week when research team members would be available to discuss the project with potential participants and schedule interviews. A member of the research team was available during these scheduled blocks of time to conduct interviews with women who chose to "drop-in" rather than schedule an interview. This schedule was given to the program staff and posted in a central location within the program facilities for program clients to view. In addition, the informational flyer included my cell phone number for women to call for more information or to

schedule an interview. Interviews were scheduled at the research participants' convenience and took approximately one hour to complete. In order to maximize participants' feelings of comfort and safety during the interview, interviews were conducted at a location of the participants' choosing. Most interviews took place in a private space in the shelter complex or at other program facilities. Some interviews were conducted in the participants' homes.

Interviews

Before starting the interview, the interviewer spent some time informally chatting with the participant to help her feel more comfortable. Once the participant was ready to begin, the interviewer obtained the participants' informed consent. The research assistants read the consent form aloud to each participant in order to ensure that the information contained on the consent form was clearly communicated. During the consent process, the interviewer reviewed the purpose of the study, described what the interview would involve, and informed her of her rights as a research participant. In addition, the research assistant asked the participant's permission to tape record the interview for quality control purposes. The interviewer explained that the tape would only be heard by the research team and was only intended to ensure that the interviews were being conducted in a consistent and thorough manner. Participants were also assured the tape would be stored in a locked file cabinet and destroyed once the study was completed. After reading the consent form, the interviewer answered any questions that the participant had and then asked for the participant's signature on the consent form. One copy of the consent form was provided to the

participant if she desired, and the signed consent form was placed in a designated folder, separate from any other research materials.

Following the consent procedure, the interview began. The structured interview protocol included basic demographic data and measures of economic abuse, physical abuse, psychological abuse, and economic health, which are described in detail below. In order to shorten the length of the interview and avoid the monotony of hearing the same response options over and over again, the response options for each of the measures were pre-printed on 4X6 index cards. Prior to beginning each section of the interview, the interviewer placed the appropriate card in front of the participant and asked her to refer to the card when giving her response to the items.

In order to minimize any emotional distress experienced during the course of the interview, the research team was trained to put women's emotional needs before the data. In other words, the interviewers stopped the interview and took the time to listen and empathize with any woman who became distressed and/or wanted to talk about her experiences and then assess whether she felt she could continue the interview before beginning again. All of the interviewers received extensive training in empathy and active listening. Also, the interviewers were prepared to refer women to counselors employed by the domestic violence program, should the need arise during the interview.

Upon completion of the interviews, participants were given \$10 cash as compensation for their time. Any participant who chose to terminate the interview early for any reason still received compensation. At the end of the interview, the

interviewer assigned each interview a unique ID number. The ID number reflected the number assigned to the data collection site and the chronological order of the interview. For example, if an agency was designated site 01 and the third interview that took place there was assigned the code 03, the ID for that interview was 0103. Each research assistant was responsible for returning the completed interviews to the project office and storing the data in the locked file cabinet in a timely manner.

The research team met weekly in order to monitor the recruitment procedures and ensure that the interviews were being conducted accurately and systematically. Prior to the weekly research team meeting, I reviewed the interview protocols, audiotapes and entered data from the previous week and made note of any problems that needed to be addressed, as well as things that the interviewers were doing well. In the research team meeting, we discussed the interviews from the previous week and addressed any issues or concerns that the research assistants had regarding recruitment or interviewing that week. During the meeting we also determined the recruitment and interview schedule for the upcoming week.

Measures

Demographic Information. Eight items were used to assess the following demographic variables: race, age, number of children, education level, education status, employment status, relationship status, and relationship history.

Scale of Economic Abuse (SEA). The SEA contained items that describe behaviors that control a woman's ability to acquire, use and maintain economic resources. One hundred and twenty items describing economic abuse tactics were measured on a five-point Likert scale, ranging from 1 (Never) to 5 (Quite Often). Each of the economic abuse items was endorsed according to the frequency of occurrence since the woman's relationship began. In addition to the quantitative items, the scale also contained qualitative questions eliciting any additional forms of economic abuse that were experienced but not covered in the survey. Several experts, including survivors of intimate partner abuse, determined that the SEA had good face validity; that is, the SEA items appeared to capture economic abuse.

To help test the validity of the measure under development, three additional instruments were contained in the interview. One measured women's economic well-being, one was a widely used measure of psychological abuse, and one was a widely used measure of physical abuse.

Economic Health Index (EHI). Developed for this study, the EHI consisted of 13 items designed to assess women's economic health since the abusive relationship began. Examples of the yes-no items included, "Have you had trouble buying food or other necessities for your family?", "Have you had trouble with your credit rating?" and "Has your telephone, electricity or other utilities ever been turned off?" The EHI had good internal consistency, with a Cronbach's alpha of .86. In a follow-up question to the 13-item EHI, participants were asked to think about the items to which they had responded "yes" and then rate on a

scale ranging from 1 (None/Not at all) to 5 (Completely) how much they thought their partner had to do with those financial hardships.

Psychological Maltreatment of Women Inventory (PMWI; Tolman, 1989).

The short-version PMWI contained 14 items and was used to assess the degree of psychological abuse women experienced in the last six months of their relationship. Women rated how frequently each of the 14 abusive acts occurred during the last six months of their relationship on a scale ranging from 1 (Never) to 5 (Very Frequently). Examples of the items included on the short version of the PMWI include "My partner called me names" and "My partner told me my feelings were irrational or crazy." The PMWI had an internal consistency coefficient of .87.

Modified Conflict Tactics Scale (modified CTS; Straus, 1979; Sullivan, 1999). The CTS as modified by Sullivan (1992) was used to assess the level of violence women experienced in the last six months of their relationship. The modified CTS is a 23-item measure that asks women to rate the frequency of each behavior during the last six months of their relationship on a scale ranging from 1 (Never/None) to 7 (More than 4 times per week). The types of physically abusive behaviors included in the modified CTS include "Pushed or shoved you", "Pulled your hair" and "Choked or strangled you." This scale has demonstrated good internal consistency ($\alpha = 0.92$; Goodkind, Sullivan & Bybee, 2004). In this sample, the reliability coefficient was .93.

Results

Participants

A convenience sample of 103 adult women survivors of intimate partner abuse were recruited for participation in this study. The women ranged in age from 18 to 85, with an average age of 35 years ($SD=10.4$). Forty-eight percent of the women were African American, 45% were White, 5% were Hispanic/Latina, 1% was Asian American, and 1% declined to provide racial information. Eighty-eight percent of the women had completed high school and/or college. At the time of the interview, 65% of the women were unemployed. Of those who were working, 22% had a full-time job and 16% were employed part-time. Over half (57%) of the women reported an annual family income of less than \$15,000, while 21% lived in a household earning between \$15,000 and \$30,000, and 22% reported over \$30,000 in family income per year.

The average woman in the sample had been involved with her abusive partner for 8 years and had 2 minor children. Eighty-one percent of the women were living with their partner at the time the abuse occurred, 30% of whom were married. See Table 1 for demographics.

All of the women in the sample had experienced psychological abuse and 98% had suffered physical abuse during the last six months of their relationship. Similarly, 99% of the women had experienced economic abuse at some point during their relationship. The types of physical abuse most commonly experienced were pushing/shoving and grabbing, while the most frequently reported forms of psychological abuse were yelling/screaming and swearing.

Over half of the women had been sexually assaulted (57%) and 65% had been strangled by their intimate partner. See Table 2 for frequencies for psychological and physical abuse.

Table 1
Demographics
(N = 103)

	Frequency (%)
AGE	
18 – 24	15
25 – 34	36
35 – 44	32
45 – 54	13
55 – 64	3
65 & over	1
RACE	
African American/Black	48
Caucasian/White	45
Hispanic/Latina	5
Asian American	1
Unknown	1
EDUCATION	
Some High School	22
High School/GED	29
Some College	32
College Graduate/Trade School	16
Advanced Degree	1
EMPLOYMENT	
Unemployed	63
Employed Part-time	16
Employed Full-time	21
INCOME	
Under \$5,000	25
\$5,001 - \$10,000	15
\$10,001 - \$15,000	16
\$15,001 - \$20,000	17
\$20,001 - \$30,000	4
\$30,001 - \$50,000	8
\$50,001 & over	15

Table 1 (cont'd).

CHILDREN	
None	21
1	19
2	21
3	24
4	7
5 & over	7
RELATIONSHIP STATUS	
Married and living together	30
Separated/Divorced	4
Girl/boyfriend and living together	50
Girl/boyfriend but not living together	11
Ex-girl/boyfriend	1
Dating	1
Other	3
LENGTH OF RELATIONSHIP	
Less than 6 months	4
6 months – 1 year	9
13 months – 3 years	27
36 months – 5 years	12
61 months – 7 years	9
85 months – 10 years	13
121 months – 15 years	12
181 months – 20 years	6
Over 20 years	8

Table 2
Frequencies for Psychological and Physical Abuse Experienced
In Last Six Months of Relationship

TYPE OF ABUSE	Frequencies (%)
<i>Psychological</i>	
Yell and scream at you.	99
Call you names.	98
Treat you like an inferior.	97
Swear at you.	96
Tell you your feelings were irrational or crazy.	95
Try to keep you from doing things to help yourself.	93
Blame you for his problems.	92
Try to make you feel crazy.	92
Use money or make important financial decisions without talking to you about it.	92
Was jealous or suspicious of your friends.	92
Monitor your time and make you account for your whereabouts.	91
Interfere in your relationships with other family members.	87
Accuse you of having an affair with another man.	80
Restrict your use of the telephone.	70
<i>Physical</i>	
Pushed or shoved you.	82
Grabbed you	79
Thrown something at you	72
Tried to hit you with an object	68
Drove recklessly to scare you	68
Slapped you with an open hand	65
Coked or strangled you	65
Beat you up	64
Pulled your hair	63
Hit you with a fist	63
Broke your glasses or tore your clothes	60
Forced sexual activity	57
Tied you up or physically restrained you	56
Kicked you	55
Twisted your arm or leg	54
Hit you with an object, aside from throwing something at you	51
Threatened you with a knife	36
Smothered you	28
Threatened you with a gun	27
Bit you	19
Burned you	13
Stabbed you	5
Shot you	0

Scale Construction

In constructing the final SEA, the goal was to end up with instrument that was brief, reflective of a broad range of economically abusive tactics, and widely applicable to respondents. Several steps were taken toward this end. In the initial pass, items that were not applicable to more than 25% of women in the sample were removed. In total, 37 items were removed due to inapplicability, including all items pertaining to school interference and items making reference to children. Once these items were removed, the expectation maximization (EM) method was used to provide estimates for the remaining missing data, in order to facilitate psychometric analysis with the full sample. Expectation maximization is a two-step iterative process. In the expectation step an estimated covariance matrix is used to construct a series of regression equations. The predicted values generated by the regression equations are then used as estimates of the missing data points. In the maximization step, the data matrix generated in the estimation step is used to obtain updated estimates of the covariance matrix and mean vector. This two step process repeats until the differences between covariance matrices in each successive maximization step falls below a set criterion. At the final maximization step, a maximum likelihood estimate of the covariance matrix and mean vector is obtained (Enders, 2003). The EM method was used to estimate 4% of the values in the data matrix. Little's Missing Completely at Random (MCAR) test was nonsignificant ($p = 1.00$) indicating that the pattern of missing data was not significantly different from a random pattern and providing support for handling the missing values as "ignorable."

