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EFFECTIVENESS OF DOMESTIC VIOLENCE VICTIM INTERVENTIONS:
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DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

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This dissertation is dedicated to five people: The first is my fiancé and soon-to-be husband, Robert Joel Bowen. Despite the stress and tears, sleepless nights, and putting him second to all things Doctoral, he has supported and loved me when I often wonder if anyone else could. He completes and betters me in a way that I never knew was possible. He is patient and kind and helps me to believe in myself despite the times when I thought I would never be able to go on. It is with him by my side that I have been able to accomplish this tremendous task. I love you more than I can possibly say, and I cannot wait to become your wife in just two short weeks!

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Abstract

This study used meta-analysis to examine the effectiveness of domestic violence interventions. Results from 50 reviewed studies revealed mean effect size d -values of .99 for adult interventions and .67 for child interventions. For control groups, adults had a mean effect size of .34, whereas children had a mean effect size of .01. This meta-analytic review suggests that interventions are effective, but that counseling interventions are more effective than advocacy interventions for both adults and children. In particular, CBT, Parent/Family, Empowerment, and Play therapy interventions seem to be equally highly effective for treating adults. For children, CBT seems to be the most effective, followed by Parent/Family, Empowerment, and Play therapy interventions. Further, interventions are effective at reducing maltreatment events, stress/distress, PTSD, and psychopathology; and increasing quality of life, social support, the parent-child relationship, and domestic violence skills in adults. Interventions are not effective at treating adult internalizing symptoms and self-concept. For children, interventions seem to be effective in the same areas as well as in decreasing behavior problems. Implications for current victim interventions are discussed as well as directions for future research.

Chapter 1: Introduction

Impact of Domestic Violence

The detrimental impact of domestic violence (DV) is well studied (e.g., Chan & Yeung, 2009; Evans, Davies, & DiLillo, 2008; Jewell & Wormith, 2010; Olver, Stockdale, & Wormith, 2011; Wolfe et al., 2003) and includes the physical, emotional, psychological and financial consequences (Dienemann, Glass, Hanson, & Lunsford, 2007; Rock, Sellbom, Ben-Porath, & Salekin, 2012). These detrimental effects of physical, sexual, emotional, and verbal abuse overlap (Romero, Donohue, & Allen, 2009; Stover, Berkman, Desai, Marans, 2010). For instance, physical abuse typically results in bodily harm, and frequently causes lasting emotional injuries similar to the effects of psychological abuse (Franzblau, Echevarria, Smith, & van Cantfort, 2008) including shame, distrust of others, and depression (Zanville & Cattaneo, 2012). This is true not only for the adult victims of abuse, but also for child victims. Almost half of female victims of domestic violence live in households with children under the age of 12 (Bureau of Justice Statistics, 2006). Children can suffer from the negative effects of domestic violence by both witnessing parental violence and by being direct targets of the abuse (Alessi & Hearn, 2007; Saxe, Ellis, Fogler, Hansen, & Sorkin, 2005). Thus, domestic violence affects all involved, including adult and child victims.

Impact of domestic violence on adult victims. The detrimental consequences of domestic violence on adult victims are complicated and varied. Perhaps the most terrifying result of domestic violence is the possibility of physical injury and death inflicted upon victims by their abusive partners (Wathen & MacMillan, 2003). Women who survive domestic abuse exhibit a range of emotional, physical and social problems

(Johnson & Zlotnick, 2009). For instance, adult victims often suffer mental health problems, including anxiety, posttraumatic stress disorder, mood and eating disorders, and substance dependence (Kohl & Macy, 2008; Wathen & MacMillan, 2003). A recent meta-analytic review by Beydoun, Beydoun, Kaufman, Lo, and Zonderman (2012) found that exposure to domestic violence significantly increased a woman's risk for both major depressive disorder and other depressive symptoms when compared to women who had not experienced DV. Further, female victims often suffer physical health ailments including gynecological, central nervous system, and stress-related problems (Wathen & MacMillian, 2003). They also have been found to report low social support and frequently suffer from severe isolation (Kohl & Macy, 2008). A very distressing consequence of domestic violence is that of victim suicidal ideation and action (Devries et al., 2011). These detrimental effects of domestic violence become more severe if the victim is exposed to prolonged or repeated violent events (Cook, Blaustein, Spinazzola, & van der Kolk, 2003). Repeated violent trauma causes the nervous system to react in a constant state of alarm, which can result in posttraumatic stress disorder (McWhirter, 2011). Researchers also associate repeated domestic violence with higher rates of parental stress, depression, tense parent-child interactions, anger, anxiety, and social isolation (McWhirter, 2006; Smith & Landreth, 2003).

Impact of domestic violence on child victims. Children who witness domestic violence and/or experience physical child abuse endure a variety of negative symptoms. Wolfe et al. (2003) conducted a meta-analysis on the negative effects of exposure to DV on children and found that 40 of 41 studies showed a statistically significant, negative effect on children witnesses. Kennedy, Bybee, Sullivan, and Greeson (2010) found that

depression was positively correlated with witnessing intimate partner violence. Thompson and Trice-Black (2012) reported that children exposed to the trauma of domestic violence tend to experience difficulties with internalized (i.e., depression, anxiety) and externalized (i.e., conduct problems, poor grades) behavior problems, social skills deficits, and difficulties with academic functioning. Margolin and Vickerman (2011) stated that the often repeating and ongoing nature of domestic violence can result in symptoms of posttraumatic stress disorder (PTSD). Although most research focuses on young children, older children also experience the negative symptoms of domestic violence. Moylan et al. (2010) found that child abuse, domestic violence, and both in combination increase a child's risk for internalizing and externalizing outcomes in adolescence. Sousa et al. (2011) found that youth exposed to both abuse and domestic violence were less attached to parents in adolescence than those who were not exposed.

Not only do children suffer because of exposure to domestic violence and direct forms of child abuse, but often because of the detrimental effects that domestic violence has on their parents' ability to care for them effectively. Dehon and Weems (2010) found support for a theoretical model that suggests that domestic violence is associated with maternal depression, maternal depression is associated with the use of maladaptive parenting practices, and maternal maladaptive parenting practices are associated with children's internalizing and externalizing problems. Further, Katz and Windecker-Nelson (2006) found that domestic violence was associated with parental difficulty in talking to and helping their children manage their emotions, specifically anger and fear. They found that this lack of "emotion coaching" increased children's behavior

problems. Zerk, Mertin, and Proeve (2009) found that parent stress level was the strongest predictor of children's negative symptoms. In particular, that maternal distress adversely impacted the parent-child relationship. Levendosky, Bogat, Huth-Bocks, Rosenblum, and von Eye (2011) reported that, overall, attachment was unstable for 56% of their sample of 150 abused women and their children. Therefore the negative effects of domestic violence on the parents often lead to some of the most detrimental effects on the children.

Importantly, longitudinal studies reveal that experiencing domestic violence as a child has a lasting impact into adulthood. Shen (2009) sampled 1,924 college students and found that both witnessing domestic violence and experiencing physical maltreatment during childhood had long-term, detrimental impacts on self-esteem. Further, they reported that gender played an important role with male participants who experienced dual violence reporting lower self-esteem than female participants who experienced dual violence. Similarly, Paradis et al. (2009) found that both family arguments and physical violence were significantly related to compromised abilities across multiple areas of adult functioning, like mental health problems, deficits in psychological and occupational/career functioning, and poorer physical health at age 30 years. Kulkarni, Graham-Bermann, Rauch, and Seng (2012) found that childhood abuse and combined exposure to abuse and witnessing abuse correlated to current and lifetime PTSD diagnoses. Therefore, the effects of domestic violence are often devastating and long-lasting for children.

Nevertheless, children have a potential for resiliency (Zerk et al., 2009). An important model for understanding resiliency is the "developmental psychopathology

model” (DPM) designed by Cummings, Davies, and Campbell (2000). The DPM focuses on how various biological, psychological and social factors interact to determine a child’s reaction to a negative experience, like domestic violence (Cummings et al., 2000). For instance, a child might experience repeated domestic violence, but not suffer severe negative effects due to the natural resiliency inherent in children. Resiliency is due to a variety of factors like a child’s developing brain, personality traits, social support, appropriate attachment with the victim of the abuse, and type of violence experienced (Wolfe et al., 2003). On the other hand, the opposite of these factors can be detrimental. For instance, a child’s temperament, lack of social support, and/or secure attachment with the abuser might combine to create a more traumatic response to domestic violence (Wolfe et al., 2003). Thus, intervening with child victims of domestic violence is particularly important to aid in resiliency.

Domestic Violence Victim Interventions

A wide variety of domestic violence programs are offered for adult and child victims in diverse settings and with differing treatment length, intervention methodology, and theoretical background. There is a lack of research, however, determining the overall effectiveness of these interventions. For instance, Wathen and MacMillan (2003) systematically reviewed twenty-two articles on interventions that were aimed at preventing abuse or reabuse of women. They found that the research remains unclear as to which interventions reduce rates of abuse and reabuse. They did find, however, that among women who spent at least one night in a shelter and received a specific program of advocacy and counseling services, there was fair evidence reporting a decreased rate of reabuse and an improved quality of life. They reported,

nevertheless, that no study has been conducted to look at improved outcomes for women as opposed to identification of abuse. They argue that the benefits of interventions in treating both women and men are unclear, due to a lack of well-designed research measuring appropriate outcomes. Further, they state that the potential harms of interventions are often not discussed within published studies. Wathen and MacMillan (2003) argue that the evaluation of interventions remains a key research priority.

The modality of interventions utilized to help mothers and children vary vastly from agency to agency, ranging from individual to group, or some combination of both (e.g., McWhirter, 2006; Smith & Landreth, 2003; Sullivan et al., 2004). Further, agencies vary on how to implement these different methods: some utilize individual or sibling play therapy for children, others provide therapies just for mothers alone, and still others combine joint therapies for mothers and children together (e.g., McDonald, Jouriles, & Skopp, 2006; Pike, & Murphy, 2006; Romero et al., 2009; Stover et al., 2010). Further, the method of implementation itself may affect the overall functioning of the mothers/children (Jarvis & Novaco, 2006). Another type of intervention is one that is individually designed and administered in the victim's home (Romero et al., 2010). Thus the research has shown a lack of synthesis regarding the design of victims' interventions.

Efficacy of Domestic Violence Interventions

While most published research on interventions has been shown to be effective (e.g., Coker, Smith, Whitaker, Le, Crawford, & Flerx, 2012; Blodgett, Behan, Erp, Harrington, & Souers, 2008; Tetterton & Farnsworth, 2011; Crusto et al., 2008;

McDonald et al., 2006; McFarlane et al., 2005), these studies have commonly been fraught with problems (Dutton, 2012). Many have not included control groups and those revealed to be ineffective typically go unpublished (Jewell & Wormith, 2010, Wathen & MacMillan, 2003). Further, some difficulties exist as the outcome measures can either vary or remain consistent across interventions. For example, many measure depression and recurrence of domestic violence (e.g., Franzblau et al., 2008; Kennedy et al., 2010), but others measure specific outcomes, such as self-esteem and child conduct problems (Jouriles et al., 2009; McWhirter, 2011). Further, when measuring child adjustment, many studies utilize the Child Behavior Checklist (CBCL) yielding similar outcomes across studies (e.g., Gwynne et al., 2009; Jarvis & Novaco, 2006). Others studies that report child behavioral issues, however, do not utilize this common measurement, making results difficult to compare. Then, some studies assess mothers' functioning, foregoing child functioning and vice versa (e.g., Hughes & Huth-Bocks, 2007; Lieberman et al., 2005). Thus, while domestic violence intervention programs seem to be effective, many problems exist which make a meta-analysis necessary.

Efficacy of domestic violence victim interventions on adults. A review of research reveals that victim interventions are efficacious with a variety of symptoms. Gwynne et al. (2008) found significant improvements in parent/child interaction, parent stress, parental satisfaction, parent confidence, parental capacity, family interactions, child well-being, child language development, child externalizing behaviors, and total family functioning. Stover et al. (2010) found that women were more likely to call the police and report domestic violence, use court-based services, and seek mental health treatment for their children after receiving an intervention. McWhirter (2006) found that

interventions increased social network size and self-efficacy while decreasing social isolation and financial stress. Franzblau et al. (2008) found reduction in feelings of depression following intervention. Smith and Landreth (2003) compared three different interventions and found that all three were effective. McDonald et al. (2006) evaluated the long-term effects of a DV intervention and found that significant improvement in both parents and children continued at two years posttreatment. Thus, domestic violence interventions' modalities vary tremendously, but still seem to be effective.

Victim interventions, however, are often plagued by early termination of services. This is often the result of either leaving the shelter (either prematurely or after a successful stay) or dropping out of the intervention program (Johnson & Zlotnick, 2009), which makes determination of efficacy difficult. Further, Johnson and Zlotnick found that victims often desired to have services after leaving a shelter, but that these services were not available. Further, efficacy for minority participants in victim intervention programs is lacking. Bloom et al. (2009) found a need for culturally competent intervention programs. An encouraging finding, however, is that 25-50% of women in domestically violent relationships have visited a healthcare provider (Devries et al., 2011). Thus, mental health professionals have the opportunity to intervene effectively with adult DV victims.