Once the missing values were estimated, eight items that had been unclear or difficult for women to answer during the interviews were removed. For example, many of women in the sample had expressed difficulty responding to items that were not easily quantified according to the Likert scale, such as being prevented from getting a credit card or vehicle of one's own. The internal consistency of the remaining 75 items was assessed and 17 additional items were removed based on their low item-total correlations. Another five items were removed because they were redundant with better performing items. Overall, this process resulted in the removal of 67 items.

Analysis of the remaining 53 items began with a review of the originally proposed theoretical framework, which defined economic abuse as behaviors that control a woman's ability to acquire, use or maintain economic resources. Through the data collection process, it became clear that the guiding theoretical framework appeared accurate, at least anecdotally. Women's experiences of economic abuse tended to involve control over their access to and use of resources, as well as their ability to maintain those resources. However, through conversations with women during and after the interviews it became clear that what had been conceptualized as 'resource maintenance' was better explained as 'economic exploitation.' There was a distinct group of women whose partners had taken advantage of them economically. These men stole from their partners, forced or coerced them into financially providing for them, and had managed to deplete their resources in a variety of ways. The unique impact of this form of economic abuse became increasingly evident during the data collection process,

as women who had been exploited economically by their partners expressed the most anger and resentment during the interviews.

With this revised theoretical framework in mind, the frequencies, means and item-total correlations were examined for the remaining 53 items. Table 3 includes the psychometric properties and frequencies for the 53 items.

Cronbach's alpha for the scale was .957 and the item-total correlations ranged from .402 to .673. Some of the most frequently occurring items were those involving control over the use of and access to money. For example, 83% of women reported that their partners had done things to keep them from having money of their own, 91% reported that their partners demanded to know how money was spent, and 89% of the women had partners who decided how they could spend money rather than letting them spend it how they saw fit. The least frequently occurring items were all involving specific actions intended to prevent someone from getting a job or going to work. For example, 24% reported that their partners had physically assaulted them as a means of keeping them from going to work and 30% said their partners had hidden or destroyed their clothes in an effort to prevent them from working.

Table 3
SEA Item Means, Frequency of Endorsement and Item-Total Correlations

ITEM	Mean	SD	Frequency (%)	Item-total Correlation
1) Not let you sleep before an interview.	2.74	1.53	65	.518
2) Hide or steal your id, social security card or birth certificate to keep you from getting a job	1.96	1.47	36	.573
3) Steal the car keys or take the car so you couldn't go look for a job or go to a job interview.	2.68	1.70	59	.595
4) Call you names or put you down before an interview.	2.91	1.70	64	.577
5) Do things to keep you from going to your job.	3.02	1.28	82	.588
6) Demand that you stay home from work.	2.19	1.28	58	.666
7) Cause visible physical injuries to keep you from going to work.	2.00	1.29	47	.437
8) Steal the car keys or take the car so you couldn't go to work.	2.52	1.50	60	.582
9) Physically restrain you from going to work.	1.60	.98	32	.597
10)Threaten you to keep you from going to work.	2.02	1.28	48	.645
11)Hide your purse, wallet or money to keep you from going to work.	1.86	1.37	36	.541
12)Hide or destroy your clothes to keep you from going to work.	1.66	1.17	30	.507
13)Beat you up if you said you needed to go to work.	1.50	.99	24	.540
14)Do things to make you leave work during the day.	2.60	1.26	74	.407
15)Do things to force you to quit or make you lose your job.	2.76	1.46	73	.492
16)Come to your work to harass you	2.55	1.51	62	.546

Table 3 (cont'd).

ITEM	Mean	SD	Frequency (%)	Item-total Correlation
17)Call you at work to harass you.	3.10	1.53	74	.413
18)Bother your coworkers or boss.	1.92	1.30	44	.461
19)Threaten you to make you leave work.	2.20	1.37	52	.548
20)Demand that you quit your job.	2.26	1.46	52	.569
21)Do things to keep you from having money of your own.	4.07	1.23	93	.525
22)Keep you from building credit by doing things like put property in only his name, not let you get a credit card of your own or keep you from having your own bank account.	2.81	1.72	58	.445
23)Take your paycheck, financial aid check, tax refund check, disability payment or other support payments from you.	2.83	1.74	58	.638
24)Decide how you could spend money rather than letting you spend it how you saw fit.	3.98	1.34	89	.673
25)Demand to know how money was spent.	4.17	1.28	91	.596
26)Go shopping with you to watch what you spent or pay the cashier himself.	3.45	1.64	76	.504
27)Demand that you give him receipts and/or change when you spent money.	3.12	1.75	67	.511
28)Keep you from having the money you needed to buy food, clothes or other necessities.	3.27	1.60	75	.568
29)Hide money so that you could not find it.	3.33	1.70	73	.584
30)Keep you from having access to bank accounts.	2.55	1.67	54	.526
31)Keep you from driving the car.	3.20	1.66	70	.547
32)Keep you from using the checkbook.	2.66	1.69	43	.442
33)Keep financial information from you.	3.52	1.60	77	.523

Table 3 (cont'd).

ITEM	Mean	SD	Frequency (%)	Item-total Correlation
34)Make important financial decisions without talking with you about it first.	3.83	1.46	84	.572
35)Make you ask him for money.	3.74	1.62	80	.462
36)Take money from you without your permission and/or knowledge.	3.26	1.56	77	.579
37)Damage, destroy or steal your property, such as your clothes, household items or car.	3.33	1.54	78	.607
38)Damage your credit by doing things like put property in your name and then refuse to pay the bill or prevent you from paying the bill.	2.60	1.75	51	.473
39)Take money from your purse, wallet or bank account without your permission and/or knowledge.	3.20	1.61	73	.597
40)Force you to give him money or let him use your checkbook, ATM card or credit card.	3.11	1.63	69	.570
41)Damage or destroy household items.	3.13	1.54	76	.632
42)Steal your property.	2.73	1.68	60	.555
43)Cause damage to your house or apartment.	3.17	1.55	75	.525
44)Damage or destroy your personal possessions.	3.27	1.55	78	.567
45)Pay bills late or not pay bills that were in your name or in both of your names.	3.40	1.57	79	.536
46)Build up debt under your name by doing things like use your credit card or run up the phone bill.	2.84	1.71	60	.402
47)Gamble with your money or your shared money.	2.14	1.51	42	.548
48)Have you ask your family or friends for money but not let you pay them back.	2.21	1.49	48	.506

Table 3 (cont'd).

ITEM	Mean	SD	Frequency (%)	Item-total Correlation
49) Convince you to lend him money but no pay it back.	3.02	1.68	65	.423
50) Loan out your money or your shared money without your permission and/or knowledge.	2.55	1.50	60	.571
51) Pawn your property or your shared property.	2.15	1.50	45	.546
52) Spend the money you needed for rent or other bills.	2.81	1.60	66	.502
53) Threaten you or beat you up for paying the bills or buying things that were needed.	2.10	1.37	48	.496

(Rating scale: 1=never, 2=hardly ever, 3=sometimes, 4=often, 5=quite often)

The next step in scale construction was to select items from each of the potential subscales for further analysis. Of the 53 items remaining, 23 involved actions that interfere with women's access to resources (resource acquisition), 13 pertained to control over the use of resources (resource utilization) and 17 items concerned economic exploitation. Item-total correlations, item means, standard deviations, and the conceptual contribution of each item were taken into account in selecting items. This was an iterative process in which the conceptual contribution and psychometric properties of each item were taken into consideration in relation to the other remaining items in each domain. For example, the psychometrics of the five remaining items pertaining to work interference through on-the-job harassment were examined collectively. The item with the lowest item-total correlation was removed ($r = .407$), as well as two items with low-item total correlations and relatively extreme item means ($r = .413$, $\bar{x} = 3.10$; $r = .461$, $\bar{x} = 1.92$), leaving the two items with the highest item-total

correlations and most moderate item means for further analysis ($r = .546$, $\bar{x} = 2.55$; $r = .548$, $\bar{x} = 2.20$). Through this process, 37 items were selected (13 resource acquisition, 11 resource utilization and 13 exploitation items) and subjected to further reliability analysis. Ten of the 13 resource acquisition items asked about work interference in the following four areas: obtaining employment, getting to work from day to day, staying at work during the day, and job loss. One item from each of the four work-related areas was selected, as well as the two items with the highest item-total correlations of the three remaining acquisition items. In the utilization category, all but one item was retained. "Keep you from driving the car" was excluded because it would not apply to anyone who did not have a vehicle, share a vehicle with their partner, or who had other means of transportation. All 13 of the exploitation items were initially retained for further analyses.

The remaining 30 items had a reliability coefficient of .935 and item-total correlations ranged from .402 to .697. These items were scrutinized and any remaining problem items were removed. Specifically, "Keep you from building credit by doing things like put property in only his name, not let you get a credit card of you own or keep you from having your own bank account" was removed because of the length of the item and low item-total correlation. "Take money from you without your permission and/or knowledge" and "Damage your credit by doing things like put property in your name and then refuse to pay the bill or prevent you from paying the bill" were both excluded due to their redundancy with better performing items. Two items that had been removed during earlier

phases of item analysis were readmitted for conceptual reasons. That is, “Refuse to get a job so you had to support your family alone” and “beat you up if you said you needed to go to work” both tapped areas of economic abuse that were not covered by the items making up the scale, making these items an important conceptual addition.

After the aforementioned changes, 29 items remained. Exploratory principal components analysis (PCA) with oblique rotation was then used to determine the underlying factor structure of the SEA. Oblique rotation was used because it was expected that any emerging factors would be correlated. Prior to performing the PCA, the suitability of data for factor analysis was assessed. Examination of the correlation matrix revealed the presence of many coefficients of .3 or above. The Kaiser-Meyer-Olkin value was .87, exceeding the recommended value of .6 (Kaiser, 1974) and the Bartlett’s Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix.

Principal components analysis revealed the presence of six factors with eigenvalues greater than 1.0, explaining 10%, 3.1%, 2%, 1.5%, 1.1% and 1% of the variance, respectively. Inspection of the scree plot (Catell, 1966) revealed no clear indication of the appropriate number of factors to extract. Thus, as recommended by Tabachnick and Fidell (1996), an exploratory approach was used to find a satisfactory solution with as few factors as possible. Initially, three factors were retained for further analysis. After rotation, eleven items loaded highly on the first factor, eleven items loaded highly on the second factor, four

items loaded highly on the third factor and three items loaded moderately on two of the three factors. The first factor accounted for 34.5% of the variance and included resource acquisition and resource utilization items. The second factor accounted for 10.8% of the variance and was made up of the exploitation items. The third factor accounted for 6.8% of the variance and was made up of all the items pertaining to work interference. For comparison purposes, a second PCA was performed, but with two factors extracted. The two factor solution revealed a clear pattern, with most variables loading substantially on only one component. Seventeen items loaded on the first factor, which consisted of all the items involving actions that control access to and use of resources (i.e., resource acquisition and utilization items), and 11 items loaded onto the second factor, which included all of the economic exploitation items. One item, "loan out your money or your shared money without your permission and/or knowledge," loaded moderately on both factors. This item was dropped and the analysis was rerun with the item excluded. The final rotated two factor solution is presented in Table 4.

Table 4
Exploratory Factor Analysis of the SEA

Item	Communalities	Components	
		1	2
1) Decide how you can spend money rather than letting you spend it how you saw fit.	.62	.74	.10
2) Demand to know how money was spent.	.56	.73	.04
3) Demand that you give him receipts and/or change when you spent money.	.48	.73	-.08
4) Keep financial information from you.	.46	.72	-.13
5) Do things to keep you from having money of your own.	.47	.68	-.01
6) Make you ask him for money.	.45	.69	-.07
7) Keep you from having money you needed to by food, clothes and other necessities.	.49	.64	.12
8) Hide money so that you could not find it.	.44	.67	-.01
9) Make important financial decision with out talking with you about it first.	.44	.66	.02
10) Demand you quit your job.	.37	.64	-.09
11) Take your paycheck, financial aid check, tax refund check, disability payment or other support payments from you.	.52	.56	.28
12) Keep you from having access to your bank accounts.	.39	.60	.06
13) Steal the car keys or take the car so you couldn't go look for a job or go to a job interview.	.36	.57	.06
14) Threaten you to make you leave work.	.29	.57	-.07
15) Threaten you or beat you up for paying the bills or buying things that were needed.	.34	.52	.13
16) Beat you up if you said you needed to go to work.	.25	.46	.08
17) Do things to keep you from going to your job.	.25	.41	.17
18) Spend the money you needed for rent or other bills.	.60	-.001	.78
19) Convince you to lend him money but not pay you back.	.55	-.09	.78
20) Refuse to get a job so you had to support your family alone.	.50	-.28	.77
21) Build up debt under your name by doing things like use your credit card or run up the phone bill.	.45	-.06	.69

Table 4 (cont'd.)

Item	Communalities	Components	
		1	2
22)Steal your property.	.47	.04	.67
23)Have you ask your family or friends for money but not let you pay them back.	.49	.15	.63
24)Take money from your purse, wallet or bank account without your permission and/or knowledge.	.50	.16	.62
25)Pay bills late or not pay bills that were in your name or in both of your names.	.52	.21	.61
26)Pawn your property or your shared property.	.47	.13	.62
27)Force you to give him money or let him use your checkbook, ATM card or credit card.	.54	.26	.59
28)Gamble with your money or your shared money.	.45	.16	.59
Percent of variance		34	11

Reliability

The internal consistency of the SEA was assessed by examining the Cronbach's alpha coefficient and item-total correlations of the total scale and each of the two subscales. The total SEA had a reliability coefficient of .926, with corrected item-total correlations ranging from .411 to .690. The Control and Exploitation subscales also showed good internal consistency, with alpha coefficients of .909 and .893, respectively. The corrected item-total correlations of the Control subscale ranged from .44 to .72, while the coefficients of Exploitation subscale ranged from .54 to .71(see Table 5).

A correlation matrix was generated that correlated each of the items with the two subscales. As presented in Table 5, this analysis revealed that all of the Control items were more highly correlated with the Control subscale than with the Exploitation subscale, and the Exploitation items were more highly correlated

with the Exploitation subscale than with the Control subscale. In addition, with the exception of two Control items (“Do things to keep you from going to your job” and “Beat you up if you said you needed to go to work.”), the Control and Exploitation items were more highly correlated with their own subscale than with the measures of physical or psychological abuse. Taken together, the factor analysis and correlational analyses strongly supported the existence of two distinct subscales.

Table 5
Item-Total and Item-Scale Correlations

	CONTROL	EXPLOIT	SEA	PHYSICAL	PSYCH
CONTROL					
1. Steal the car keys or take the car so you couldn't go look for a job or go to a job interview.	.552	.321	.515	.283**	.349**
2. Do things to keep you from going to your job.	.441	.345	.458	.448**	.485**
3. Beat you up if you said you needed to go to work.	.453	.285	.435	.546**	.243*
4. Threaten you to make you leave work.	.483	.203	.411	.469**	.213*
5. Demand that you quit your job.	.541	.219	.559	.369**	.350**
6. Do things to keep you from having money of your own.	.625	.316	.559	.253**	.436**
7. Take your paycheck, financial aid check, tax refund check, disability payment or other support payments from you.	.632	.528	.676	.469**	.342**
8. Decide how you could spend money rather than letting you spend it how you saw fit.	.722	.449	.690	.404**	.481**
9. Demand to know how money was spent.	.680	.387	.631	.301**	.463**
10. Demand that you give him receipts and/or change when you spent money.	.612	.272	.525	.314**	.372**
11. Keep you from having the money you needed to by food, clothes or other necessities.	.637	.417	.619	.272**	.419**
12. Hide money so that you could not find it.	.605	.317	.546	.316**	.289**
13. Keep you from having access to your bank accounts.	.569	.338	.535	.382**	.241*
14. Keep financial information from you.	.603	.236	.501	.167	.332**
15. Make important financial decisions without talking with you about it first.	.608	.345	.563	.224*	.402**
16. Make you ask him for money.	.595	.267	.514	.245*	.395**
17. Threaten you or beat you up for paying the bills or buying things that were needed.	.521	.358	.516	.363**	.365**

Table 5 (cont'd).

	CONTROL	EXPLOIT	SEA	PHYSICAL	PSYCH
EXPLOITATION					
1. Take money from your purse, wallet or bank account without your permission and/or knowledge.	.438	.633	.594	.518**	.411**
2. Force you to give him money or let him use your checkbook, ATM card or credit card.	.508	.641	.648	.431**	.295**
3. Steal your property.	.348	.607	.519	.433**	.428**
4. Pay bills late or not pay bills that were in your name or in both of your names.	.469	.637	.618	.318**	.429**
5. Build up debt under your name by doing things like use your credit card or run up the phone bill.	.246	.577	.435	.388**	.215*
6. Refuse to get a job so you had to support your family alone.	.089	.537	.309	.246*	.104
7. Gamble with your money or your shared money.	.430	.580	.566	.406**	.254**
8. Have you ask your family or friends for money but not let you pay them back.	.421	.620	.577	.329**	.290**
9. Convince you to lend him money but not pay it back.	.269	.650	.483	.268**	.265**
10. Pawn your property or your shared property.	.412	.614	.568	.467**	.257**
11. Spend the money you needed for rent or other bills.	.346	.713	.565	.336**	.261**

** significant at .01; * significant at .05

Validity

Correlation and regression analyses were used to examine the construct validity of the SEA. Table 6 depicts the correlations among the entire SEA, the two SEA subscales, the measures of physical abuse, psychological abuse, and economic health, and demographic variables: age, race (dichotomously coded as 1=white, 2=non-white) and income. The correlation between the subscales was significant, but of moderate strength ($r = .514$), indicating that while they are related, they are measuring unique constructs. It is also important to note that the SEA was not significantly correlated with age, race or income. In fact, the correlations were all quite low. The lack of correlation between these demographic characteristics and the SEA suggests that, in this sample, economic abuse scores are not significantly influenced by these dimensions.

The Relationship between Economic Abuse and Physical and Psychological Abuse

The construct validity of the SEA was examined by assessing the relationship between the SEA and measures of physical abuse (modified CTS) and psychological abuse (PMWI). The SEA was positively correlated with both the modified CTS and the PMWI ($r = .61, p < .01$; $r = .58, p < .01$), indicating that higher levels of economic abuse are significantly related to higher levels of physical and psychological abuse. The correlation between the SEA subscales and the modified CTS and the PMWI were also both positive and significant. Specifically, the Control subscale was positively correlated with physical and psychological abuse ($r = .52, p < .01$; $r = .56, p < .01$), indicating that the more physical and psychological abuse a woman experienced, the more her partner controlled her access to and use of

Table 6
Correlations

	SEA	CONTROL	EXPLOIT	PHYSICAL	PSYCH	EH1	AGE	INCOME
SEA	1.00							
CONTROL	.905**	1.00						
EXPLOIT.	.830**	.514**	1.00					
PHYSICAL	.608**	.524**	.540**	1.00				
PSYCH	.575**	.562**	.422**	.417**	1.00			
EH1	.523**	.403**	.527**	.194	.208*	1.00		
AGE	-.156	-.110	-.169	-.085	-.054	-.188	1.00	
RACE	-.158	-.085	-.177	.022	-.193	-.183	-.118	-.171
INCOME	-.090	-.043	-.124	-.187	-.081	-.162	.374**	1.00

** significant at .01; * significant at .05

economic resources. Similarly, the positive correlation between the Exploitation subscale of the SEA and the modified CTS and the PMWI suggests that the women who suffered higher levels of physical and psychological abuse were also more economically exploited by their partners ($r = .54, p < .01$; $r = .42, p < .01$). While the correlations between the measures of physical and psychological abuse and the SEA were all positive, the fact that they were of only moderate strength (ranging from .42 to .60) is evidence that economic abuse is a unique construct in need of a separate measure.

The Relationship between Economic Abuse and Economic Health

The construct validity of the SEA was further examined by assessing the relationship between the SEA and economic health. The Economic Health Index was a 24-item measure developed to assess the degree of economic difficulty experienced by survivors of abuse since their relationship with their abuser began. After reliability analysis, 11 of the 24 items were removed due to low item-total correlations. The resulting 13-item scale demonstrated good internal consistency, with an alpha coefficient of .86. As Table 7 illustrates, the women in the sample had experienced a wide range of economic problems since their relationship began. For example, the overwhelming majority of the women struggled to find and maintain affordable housing. Specifically, 80% of women in the sample indicated that they had had trouble finding an affordable place to live, while 86% had to stay with family or friends or in a shelter because they could not find a place of their own. Also, over half (52%) of the women had been evicted or had a house foreclosed. In addition to housing, many of the women

interviewed had trouble paying their bills and providing food and other necessities for their families. In fact, 53% of the women had gone as far as pawning or selling their property so they could pay bills or provide food for their families and 61% had had their telephone, electricity or other utilities shut off.