Efficacy of domestic violence victim interventions on children. Efficacy of interventions on children's well-being is also strong. Schewe (2008) found that direct services benefit both caregivers and children. Specifically, caregiver services focusing on the impact of violence on children, sexual abuse, building support systems, and grief and loss provided the best outcomes for caregivers, while caregiver services that

focused on appropriate discipline were associated with positive outcomes for children. Children improved most when they received services focusing on identifying and expressing feelings, differentiating between “good” and “bad” touches, domestic violence (e.g., safety planning), and community violence (e.g., gang violence; Schewe, 2008). Further, Crusto et al. (2008) conducted an in-home intervention with families and found (a) a significant decrease in the number of traumatic events that children experienced, (b) significant decreases over time in children’s post-traumatic stress–intrusive thoughts and post-traumatic stress–avoidance behaviors, (c) significant decreases in self-reported stress associated with the parenting role among caregivers, (d) favorable ratings of services by caregivers, and (e) high levels of service receipt. In addition, McWhirter (2011) compared two community-based group therapies designed to treat mothers and children. The author found an increased quality of social support in the emotion-focused intervention and a reduction of both family conflict and alcohol use for the goal-oriented intervention. Thus, children benefit in a variety of ways from domestic violence victim interventions.

Meta-Analyses on Domestic Violence Interventions

Although a significant number of meta-analytic studies have been conducted on DV, none have reviewed the literature on victim intervention efficacy. The majority of meta-analyses that have been conducted have focused on the effects of domestic violence on adult victims and children without addressing intervention efficacy (e. g., Chan & Yeung, 2009; Evans et al., 2008; Wolfe et al., 2003). Of those meta-analyses that have assessed DV interventions, only perpetrator programs have been analyzed (i.e., Jewell & Wormith, 2010; Olver et al., 2011; Feder & Wilson, 2005; Babcock,

Green, & Robie, 2004). Stover, Meadows, and Kaufman (2009) conducted a relevant review of four types of DV intervention: perpetrator, victim, couple, and child. Unfortunately, only a small number of studies was selected for each category and no effort was made to include unpublished studies to better account for the bias in publication of effective interventions. While these meta-analyses are incredibly important, a large gap in the research exists when it comes to domestic violence victim intervention programs. The purpose of the current study is to better understand the effectiveness of domestic violence victim interventions. A meta-analysis will be conducted to synthesize the breadth of study results. Attention will be paid to research utilizing control groups and a special effort made to include studies that might not show effectiveness (i.e., unpublished studies, dissertations, theses).

Chapter 2: Literature Review

Frequency and Prevalence of Domestic Violence

Unfortunately, domestic violence (DV) continues to be an alarming concern in the United States. The Center for Disease Control (CDC) in 2008 found that approximately 1 in 4 women and 1 in 10 men report at least one lifetime episode of domestic violence. Nearly 4.8 million intimate partner–related physical assaults and rapes are reported annually, resulting in up to 1,500 deaths each year (Tjaden & Thoennes, 2000; U.S. Department of Justice, 2009). The health-related costs of rape, physical assault, stalking, and homicide by intimate partners in the United States exceed \$5.8 billion each year, including direct medical and mental health care service expenses (nearly \$4.1 billion) and productivity losses (\$1.8 billion; CDC, 2003). These numbers indicate just how prolific and detrimental domestic violence is in the United States.

Common Terms

Domestic violence. It is important to understand and differentiate between terms when conducting research and designing domestic violence interventions. Early conceptualizations of domestic violence referred to physical, emotional, and/or sexual violence perpetrated against a wife by her husband (Stratton, 1944). More recently, domestic violence has been expanded to include same sex couples, couples not married, and reciprocal violence (Roberts, 2007). Typically, the term domestic violence refers specifically to violence that occurs within a single, cohabitating couple (Wathen & MacMillan, 2003).

Intimate partner violence. Although sometimes used interchangeably with domestic violence, researchers frequently use the term “intimate partner violence”

(IPV) to include definitions that encompass greater subtleties of violence that occur in intimate relationships (Letourneau, Duffy, & Duffett-Leger, 2012). Johnson (1995, 2006) identified four major types of intimate partner violence. *Common couple violence* is not connected to general control behavior, but instead arises from arguments where one or both partners become physically violent. *Intimate terrorism* involves one partner trying to control the other through emotional and/or physical abuse. *Violent resistance* describes violence enacted solely as self-defense by the victim against his/her abusive partner. Finally, *mutual violent control* involves both partners behaving violently to attempt to control the other. Therefore, the term intimate partner violence is used to describe violence toward a partner that occurs within a variety of situational contexts.

Family violence. The term “family violence” on the other hand includes domestic violence perpetrated against both intimate partner and child. Domestic abuse toward the child can take the form of witnessing parental violence, or emotional, psychological or physical violence directed at the child (McFarlane, Groff, O’Brien, & Watson, 2005). Within this broader context of family violence, Cross, Mathews, Tonmyr, Scott, and Ouimet (2012) utilized the term “exposure to domestic violence” (EDV) to refer to children witnessing physical or psychological violence between adults. EDV can take many forms, including: overhearing the violence or seeing its aftermath, like injuries or emotional harm (Cross et al., 2012).

Terms utilized in current study. Despite these differences, intimate partner violence, domestic violence and family violence are often used interchangeably. While intimate partner violence describes violence that occurs in the context of a romantic relationship, domestic violence implies violence that occurs in a shared living situation,

and family violence includes violence not only between the couple, but also their children (Chan & Yeung, 2009). Throughout this paper, the term “domestic violence” will be used because of its greater association with interventions and more extensive literature base; however, interventions that assess for domestic violence, intimate partner violence and/or family violence will all be included in review of relevant literature and within methodology and analyses.

Impact of Domestic Violence

The detrimental impact of domestic violence is well studied (e.g., Wolfe et al., 2003; Chan & Yeung, 2009; Evans, Davies, & DiLillo, 2008; Jewell & Wormith, 2010; Olver, Stockdale, & Wormith, 2011) and includes the physical, emotional, psychological and financial consequences for both victims and perpetrators (Dienemann, Glass, Hanson, & Lunsford, 2007; Rock, Sellbom, Ben-Porath, & Salekin, 2012). For perpetrators, the consequence of committing violence is often involvement with the justice system (Hirschel, Hutchison, & Shaw, 2010). For victims, however, while one consequence might be involvement with the justice system, the more prominent consequences are often personal and emotional (Dienemann et al., 2007). Further, the detrimental effects of these different types of abuse overlap. For instance, physical abuse typically results in bodily injury and, in addition, frequently causes lasting emotional injuries similar to the effects of emotional and psychological abuse (Franzblau, Echevarria, Smith, & van Cantfort, 2008) including shame, distrust of others, and depression (Zanville & Cattaneo, 2012). This is true not only for the adult victims of abuse, but also for child victims. Thus, domestic violence affects all

involved, including: perpetrators, adult victims, and children. In the next section, consequences of domestic violence within each group will be reviewed in greater detail.

Impact of domestic violence on perpetrators. The detrimental effects that perpetrators experience as a result of their commission of domestic violence remain unclear (Jewell & Wormith, 2010). Specifically, it is hard to differentiate between symptoms experienced prior to commission of domestic violence and those experienced from commission of domestic violence (Hirschel et al., 2010). Most likely, the relationship is intrinsically linked with certain symptoms leading to commission of domestic violence and domestic violence leading to a continuation and/or worsening of current symptoms and the development of new symptoms (Hirschel et al., 2010). For instance, Rock et al. (2012) found that men who committed domestic violence tended to score higher on measures of hostility, antisocial characteristics, depression, and anger. It is unclear, however, if these symptoms were all present prior to committing domestic violence, or if some developed after committing domestic violence. Therefore, this section will address the interrelated symptoms that perpetrators experience.

A particularly important factor is substance use. Although considered a mitigating factor, the exact relationship between substance use and perpetration of domestic violence is complicated (Stuart, Moore, Kahler, Ramsey, & Strong, 2004). Hirschel et al. (2010) found that substance abuse often co-occurred with perpetration of domestic violence, but argued that it is impossible to know whether substance abuse precedes domestic violence or if substance abuse is used as a coping mechanism. The authors state that the most likely explanation is some combination of both. Whatever the reason, substance use often precedes severe domestically violent incidents, which

commonly results in more acute emotional, psychological, and physical distress (Roberts, 2007).

Another potential impact of domestic violence on perpetrators is the perpetrator's own unhappiness with the relationship. While unhappiness might occur before perpetration of domestic violence, it is likely that domestic violence increases the perpetrator's unhappiness with the relationship (Scott & Crooks, 2007). Scott and Crooks (2007) found that while perpetrators frequently report being depressed and unhappy with their relationship, they often decide to continue the relationship. For instance, Henning and Connor-Smith (2011) found that, out of 1,130 men who were convicted of perpetrating violence on a female partner, almost sixty percent reported that they were currently in or planning to continue their relationship. Further, these men reported that relationship dissatisfaction resulted in a higher likelihood for them to perpetrate domestic violence. Therefore, despite their unhappiness with the relationship, and the increased likelihood of committing domestic violence, the perpetrators were still planning to continue the relationship. The reasons why are unclear, but the authors hypothesize that domestic violence in the perpetrator's family of origin, being married to the victim, having children with the victim, and the duration of the relationship add to the desire to continue their relationship. The research on the effects of domestic violence on the perpetrators of such violence is sparse, with more research needed to better understand the effects of DV on the perpetrators

Impact of domestic violence on victims. The emotional, psychological, and physical impact of domestic violence for victims, on the other hand, has been well researched (Beeble, Bybee, Sullivan, & Adams, 2009). DV research includes not only

the adult victims of domestic violence, but the child victims as well (e.g., Katz & Windecker-Nelson, 2006). Further, the research is extensive on the various types of violence perpetrated (Roberts, 2007). Researchers have assessed the consequences of emotional, psychological, physical and sexual abuse for adult victims (e.g., Romero, Donohue, & Allen, 2009; Stover, Berkman, Desai, Marans, 2010). Others have determined the consequences of physical child abuse and the witnessing of parental abuse on children (e.g., Saxe, Ellis, Fogler, Hansen, & Sorkin, 2005; Smith & Landreth, 2003). This section will give a more in depth analysis of the effects of domestic violence on both adult and child victims.

Impact of domestic violence on adult victims. Victims of domestic violence suffer a variety of negative effects from being abused. Perhaps the most terrifying is the possibility of physical injury and death inflicted upon victims by their abusive partners (Wathen & MacMillan, 2003). Women who survive domestic abuse exhibit a range of emotional, physical and social problems (Johnson & Zlotnick, 2009). For instance, adult victims often suffer mental health consequences, including depression, anxiety, posttraumatic stress disorder, mood and eating disorders, and substance dependence (Kohl & Macy, 2008; Wathen & MacMillan, 2003). Further, female victims often suffer physical health ailments including gynecological, central nervous system, and stress-related problems (Wathen & MacMillian, 2003). They also have been found to report low social support and frequently suffer from severe isolation (Kohl & Macy, 2008). Importantly, women who are victims of abuse often have personal histories of childhood abuse and/or neglect which may normalize relational abuse experiences

(Kohl & Macy, 2008). The detrimental consequences of domestic violence on adult victims are complicated and varied.

A very distressing consequence of domestic violence is that of victim suicidal ideation and action (Wathen & MacMillan, 2003). Devries et al. (2011) used data from a multi-country study to examine the prevalence of suicidal thoughts and attempts after experiencing any form of domestic violence. The authors sampled nearly 20,000 women from nine countries between the ages of 15-49. They found significantly elevated lifetime prevalence rates for suicide attempts (0.8% to 12.0%), lifetime suicidal thoughts (7.2% to 29.0%), and recent suicidal thoughts (i.e., in the past four weeks, 1.9% to 13.6%) when compared with women not experiencing domestic violence (Devries et al., 2011). Therefore suicidal thoughts are more common both while experiencing domestic violence and after ending the domestically violent relationship. An encouraging finding was that between 25-50% of these women with suicidal thoughts in the past four weeks had also visited a health worker in that time (Devries et al., 2011). Thus, health care workers have the opportunity to intervene effectively with adult DV victims.

The detrimental effects of domestic violence become more severe if the victim is exposed to prolonged or repeated violent events (Cook, Blaustein, Spinazzola, & van der Kolk, 2003). Repeated violent trauma causes the nervous system to react in a constant state of alarm, which can result in posttraumatic stress disorder, characterized by negative stress reactions and compromised mental, emotional, and social functioning (McWhirter, 2011). Researchers also associated repeated domestic violence with higher rates of parental stress, depression, tense parent-child interactions, anger, anxiety, and

social isolation (McWhirter, 2006; Smith & Landreth, 2003). The detrimental effects of domestic violence on adult victims are many and often worse with repeated exposure.

Impact of domestic violence on child victims. Another important aspect of domestic violence is the effect that it has on children. Specifically, almost half of female victims of domestic violence live in households with children under the age of 12 (Bureau of Justice Statistics, 2006). Although the exact number is unknown, it is estimated that at least 3.3 million perhaps as many as 10 million children witness domestic violence in the United States annually (Roberts, 2007; Tjaden & Thoennes, 2000). Thus, children are at a great risk for experiencing the negative impact of witnessing domestic violence. Further, children present during instances of DV are placed at further risk for becoming direct targets of abuse (Alessi & Hearn, 2007). It is important, then to ensure that children as well as adult victims receive treatment for domestic violence.

Young child victims. Young children who witness domestic violence and/or experience physical child abuse endure a variety of negative symptoms. Kennedy, Bybee, Sullivan, and Greeson (2010) sampled 100 school-aged children over two years and found that depression was positively correlated with witnessing intimate partner violence. Thompson and Trice-Black (2012) reported that children exposed to the trauma of domestic violence tend to experience difficulties with internalized (i.e., depression, anxiety) and externalized (i.e., conduct problems, poor grades) behavior problems, social skills deficits, and difficulties with academic functioning. Margolin and Vickerman (2011) stated that the often repeating and ongoing nature of domestic violence can result symptoms of posttraumatic stress disorder (PTSD). Further, children

may experience problems in multiple domains of functioning and meet criteria for multiple disorders in addition to PTSD. Thus, young children experience a variety of negative effects from domestic violence.