Table 7
Psychometric Properties and Frequencies for the Economic Health Index

Scale Item	Item <i>M</i>	Item <i>SD</i>	CITC* Scale	Freq. (%)
<i>Retained Items</i>				
1) Have you had trouble finding an apartment or house you could afford?	.80	.41	.54	80
2) Have you had to stay with friends or family or in a shelter because you could not find a place to live?	.86	.34	.42	86
3) Have you had trouble getting a house, apartment, vehicle or credit card because of your credit?	.83	.37	.46	84
4) Have you been evicted from a place you were renting or had your house foreclosed?	.51	.50	.57	52
5) Has your landlord ever threatened to evict you because you could not pay your rent?	.52	.50	.65	52
6) Have you had trouble buying food or other necessities for your family?	.73	.45	.54	73
7) Have you had to borrow money to pay rent or other bills because you did not have the money to pay them when they were due?	.80	.41	.49	80
8) Have you asked a community agency for help to pay your rent or other bills?	.75	.44	.55	75
9) Have you sold or pawned your property because you needed money for rent, bills or other necessities?	.53	.50	.49	53
10) Have you been harassed by people/businesses you owe money to?	.70	.46	.51	70
11) Have you had trouble with your credit rating?	.81	.40	.49	81
12) Has your telephone, electricity or other utilities ever been turned off?	.61	.49	.65	61
13) Has your credit rating made it difficult to get a phone?	.51	.50	.51	52

Table 7 (cont'd).

Scale Item	Item <i>M</i>	Item <i>SD</i>	CITC* Scale	Frequency (%)
<i>Dropped Items</i>				
Have you taken on a second job or worked more hours to make ends meet?	.42	.50	.13	42
Have you been on welfare?	.73	.45	.29	73
Have you had to file or consider filing for bankruptcy?	.46	.50	.26	46
Have you been in trouble with the IRS?	.07	.25	.05	7
Have you had a checking or savings account?	.17	.37	.01	17
Have you had a credit card?	.46	.50	.16	46
Have you had a vehicle of your own?	.19	.40	-.05	19
Have you had to get rid of a vehicle because you could not afford it?	.34	.48	.11	34
Has your car been repossessed?	.12	.32	.13	12
Have you had to get your furniture or appliances from a rent-to-own store because you did not have the money to purchase them?	.22	.42	.33	22
Have you been able to afford child care?	.75	.44	.30	75
Alpha	.86			
Scale mean	9.0			
Scale standard deviation	3.6			

Note. Items were scored 0=No; 1=Yes. *CITC= Corrected Item-Total Correlation

Correlation analysis revealed a significant positive relationship between economic health and economic abuse, $r = .523$, $p < .01$. The relationship between economic health and the SEA subscales was also examined. First, the results showed that the Control subscale of the SEA was significantly positively correlated with economic health ($r = .403$, $p < .01$), indicating that the more women's access to and use of resources is controlled by their abusive partner, the greater the amount of financial hardship they experience. The Exploitation subscale was also significantly correlated with economic health in the positive direction ($r = .527$, $p < .01$) meaning that as women's economic resources are increasingly compromised as a result of their partner's actions, the degree of financial difficulties they experience also increases.

Hierarchical multiple regression was used to further explore the relationship between economic health and economic abuse for the purpose of assessing the content validity of the SEA. Three models were tested to examine whether the total SEA and the two subscales significantly predict economic health after accounting for the effects of the women's age, race, and income and the level of physical and psychological abuse they experienced. Model 1 regressed the economic health scores upon the scores for the total SEA. Variables for this model were entered in three blocks. In the first block the demographic variables of age, race and income were entered as controls. In the second block, the scores from the CTS and PMWI were also entered as controls. The SEA was entered in the third block. Results indicated that this model accounted for approximately 35% ($R^2 = .348$) of the variance in economic health

scores. Beta was .674, indicating that women scoring one standard deviation higher on economic abuse had, on average, economic health scores that were .67 standard deviation higher. The R-square change due to the addition of the SEA was .219, significant at $p < .001$, meaning that economic abuse accounts for about 22% of the variance in economic health scores, after the effects of age, race, income and physical and psychological abuse are removed (see Table 8).

Table 8
Summary of Multiple Regression Results from Model 1

Predictors	Standardized β	t	R ² Change
Block 1:			
Age	-.068	-.755	
Race	-.133	-1.53	
Income	-.145	-1.59	.095
Block 2:			
Physical Abuse	-.187	-1.74	
Psychological Abuse	-.143	-1.39	.034
Block 3:			
SEA	.674*	5.68*	.219*
Total R-square			.348
Total F			8.53*

Note: Coefficients were from the final block, with all the variables in the model.
* $p < .001$

Model 2 regressed the economic health scores upon the Control subscale for the purpose of assessing the unique contribution of the Control subscale to the prediction of economic health. Variables for this model were also entered in three blocks. In the first block, the demographic variables were again entered as controls. Physical and psychological abuse were entered as controls in the second block, and the scores from the Control subscale were entered in the third block. Results indicated that this model accounted for approximately 22% ($R^2 = .218$) of the variance in the economic health scores. Beta was .4, indicating that

women scoring one standard deviation higher on economic abuse had, on average, economic health scores that were .4 standard deviation higher. The R-square change due to the addition of the Control subscale was .09, significant at $p < .001$, indicating that economic control accounts for 9% of the variance in economic health after controlling for the effects of demographic characteristics and physical and psychological abuse (see Table 9).

Table 9
Summary of Multiple Regression Results from Model 2

Predictors	Standardized β	t	R ² Change
Block 1:			
Age	-.116	-1.19	
Race	-.159	-1.67	
Income	-.138	-1.38	.095
Block 2:			
Physical Abuse	-.026	-.231	
Psychological Abuse	-.054	-.483	.034
Block 3:			
Control Subscale	.400*	3.32*	.09*
Total R-square			.218
Total F			4.47*

Note: Coefficients were from the final block, with all the variables in the model.

* $p < .01$

Model 3 regressed the economic health scores upon the Exploitation subscale of the SEA in order to examine the unique predictive power of the exploitation subscale. Variables for this model were again entered in three blocks. Specifically, the demographic variables were entered in the first block, physical and psychological abuse scores were entered in the second block, and the Exploitation subscale scores were entered in the third block. Results indicated that this model accounted for 33% of the variance ($R^2 = .331$) in the economic health scores ($\beta = .561$). The R-square change due to the addition of

the Exploitation subscale was .203, significant at $p < .001$, indicating that exploitation accounts for an additional 20% of the variance in economic health after the effects of age, race, and income and physical and psychological abuse have been removed (see Table 10).

Table 10
Summary of Multiple Regression Results from Model 3

Predictors	Standardized β	t	R ² Change
Block 1:			
Age	-.081	-.893	
Race	-.166	-1.90	
Income	-.115	-1.25	.095
Block 2:			
Physical Abuse	-.125	-1.20	
Psychological Abuse	-.023	-.234	.034
Block 3:			
Exploitation Subscale	.561*	5.39*	.203*
Total R-square			.331
Total F			7.93*

Note: Coefficients were from the final block, with all the variables in the model.

* $p < .001$

Two additional models were tested for the purpose of assessing the unique contribution of each of the SEA subscales after accounting for the effects of the other subscale. In Model 4, age, race and income were entered in the first block, physical and psychological abuse was entered in the second block, Exploitation was entered in the third block and Control was entered in fourth block. Results indicated that this model accounted for 37% of the variance ($R^2 = .373$) in the economic health scores. Again, the Exploitation subscale accounted for an additional 20% of the variance in economic health after the demographics and physical and psychological abuse were removed (R^2 change = .203, $p < .001$). After controlling for the effects of demographics, physical and

psychological abuse and Exploitation, the Control subscale accounted for an additional 4% of the variance in economic health (R^2 change = .042, $p < .05$).

Reversing the entry order of the two SEA subscales, a fifth model was tested in order to examine the unique contribution of the Exploitation subscale to the explanation of economic health and to address the question of which subscale, Control or Exploitation, is the best predictor of economic health. As Table 12 shows, after the effects of demographics, physical and psychological abuse and Control were taken into account, Exploitation accounted for an additional 15.5% of the variance in economic health scores. Examination of the beta coefficients associated with the two SEA subscales revealed that Exploitation made the strongest unique contribution to the prediction of economic health ($\beta = .503$). The unique predictive power of the Control and Exploitation subscales is further evidence for the existence of two distinct dimensions of economic abuse. Furthermore, the significant relationship between economic abuse and economic health is strong evidence supporting the construct validity of the SEA.

Table 11
Summary of Multiple Regression Results from Model 4

Predictors	Standardized β	t	R ² Change
Block 1:			
Age	-.062	-.690	
Race	-.139	-1.63	
Income	-.136	-1.51	.095
Block 2:			
Physical Abuse	-.203	-1.91	
Psychological Abuse	-.118	-1.16	.034
Block 3:			
Exploitation Subscale	.503*	4.84*	.203*
Block 4:			
Control Subscale	.280**	2.52**	.042**
Total R-square			.373
Total F			7.53*

Note: Coefficients were from the final block, with all the variables in the model.

*p < .001; **p < .05

Table 12
Summary of Multiple Regression Results from Model 5

Predictors	Standardized β	t	R ² Change
Block 1:			
Age	-.062	-.690	
Race	-.139	-1.63	
Income	-.136	-1.51	.095
Block 2:			
Physical Abuse	-.203	-1.91	
Psychological Abuse	-.118	-1.16	.034
Block 3:			
Control Subscale	.280**	2.52**	.090*
Block 4:			
Exploitation Subscale	.503*	4.84*	.155*
Total R-square			.373
Total F			8.07*

Note: Coefficients were from the final block, with all the variables in the model.

*p ≤ .001; **p < .05

Discussion

Intimate partner abuse of women by male partners occurs at an alarming rate in our society. Until now the majority of research in the area of intimate partner abuse has largely focused on physical and psychological forms of abuse. This is despite considerable documented and anecdotal evidence indicating a vast array of abusive tactics used by batterers in an attempted to establish power and maintain control over their partners. The findings of the present study contribute to our collective understanding of intimate partner abuse in two major ways: first, by highlighting the extent to which economic abuse occurs in abusive relationships; and second, by producing the Scale of Economic Abuse (SEA), a measure of economic abuse that can be used to assess the degree of economic control and/or exploitation experienced by women in abusive relationships.

This is the first study to take a comprehensive, systematic approach to the investigation of the extent to which women in physically and/or psychologically abusive relationships also experience economic forms of abuse. In this sample of women, it was discovered that economic abuse occurred as frequently as physical and psychological abuse. Specifically, all of the women interviewed had suffered psychological abuse and 98% had experienced physical abuse during the last six months of their relationship, and an astounding 99% of the women were subjected to some form of economic abuse at some point during their relationship. In other words, almost all of the women had been involved with partners who controlled their use of or access to economic resources and/or took advantage of them economically. These findings provide evidence that economic

abuse is a distinct form of abuse commonly experienced by women in abusive relationships. Furthermore, these findings empirically demonstrate that economic abuse *is* a significant component of the broad system of tactics used by abusive men to gain power and maintain control over their partners. Thus, additional research is needed to examine the ways in which women experience economic abuse and the consequences this form of abuse has on women's lives. With the development of the SEA, such research is now more likely.

The findings of this study provide initial evidence of the reliability and validity of the SEA as an instrument that can be used to measure economic abuse as a distinct form of abuse. This scale is unique in that it is the first to tap a broad range of economically abusive tactics as a means of assessing the degree of economic abuse experienced in an abusive relationship. Whereas previous measures of abuse have included a limited number of items tapping economic abuse or focused primarily on a specific form of economic abuse, the SEA includes 28 items, 17 of which capture behaviors that control a woman's access to and use of resources and 11 that capture economically exploitive behaviors. These two dimensions, Economic Control and Economic Exploitation, have been shown to be meaningfully distinct and useful for predicting the degree of economic hardship experienced by women with abusive partners. The SEA will be useful for gaining a more complete picture of the ways in which economic abuse affects women's lives. Such information is needed to inform the development of interventions specifically tailored to meet the unique needs of women impacted by economic abuse.

While the SEA has been shown in this study to be a valid and reliable measure of economic abuse, the study does have limitations, mostly stemming from an under representation of specific groups of women in the sample. The vast majority of the women in the sample were either African American or White, they were primarily low-income women, and all of the women were receiving services from a domestic abuse organization. As a result, the findings of this study do not necessarily reflect the experiences of other groups of women. For example, it is possible that the nature and consequences of economic abuse differ for women from other ethnic minority groups, middle to high income earners or non-formal help-seeking women. Thus, caution should be used in generalizing the findings of this study beyond low income, African American and White women receiving services from a domestic abuse organization. A study of economic abuse involving a more diverse sample of women is needed in order to better understand the unique experiences of various groups of women and to further assess the validity of the SEA.

The low-income status of the majority of women in this sample raises an additional concern. With over three-quarters of the women reporting a family income of under \$20,000, it is reasonable to question whether the financial hardships reported on the EHI represent chronic financial problems stemming from insufficient income rather than resulting from economic abuse. However, the relationship between economic health and economic abuse is strongly supported by both the empirical findings of this study and the women's personal accounts. After responding to the economic health items, respondents were

asked to what they attributed their financial difficulties. Only 5% of the women stated that their partners were not at all responsible for their financial difficulties, while 76% stated that their partners were very much or completely responsible for the economic hardships they had faced. Correlation analyses showed that the level of economic abuse experienced was significantly correlated with the women's attribution of their economic struggles to their partners ($r = .296$, $p < .01$). In other words, women experiencing higher levels of economic abuse placed greater responsibility for their economic hardships on their partners. However, it should be noted that because the study is based on cross-sectional data, a causal link between economic abuse and economic hardship can not be inferred. Longitudinal studies that examine the effects of economic abuse are needed.

In addition to the aforementioned demographic characteristics, the sample was also limited in the number of women who had attended or attempted to attend school and in women who had children in common with the abuser. The under-sampling on these characteristics resulted in the exclusion of all items pertaining to school interference and tactics involving children. Thus, while the SEA captures a broad range of economically abusive tactics, it is also missing these important types of economic abuse. This is a potentially significant omission, given the frequency with which school interference and abuse tactics involving children are discussed in the literature (Anderson, et al., 2003; Curcio, 1997; Moe & Bell, 2004; Ptacek, 1997; Rapheal, 1996; Riger, Ahrens & Blickenstaff, 2001; Shepard & Pence, 1988; Tolman, 1989; Tolman & Rapheal,

1997) and cited by both practitioners and survivors. Accordingly, such tactics need to be taken into consideration in future studies examining economic abuse.

The most significant limitation of the study stems from an inconsistency in the timeframes used as reference points for the respondents' reports of their experiences of abuse and economic health. All of the women reported their economic health and economic abuse from the time their relationship began with their abusive partner. In comparison, the occurrence of both physical and psychological abuse were reported for the last six months of their relationships. It is possible that there were differences in the physical and psychological abuse women experienced earlier in the relationship, that is, prior to the six month time frame. Such differences may have changed the women's scores on the PMWI and CTS, thus affecting the relationship between these measures and economic abuse and economic health. While this timeframe inconsistency is not ideal, it was necessary given the nature of the economic abuse items. More specifically, many of the original economic abuse items captured events that occur with low regularity (e.g., signing a lease, buying a car), thus the application of a six month timeframe would not have captured women's full experiences of economic abuse within their relationships. However, the significance of this limitation is minimized in the final scale, with the majority of items tapping events that most likely occur regularly. Therefore, future research could pilot whether the use of a more specified timeframe effectively captures women's experiences of economic abuse as measured by the SEA.

Despite these limitations, this study is an important step toward gaining a fuller understanding of the complexity of intimate partner abuse. Women not only experience physical and psychological forms of abuse, but they are also being terrorized and controlled economically by their abusive partners. With the nature and frequency of economic abuse empirically established, research is now needed that examines the impact this specific form of abuse has on women's short-term and long-term well-being. Such knowledge can be used to develop interventions and garner resources for use by women whose physical, emotional and economic health have been compromised by an economically controlling and/or exploitive partner.

APPENDIX

Interviewer ID# _____
Participant ID# _____
Time Interview Started _____

I'd like to begin by asking you some general questions about yourself.

1. What is your race or ethnic background?

AFRICAN AMERICAN/BLACK1
CAUCASIAN/WHITE.....2
HISPANIC/LATINA.....3
ASIAN AMERICAN.....4
NATIVE AMERICAN/AMERICAN INDIAN.....5
BIRACIAL (SPECIFY6
MULTIRACIAL (SPECIFY7
OTHER (SPECIFY8

2. How old are you?: _____

3. How many minor children do you have? (Under 18): _____

4. Are you currently a student?

YES1
NO2

5. What's your education level?

LESS THAN HIGH SCHOOL.....1
SOME HIGH SCHOOL.....2
HIGH SCHOOL/GED.....3
SOME COLLEGE.....4
COLLEGE GRADUATE.....5
TRADE SCHOOL.....6
ADVANCED DEGREE.....7

6. In the last six months, have you been employed?

YES1
NO2

6a. Are you employed right now?
(GO TO #6b)

YES1
NO2

6b. Do you work part-time, full-time or sporadically (off and on, temporary)?
(FULLTIME = 35 HOURS PER WEEK OR MORE)

PART-TIME.....1
FULL-TIME.....2
SPORADICALLY.....3
(Not Applicable).....8

Now if you don't mind, I'd like to ask you some questions about your relationship with the man who abused you. Would you mind telling me his name so that I can refer to him by that? NAME:

_____ [NOTE TO INTERVIEWER: If woman is at all uncomfortable with giving you his/her name, offer to refer to the person as "your boyfriend," etc.] If you don't want to answer any of these questions, just let me know or if you want to stop at any time, just let me know.

7. What was your relationship with _____ at the time the abuse occurred?

MARRIED, LIVING TOGETHER1
MARRIED, SEPARATED.....2
DIVORCED.....3
GIRL/BOYFRIEND, LIVING TOGETHER.....4
GIRL/BOYFRIEND, NOT LIVING TOGETHER..5
EX-GIRLFRIEND, EX-BOYFRIEND.....6
DATING, BUT NOT GIRL/BOYFRIEND.....7
OTHER (SPECIFY _____)..8

8. How long have you been/were you in a relationship with _____?

(WRITE EXACT NUMBER OF MONTHS) _____

Now I have a list of some of the emotional things some men do to annoy or hurt their partners and ex-partners. (HAND PARTICIPANT YELLOW CARD) These may or may not have ever happened in your relationship. 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, to the best of your recollection, what statement on this card gives the best summary of how frequently, if at all, each thing happened in the last six months of your relationship with _____.

1=NEVER
2= RARELY
3= OCCASIONALLY
4= FREQUENTLY
5= VERY FREQUENTLY
8= NOT APPLICABLE
9= DECLINED TO ANSWER

How often, if at all, did _____

9. Call you names. _____

10. Swear at you. _____
11. Yell and scream at you. _____
12. Treat you like an inferior. _____
13. Monitor your time and make
you account for your whereabouts. _____
14. Use money or make important
financial decisions without talking to you about it. _____
15. Was jealous or suspicious of your friends. _____
16. Accuse you of having an affair with another man. _____
17. Interfere in your relationships with other family members. _____
18. Try to keep you from doing things to help yourself. _____
19. Restrict your use of the telephone. _____
20. Tell you your feelings were irrational or crazy. _____
21. Blame you for his problems. _____
22. Try to make you feel crazy. _____

Now I have a list of different types of violence that some women have experienced from their partners and ex-partners. Using this card (HAND PARTICIPANT BLUE CARD), could you tell me, to the best of your recollection, how many times in the last six months of your relationship _____ did any of the following things to you:

- 1 = NEVER/NONE
- 2 = ONCE/ONE
- 3 = ONCE A MONTH OR LESS (2 TO 4 TIMES)
- 4 = TWO TO THREE TIMES A MONTH
- 5 = ONE OR TWO TIMES A WEEK
- 6 = 3 OR 4 TIMES A WEEK
- 7 = MORE THAN 4 TIMES A WEEK
- 8 = NOT APPLICABLE
- 9 = DECLINED TO ANSWER

23. Broke your glasses or tore your clothing? _____
24. Pushed or shoved you? _____

- 25. Grabbed you? _____
- 26. Slapped you with an open hand? _____
- 27. Pulled your hair? _____
- 28. Bit you? _____
- 29. Hit you with a fist? _____
- 30. Kicked you? _____
- 31. Thrown something at you? _____
- 32. Hit you with an object, aside from throwing something at you? _____
- 33. Tried to hit you with an object? _____
- 34. Twisted your arm or leg? _____
- 35. Drove recklessly to scare you? _____
- 36. Choked or strangled you? _____
- 37. Smothered you? _____
- 38. Burned you? _____
- 39. Tied you up or physically restrained you? _____
- 40. Beat you up? _____
- 41. Forced sexual activity? _____
- 42. Threatened you with a knife? _____
- 43. Threatened you with a gun? _____
- 44. Stabbed you? _____
- 45. Shot you? _____
- 46. Anything I haven't mentioned?
(explain: _____)

In this section of the interview, I am going to go through a list of things some men do to hurt their partner or ex-partner financially. Using this card, (HAND PARTICIPANT GREEN CARD), could you tell me, to the best of your recollection, how frequently, _____ has done any of the following things since your relationship began.