Older child victims. Older children also experience negative symptoms of domestic violence. Moylan et al. (2010) studied 457 adolescents and found that child abuse, domestic violence, and both in combination (i.e., dual exposure) increased a child's risk for internalizing and externalizing outcomes in adolescence. Sousa et al. (2011) found that youth exposed to both abuse and domestic violence were less attached to parents in adolescence than those who were not exposed. Further, the authors found that stronger bonds of attachment to parents in adolescence predicted a lower risk of antisocial behavior. Although research is not as prominent on adolescents as on younger children, older children still experience the negative effects of domestic violence.

Parenting difficulties. Not only do children suffer because of exposure to domestic violence and direct forms of child abuse, but often because of the detrimental effects that domestic violence has on their parents' ability to care for them effectively. Dehon and Weems (2010) studied 359 women and one of their children between the ages of 5-12. They found support for a theoretical model that suggests that domestic violence is associated with maternal depression, maternal depression is associated with the use of maladaptive parenting practices, and maternal maladaptive parenting practices are associated with children's internalizing and externalizing problems. Katz and Windecker-Nelson (2006) found that domestic violence was associated with parental difficulty in talking to and helping their children manage their emotions, specifically that domestic violence was associated with less coaching of anger and fear.

They found that the lack of “emotion coaching” increased children’s behavior problems. Zerk, Mertin, and Proeve (2009) assessed 60 preschool-aged children to determine the effects of domestic violence. They found that parenting stress was the strongest predictor of children’s negative symptoms. In particular, that maternal distress adversely impacted the parent-child relationship. Levendosky, Bogat, Huth-Bocks, Rosenblum, and von Eye (2011) studied 150 women and children over four years who were victims of domestic violence. They reported that, overall, attachment was unstable for 56% of the sample. Therefore the negative effects of domestic violence on the parent often lead to some of the most detrimental effects on the children.

Long-term impact. Longitudinal studies reveal that experiencing domestic violence as a child has a lasting impact into adulthood. Shen (2009) sampled 1,924 college students and found that both witnessing domestic violence and physical maltreatment during childhood had long-term, detrimental impacts on self-esteem. Moreover, the authors stated that participants who both witnessed domestic violence and were physically abused (i.e., dual violence) during childhood reported lower self-esteem than those experiencing only one type of domestic violence or none at all. Further, they reported that gender played an important role with male participants who experienced dual violence reporting lower self-esteem than female participants who experienced dual violence.

Similarly, Paradis et al. (2009) studied 346 participants from the age of 5 years up through adulthood. The authors found that both family arguments and physical violence were significantly related to compromised functioning across multiple areas of adult functioning, like mental health problems, deficits in psychological and

occupational/career functioning, and poorer physical health at age 30 years. Kulkarni, Graham-Bermann, Rauch, and Seng (2012) found that childhood abuse only and combined exposure to abuse and witnessing abuse correlated to current and lifetime PTSD diagnoses. Therefore, the effects of domestic violence are often devastating and long-lasting for children.

Resiliency. Nevertheless, children have a potential for resiliency (Zerk et al., 2009). An important model for understanding resiliency is the “developmental psychopathology model” (DPM) designed by Cummings, Davies, and Campbell (2000). The DPM focuses on how various biological, psychological and social factors interact to determine a child’s reaction to a negative experience, like domestic violence (Cummings et al., 2000). For instance, a child might experience repeated domestic violence, but not suffer severe negative effects due to the natural resiliency inherent in children. Resiliency is due to a variety of factors like a child’s developing brain, personality traits, social support, appropriate attachment with the victim of the abuse, and type of violence experienced (Wolfe et al., 2003). On the other hand, the opposite of these factors can be detrimental. For instance, a child’s temperament, lack of social support, and/or secure attachment with the abuser might combine to create a more traumatic response to domestic violence (Wolfe et al., 2003). Therefore, children will respond to the experience of domestic violence differently. Even siblings growing up in the same violent household might respond distinctly to the domestic violence (Sroufe, 1997). Thus, intervening with child victims of domestic violence is particularly important to aid in resiliency.

Domestic Violence Interventions

A wide variety of domestic violence programs are offered for perpetrators, adult victims, and child victims in diverse settings and with differing treatment length, intervention methodology, and theoretical background. There is a lack of research, however, determining the overall effectiveness of these interventions. For instance, Wathen and MacMillan (2003) systematically reviewed twenty-two articles on interventions that were aimed at preventing abuse or reabuse of women. They found that the research remains unclear as to which interventions reduce rates of abuse and reabuse. They did find, however, that among women who spent at least one night in a shelter and received a specific program of advocacy and counseling services, there was fair evidence reporting a decreased rate of reabuse and an improved quality of life. They reported, nevertheless, that no study has been conducted to look at improved outcomes for women as opposed to identification of abuse. They argue that the benefits of interventions in treating both women and men are unclear, due to a lack of well-designed research measuring appropriate outcomes. Further, they state that the potential harms of interventions are often not discussed within published studies. Wathen and MacMillan (2003) argue that the evaluation of interventions remains a key research priority.

Domestic violence perpetrator interventions. Perpetrator intervention programs were created to help teach abusers the skills necessary to change their violent and abusive behavior toward their partners and/or children (Jewell & Wormith, 2010). Often, these programs are court-mandated for perpetrators convicted of domestic violence (Jewell & Wormith). Shepard, Falk, and Elliott (2002) analyzed the success of

a perpetrators' intervention program called the Men's Nonviolence Program. The authors stated that, when compared to a baseline period, offenders had significantly lower rates of recidivism after the program was implemented. Further, they reported that there were steady declines in the number of recidivists over the three years of the project. The authors found that two variables were significantly related to offenders reabusing during all years of the study: the offender having been court mandated to attend the program and the offender having completed the program. While perpetrator interventions can be effective, important characteristics must be present to ensure optimal benefit.

Scott and Crooks (2007) analyzed a unique intervention program called "Caring Dads," designed for men who had physically abused their children and/or exposed their children to the abuse of the children's mother. The intervention was 17-weeks long and targeted a change in the use of abusive parenting strategies, in attitudes and beliefs that support unhealthy parenting, and in men's appreciation of the impact of violence on children. The authors found support for the program, but stressed that success hinged largely on motivation and subsequent program completion. Therefore, perpetrator intervention programs have demonstrated some effectiveness, but rely heavily on the perpetrator's willingness complete the program and ultimately change his behavior.

Domestic violence victim interventions. Another set of interventions focuses on victims: both adults and children. The modality of interventions utilized to help mothers and children vary vastly from agency to agency, ranging from individual to group, or some combination of both (e.g., McWhirter, 2006; Smith & Landreth, 2003; Sullivan et al., 2004). Further, agencies vary on how to implement these different

methods: some utilize individual or sibling play therapy for children, others provide therapies just for mothers alone, and still others combine joint therapies for mothers and children together (e.g., McDonald, Jouriles, & Skopp, 2006; Pike, & Murphy, 2006; Romero et al., 2009; Stover et al., 2010). Further, the method of implementation itself may affect the overall functioning of the mothers/children (Jarvis & Novaco, 2006). Thus the research has shown a lack of synthesis regarding the design of victims' interventions. The following sections will go into more detail on the interventions to demonstrate the lack of synthesis.

Domestic violence interventions focused on treating adult victims. One of the ways in which victims are treated is through services provided directly to the victim and not to anyone else in the household (i.e., children). For instance, Kendall et al. (2009) studied the impact of emergency department domestic violence counseling and resource referrals on victim-perceived safety and safety planning. Victims consulted with trained domestic violence advocacy counselors who completed safety assessments, provided resource referrals, and helped victims develop safety plans. Over 96% of victims perceived an increase in their safety after the intervention, and approximately 50% had completed a portion of their safety plan. The authors reported that victims felt that legal assistance and/or law enforcement were considered the most beneficial resource referrals. Thus, although the safety could indirectly impact others in the household, including children and other family members, the intervention is focused on providing services to the victim alone.

Further, McWhirter (2006) investigated a community-based group therapy intervention for women currently living in a homeless shelter. These 37 women

participated in 90-minute therapy session utilizing both Cognitive-Behavioral and Gestalt therapy techniques. The comparison group consisted of 31 women going through a life transition taking part in a group that focused on employment and social stability. Both interventions were found to increase social network size, decrease social isolation, and decrease financial stress. The therapy intervention participants also reported increased self-efficacy for increasing health coping (e.g., enhancing relationships) and decreasing unhealthy coping (e.g., decreasing substance use). Hence, both groups showed improvement, but the therapy group provided a unique opportunity for self-growth to its participants (McWhirter, 2006).

Similarly, Johnson and Zlotnick (2009) developed a treatment program utilizing cognitive-behavioral therapy for battered women with posttraumatic stress disorder called Helping to Overcome PTSD through Empowerment (HOPE). The program was short-term and focused on creating stability, safety, and empowerment. Further, women learned skills to manage their PTSD symptoms, especially when the symptoms interfered with their ability to access important community resources and/or to establish safety for themselves and their children. The authors found that women were better able to manage their PTSD symptoms after treatment. Thus, cognitive behavioral components have been shown to be effective, but might have better effectiveness if combined with a treatment more focused on emotion (Johnson & Zlotnick, 2009).

Stover, Rainey, Berkman, and Marans (2008) looked a different type of intervention focused on examining factors related to engagement in services offered by police officer-advocate teams. The authors studied police and clinical records for 301 female victims referred to the Domestic Violence Home Visit Intervention program.

They found that the severity of domestic violence charges as well as matching ethnicity of the victim, advocate, and police officer were all significantly related to engagement in the intervention program. Specifically, the authors found that Hispanic women served by Hispanic advocate–officer teams were more engaged in services than African American or Caucasian women. Therefore, ethnicity may play a role in the success of victim interventions (Stover et al., 2008).

Often for interventions designed for victims alone, however, the intent is to help both the adult and child victims. For instance, McFarlane et al. (2005) studied a treatment program for abused mothers that was designed to positively affect the behaviors of their children. Participants included women who had experienced domestic violence within the last 12 months and had at least one child living at home (n=233). The participants were divided into two groups in which they either received an abuse assessment and receipt of a wallet-size referral card, or an abuse assessment, receipt of a wallet-size referral card, and nurse case management sessions. The authors measured child behavior at 6, 12, 18, and 24 months following the intervention. Children improved significantly from intake to 24 months, regardless of which treatment protocol their mother received. Children ages 18 months to 5 years showed the most improvement and teenagers showed the least improvement. Domestic violence programs are important, not only for adult victims, but for the child victims, even if children are not directly involved in treatment.

Another type of intervention is one that is individually designed and administered in the victim’s home. Romero et al. (2010) analyzed a home-based Family Behavior Therapy designed to treat women suffering from domestic violence,

committing child neglect, and other co-occurring problems. Treatment included emergency planning, self-control, communication and child management skills training exercises, with financial management components. The authors found improvements in child abuse, domestic violence, and drug use. Donohue et al. (2010) also examined Family Behavior Therapy in the treatment of a mother who evidenced domestic violence, child neglect, posttraumatic stress disorder, substance dependence and bipolar I disorder. They found that the intervention resulted in the termination of substance use, lowered risk of child maltreatment, improved parenting attitudes and practices, and reduced instances of violence in the home (Donohue et. al, 2010). Taken together, these studies suggest that victims programs administered in a variety of different ways appear similarly efficacious.

Domestic violence interventions focused on treating adult and child victims.

Other intervention programs have been designed to directly assist children as well as victims. Oppenheim (2006) argues that working with parent and child to teach parents the skills necessary to help their children define and attribute meaning to his/her traumatic experience yields the greatest benefit for child resilience. Gwynne, Blick, and Duffy (2008) evaluated the Spilstead Model in Australia, which provided a unique integrated model of care. The study targeted clients who attended the program over a 12-month period. The authors found large effect size changes in parent/child interaction, reduced parent stress, parental satisfaction, parent confidence, parental capacity, family interactions, child well-being, and total family functioning. The authors found a large effect size of improvement on children's externalizing behaviors. This

intervention showed drastic improvements in the children who participated (Gwynne et al., 2008).

In addition, McWhirter (2011) compared two community-based group therapies: emotion-focused versus goal-oriented. Participants were 46 women who were victims of domestic violence and their children aged between 6 to 12 years. Each group had both a women's group and a children's group. The goal-oriented groups focused on cognitive-behavioral techniques to reach a specific goal. The emotion-focused groups focused on behavioral and gestalt therapeutic interventions to increase personal awareness. Both groups participated in a joint family therapy group. The author found an increased quality of social support in the emotion-focused intervention and a reduction of both family conflict and alcohol use for the goal-oriented intervention. Thus both intervention programs were found to be effective, but for different outcomes (McWhirter, 2011).

Drotar et al. (2003) analyzed 1117 children that were referred to an intervention program after witnessing and experiencing domestic violence over a 17.5 month period. Many of these children and adolescents reported high levels of trauma symptoms. Each received an individualized service plan including safety planning and crisis intervention. The authors found that implementing a program directly after a domestically violent incident provides the most benefit to children. Perhaps intervening early provides the best opportunity for adjustment (Drotar et al., 2003).

Jarvis and Novaco (2006) studied a different type of program that was administered during a stay in a shelter. The 62 participants were women who had endured severe partner abuse. These women had completed a shelter program with their

children and then resided in the community for at least six months. The emergency shelter provided women and children with housing and support services for up to 45 days and assisted with permanent housing, employment, educational, financial, and legal issues. Children attended weekly individual counseling sessions and participated in daily child-centered therapeutic activities. The authors found that nearly all women had lived violence free since shelter exit. Thus, researchers have found support for programs administered both in shelters and in the community (Jarvis & Novaco, 2006).

Smith and Landreth (2003) also studied the effectiveness of an in-shelter domestic violence program. It was an intensive 12-session parent training therapy group, conducted within 2-3 weeks upon entry into the shelter. The authors found that child witnesses in the experimental group significantly reduced behavior problems and significantly increased their self-efficacy. In addition, mothers scored significantly higher after training on both their acceptance and empathic behavior. The authors reported that intensive parental therapy was as effective in reducing behavior problems as was intensive individual play therapy and intensive sibling group play therapy. This study supports the overall effectiveness of interventions as each of three was effective. Perhaps the most important lesson is that interventions need to be implemented, not necessarily a particular intervention (Smith & Landreth, 2003).

Another group of researchers looked at how intervention programs could be implemented across the judicial system and community. Pike and Murphy (2006) assessed The Columbus Pilot Project in the Family Court of Western Australia (FCWA). The Columbus intervention was a holistic, multidisciplinary (legal and social science) approach to addressing allegations of child abuse and family violence. Cases

were individually managed through a series of family conferences which were jointly chaired by a designated registrar and a court counselor until a stable, safe contact system was established. Further, the project integrated therapeutic and education services as part of the intervention. There was no limit to the number of meetings available to the participants. The authors found improvement in the stability of the home and in the decrease of abuse perpetrated within the home (Pike & Murphy, 2006).

Similarly, Stover et al. (2010) analyzed The Domestic Violence Home Visit Intervention which provided advocate/police officer team home visits following a domestic dispute. The 107 women were interviewed at 1, 6, and 12 months following a police reported domestic incident to assess repeated violence, service utilization, and symptoms. The authors found that women who received the intervention were more satisfied with the police and likely to call them to report a domestic dispute in the 12 months following the initial incident than women in the comparison group. Further, participants in the intervention were significantly more likely to use court-based services and seek mental health treatment for their children (Stover et al., 2010). Thus, domestic violence interventions' modalities vary tremendously, but still seem to be effective.

For instance, Saxe et al. (2005) analyzed Trauma Systems Therapy as an effective way to treat the negative consequences of domestic violence. Significant changes toward improvement were observed after three months of Trauma Systems Therapy. Specifically, children receiving Trauma Systems Therapy improved on several dimensions of psychiatric symptoms as well as on social-environmental stability and

overall child functioning (Saxe et al., 2005). Thus, there is support for this specific type of therapy leading to improvement in child functioning.

Others have assessed interventions that are designed for specific ages of children. Kaufman, Ortega, Schewe, Kracke, and the Safe Start Demonstration Project Communities (2011) studied The Safe Start demonstration projects which were designed to reduce the incidence of and impact of exposure to violence for children aged birth to 6 years. The authors found that one quarter of the children and nearly half of their parents evidenced clinical levels of stress, but were below the clinical level at completion of program (Kaufman et al, 2011). Lieberman, van Horn, and Ippen (2005) designed a program for preschool-aged children exposed to marital violence. They compared the efficacy of Child-Parent Psychotherapy to case management plus treatment as usual in the community. Seventy-five multiethnic mother-child dyads from various socioeconomic backgrounds were randomly assigned to either group. Child-Parent Psychotherapy consisted of weekly parent-child sessions for one year, which were structured with a treatment manual and intense supervision. The Child-Parent Psychotherapy group showed improvements in children's total behavior problems, traumatic stress symptoms, and lower rates of clinical diagnosis. The authors found evidence for the importance of a relationship focus in the treatment of traumatized preschoolers (Lieberman et al, 2005). This lends support to the idea that parental victims of domestic violence often lose the ability to parent effectively and thus benefit from treatment to relearn these skills.

Sullivan et al. (2004) utilized this idea to evaluate a 9-week group intervention program. It was designed to increase parenting skills, increase both parental and child

coping abilities and safety planning skills, and decrease the effects of postviolence stress. Overall, the authors found that the group intervention was effective in reducing blame and trauma symptoms. Further, although the parents generally perceived the intervention to be more helpful for their children than for themselves, the parents' scores indicated that their feelings of isolation, stress levels, and health problems decreased significantly at posttest (Sullivan et al, 2004). Thus, even if the child is the focus of the domestic violence intervention, perhaps the parents still benefit indirectly (much like the children did from their parent taking part in an intervention program).

Another important aspect to consider is the lasting impact of these interventions. McDonald et al. (2006) evaluated the long-term effects of Project SUPPORT, an intervention designed to reduce conduct problems among children in domestically violent families. Participants were 66 mothers who had been in a shelter because of domestic violence and had at least one child between the ages of 4–9 years old that were exhibiting clinical levels of conduct problems. The Project SUPPORT intervention involved teaching mothers child management skills as well as providing instrumental and emotional support to mothers. Families were randomly assigned to the Project Support intervention condition or to an existing services comparison condition. The participants were assessed over 20 months following their departure from the shelter. The authors found that significant improvement at two years posttreatment. Specifically, 15% of children in families in the Project SUPPORT condition exhibited clinical levels of conduct problems compared with 53% of those in the existing services condition. In addition, mothers of children in the Project SUPPORT condition reported their children to be happier, to have better social relationships, and to have lower levels

of internalizing problems. Mothers in the Project SUPPORT condition also were less likely to use aggressive child management strategies and to have returned to their partners during the follow-up period (McDonald et al, 2006).

Jouriles, McDonald, Rosenfield, Stephens, Corbitt-Shindler, and Miller (2009) also analyzed Project SUPPORT. Children in the Project SUPPORT condition, compared with those in the comparison condition, exhibited greater reductions in conduct problems. Mothers in the Project Support condition, compared with those in the comparison condition, displayed greater reductions in inconsistent and harsh parenting behaviors and psychiatric symptoms. Changes in mothers' parenting and psychiatric symptoms accounted for a sizable proportion of Project SUPPORT's effects on child conduct problems at the end of treatment (Jouriles et al., 2009). These results show that, despite the differences, domestic violence intervention programs have the potential to give longterm positive effects.

Efficacy of Domestic Violence Interventions

Perhaps not surprisingly, most published interventions have been shown to be effective. Many have not included control groups and those revealed to be ineffective typically go unpublished (Jewell & Wormith, 2010, Wathen & MacMillan, 2003). Further, some difficulties exist as the outcome measures can either vary or remain consistent across interventions. For example, many measure depression and recurrence of domestic violence (e.g., Franzblau et al., 2008; Kennedy et al., 2010), but others measure specific outcomes, such as self-esteem and child conduct problems (Jouriles et al., 2009; McWhirter, 2011). Specifically, when measuring child adjustment, many studies utilize the Child Behavior Checklist (CBCL) yielding similar outcomes across

studies (e.g., Gwynne et al., 2009; Jarvis & Novaco, 2006). Others studies that report child behavioral issues, however, do not utilize this common measurement, making results difficult to compare. Further, some studies would assess mothers' functioning, foregoing child functioning and vice versa (e.g., Hughes & Huth-Bocks, 2007; Lieberman et. al, 2005). Thus, while domestic violence intervention programs seem to be effective, results are difficult to compare due to the wide variety of outcome measures employed.

Efficacy of domestic violence perpetrator interventions. For perpetrator intervention programs, results are somewhat mixed. For instance, Shepard et al. (2002) found support for their "Men's Nonviolence Program," but this depended heavily upon successful completion of the program. This is a problem that plagues many perpetrators programs (Jewell & Wormith, 2010). Because completion is intrinsically tied to motivation (Jewell & Wormith), leaders of perpetrator interventions must find ways to ensure that the participants are motivated. Chovanec (2009) found that a major challenge for facilitators of perpetrator programs is engaging men who abuse their partners in the change process. Scott and Crooks (2007) found support for their "Caring Dads" program, but only with men who were motivated and able to appreciate the impact of their violence on their children. Little research has been conducted regarding women perpetrators of violence and programs designed to help them (Swan & Sullivan, 2009).

Efficacy of domestic violence victim interventions. After the implementation of domestic violence victim interventions, it is important to determine whether or not the programs are effective. While most published research on interventions has been

shown to be effective (e.g., Crusto et al., 2008; McDonald et al., 2006; McFarlane et al., 2005), these studies have commonly been fraught with problems. For instance, many studies have not included a control group (e.g., Donohue et al., 2010; Gwynne et al., 2009). In the coming section efficacy of these interventions will be discussed and an argument made that a meta-analysis needs to be conducted that includes unpublished studies and pays particular attention to the utilization of control groups.

Efficacy of domestic violence victim interventions on adults. A review of research reveals that victim interventions are efficacious with a variety of symptoms. Gwynne et al. (2008) found significant improvements in parent/child interaction, parent stress, parental satisfaction, parent confidence, parental capacity, family interactions, child well-being, child language development, child externalizing behaviors, and total family functioning. Stover et al. (2010) found that women were more likely to call the police and report domestic violence, use court-based services, and seek mental health treatment for their children after receiving an intervention. McWhirter (2006) found that interventions increased social network size, decreased social isolation, increased self-efficacy, and decreased financial stress. Franzblau et al. (2008) found reduction in feelings of depression following intervention.

Victim interventions, however, are often plagued by the same problem associated with perpetrator interventions: early termination of services. This is often the result of either leaving the shelter (either prematurely or after a successful stay) or dropping out of the intervention program (Johnson & Zlotnick, 2009). For instance, Johnson, and Zlotnick (2009) found a problem with victims not completing the program. Further, they found that victims often desired to have services after leaving a

shelter, but that these services were not available. Since completion of the program is a significant contributor to success, interventions need to be designed with aspects that will increase likelihood of retention throughout the program.

Efficacy for minority participants in victim intervention programs is lacking. Bloom et al. (2009) found a need for culturally competent intervention programs. The authors began designing a program for Latinas experiencing domestic violence. They felt this was particularly important as Latinas often avoid formal resources due to fear, distrust, and cultural and language barriers. The authors argue that interventions need to be developed that include abused Latinas' voices in research and that collaborate with the community-based organizations that serve Latinas. Thus, it is important to focus on developing culturally competent programs in order to ensure equal effectiveness for diverse participants.

Efficacy of domestic violence victim interventions on children. Efficacy of interventions on children's well-being is also strong. Schewe (2008) evaluated several programs designed to help children and caregivers who have been exposed to domestic violence. The goal of the evaluation was to improve the understanding of community-based services and outcomes for children who have been exposed to violence. The author found that direct services benefit both caregivers and children. Specifically, caregiver services focusing on the impact of violence on children, sexual abuse, building support systems, and grief and loss provided the best outcomes for caregivers, while caregiver services that focused on appropriate discipline were associated with positive outcomes for children. Children improved most when they received services focusing on identifying and expressing feelings, differentiating between "good" and

“bad” touches, domestic violence (e.g., safety planning), and community violence (e.g., gang violence; Schewe, 2008).

Further, Crusto et al. (2008) evaluated an intervention that offered comprehensive assessment, targeted caregiver-child intervention, individualized service planning, and care coordination. Baseline-to-discharge results revealed: (a) a significant decrease in the number of traumatic events that children experienced, (b) significant decreases over time in children’s post-traumatic stress–intrusive thoughts and post-traumatic stress–avoidance behaviors, (c) significant decreases in self-reported stress associated with the parenting role among caregivers, (d) favorable ratings of services by caregivers, and (e) high levels of service receipt (Crusto et al., 2008). Children have benefited in a variety of ways from domestic violence victim interventions.

Meta-Analyses on Domestic Violence Interventions

To date, twenty-one meta-analyses have been published on domestic violence. Of those, only two have been conducted regarding interventions. These two studies, however, have both been on perpetrator interventions, not victim interventions. One study assessed recidivism and the other assessed attrition (i.e., Olver et al., 2011, Jewell & Wormith, 2010, respectively). In addition to these, meta-analyses have focused on the effects of domestic violence on adult victims and children without addressing intervention efficacy (e. g., Chan & Yeung, 2009; Evans et al., 2008; Wolfe et al., 2003). For instance, Shah and Shah (2010) found that pregnant women who experience domestic violence are at increased risk for negative outcomes. Low birth weight and preterm births were increased among women exposed to domestic violence. While it is

important that meta-analyses analyze effects of domestic violence, a large gap in the research exists when it comes to domestic violence victim intervention programs.

Implications of Domestic Violence Interventions

The implications for interventions on domestic violence are many. Because researchers on domestic violence interventions report that programs are effective (e.g., Zerk et al., 2009; Tollefson & Gross, 2006), it is important to encourage both perpetrators and victims to participate. Further, it will be important to learn more about retention in order to help successfully complete these programs (Olver et al., 2011). Also, it will be important to explore more literature regarding programs that were not successful in order to determine if the effectiveness of domestic violence interventions is inflated (Wathen & MacMillan, 2003).

Implications for treatment of perpetrators. For perpetrator interventions, it will be important to determine ways to increase participation and sustain retention. As has been mentioned previously, one of the strongest predictors of improvement is completion of the intervention program (Olver et al., 2011). Chovanec (2009) stated that, whether or not the perpetrator completes the program can be directly related to the perpetrator's "stage of change." The author argues that facilitators need to be aware of a participant's stage of change in order to tailor the intervention to the participant and increase the likelihood of a successful outcome. Thus, adapting interventions to perpetrators is vital to increase their motivation and have a successful intervention model.