- 1=NEVER
- 2= HARDLY EVER
- 3= SOMETIMES
- 4= OFTEN
- 5= QUITE OFTEN
- 8= NOT APPLICABLE
- 9= DECLINED TO ANSWER

Sometimes some men will try to keep their partner/ex-partners from getting a job. In this first set of questions, I am going to ask you about some things _____ may or may not have done to keep you from working. I will start with a general question and then ask you about several specific things _____ may have done.

Since your relationship began, how often, if at all, did _____

- 47. Not let you have a job. _____
- 48. Keep you from sleeping
the night before a job interview. _____
- 49. Not watch the children so you
could look for a job or go to a job interview. _____
- 50. Hide the job section of the newspaper. _____
- 51. Hide or steal your identification, social security
card or birth certificate to keep you from getting a job. _____
- 52. Steal the car keys or take the car so you
couldn't go look for a job or go to a job interview. _____
- 53. Call you names or put you down
before an interview. _____

Once you had a job, _____ may or may not have done things to keep you from going to work from day to day. In this next set of questions, I am going to ask you about some things _____ may have done to keep you from going to work. Again, I will start with a general question and then ask you about several specific things _____ may have done.

Since your relationship began, how often, if at all, did _____
(IF SHE NEVER WORKED DURING THE RELATIONSHIP, MARK ALL 8)

- 54. Do things to keep you from going to your job. _____
- 55. Demand that you stay home from work. _____
- 56. Sabotage the car so you couldn't go to work. _____
- 57. Cause visible physical injuries to keep
you from going to work. _____
- 58. Not watch the children so you
couldn't go to work. _____
- 59. Refuse to give you a ride to work. _____
- 60. Steal the car keys or take the car so you
couldn't go to work. _____
- 61. Physically restrain you from going to work. _____
- 62. Threaten you to keep you from going to work. _____
- 63. Shut off the alarm clock to keep you from
going to work. _____
- 64. Hide your purse, wallet or money to keep you
from going to work. _____
- 65. Hide or destroy your clothes to keep you
from going to work. _____
- 66. Beat you up if you said you needed to go to work. _____
- 67. Hurt or neglect your children
while you were at work. _____

Now this next set of questions is about things _____ may or may not have done to bother you at work or make you stop working.

Since your relationship began, how often, if at all, did _____
(IF SHE NEVER WORKED DURING THE RELATIONSHIP, MARK ALL 8)

- 68. Do things to make you leave work during the day. _____
- 69. Do things to force you to quit or make you lose your job. _____
- 70. Lie about your children's health or safety to make you leave work. _____
- 71. Come to your work to harass you. _____
- 72. Call you at work to harass you. _____
- 73. Bother your coworkers or boss. _____
- 74. Embarrass you in front of your coworkers or boss. _____
- 75. Lie to your coworkers or boss about you. _____
- 76. Threaten you to make you leave work. _____
- 77. Physically force you to leave work. _____
- 78. Threaten your coworkers or boss. _____
- 79. Demand that you quit your job. _____

In this next part, I am going to ask you about things _____ may or may not have done to interfere with your ability to go to school. This could be any type of education or training program.
Since your relationship began, how often, if at all, did _____

- 80. Not let you go to school. _____
- 81. Do things to keep you from getting into school. _____
- 82. Do things to make it difficult for you to go to school. _____
- 83. Keep you from taking the tests necessary to start school. _____

84. Keep you from having money to pay for school. _____

(IF SHE NEVER WENT TO SCHOOL DURING THE RELATIONSHIP, MARK ALL 8)

85. Destroy your books or homework. _____

86. Sabotage the car so that you couldn't go to school. _____

87. Cause visible physical injuries to keep you from going to school. _____

88. Not watch the children so that you couldn't go to school. _____

89. Refuse to give you a ride to school. _____

90. Steal the car keys or take the car so that you couldn't go to school. _____

91. Physically restrain you from going to school. _____

92. Demand that you stay home from school. _____

93. Threaten you to keep you from going to school. _____

94. Shut off the alarm clock to keep you from going to school. _____

95. Hide your purse, wallet or money to keep you from going to school. _____

96. Hide or destroy your clothes to keep you from going to school. _____

97. Do things to force you to quit or get kicked out of school. _____

98. Lie about your children's health or safety to make you leave school. _____

99. Come to school to harass or watch you. _____

100. Bother your school friends or instructors. _____

- 101. Embarrass you in front of your school friends or instructors. _____
- 102. Lie to your school friends or instructors about you. _____
- 103. Threaten you to make you leave school. _____
- 104. Physically force you to leave school. _____
- 105. Demand that you quit going to school. _____

That is all of the questions I have about _____'s interference with work and school. Now I am going to ask you about other things _____ may or may not have done to keep you from having money or other resources of your own.

Since your relationship began, how often, if at all, did _____

- 106. Do things to keep you from having money of your own. _____
- 107. Keep you from building credit by doing things like put your property in only his name, not let you get a credit card of your own or keep you from having your own bank account. _____
- 108. Keep you from collecting child support from your children's father(s). _____
- 109. Threaten you if you tried to collect child support (For example, threatened to physical hurt you, threatened to leave the state, threatened to quit his job, etc). _____
- 110. Refuse to pay child support for your children. _____
- 111. Keep you from getting a credit card of your own. _____
- 112. Take your paycheck, financial aid check, tax refund check, disability payment or other support payments from you. _____
- 113. Keep you from going on welfare for help with bills, food or medical care. _____
- 114. Keep you from having your own checking or savings account. _____
- 115. Keep you from getting a car of your own. _____

116. Demand that the car be in his name only. _____

117. Demand that the lease or mortgage be
in his name only. _____

In this next section I am going to be asking you about things _____ may or may not have
done to control your use of money or other resources.

Since your relationship began, how often, if at all, did _____

118. Decide when and how you could use your
cash, bank accounts or credit cards. _____

119. Decide how you could spend money rather
than letting you spend it how you saw fit. _____

120. Demand to know how money was spent. _____

121. Go shopping with you to watch what you spent
or pay the cashier himself. _____

122. Demand that you give him receipts and/or
change when you spent money. _____

123. Watch you closely when you wrote out checks
to pay the bills or buy things you needed. _____

124. Keep you from having the money you needed
to pay the rent, or other bills. _____

125. Keep you from having the money you needed
to buy food, clothes or other necessities. _____

126. Hide money so that you could not find it. _____

127. Keep you from having access to your bank account(s). _____

128. Keep you from driving the car. _____

129. Keep you from using the checkbook. _____

130. Keep you from using your credit cards. _____

131. Keep financial information from you. _____

- 132. Make important financial decisions without talking with you about it first. _____
- 133. Give you an allowance. _____
- 134. Make you ask him for money. _____
- 135. Demand that you go on welfare. _____

Now I am going to ask you about things _____ may or may not have done to interfere with your ability to maintain or save up your money and other resources

Since your relationship began, how often, if at all, did _____

- 136. Take money from you without your permission and/or knowledge. _____
- 137. Damage, destroy or steal your property, such as your clothes, household items or car. _____
- 138. Damage your credit by doing things like put property in your name and then refuse to pay the bill or prevent you from paying the bill. _____
- 139. Take money from your purse, wallet or bank account without your permission and/or knowledge. _____
- 140. Use your checkbook, ATM card, and/or credit card without your permission and/or knowledge. _____
- 141. Force you to give him money or let him use your checkbook, ATM card or credit card. _____
- 142. Damage or destroy household items. _____
- 143. Steal your property. _____
- 144. Cause damage to your house or apartment. _____
- 145. Intentionally cause damage to your car. _____
- 146. Damage or destroy your personal possessions. _____

147. Pay bills late or not pay bills that
were in your name or in both of your names. _____
148. Build up debt under your name by doing
things like use your credit card or run up the phone bill. _____
149. Build up debt under your name by doing things
like putting a car, apartment/house or credit cards in your name. _____
150. Make sure your money went into your joint bank
account and then spend it on whatever he wanted
without discussing it with you. _____
151. Buy you expensive gifts with your
own money. _____
152. Use your money to pay the bills or buy things
that were needed and spent his however he wanted. _____
153. Use your money to pay the bills and buy things
because he did not have any money of his own. _____
154. Refuse to get a job so you had to support your
family alone. _____
155. Demand that you get a job or work more hours. _____
156. Gamble with your money or your shared money. _____
157. Have you ask your family or friends for money
but not let you pay them back. _____
158. Convince you to lend him money,
but not pay it back. _____
159. Loan out your money or your shared
money without your permission and/or knowledge. _____
160. Pawn your property or your shared
property. _____
161. Have your utilities shut off (For example,
electricity, phone, cable tv). _____
162. Spend the money you needed for rent or
other bills. _____

163. Buy drugs and alcohol with the money
needed for necessities such as food or rent. _____

164. Buy luxury items such as a new car, TV or CD's
rather than paying for household necessities such
as food and rent. _____

165. Make you drive him around. _____

166. Threaten you or beat you up for paying the
bills or buying things that were needed. _____

Are there any other things _____ did to control your ability to get, use or keep money or
other economic resources that you think should be included in this survey?

Continue on to Next Page

In this final section, I am going to ask you about your financial situation since your relationship with _____ began. These are all yes or no questions, so I just need you to tell me whether or not each thing has happened since your relationship with _____ began [TO THE PRESENT]

167. Have you taken on a second job or worked more hours to make ends meet?	YES	NO	N/A
168. Have you had trouble finding an apartment or house you could afford?	YES	NO	N/A
169. Have you had to stay with friends or family or in a shelter because you could not find a place to live?	YES	NO	N/A
170. Have you had trouble getting a house, apartment, vehicle or credit card because of your credit?	YES	NO	N/A
171. Have you been evicted from a place you were renting or had your house foreclosed?	YES	NO	N/A
172. Has your landlord ever threatened to evict you because you could not pay your rent?	YES	NO	N/A
173. Have you had trouble buying food or other necessities for your family?	YES	NO	N/A
174. Have you had to borrow money to pay rent or other bills because you did not have the money to pay them when they were due?	YES	NO	N/A
175. Have you asked a community agency for help to pay your rent or other bills?	YES	NO	N/A
176. Have you sold or pawned your property because you needed money for rent, bills or other necessities?	YES	NO	N/A
177. Have you been on welfare?	YES	NO	N/A
178. Have you had to file or consider filing for bankruptcy?	YES	NO	N/A
179. Have you been in trouble with the IRS?	YES	NO	N/A
180. Have you been harassed by people/businesses you owe money to?	YES	NO	N/A
181. Have you had trouble with your credit rating?	YES	NO	N/A
182. Have you had a checking or savings account?	YES	NO	N/A
183. Have you had a credit card?	YES	NO	N/A
184. Have you had a vehicle of your own?	YES	NO	N/A
185. Have you had to get rid of your vehicle because you could not afford it?	YES	NO	N/A
186. Has your car been repossessed?	YES	NO	N/A
187. Have you had to get your furniture or appliances from a rent-to-own store because you did not have the money to purchase them?	YES	NO	N/A
188. Has your telephone, electricity or other utilities ever been turned off?	YES	NO	N/A
189. Have you been able to afford childcare?	YES	NO	N/A
190. Has your credit rating made it difficult to get a phone?	YES	NO	N/A

191. Thinking about those things you just said "yes" to, [that is, the financial struggles you have faced since your relationship began] how much do you think _____ had to do with any of those things?

[NOTE TO INTERVIEWER: Be sure to find out if his impact was intentional or unintentional) ____

192. (HAND PARTICIPANT PINK CARD), Now, if you had to put a number on it, how much do you think _____ had to do with any of those things?

- 1=NONE/NOT AT ALL
- 2=VERY LITTLE
- 3=SOMEWHAT
- 4=VERY MUCH
- 5=COMPLETELY
- 8=NOT APPLICABLE
- 9=DECLINED TO ANSWER

193. [HAND HER THE ORANGE CARD). Looking at this card, which number would you say is the closest to your family income last year?

- 1 = \$0 – 5,000
- 2 = \$5,001 – \$10,000
- 3 = \$10,001 – \$15,000
- 4 = \$15,001 – \$20,000
- 5 = \$20,001 – \$30,000
- 6 = \$30,001 – \$50,000
- 7 = above \$50,000

Thank you for answering all of these questions. Do you have any questions for me before we end the interview? (ANSWER QUESTIONS, PAY HER AND THEN THANK HER FOR HER TIME).

Time Interview Ended _____

References

- Adams, D., & McCormick, A. J. (1982). Men unlearning violence: A group approach based on the collective model. In M. Roy (Ed.), *The Abusive Partner: An Analysis of Domestic Battering* (pp. 170-197). New York: Van Nostrand Reinhold Company.
- Aguilar, R. J., & Nightingale, N. N. (1994). The impact of specific battering experiences on the self-esteem of abused women. *Journal of Family Violence*, 9(1), 35-45.
- Aguirre, B. E. (1985). Why do they return? Abused wives in shelters. *Social Work*, 30(4), 350-354.
- Allard, M. A., Colten, M. E., Lalbelda, R., & Cosenza, C. (1997). *"In harm's way? Domestic violence, AFDC receipt and welfare reform in Massachusetts"*. Ann Arbor: University of Michigan.
- Anderson, M. A., Gillig, P. M., Sitaker, M., McCloskey, K., Malloy, K., & Grigsby, N. (2003). 'Why Doesn't She Just Leave?': A Descriptive Study of Victim Reported Impediments to Her Safety. *Journal of Family Violence*, 18(3), 151-155.
- Arias, I., & Pape, K. T. (1999). Psychological abuse: Implications for adjustment and commitment to leave violent partners. *Violence and Victims*, 14(1), 55-67.
- Bancroft, L. (2002). *Why does he do that?: Inside the minds of angry and controlling men*. New York: G.P. Putnam's Sons.
- Barnett, O. W., & LaViolette, A. D. (1993). *It could happen to anyone : why battered women stay*. Newbury Park, Calif.: Sage.
- Brandwein, R. A. (Ed.). (1999). *Battered women, children, and welfare reform: The ties that bind*. Thousand Oaks, CA, US: Sage Publications, Inc.
- Brandwein, R. A., & Filiano, D. M. (2000). Toward real welfare reform: The voices of battered women. *Affilia*, 15(2), 224-243.
- Bartlett, M.S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of the Royal Statistical Society*, 16, 296-298.
- Brewster, M. P. (2003). Power and Control Dynamics in Prestalking and Stalking Situations. *Journal of Family Violence*, 18(4), 207-217.

- Brooks, M. G., & Buckner, J. C. (1996). Work and welfare: Job histories, barriers to employment, and predictors of work among low-income single mothers. *American Journal of Orthopsychiatry*, 66(4), 526-537.
- Brown, G. W., & Moran, P. M. (1997). Single mothers, poverty and depression. *Psychological Medicine*, 27(1), 21-33.
- Browne, A. (1993). Violence against women by male partners: Prevalence, outcomes, and policy implications. *American Psychologist*, 48(10), 1077-1087.
- Browne, A., Salomon, A., Bassuk, S. S., & Raphael, J. (1999). The impact of recent partner violence on poor women's capacity to maintain work. *Violence Against Women*, 5(4), 393-426.
- Brush, L. D., & Raphael, J. (2000). Battering, traumatic stress, and welfare-to-work transition. *Violence Against Women*, 6(10), 1039-1065.
- Campbell, R. (2002). *Emotionally Involved: The impact of researching rape*. New York: Routledge.
- Cascardi, M., O'Leary, K. D., Lawrence, E. E., & Schlee, K. A. (1995). Characteristics of women physically abused by their spouses and who seek treatment regarding marital conflict. *Journal of Consulting and Clinical Psychology*, 63(4), 616-623.
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1, 245-276.
- Chalmers, L., & Smith, P. (1984). Wife battering: psychological, social, and physical isolation and counteracting strategies. *Review of Canadian Studies*, 1(2), 221-244.
- Coker, A. L., Smith, P. H., Bethea, L., King, M. R., & McKeown, R. E. (2000). Physical health consequences of physical and psychological intimate partner violence. *Arch Fam Med*, 9(5), 451-457.
- Correia, A. & Rubin, J. (2001). *Housing and battered women: A case study of Domestic Violence Programs in Iowa*. VAWnet - Applied Research Paper Series. November, 2001. Available on <http://www.vawnet.org>.
- Curcio, W. (1997). *The Passaic County study of AFDC recipients in a welfare-to-work program: A preliminary analysis*. Ann Arbor: University of Michigan.

- Davies, J., & Lyon, E. (1998). *Safety planning with battered women*. Thousand Oaks: Sage Publications.
- Davis, M. F. (1999). The economics of abuse: How violence perpetuates women's poverty. In A. Brandwein Ruth (Ed.), *Battered Women, Children, and Welfare Reform: The Ties that Bind* (pp. 17-30). Thousand Oaks: Sage.
- Dobash, R. E., & Dobash, R. (1979). *Violence against wives : a case against the patriarchy*. New York: Free Press.
- Dukes, R. L., Borega, K. N., Clayton, S. L., Dukes, C. K., Fox, C., McCombs, J., Miller, T. L., & Rodgers, S. E. (2002). Tainted love: Content analysis of documents written by accused spousal abusers to their victims. *Psychological Reports*, 90(2), 679-684.
- Dunn, J. R., & Hayes, M. V. (2000). Social inequality, population health, and housing: a study of two Vancouver neighborhoods. *Social Science and Medicine*, 51(4), 563-587.
- Enders, C. K. (2003). Using the expectation maximization algorithm to estimate coefficient alpha for scales with item-level missing data. *Psychological Methods*, 8(3), 322-337.
- Follingstad, D. R., Rutledge, L. L., Berg, B. J., Hause, E. S., & Polek, D. S. (1990). The role of emotional abuse in physically abusive relationships. *Journal of Family Violence*, 5(2), 107-120.
- Fox, J. A. (1998). *Violence by Intimates: Analysis of Data on Crimes by Current or Former Spouses, Boyfriends, and Girlfriends*.: U.S Department of Justice.
- Golding, J. M. (1999). Intimate partner violence as a risk factor for mental disorders: A meta-analysis. *Journal of Family Violence*, 14(2), 99-132.
- Gondolf, E. W., & Fisher, E. R. (1988). *Battered women as survivors : an alternative to treating learned helplessness*. Lexington, Mass.: Lexington Books.
- Greenfeld, L. A., & Rand, M. R. (1998). *Violence by intimates: Analysis of data on crime by current or former spouses, boyfriends, and girlfriends*: U.S. Department of Justice. Bureau of Justice Statistics.
- Hall, L. A., Williams, C. A., & Greenberg, R. S. (1985). Supports, stressors, and depressive symptoms in low-income mothers of young children. *American Journal of Public Health*, 75(5), 518-522.

- Hass, G. A., Dutton, M. A., & Orloff, L. E. (2000). Lifetime prevalence of violence against Latina immigrants: Legal and policy implications. *International Review of Victimology*, 7(1-3), 93-113.
- Hofeller, K. H. (1982). *Social, psychological, and situational factors in wife abuse*. Palo Alto, Calif.: R & E Research Associates.
- Hudson, W. W., & McIntosh, S. R. (1981). The Assessment of Spouse Abuse: Two Quantifiable Dimensions. *Journal of Marriage and the Family*, 43(4), 873-885.
- Johnson, I. M. (1992). Economic, situational, and psychological correlates of the decision-making process of battered women. *Families in Society*, 73(3), 168-176.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39, 31-36.
- Katz, J., Arias, I., & Beach, R. H. (2000). Psychological abuse, self-esteem, and women's dating relationship outcomes: A comparison of the self-verification and self-enhancement perspectives. *Psychology of Women Quarterly*, 24(4), 349-357.
- Kerouac, S., Taggart, M. E., Lescop, J., & Fortin, M. F. (1986). Dimensions of health in violent families. *Health Care Women Int*, 7(6), 413-426.
- Khan, F. I., Welch, T. L., & Zillmer, E. A. (1993). MMPI-2 profiles of battered women in transition. *Journal of Personality Assessment*, 60(1), 100-111.
- Labell, L. S. (1979). Wife abuse: A sociological study of battered women and their mates. *Victimology: An International Journal*, 4(2), 258-267.
- Langley, R., & Levy, R. C. (1977). *Wife beating: The silent crisis*. Toronto: Clarke, Irwin & Company.
- Lloyd, S. (1997). The effects of domestic violence on women's employment. *Law and Policy*, 19(2), 139-167.
- Lloyd, S., & Taluc, N. (1999). The effects of male violence on female employment. *Violence Against Women*, 5(4), 370-392.
- Lynch, J. W., Kaplan, G. A., & Shema, S. J. (1997). Cumulative impact of sustained economic hardship on physical, cognitive, psychological, and social functioning. *New England Journal of Medicine*, 337(26), 1889-1895.