Other important factors to consider are the traits that predict perpetrators reabusing their partners and/or children. For instance, Tollefson and Gross (2006)

examined recidivism rates for 197 perpetrators who participated in a state-sponsored domestic violence treatment program. They identified four factors that were predictive of reabuse: psychopathology, psychiatric history, substance abuse, and child abuse in family of origin. These factors alone accounted for 84% of the variance in re-perpetration of violence. The authors suggested that perpetrator characteristics, particularly perpetrator pathology and substance abuse, were more influential determinants of recidivism than systemic and programmatic factors. Therefore, it might be important to design programs that focus on treating psychiatric disorders, substance, and trauma from past child abuse rather than focusing directly on the present domestically violent tendencies.

Finally, researchers might want to start designing programs for women that perpetrate violence and/or couples that are mutually violent. Swan and Sullivan (2009) looked at how to design an intervention for women who perpetrate violence. They found that most women perpetrators were also victims of violence. These women often sought out domestic violence services in the community. Those that utilized these services were less likely to perpetrate violence. Because these women were likely to seek out services in the community, it is important to ensure that they are getting help, not only as victims, but as perpetrators to develop better coping skills.

Implications for treatment of victims. There are no fewer implications for domestic violence victim interventions. If these interventions prove to be as efficacious as claimed, domestic violence programs will be viable ways to treat victims experiencing negative symptoms from domestic violence (e.g., Beeble et al., 2009; Kaufman et al., 2011). This could mean a change in how domestic violence victims

receive services as well as how shelters treat adult and child victims of domestic violence (Malik, Ward, Janczewski, 2008; Bloom et al., 2009). This section will look at the specific implications as related to both adult and child victims.

Implications for treatment of adult victims. There are many important implications for victim interventions. Although the literature is extensive, four themes emerged as vital to the success of adult victim interventions. First, enabling victims to engage, actively participate, and complete the program is crucial to gain optimal improvement (Alessi & Hearn, 2007). Second, there is a need for individualized services (Hughes & Huth-Bocks, 2007). Third, changes need to be made in the training that advocates in the justice field receive (Stover et al., 2008). Finally, despite tailoring to individual needs, certain aspects are important to incorporate for the greatest benefit across interventions (Franzblau et al., 2008).

Program completion. Like perpetrator intervention programs, victim interventions have high attrition rates (Wathen & MacMillan, 2003). While this is not always because of a lack of motivation or negativity toward the program (i.e., victims may leave the shelter to move on with their lives), attrition poses a problem in determining efficacy of a domestic violence intervention (Alessi & Hearn, 2007). Further, women that leave the program early will not receive the full benefit of the intervention (Wathen & MacMillan, 2003). Therefore, domestic violence victim interventions need to be designed conscientiously in order to provide victims with the optimal opportunity for success.

Individualized services. Many researchers have found support for tailoring interventions to the needs of the clients. For instance, Hughes and Huth-Bocks (2007)

studied 172 African-American mothers and their children (4 to 12 years of age) residing at battered women's shelters. The authors found substantial variability in women's experiences of parenting stress with regard to both type and quantity. Further, women significantly differed in parenting behaviors and general psychological distress, as did their children's severity of internalizing and externalizing problems. Hughes and Huth-Bocks determined that individualized interventions, with a particular focus on parenting stress, would better serve the needs of women and children experiencing intimate partner violence.

Further, multiple authors found cultural differences regarding the success of an intervention. Stover et al. (2008) examined factors related to engagement in services offered by police officer-advocate teams. They found that this intervention model may be particularly beneficial for Hispanic victims of intimate partner violence when implemented by a Spanish-speaking officer-advocate team. Bloom et al. (2009) studied Latinas experiencing domestic violence. They were particularly interested in this group because of the paucity of research on Latinas seeking treatment for domestic violence. The authors argue that culturally competent interventions are necessary and should particularly focus on sharing power and knowledge as well as demonstrating accountability to the community.

Changes to the justice system. Like Stover et al. (2008), Letourneau et al. (2012) found that the legal system was incredibly important in a domestic violence victim's journey to healing. While they found that mothers affected by domestic violence are often confronted with negative attitudes and ineffectual practices within criminal justice systems, leaving many feeling revictimized; women in both studies cited positive

examples of feeling comforted, validated, and even empowered by the actions of specific service providers. These findings underscore the need for greater efficiencies within the justice system and mandatory training for service providers, making it easier for women who have left their abusers to access appropriate support services.

Important intervention components. Along with these community and justice services, research supports the addition of therapeutic services. McWhirter (2006) argued for a need to integrate a group therapy intervention into traditional social service programs. Lapierre (2010) suggested that in order to support women who experience domestic violence, professionals need to understand the challenges and difficulties that they face, and to be mindful not to exacerbate the women's sense of responsibility and loss of control. Similarly, Franzblau et al. (2008) found that recasting women as authorities on domestic violence and teaching them how to calm their minds by focusing on yogic breathing were effective ways to help women take control over their bodies and lives. Thus, it might be that even adding small changes like breathing techniques, allowing women to freely tell their stories, and providing a group component could improve the likelihood of successful implementation of domestic violence programs.

Another important component is strengthening social support to lessen the effects of domestic violence. Beeble et al. (2009) interviewed 160 survivors over two years to examine the role of social support in explaining or buffering negative psychological consequences. They found that social support was positively related to quality of life and negatively related to depression. Further, the buffering effects of social support were strongest at lower levels of abuse. Shen (2009) found that parental

and peer relationship qualities mediated the joint impact of interparental violence and physical maltreatment on adult self-esteem. Thus it seems that domestic violence programs should be tailored to account for type and amount of abuse and ethnicity to determine what interventions would be most appropriate.

Implications for treatment of child victims. For children, domestic violence interventions seem to positively impact the well-being for child victims. After reviewing the available research, four themes emerged as important in designing effective child victim interventions. First, intervene quickly after a domestically violent incident (Drotar et al., 2003). Second, treating parents and improving parenting alters children's responses to domestic violence (Oppenheim, 2006). Third, interventions might need to focus on younger children as they seem to show the most improvement from intervention programs (McFarlane et al., 2005). Finally, school officials need to be trained to identify domestic violence and treat it effectively (Thompson & Trice-Black, 2012).

Intervene quickly. Huang, Wang, and Warrener (2010) found an important connection between domestic violence, maternal mental health and children's problems. From a longitudinal study, they found that domestic violence at Year 1 had a direct effect on maternal mental health at Year 3, which had direct effects on children's externalizing behavior problems at Year 5. Likewise, domestic violence at Year 1 had direct effects on parenting behavior at Year 3, and parenting behavior then had direct effects on children's externalizing and internalizing behavior problems at Year 5. These results suggest that there are long-term effects of domestic violence on the behavior

problems of preschool-aged children and that early interventions are needed to prevent later problems among children in families experiencing domestic violence.

Actively involve parents. Moreover, as suggested by Huang et al. (2010) involving the parents in the intervention is key for a child's success. Schechter et al. (2011) also found that parental functioning was important. They suggested that, when presented with a preschool-aged child who is brought to consultation for behavioral difficulties, aggression, and/or unexplained fears, clinicians should evaluate maternal psychological functioning as well as assess and treat the effects of interpersonal violence. Busch and Lieberman (2010) supported these findings by showing that children displayed significantly stronger verbal and perceptual-organizational abilities when their mothers exhibited more secure attachment. This suggests that clinical interventions for children exposed to domestic violence should include helping their mothers achieve coherent ways of thinking about their own childhood experiences, including past trauma. Thus, it is particularly important, not only to focus on giving the parents the tools necessary to succeed, but to also intervene quickly to give young children the best opportunity for resiliency.

Chen and Scannapieco (2006) showed that a good quality parent-child connection, caregiver knowledge, and caregiver skill significantly predicted lower risk of child maltreatment. However, the significant effects were found only among families of minor child maltreatment pattern. This suggests that, while interactions with the parent are important, the significance might vary depending on the severity of the domestic violence. Therefore a different intervention emphasis might be needed to work with families of more severe risk issues.

Another important aspect tied to intervening early is that of “readiness to change.” This might impact your ability to intervene early and effectively. Humphreys, Thiara, and Skamballis (2011) argued that ‘readiness to change’ should be used to inform the provision of domestic violence services to women and children. ‘The Talking to My Mum’ project developed activities to support the change process and found that organizations and workers needed to be ‘motivated to embrace the change to the work focus as being more individualized. Creative processes were needed to support women and children if they were to feel safe and supported in strengthening their relationship in the aftermath of domestic violence. Although it is important to intervene early, attention needs to be paid to the client’s readiness to change.

Intervene at a young age. Along with the concept of intervening quickly after a domestically violent episode, it is important to intervene early in a child’s life (McFarlane et al, 2005). For example, McFarlane et al. (2005) found that preschool aged children significantly improved after the intervention, whereas older children improved, but not significantly. Many more authors have found support for effectively intervening with preschool aged children (e.g., Huang et al., 2010; Lieberman et al., 2005; Schechter et al., 2011; Zerk et al., 2009). While some researchers have found efficacy for adolescents (e.g., Drotar et al., 2003), effects are not as strong as those for younger children (McFarlane et al., 2005). This supports the developmental psychopathology model as younger children’s brains have greater capacity for change and thus resiliency (Cummings et al., 2000). Therefore, importance should be placed on intervening with children at a young age and soon after exposure to domestic violence.

Emphasize school interventions. Researchers have found evidence to suggest that policy needs to change in order for children to receive the most benefit from domestic violence interventions. McFarlane et al. (2005) found that routine abuse assessment and referral have the potential to positively improve the behavioral functioning of children exposed to domestic violence. Kaufman et al. (2011) argue that policy makers and service providers who are interested in treating families exposed to domestic violence need to understand: the extent of exposure to violence (e.g., the severity and types of violence); the impact of this exposure on the families, and the ways in which families exposed to violence will seek help. Further, Thompson and Trice-Black (2012) recommend that mental health practitioners in the school setting, including school counselors, school psychologists, and school social workers, receive specific training in how to work with children exposed to domestic violence. They argue that these individuals are ideally positioned to address developmental concerns that impeded development. Specifically, they suggest group counseling interventions that include both structured activities and play therapy (Thompson & Trice-Black, 2012). The school environment may offer an ideal setting in which to work with child survivors of trauma, as all students have accessibility to school mental health resources (Thompson & Trice-Black, 2012). Therefore, domestic violence interventions may need to be designed that specifically seek to impact children and are able to be implemented within the school setting.

Current Study

The purpose of the current study is to better understand the effectiveness of domestic violence victim interventions. A meta-analysis will be conducted to synthesize

the breadth of study results. Attention will be paid to research utilizing control groups and a special effort made to include studies that might not show effectiveness (i.e., unpublished studies, dissertations, theses). In particular, outcomes will be compared across types of interventions (e.g., cognitive-behavioral groups, individualized home services, referral cards). Moderators (i.e., demographic variables) will be assessed in order to determine the greatest amount of specificity regarding victim intervention and how these interventions affect the participants. Both adult victim and child victim interventions will be included. Finally, recommendations will be made from the findings as to how best to utilize victim interventions.

Chapter 3: Method

Selection of Studies

Several techniques were used to find the studies for this meta-analysis. First, studies were located through electronic literature searches of PsycInfo, PubMed, Social Work Abstracts, ERIC, SocINDEX, Anthropology Abstracts, Web of Science, and Dissertation Abstracts for the years 1990 through 2013 using multiple combinations of the keywords: domestic violence, interpersonal violence, intimate partner violence, parental violence, family violence, intervention, and program. Articles that were not available online were requested through interlibrary loan. Dissertations were utilized in order to better include studies that showed both effective and ineffective interventions. Second, reference sections from previous reviews of domestic violence intervention research were examined (i.e., Barner, & Carney, 2011; Cohen, Mannarino, Murray, & Igelman, 2006; Easton, Lee, Wupperman, & Zonana, 2008; Lund, 2001; Mears, 2003; Poole, Beran, & Thurson, 2008; Rivett, Howarth, & Harold, 2006; Tolan, Gorman-Smith, & Henry, 2006; Wathen & MacMillan, 2003). Third, the author manually searched the reference sections of studies identified using the first two methods. Fourth, all domestic violence victims interventions utilized in Stover et al.'s 2009 meta-analysis were included. A total of 233 studies were considered potentially appropriate and were obtained and reviewed by the author to determine if the study met the inclusion criteria as described below. Those articles that did not meet the inclusion criteria were eliminated, resulting in a total of 50 studies that were included in this meta-analysis (44 journal articles, 6 dissertations). See references marked with an * for a complete listing.

The distinguishing feature for inclusion in the meta-analysis was that the study examined the effect of a domestic violence victim intervention on either adult or child victims. Type of abuse experienced varied across studies (i.e., physical, emotional, sexual, verbal, child witness of parental violence), all of which were included in the current study. Second, the study must have been written in English. Third, the study must have reported sufficient data to permit the calculation of an effect size using the formulas presented by Lipsey and Wilson (2001).

Coding Procedures

A detailed coding form was developed that included variables related to the study characteristics (e.g., publication date, author, source of publication, duration of study, location of study), sample characteristics (e.g., number, age, gender, ethnicity, recruitment setting, socioeconomic status), the primary outcome measure (e.g., maltreatment events, parent-child relationship, internalizing problems), treatment modality (e.g., group, individual, family therapy), type of intervention administered (e.g., cognitive-behavioral, empowerment, parent), and the statistics needed to compute effect size estimates. Type of intervention was divided into six categories: cognitive-behavioral (CBT), advocacy, parent/family, empowerment, play therapy, and no treatment/control group. Primary outcome measure was divided into 11 separate outcome categories: maltreatment events, internalizing problems, quality of life, social support, stress/distress, parent-child relationship, behavior problems (child only), posttraumatic stress disorder (PTSD), psychopathology, domestic violence skills, and self-concept. A coding manual was developed to ensure similar coding standards across studies (see Appendix A).