- Marshall, L. L. (1996). Psychological abuse of women: Six distinct clusters. *Journal of Family Violence, 11*(4), 379-409.
- Martin, D. (1976). *Battered wives*. San Francisco: Glide Publications.
- McCallum, D. M., Arnold, S. E., & Bolland, J. M. (2002). Low-income African-American women talk about stress. *Journal of Social Distress and the Homeless, 11*(3), 249-263.
- McCauley, J., Kern, D. E., Kolodner, K., Dill, L., Schroeder, A. F., DeChant, H. K., Ryden, J., Bass, E. B., & Derogatis, L. R. (1995). The "Battering Syndrome": Prevalence and Clinical Characteristics of Domestic Violence in Primary Care Internal Medicine Practices. *Ann Intern Med, 123*(10), 737-746.
- McLeod, J. D., & Kessler, R. C. (1990). Socioeconomic status differences in vulnerability to undesirable life events. *Journal of Health and Social Behavior, 31*(2), 162-172.
- Melbin, A., Sullivan, C. M., & Cain, D. (2003). Transitional supportive housing for women with abusive partners: Battered women's perspectives and recommendations. *Affilia: Journal of Women and Social Work, 18*(4), 445-460.
- Moe, A. M., & Bell, M. P. (2004). Abject Economics: The Effects of Battering and Violence on Women's Work and Employability. *Violence Against Women, 10*(1), 29-55.
- Murphy, C. M., & O'Leary, K. D. (1989). Psychological aggression predicts physical aggression in early marriage. *Journal of Consulting and Clinical Psychology, 57*(5), 579-582.
- Okun, L. (1986). *Woman abuse : facts replacing myths*. Albany: State University of New York Press.
- Okun, L. (1988). Termination or resumption of cohabitation in women battering relationships: A statistical study. In G. T. Hotaling & D. Finkelhor (Eds.), *Coping with family violence: Research and policy perspectives* (pp. 107-119). Thousand Oaks, CA, US: Sage Publications, Inc.
- O'Leary, K. D. (1999). Psychological abuse: A variable deserving critical attention in domestic violence. *Violence and Victims, 14*(1), 3-23.
- Orava, T. A., McLeod, P. J., & Sharpe, D. (1996). Perceptions of control, depressive symptomatology and self-esteem of women in transition from abusive relationships. *Journal of Family Violence, 11*(2), 167-186.

- Pagelow, M. D. (1981). *Woman-battering: victims and their experiences* (Vol. 129). Beverly Hills: Sage Publications.
- Pahl, J. (1983). The allocation of money and the structuring of inequality within marriage. *Sociological Review*, 31(2), 237-262.
- Pearson, J., Thoennes, N., & Griswold, E. A. (1999). Child support and domestic violence: The victims speak out. *Violence Against Women*, 5(4), 427-448.
- Pence, E., & Paymar, M. (1986). *Power and control – Tactics of men who batter: Men's curriculum for spouse abuse interventions.*: Domestic Abuse Intervention Project, Duluth, Minnesota.
- Pence, E., & Paymar, M. (1993). *Education groups for men who batter*. New York: Springer Publishing.
- Ptacek, J. (1997). The tactics and strategies of men who batter: Testimony from women seeking restraining orders. In A. P. Cardarelli (Ed.), *Violence Between Intimate Partners: Patterns, Causes, and Effects* (pp. 104-123). Boston: Allyn and Bacon.
- Ptacek, J. (1998). Why do men batter their wives?, Bergen, Raquel Kennedy (Ed). (1998). *Issues in intimate violence*. (pp. 181 195). Thousand Oaks, CA: Sage Publications, Inc.
- Rand, M. R. (1997). *Violence related injuries treated in hospital emergency departments.*: U.S. Department of Justice. Bureau of Justice Statistics.
- Raphael, J. (1996). *Prisoners of abuse: domestic violence and welfare receipt*. Chicago, IL: Taylor Institute.
- Raphael, J., & Tolman, R., M. (1997). *Trapped by poverty, trapped by abuse: new evidence documenting the relationship between domestic violence and welfare*: Chicago, IL: Taylor Institute.
- Rennison, C. M. (2003). *Intimate Partner Violence, 1993-2001*: U.S. Department of Justice.
- Rhodes, N. R., & McKenzie, E. B. (1998). Why do battered women stay?: Three decades of research. *Aggression and Violent Behavior*, 3(4), 391-406.
- Riger, S., Ahrens, C., & Blickenstaff, A. (2001). Measuring interference with employment and education reported by women with abusive partners: Preliminary data. In K. D. O'Leary & R. D. Maiuro (Eds.), *Psychological Abuse in Violent Domestic Relations*. (pp. 119-133). New York, NY: Springer Publishing Co.

- Riger, S., Ahrens, C., Blickenstaff, A., & Camacho, J. (1999). *Obstacles to employment of women with abusive partners: A summary of select interview data* (A Great Cities Institute Working Paper). Chicago: Great Cities Institute University of Illinois at Chicago.
- Rodenburg, F. A., & Fantuzzo, J. W. (1993). The measure of wife abuse: Steps toward the development of a comprehensive assessment technique. *Journal of Family Violence*, 8(3), 203-228.
- Roy, M. (1982). Four thousand partners in violence: A trend analysis. In M. Roy (Ed.), *The Abusive Partner: An Analysis of Domestic Battering* (pp. 17-35). New York: Van Nostrand Reinhold Company.
- Rusbult, C. E., & Martz, J. M. (1995). Remaining in an abusive relationship: An investment model analysis of nonvoluntary dependence. *Personality and Social Psychology Bulletin*, 21(6), 558-571.
- Sable, M. R., Libbus, M. K., & Huneke Diane, e. a. (1999). Domestic violence among AFDC recipients: implications for welfare-to-work programs. *Affilia*, 14(2), 199-216.
- Sackett, L. A., & Saunders, D. G. (1999). The impact of different forms of psychological abuse on battered women. *Violence and Victims*, 14(1), 105-117.
- Schechter, S., & Gary, L. T. (1988). A framework for understanding and empowering battered women. In M. B. Straus (Ed.), *Abuse and victimization across the life span*. (pp. 240-253). Baltimore: Johns Hopkins University Press.
- Schechter, S. (1982). *Women and male violence : the visions and struggles of the battered women's movement*. Boston: South End Press.
- Shepard, M., & Pence, E. (1988). The effect of battering on the employment status of women. *Affilia: Journal of Women and Social Work*, 3(2), 55-61.
- Shepard, M. F., & Campbell, J. A. (1992). The Abusive Behavior Inventory: A Measure of Psychological and Physical Abuse. *Journal of Interpersonal Violence*, 7(3), 291-305.
- Short, L. M., McMahon, P. M., Davis Chervin, D., Shelley, G. A., Lezin, N., Sloop, K. S., & Dawkins, N. (2000). Survivors' identification of protective factors and early warning signs for intimate partner violence. *Violence Against Women*, 6(3), 272-285.

- Snyder, D. K., & Scheer, N. S. (1981). Predicting disposition following brief residence at a shelter for battered women. *American Journal of Community Psychology*, 9(5), 559-566.
- Stets, J. E. (1990). Verbal and physical aggression in marriage. *Journal of Marriage and the Family*, 52(2), 501-514.
- Straus, M. A., & Gelles, R. J. (1990). *Physical violence in American families: Risk factors and adoptions to violence in 8,145 families*. New Brunswick: Transaction.
- Street, A. E., & Arias, I. (2001). Psychological abuse and posttraumatic stress disorder in battered women: Examining the roles of shame and guilt. *Violence and Victims*, 16(1), 65-78.
- Stronks, K., Van de Mheen, H., Van den Bos, J., & Mackenbach, J. P. (1997). The interrelationship between income, health and employment status. *International Journal of Epidemiology*, 26(3), 592-600.
- Stronks, K., Van de Mheen, H. D., & Mackenbach, J. P. (1998). A higher prevalence of health problems in low income groups: does it reflect relative deprivation? *J Epidemiol Community Health*, 52(9), 548-557.
- Strube, M. J. (1988). The decision to leave an abusive relationship: Empirical evidence and theoretical issues. *Psychological Bulletin*, 104(2), 236-250.
- Strube, M. J., & Barbour, L. S. (1983). The decision to leave an abusive relationship: Economic dependence and psychological commitment. *Journal of Marriage and the Family*, 45(4), 785-793.
- Strube, M. J., & Barbour, L. S. (1984). Factors related to the decision to leave an abusive relationship. *Journal of Marriage and the Family*, 46, 837-844.
- Sullivan, C., M., Parisian, J. A., & Davidson, W. S. (1991). *Index of Psychological Abuse: Development of a measure*. Paper presented at the 99th Annual Convention of the American Psychological Association, San Francisco.
- Sullivan, C. M., Tan, C., Basta, J., Rumptz, M. H., & Davidson, W. S. (1992). An advocacy intervention program for women with abusive partners: initial evaluation. *American Journal of Community Psychology*, 20(3), 309-332.
- Sutherland, C. A., Bybee, D. I., & Sullivan, C. M. (2002). Beyond bruises and broken bones: the joint effects of stress and injuries on battered women's health. *American Journal of Community Psychology*, 30(5), 609-636.

- Sutherland, C. A., Sullivan, C. M., & Bybee, D. I. (2001). Effects of intimate partner violence versus poverty on women's health. *Violence Against Women*, 7(10), 1122-1143.
- Tabachnick, B. G. & Fidell, L. S. (1996). *Using multivariate statistics* (4th edition). Boston: Allyn & Bacon.
- Tjaden, P., & Thoennes, N. (2000). *Extent, nature, and consequences of intimate partner violence: Findings from the National Violence against Women Survey*. Washington, DC: U.S. National Institute of Justice.
- Tolman, R. M. (1989). The development of a measure of psychological maltreatment of women by their male partners. *Violence and Victims*, 4(3), 159-177.
- Tolman, R. M. (1992). Psychological abuse of women. In R. T. Ammerman & M. Hersen (Eds.), *Assessment of family violence: A clinical and legal sourcebook*. (pp. 291-310). Oxford, England: John Wiley & Sons.
- Tolman, R. M., & Rosen, D. (2001). Domestic violence in the lives of women receiving welfare: mental health, substance dependence, and economic well-being. *Violence Against Women*, 7(2), 141-158.
- Vitanza, S., Vogel, L. C. M., & Marshall, L. L. (1995). Distress and symptoms of posttraumatic stress disorder in abused women. *Violence and Victims*, 10(1), 23-34.
- VonDeLinde, K. (2002). *How are domestic violence programs meeting the economic needs of battered women in Iowa? An assessment and recommendations*: National Resource Center on Domestic Violence.
- Walker, L. E. (1979). *The Battered Woman*. New York: Harper & Row.
- Walker, L. E. (1984). *The Battered Woman Syndrome*. New York: Springer.
- Yllo, K. (1984). The status of women, marital equality, and violence against wives: a contextual analysis. *Journal of Family Issues*, 5(3), 307-320.

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