CBT was defined as: CBT, trauma-focused CBT (TFCBT), combined CBT with another intervention(s) (i.e., motivational interviewing, gestalt therapy, systems theory), prolonged exposure therapy, cognitive processing therapy, or eye movement desensitization (EMDR). Advocacy was defined as: social support, family advocacy, in-home advocacy, technology skills, case management, shelter services, police-advocacy teams, hotline usage, coordinated community response, or interim protection orders. Parent/Family was defined as: child-parent psychotherapy (CPP), teaching parenting skills, filial therapy, parent-child interaction therapy (PCIT), or family systems therapy. Empowerment was defined as: testimony, yogic practices, emotion-focused therapy, art therapy, meditation, supportive counseling, writing trauma narrative, or eclectic treatment as usual. Play therapy was defined as: equine assisted therapy, child-centered play therapy, child only component of a parent-child intervention, or reconstructive play-based psychoeducational family therapy (RPPFT). Control was defined as: no treatment control group (e.g., waitlist, declined treatment), or abuse screening with referral card.

Maltreatment events were defined as: return to partner, recurrence of any type of abuse, family safety, danger, emergency department visits, or hospitalizations. Internalizing problems were defined as: depression, anxiety, internalizing (for children), being withdrawn, somatic complaints, or sleeping. Quality of life was defined as: quality of life, global assessment of functioning, environmental stressors, physical health, mental health, well-being, financial stress, or working on improving education/resources. Social support was defined as: family functioning, social support, peer relationships, social isolation, trust, or physical proximity to therapist.

Stress/distress was defined as: anger, role/life restriction, symptom severity, total impairment, stress, alcohol use, negative affect, psychological distress, or positive emotion/feeling. Parent-child relationship was defined as: parent-child interactions, discipline, attachment, or parenting skills. Behavior problems (child only) was defined as: conduct problems, behavior problems (both Child Behavior Checklist total and/or externalizing), being a difficult child, aggression, noncompliance, temper tantrum, or whining. PTSD was defined as: PTSD, blood pressure/heart rate measurements, intrusion, hypervigilance, arousal, avoidance, re-experiencing, or fear. Psychopathology was defined as: psychiatric symptoms, dissociation, thought problems, psychopathology, Diagnostic and Statistical Manual for Mental Disorders-Fourth Edition (DSM-IV) diagnosis, or sexual concerns. Domestic violence skills were defined as: contact with appropriate resources, engagement in court services, interaction with advocates, safety planning, and psychoeducation. Self-concept was defined as: self-efficacy, competence, adaptability, receptive/expressive language, self-esteem, readiness-to-change, feeling the violence was their fault, shame, feeling different, insight, control, power, righteous anger, mindfulness, self-compassion, coping, or reaching goals.

Chapter 4: Results

Calculation of Effect Sizes

The 50 studies in the meta-analysis generated a total of 1070 effect sizes. Effect sizes that related to a follow-up study or that compared an intervention to a control or other intervention were excluded, leaving 516 effect sizes. Multiple effect sizes for each study were calculated because the author was interested in both adults and children; studies frequently used more than one treatment group; and studies utilized multiple types of outcome. Since the purpose of the meta-analysis was to determine the overall strength and magnitude of a relationship, the 516 effect sizes were combined as described below to best address the main research questions (Lipsey & Wilson, 2001). When more than one effect size represented a particular construct within a study (e.g., multiple measures of maltreatment events), a single effect size was created by averaging effect sizes within that study according to its relation to adults or children and intervention or control group. These numbers do not equal the total number of studies because not every study provided data on adults and children, control groups, all outcome constructs, and intervention types.

The effect sizes were either calculated through SPSS 21.0 or by hand in several different ways, but all were from the standardized mean difference effect size. The effect sizes calculated and reported by the authors (e.g., Cohen's *d* coefficient) were utilized in 20.5% of cases. When unavailable, effect sizes were calculated from the reported data utilizing: Means and standard deviations (67.3%), *t*- or F-value (11%), or chi-squares (1.2%). Formulas provided by Lipsey and Wilson (2001) were used to ensure that the effect sizes remained uniform across studies. Means and standard

deviations were used when the effect size was not provided. If standard deviation data was not available, the means were not included for analysis. In cases where means and standard deviations were not available, t or F values and chi-squares were used to calculate the effect size (Lipsey & Wilson, 2001). Signs were affixed to the effect sizes to reflect intervention efficacy. A positive sign indicates that the intervention group experienced better functioning post-intervention.

All results will be compared to Cohen's (1988) effect size statistics so that .2 or less is a small effect size, .5 is a medium effect size and .8 or greater is a large effect size.

Overall Effect

Table 1 presents a summary of the meta-analytic results described in this section. The first research question evaluated whether domestic violence interventions were effective for both adults and children. Of the 50 studies, 27 provided information regarding interventions for adults. Aggregation of these 27 studies yielded a large mean effect size of $d = .99$ ($SE = .14$), which as shown by its 95% confidence interval (.71 to 1.28) and associated significance test ($t = 7.09, p < .001$) differs significantly from zero. Twenty-two studies provided information regarding interventions for children. Aggregation of these studies yielded a medium effect size of $d = .67$ ($SE = .12$), which as shown by its 95% confidence interval (.42 to .92) and associated significance test ($t = 5.55, p < .001$) differed significantly from zero. Of the 50 studies, six provided information regarding control groups for adults and children. Control groups for adults have a medium effect size ($d = .34, SE = .17$), which as shown by its 95% confidence interval ($SE = -.09$ to .77) and associated significance test ($t = 2.01, p = .10$) does not

Table 1. Summary of overall meta-analysis results.

	<i>k</i>	Total <i>N</i>	ES
Adult			
Intervention	27	3641	.994
Control	6	1249	.338
Children			
Intervention	22	1950	.666
Control	6	642	.006

differ significantly from zero. Control groups for children have a small effect size ($d = .01$, $SE = .11$), which as shown by its 95% confidence interval (-.28 to .29) and associated significance test ($t = .05$, $p = .96$) does not differ significantly from zero.

Type of Intervention

Table 2 presents a summary of the meta-analytic results described in this section. The second research question evaluated the effectiveness of different types of interventions (i.e., CBT, parent/family, empowerment, advocacy, play therapy, and no treatment/control group). These were also subdivided by type of participant (i.e., adult or child).

Adult. Of the 50 studies, six provided information regarding CBT interventions. Aggregation of these studies yielded a large mean effect size of $d = .97$ ($SE = .25$), which as shown by its 95% confidence interval (.34 to 1.60) and associated significance test ($t = 3.97$, $p = .011$) differs significantly from zero. Seven studies provided information regarding advocacy interventions. Aggregation of these studies yielded a medium mean effect size of $d = .60$ ($SE = .11$), which as shown by its 95% confidence interval (.34 to .85) and associated significance test ($t = 5.64$, $p = .001$) differs significantly from zero. Ten studies provided information regarding parent/family interventions. Aggregation of these studies yielded a large mean effect size of $d = .98$

Table 2. Summary of meta-analysis results for type of intervention.

	<i>k</i>	Total <i>N</i>	Adult ES	<i>k</i>	Total <i>N</i>	Child ES
CBT	6	433	.971	3	330	.859
Advocacy	7	1516	.596	5	465	.233
Parent/Family	10	1344	.978	11	1052	.628
Empowerment	7	200	1.084	1	48	.732
Play Therapy	3	681	1.262	10	842	.702
Control	5	1120	.456	6	551	-.044

(SE = .24), which as shown by its 95% confidence interval (.43 to 1.52) and associated significance test ($t = 4.06, p = .003$) differs significantly from zero. Seven studies provided information regarding empowerment interventions. Aggregation of these studies yielded a large mean effect size of $d = 1.08$ (SE = .09), which as shown by its 95% confidence interval (.86 to 1.31) and associated significance test ($t = 11.56, p < .001$) differs significantly from zero. Three studies provided information regarding play therapy interventions. Aggregation of these studies yielded a large mean effect size of $d = 1.26$ (SE = 1.05), which as shown by its 95% confidence interval (-3.23 to 5.76) and associated significance test ($t = 1.21, p = .35$) does not differ significantly from zero. Five studies provided information regarding control groups. Aggregation of these studies yielded a medium mean effect size of $d = .46$ (SE = .15), which as shown by its 95% confidence interval (.05 to .86) and associated significance test ($t = 3.14, p = .035$) differs significantly from zero.

Children. Of the 50 studies, three provided information regarding CBT interventions. Aggregation of these studies yielded a large mean effect size of $d = .86$ (SE = .02), which as shown by its 95% confidence interval (.77 to .95) and associated significance test ($t = 39.93, p < .001$) differs significantly from zero. Five studies provided information regarding advocacy interventions. Aggregation of these studies

yielded a medium mean effect size of $d = .23$ ($SE = .09$), which as shown by its 95% confidence interval (-.02 to .48) and associated significance test ($t = 2.61, p = .06$) approaches differing significantly from zero. Eleven studies provided information regarding parent/family interventions. Aggregation of these studies yielded a medium mean effect size of $d = .63$ ($SE = .12$), which as shown by its 95% confidence interval (.36 to .90) and associated significance test ($t = 5.12, p < .001$) differs significantly from zero. One study provided information regarding empowerment interventions, which had a medium effect size ($d = .73$). Ten studies provided information regarding play therapy interventions. Aggregation of these studies yielded a medium mean effect size of $d = .70$ ($SE = .23$), which as shown by its 95% confidence interval (.19 to 1.22) and associated significance test ($t = 3.07, p = .013$) differs significantly from zero. Six studies provided information regarding control groups. Aggregation of these studies yielded a small mean effect size of $d = .04$ ($SE = .10$), which as shown by its 95% confidence interval (-.31 to .22) and associated significance test ($t = -.43, p = .69$) did not differ significantly from zero.

Type of Outcome

Tables 3 and 4 present summaries of the meta-analytic results described in this section. The third research question evaluated intervention effectiveness on different outcomes (i.e., maltreatment events, internalizing problems, quality of life, social support, stress/distress, parent-child relationship, behavior problems (child only), PTSD, psychopathology, domestic violence skills, and self-concept. Each of these was subdivided across the type of participant and intervention.

Table 3. Summary of meta-analysis results for type of adult outcome.

	<i>k</i>	Total <i>N</i>	Intervention ES	<i>k</i>	Total <i>N</i>	Control ES
Maltreatment Events	5	679	1.174	2	341	.725
Internalizing Problems	13	1549	.741	3	615	.656
Quality of Life	6	671	.521	1	278	.274
Social Support	12	1365	1.051	3	628	.024
Stress/Distress	10	627	.671	3	298	.149
Parent-Child Relationship	9	974	.855	1	238	.367
PTSD	9	614	1.213	2	50	.337
Psychopathology	1	727	.564	--	---	---
DV Skills	3	850	1.521	1	267	.280
Self-Concept	6	645	.735	1	90	.769

Table 4. Summary of meta-analysis results for type of child outcome.

	<i>k</i>	Total <i>N</i>	Intervention ES	<i>k</i>	Total <i>N</i>	Control ES
Maltreatment Events	1	292	2.251	--	---	---
Internalizing Problems	14	1563	.525	3	308	.099
Quality of Life	2	266	2.206	--	---	---
Social Support	7	659	.674	2	22	.043
Stress/Distress	3	456	.303	--	---	---
Parent-Child Relationship	2	797	.809	--	---	---
Behavior Problems	16	1612	.439	5	529	.029
PTSD	7	720	.675	--	---	---
Psychopathology	7	682	.987	1	66	.230
DV Skills	3	349	.889	2	243	-.464
Self-Concept	8	570	.679	3	97	-.459

Adult interventions. Of the 50 studies, five reported information on maltreatment events. Aggregation of these studies yielded a large mean effect size of $d = 1.17$ ($SE = .22$), which as shown by its 95% confidence interval (.56 to 1.79) and associated significance test ($t = 5.30$, $p = .006$) differs significantly from zero. Thirteen studies reported information on internalizing problems. Aggregation of these studies yielded a medium mean effect size of $d = .74$ ($SE = .10$), which as shown by its 95% confidence interval (.51 to .97) and associated significance test ($t = 7.10$, $p < .001$)

differs significantly from zero. Six studies reported information on quality of life. Aggregation of these studies yielded a medium mean effect size of $d = .52$ (SE = .12), which as shown by its 95% confidence interval (.22 to .82) and associated significance test ($t = 4.47, p = .007$) differs significantly from zero. Twelve studies reported information on social support. Aggregation of these studies yielded a large mean effect size of $d = 1.05$ (SE = .31), which as shown by its 95% confidence interval (.37 to 1.74) and associated significance test ($t = 3.38, p = .006$) differs significantly from zero. Ten studies reported information on stress/distress. Aggregation of these studies yielded a medium mean effect size of $d = .67$ (SE = .21), which as shown by its 95% confidence interval (.20 to 1.14) and associated significance test ($t = 3.21, p = .011$) differs significantly from zero. Nine studies reported information on parent-child relationship. Aggregation of these studies yielded a large mean effect size of $d = .86$ (SE = .25), which as shown by its 95% confidence interval (.28 to 1.43) and associated significance test ($t = 3.43, p = .009$) differs significantly from zero. Nine studies reported information on PTSD. Aggregation of these studies yielded a large mean effect size of $d = 1.21$ (SE = .23), which as shown by its 95% confidence interval (.70 to 1.73) and associated significance test ($t = 5.41, p = .001$) differs significantly from zero. One study provided information regarding psychopathology, which had a medium effect size ($d = .56$). Three studies reported information on domestic violence skills. Aggregation of these studies yielded a large mean effect size of $d = 1.52$ (SE = .84), which as shown by its 95% confidence interval (-2.08 to 5.12) and associated significance test ($t = 1.82, p = .21$) does not differ significantly from zero. Six studies reported information on self-concept. Aggregation of these studies yielded a medium mean effect size of $d = .74$ (SE

= .21), which as shown by its 95% confidence interval (.21 to 1.26) and associated significance test ($t = 3.58, p = .016$) differs significantly from zero.

Child interventions. Of the 50 studies, one reported information on maltreatment events, which yielded a large mean effect size ($d = 2.52$). Fourteen studies reported information on internalizing problems. Aggregation of these studies yielded a medium mean effect size of $d = .53$ ($SE = .06$), which as shown by its 95% confidence interval (.39 to .66) and associated significance test ($t = 8.17, p < .001$) differs significantly from zero. Two studies reported information on quality of life. Aggregation of these studies yielded a large mean effect size of $d = 2.21$ ($SE = .66$), which as shown by its 95% confidence interval (-6.13 to 10.54) and associated significance test ($t = 3.36, p = .18$) did not differ significantly from zero. Seven studies reported information on social support. Aggregation of these studies yielded a medium mean effect size of $d = .67$ ($SE = .14$), which as shown by its 95% confidence interval (.34 to 1.01) and associated significance test ($t = 4.88, p = .003$) differs significantly from zero. Three studies reported information on stress/distress. Aggregation of these studies yielded a medium mean effect size of $d = .30$ ($SE = .03$), which as shown by its 95% confidence interval (.16 to .45) and associated significance test ($t = 8.83, p = .013$) differs significantly from zero. Two studies reported information on parent-child relationships. Aggregation of these studies yielded a large mean effect size of $d = .81$ ($SE = .53$), which as shown by its 95% confidence interval (-5.91 to 7.53) and associated significance test ($t = 1.53, p = .37$) did not differ significantly from zero. Sixteen studies reported information on behavior problems. Aggregation of these studies yielded a medium mean effect size of $d = .44$ ($SE = .08$), which as shown by its

95% confidence interval (.26 to .62) and associated significance test ($t = 5.23, p < .001$) differs significantly from zero. Seven studies reported information on PTSD.

Aggregation of these studies yielded a medium mean effect size of $d = .68$ ($SE = .17$), which as shown by its 95% confidence interval (.27 to 1.08) and associated significance test ($t = 4.06, p = .001$) differs significantly from zero. Seven studies reported information on psychopathology. Aggregation of these studies yielded a large mean effect size of $d = .99$ ($SE = .32$), which as shown by its 95% confidence interval (.21 to 1.77) and associated significance test ($t = 3.09, p = .021$) differs significantly from zero. Three studies reported information on domestic violence skills. Aggregation of these studies yielded a large mean effect size of $d = .89$ ($SE = .61$), which as shown by its 95% confidence interval (-1.75 to 3.53) and associated significance test ($t = 1.45, p = .28$) did not differ significantly from zero. Eight studies reported information on self-concept. Aggregation of these studies yielded a medium mean effect size of $d = .68$ ($SE = .18$), which as shown by its 95% confidence interval (.25 to 1.11) and associated significance test ($t = 3.77, p = .007$) differs significantly from zero.

Adult control groups. Of the 50 studies, two reported information on maltreatment events. Aggregation of these studies yielded a medium mean effect size of $d = .73$ ($SE = .98$), which as shown by its 95% confidence interval (-11.74 to 13.19) and associated significance test ($t = .739, p = .60$) does not differ significantly from zero. Three studies reported information on internalizing problems. Aggregation of these studies yielded a medium mean effect size of $d = .66$ ($SE = .07$), which as shown by its 95% confidence interval (.38 to .94) and associated significance test ($t = 10.05, p = .01$) differs significantly from zero. One study provided information on quality of life, which

had a medium effect size ($d = .27$). Three studies reported information on social support. Aggregation of these studies yielded a small mean effect size of $d = .02$ ($SE = .27$), which as shown by its 95% confidence interval (-1.14 to 1.18) and associated significance test ($t = .09, p = .94$) does not differ significantly from zero. Three studies reported information on stress/distress. Aggregation of these studies yielded a small mean effect size of $d = .15$ ($SE = .09$), which as shown by its 95% confidence interval (-.24 to .54) and associated significance test ($t = 1.63, p = .24$) does not differ significantly from zero. One study reported information on parent-child relationships, which yielded a medium mean effect size ($d = .37$). Two studies reported information on PTSD. Aggregation of these studies yielded a medium mean effect size of $d = .34$ ($SE = .10$), which as shown by its 95% confidence interval (-.91 to 1.58) and associated significance test ($t = 3.44, p = .18$) did not differ significantly from zero. No studies provided information on psychopathology. One study reported information on domestic violence skills, yielding a medium effect size ($d = .28$). One study reported information on self-concept, yielding a medium effect size ($d = .77$).

Child control groups. Of the 50 studies, three reported information on internalizing problems. Aggregation of these studies yielded a small mean effect size of $d = .10$ ($SE = .09$), which as shown by its 95% confidence interval (-.27 to .47) and associated significance test ($t = 1.14, p = .37$) does not differ significantly from zero. Two studies reported information on social support. Aggregation of these studies yielded a small mean effect size of $d = .04$ ($SE = .22$), which as shown by its 95% confidence interval (-2.78 to 2.87) and associated significance test ($t = .19, p = .88$) does not differ significantly from zero. Five studies reported information on behavior

problems. Aggregation of these studies yielded a small mean effect size of $d = .03$ ($SE = .11$), which as shown by its 95% confidence interval (-.28 to .34) and associated significance test ($t = .26, p = .81$) did not differ significantly from zero. One study provided information regarding psychopathology, which yielded a medium effect size ($d = .23$). Two studies reported information on domestic violence skills. Aggregation of these studies yielded a negative medium mean effect size of $d = -.46$ ($SE = .31$), which as shown by its 95% confidence interval (-4.42 to 3.49) and associated significance test ($t = -1.49, p = .38$) did not differ significantly from zero. Three studies reported information on self-concept. Aggregation of these studies yielded a negative medium mean effect size of $d = -.46$ ($SE = .002$), which as shown by its 95% confidence interval (-.47 to -.45) and associated significance test ($t = -269.43, p < .001$) differs significantly from zero. No studies utilizing control groups reported information on maltreatment events, quality of life, stress/distress, parent-child relationship, or PTSD.

Because effect sizes are independent within a particular analysis, it is not possible to directly compare the outcomes (Rosenthal & Rubin, 1986).

Chapter 5: Discussion

Results of this meta-analysis support the effectiveness of interventions for treating the negative effects of domestic violence for both adults and children. The mean effect size estimate revealed a d -value of .99 for adult interventions. This indicates that interventions for adults are highly effective. Moreover, this effectiveness exists over and above the medium effect of adult control groups ($d = .34$). For child interventions, the mean effect size estimate revealed a d -value of .67. This indicates that interventions for children are also effective, but perhaps less so than interventions for adults. Further, this effectiveness still exists when compared to child control groups ($d = .01$). Thus, domestic violence interventions appear to be between moderately to highly effective for treating the negative impacts of domestic violence. Due to the limited number of studies, however, these results need to be interpreted with caution. Further, it is unclear at this time whether or not the types of interventions differentially affect the types of outcomes.

Type of Intervention

The next research question was to address whether or not different types of interventions were equally effective in treating the negative effects of domestic violence.

CBT. The mean effect size estimate revealed a d -value of .97 for adult CBT interventions. This indicates that CBT interventions for adults are highly effective. Moreover, this effectiveness exists over and above the medium effect of adult control groups ($d = .46$). For child CBT interventions, the mean effect size estimate revealed a d -value of .86. This indicates that CBT interventions for children are also highly

effective. Further, this effectiveness still exists when compared to child control groups ($d = -.04$). Thus, CBT interventions appear to be highly effective for treating the negative impacts of domestic violence for both adults and children.

Advocacy. The mean effect size estimate revealed a d -value of .60 for adult advocacy interventions. This indicates that advocacy interventions for adults are moderately effective. This effectiveness exists slightly above the medium effect of adult control groups ($d = .46$). Although more studies are needed, it seems that advocacy interventions do not help more than control groups. Thus, the passage of time seems to account for as much of the positive change as does an advocacy intervention. For child advocacy interventions, the mean effect size estimate revealed a d -value of .23. This indicates that advocacy interventions for children have small, possibly negligible effects. This effectiveness, however, is greater than child control groups ($d = -.04$). Thus, advocacy interventions appear to only have small impacts on treating domestic violence effects for both adults and children.

Parent/Family. The mean effect size estimate revealed a d -value of .98 for adult parent/family interventions. This indicates that parent/family interventions for adults are highly effective. Moreover, this effectiveness exists over and above the medium effect of adult control groups ($d = .46$). For child parent/family interventions, the mean effect size estimate revealed a d -value of .63. This indicates that parent/family interventions for children are moderately effective. Further, this effectiveness still exists when compared to child control groups ($d = -.04$). Thus, parent/family interventions appear to be moderately to highly effective for treating the negative impacts of domestic violence for both adults and children.

Empowerment. The mean effect size estimate revealed a d -value of 1.08 for adult empowerment interventions. This indicates that empowerment interventions for adults are highly effective. Moreover, this effectiveness exists over and above the medium effect of adult control groups ($d = .46$). For child empowerment interventions, the mean effect size estimate revealed a d -value of .73. This indicates that empowerment interventions for children are moderately effective. Further, this effectiveness still exists when compared to child control groups ($d = -.04$). These results need to be interpreted with caution, however, as only one empowerment intervention reported information for children. Overall, empowerment interventions appear to be moderately to highly effective for treating the negative impacts of domestic violence for adults and children.

Play therapy. The mean effect size estimate revealed a d -value of 1.26 for adult play therapy interventions. This indicates that play therapy interventions for adults are highly effective. Moreover, this effectiveness exists over and above the medium effect of adult control groups ($d = .46$). For child play therapy interventions, the mean effect size estimate revealed a d -value of .70. This indicates that play therapy interventions for children are moderately effective. Further, this effectiveness still exists when compared to child control groups ($d = -.04$). Thus, play therapy interventions appear to be moderately to highly effective for treating the negative impacts of domestic violence for adults and children.

Type of Outcome

The third research question evaluated intervention effectiveness on different outcomes.

Maltreatment events. The mean effect size estimate revealed a d -value of 1.17 for adult maltreatment events. This indicates that interventions are highly effective in lessening adult maltreatment events. Moreover, this effectiveness exists over and above the medium effect of adult control groups ($d = .73$). For child maltreatment events, the mean effect size estimate for interventions revealed a d -value of 2.25. This indicates that interventions are also highly effective in decreasing child maltreatment events. These results, however, need to be interpreted with caution as this refers to only one study and there is no control group for a comparison. Overall, interventions appear to be highly effective for decreasing maltreatment events for both adults and children.

Internalizing problems. The mean effect size estimate revealed a d -value of .74 for internalizing problems. This indicates that interventions moderately effective in decreasing internalizing problems for adults. This effectiveness, however, is comparable to the medium effect size of adult control groups ($d = .66$). For child internalizing problems, the mean effect size estimate revealed a d -value of .53. This indicates that interventions for children are also moderately effective in reducing internalizing problems. Further, this effectiveness still exists when compared to child control groups ($d = .10$). Thus, interventions appear to be effective for treating the internalizing problems for children, but not for adults.

Quality of life. The mean effect size estimate revealed a d -value of .52 for adult quality of life. This indicates that interventions for adults are moderately effective in increasing quality of life. The effectiveness seems to exist over and above the smaller medium effect of adult control groups ($d = .27$). For child quality of life, the mean effect size estimate revealed a d -value of 2.206. This indicates that interventions are

highly effective in increasing child quality of life. This result, however, needs to be interpreted with caution as there was no control group for comparison. Overall, quality of life seems to be improving for both adults and children.

Social support. The mean effect size estimate revealed a d -value of 1.05 for adult social support. This indicates that interventions for adults are highly effective in increasing social support. Moreover, this effectiveness exists over and above the small effect of adult control groups ($d = .02$). For child social support, the mean effect size estimate revealed a d -value of .67. This indicates that interventions for children are moderately effective in increasing social support. Further, this effectiveness still exists when compared to child control groups ($d = .04$). Thus, interventions appear to be moderately to highly effective for increasing social support for adults and children.

Stress/distress. The mean effect size estimate revealed a d -value of .67 for adult stress/distress. This indicates that interventions are moderately effective in decreasing adult stress/distress. Moreover, this effectiveness exists over and above the small effect of adult control groups ($d = .15$). For child stress/distress, the mean effect size estimate revealed a d -value of .30. This indicates that interventions are also moderately effective in reducing stress/distress. This result, however, needs to be interpreted with caution as there was no control group for comparison. Overall, interventions appear to be moderately effective in decreasing stress/distress in adults and children.

Parent-child relationship. The mean effect size estimate revealed a d -value of .86 for the adult component of the parent-child relationship. This indicates that interventions are highly effective in improving the adult side of the parent-child relationship. Moreover, this effectiveness exists over and above the medium effect of

adult control groups ($d = .37$). For the child side of the parent-child relationship, the mean effect size estimate revealed a d -value of .81. This indicates that interventions are also highly effective in improving the child side of the parent-child relationship. This result, however, needs to be interpreted with caution as there was no control group for comparison. Overall, interventions appear to be highly effective for improving the parent-child relationship.

Behavior problems. For child behavior problems, the mean effect size estimate revealed a d -value of .44. This indicates that interventions are moderately effective in decreasing behavior problems. Further, this effectiveness still exists when compared to child control groups ($d = .03$). Thus, interventions appear to be moderately effective in decreasing child behavior problems.

PTSD. The mean effect size estimate revealed a d -value of 1.21 for adult PTSD. This indicates that interventions are highly effective in decreasing the symptoms of adult PTSD. Moreover, this effectiveness exists over and above the medium effect of adult control groups ($d = .34$). For child PTSD, the mean effect size estimate revealed a d -value of .68. This indicates that interventions are moderately effective in decreasing child PTSD symptoms. This result, however, needs to be interpreted with caution as there was no control group for comparison. Overall, interventions appear to be moderately to highly effective for decreasing PTSD for both adults and children.

Psychopathology. The mean effect size estimate revealed a d -value of .56 for adult psychopathology. This indicates that interventions are moderately effective in decreasing adult psychopathology. This result, however, needs to be interpreted with caution as this is only from one study and there was no control group for comparison.

For child psychopathology, the mean effect size estimate revealed a d -value of .99. This indicates that interventions are highly effective for decreasing child psychopathology. Further, this effectiveness still exists when compared to child control groups ($d = .23$). Thus, interventions appear to be between moderately to highly effective for decreasing adult and child psychopathology.

Domestic violence skills. The mean effect size estimate revealed a d -value of 1.52 for adult domestic violence skills. This indicates that interventions are highly effective in increasing adult domestic violence skills. Moreover, this effectiveness exists over and above the medium effect of adult control groups ($d = .28$). For child domestic violence skills, the mean effect size estimate revealed a d -value of .89. This indicates that interventions are also highly effective in increasing child domestic violence skills. Further, this effectiveness still exists when compared to child control groups ($d = -.46$). Thus, interventions appear to be highly effective for increasing domestic violence skills in both adults and children.

Self-concept. The mean effect size estimate revealed a d -value of .74 for adult self-concept. This indicates that interventions are moderately effective in increasing adult self-concept. This effectiveness, however, is similar to the medium effect of adult control groups ($d = .77$). For child self-concept, the mean effect size estimate revealed a d -value of .68. This indicates that interventions are also moderately effective in increasing child self-concept. Further, this effectiveness still exists when compared to child control groups ($d = -.46$). Thus, interventions appear to be moderately effective for increasing child self-concept, but not effective in increasing adult self-concept.

Recommendations

Overall, interventions seem to be important for both adults and children. Effectiveness, however, seems to vary significantly across type of intervention and outcomes. CBT, parent/family, empowerment, and play therapy interventions seem to be highly effective in decreasing the negative impacts of domestic violence on adults. Advocacy interventions, however, do not seem to be effective. Therefore, it seems that attention should be paid to increasing these other, more “counseling” heavy interventions, as opposed to advocacy interventions. For children, CBT interventions appear to be the most effective for children. Next, parent/family, empowerment, and play therapy interventions all had positive impacts on the treatment of children, but not as high as CBT. Advocacy interventions did not seem to be effective for children. Therefore, future interventions should focus on CBT interventions for children. Parent/family, empowerment, and play therapy are still viable options, but advocacy interventions should either be changed or forgone in favor of one of the therapy interventions.

These results lend support to the idea of common factors (Duncan, Miller, Wampold, & Hubble, 2010) as important in enabling lasting change to take place. Advocacy interventions may be effective only in the extent to which they reflect limited aspects of common factors which are known to be fully present in effective therapeutic interventions. For example, the therapeutic relationship and treatment model are present in the therapeutic interventions, allowing the facilitators to develop a cogent rationale. This does not exist, however, in advocacy interventions. Therefore, this may be one reason that therapy interventions are more effective than advocacy interventions.

For outcomes, adult internalizing symptoms (e.g., depression, anxiety) and self-concept did not seem to improve over and above the improvements reported by the control groups. Thus interventions seem to be most effective in treating adult maltreatment events, quality of life, social support, stress/distress, parent-child relationship, PTSD, psychopathology, and domestic violence skills. Therefore, interventions need to be altered in order to better treat internalizing symptoms and self-concept in adults. Children seem to be improving across all outcomes over and above control groups. This speaks to children's resiliency and the ability of interventions to be effective (Cummings et al., 2000; Zerk et al., 2009). Thus, interventions should continue to focus on treating children as they seem to be benefiting greatly from these services.

In terms of the literature, it is recommended that research on domestic violence intervention programs focus more on the utilization of control groups. Due to the newness of domestic violence interventions, studies that are reported are often pilot studies that are qualitative or the first quantitative evaluation of a treatment intervention, which means that control groups are not utilized (Jewell & Wormith, 2010). Further, control groups are often considered unethical for domestic violence victims as their needs are very acute and require treatment (Wathen & MacMillan, 2003). As more studies are published, it will be important to track these and include them in a follow up study. Ethical concerns are frequently cited as a rationale for the limited number of well-designed studies involving a traditional control groups. This limitation is not uncommon within other fields involving high-risk health studies.

Overall, findings reveal that more controlled and well-designed clinical research should be encouraged within the field.

Limitations

One important limitation of the literature is reflected in study findings which reveal relatively few studies within each category. It is difficult to make strong recommendations based on the complications in finding large numbers of studies for each category. As more studies are conducted, it will be important to continue assessing these studies in order to conduct a more thorough meta-analysis in the future. Also, the addition of more studies will ensure that the results presented in this meta-analysis are accurate. This will allow a more accurate interpretation of how different interventions affect different outcomes, creating a specificity that is not available in the current meta-analysis.

Future Research

Future analyses need to look at studies that report effect sizes comparing interventions to control groups. This will help to further determine the effects of interventions on the participants. Also, demographic analyses need to be conducted to determine if moderating variables are important. For example, does ethnicity play a role in the effectiveness of domestic violence interventions? Importantly, a follow-up meta-analysis will need to be conducted in order to increase the number of studies that are available for each category. This will allow for a stronger determination that the results of this meta-analysis are accurate representations of the literature.

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Appendix A: Codebook

STUDY LEVEL CODING MANUAL

1. Study ID Number. Assign a unique identification number to each study. If a report presents two independent studies, i.e., two independent outcome studies with different participants, then add a decimal to the study ID number to distinguish each study within a report and code each independent study separately.
2. Coder. Who coded the study
 1. If coded by Shannon
 2. If coded by Paula.
 3. If coded by both.
3. Independent sample ID number. Within each study, number each independent sample you find.
4. Study Reference. Write the full APA reference for each study.
5. What type of publication is the report? If two separate reports are being used to code a single study, code the type of the more formally published report (i.e. book or journal article)
 1. Book
 2. Journal article or book chapter.
 3. Thesis or doctoral dissertation.
 4. Technical report.
 5. Conference paper
 6. Other (specify).

6. What is the publication year? If two separate reports are being used to code a single study, code the publication year of the more formally published report.

Sample Descriptors

7. How Participants Receive Treatment:
 1. Group
 2. Family
 3. Individual
 4. Group and individual
 5. Group and family
8. Grouping Variable. Person intervention focused on:
 1. Adult victim
 2. Adult and child victim together
 3. Family Unit
 4. Child Victim
 5. Adult and child victim separate
 6. Father only
 7. Other
9. Grouping Variable Specific. Define how the participants were given the treatment and groups were sorted if more than one group was analyzed.
10. Provide the duration of the study in months. If in between a whole month, provide the percentage of the month completed.
11. Location of study. Provide exact city if located in the US. Provide country if outside the US.

12. Sessions. How many sessions did the participants receive? Specifically define how often these sessions took place and when the assessment measures were given to the participants.
13. Compensation. Were the participants compensated? Specify how much and when they received the money.
14. Followup. When was the follow up conducted in months? Specifically define any times the assessment measures were given.
15. Number of Hours. How many hours did the participants spend in the treatment?

Nature of the Research Descriptors

16. How were the participants recruited? Provide details in next column if choices do not match the recruitment method (i.e. you had to choose “other”).
 1. Community Agency
 2. DV shelter/agency
 3. Hospital
 4. Homeless shelter
 5. Housing shelter
 6. Police Intervention
 7. Courthouse
 8. Combination

Research Design Descriptors

17. Unit of assignment to conditions. Select the code that best describes the unit of assignment to treatment and control groups.
 1. Randomly

2. Volunteer
3. Matched

18. Overall confidence of judgment on how subjects were assigned (code 9999 if assignment not used, i.e. you could not randomly assign one group to divorce and the other not).

1. Very low (little basis).
2. Low (guess).
3. Moderate (weak inference).
4. High (strong inference).
5. Very high (explicitly stated).

19. Was the equivalence of the groups tested at pretest?

1. Yes
2. No

20. Pretest differences, if tested. Note: an “important” difference means a difference on several variables, or on a major variable, or large differences; major variables are those likely to be related to adjustment, e.g., age, sex, ethnicity, parental involvement, socioeconomic status, etc. Pretest differences on an outcome variable should be coded as important.

1. Negligible differences, judged unimportant.
2. Some difference, judged of uncertain importance.
3. Some differences, judged important.

21. Total Sample Size.

- a. Start of study.

- b. End of study.

Adult Variables

22. Total Number of Adult Victims. Give the total number of adult victims included in the study.

23. Number of Female Victims.

24. Number of Male Victims.

25. Adult Victim Age and Standard Deviation.

26. Total Number of Perpetrators. Enter the total number of perpetrators included in the study.

27. Perpetrator Age and Standard Deviation

28. Racial Makeup of Adult Victims. Please code the specific makeup of the sample(s).

If percentages given, make sure and multiply by the total n to get the correct n . If data are not provided at all, code 9999.

- a. n White

- b. n Black

- c. n Hispanic

- d. n Asian

- e. n Native American

- f. n Multiracial

- g. n Other/Not provided

29. Education Level of Adult Victim. If not given, code 9999.

- a. n did not graduate high school

- b. n high school graduate

- c. n some college
- d. n graduate school
- e. Mean
- f. Standard Deviation

30. Socioeconomic Status of Adult Victims. Provide exact amount if available. If nothing given, code 9999. If exact amount is \$9999, add or subtract \$1 to avoid confusion. If monthly income provided, multiply by 12. If range given, code exact percent in each range:

- 1. Lower (\$0-\$18,499)
- 2. Lower-middle (\$18,500-\$34,737)
- 3. Middle (\$34,738-\$55,330)
- 4. Upper-middle (\$55,331-\$88,029)
- 5. Upper (\$88,030+)

31. Adult Victim Has Children. Provide the number of adult victims that have children.

32. Recency of Intimate Partner Violence. Provide means and standard deviation.

33. Perpetrator Female. Number of perpetrators that are female.

34. Perpetrator Male. Number of perpetrators that are male.

Child Variables

35. Total Number of Children. Give the total number of children being used to calculate the effect size.

36. Racial Makeup of Children. Please code the specific makeup of the sample(s). If percentages given, make sure and multiply by the total n to get the correct n . If data are not provided at all, code 9999.

- a. *n* White
- b. *n* Black
- c. *n* Hispanic
- d. *n* Asian
- e. *n* Native American
- f. *n* Multiracial
- e. *n* Other/Not provided

37. Mean age of child sample(s). Specify the approximate or exact mean age of each sample provided and standard deviation. Code the best information available; estimate mean age from grade levels if necessary. If mean age cannot be determined, enter 9999. If only age range is provided, code the following:

- 1. 0-5 years
- 2. 6-12 years
- 3. 13-18 years
- 4. 19+ years

38. Sex of the sample(s). Give the exact number. If not provided at all, code 9999.

- a. *n* Male
- b. *n* Female
- c. *n* Other/Information not provided

EFFECT SIZE LEVEL CODING MANUAL

1. Effect Size Number. Assign each effect size within a study a unique number.

Number multiple effect sizes within a study sequentially. (You will number **ALL**

effect sizes sequentially. Even once you have begun coding another study, continue counting upwards on the effect size number, do **not** start over).

Dependent Measure Descriptors

2. Effect size type. Should always be d because this is what we need the effect size to be in before we can run analyses.

- a. r correlation or d coefficient
- b. Means and standard deviation
- c. t -value or F -value
- d. chi-square ($df = 1$)
- e. frequencies or proportions, dichotomous
- f. frequencies of proportions, polychotomous
- g. researcher assessment (specify)

3. Category of Treatment Intervention. What type of intervention is being used?

Specifically define how the authors did the domestic violence intervention.

- a. Cognitive Behavioral
- b. Advocacy
- c. Parent/family
- d. Empowerment
- e. Play Therapy
- f. Control Group

4. Type of Assessment. Provide specific details in the following column (i.e. what exact tests were used, etc.).

1. Clinical (interview).

2. Questionnaire.
3. Observation.
4. Other psychological assessment
5. Existing data.
6. Clinical and Questionnaire
7. Clinical and Observation
8. Clinical and Other psychological assessment
9. Clinical, Questionnaire and Observation
10. Clinical, Questionnaire and Other psychological assessment
11. Clinical, Questionnaire, Observation and Other psychological assessment.
12. Questionnaire and Observation.
13. Questionnaire and Other psychological assessment
14. Questionnaire, Observation and Other psychological assessment.
15. Observation and Other psychological assessment
16. Other

5. Type of Abuse.

- a. Psychological/verbal
- b. Physical/sexual
- c. Emotional
- d. Psychological and physical
- e. Psychological and emotional
- f. Psychological, physical and emotional

6. Adult or Child. Are the effect sizes related to adults or children?
 - a. Adult
 - b. Child

7. Social desirability response bias. Rate the extent to which this measure seems susceptible to social desirability response bias. At one end of the continuum would be measures based on objective procedures administered by impartial others, e.g. an assessment made by an impartial third party. At the other end would be the child's own reports made to someone with authority over him/her. Code 9999 if not applicable.
 - 1 very low potential
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7 very high potential

8. Post-Intervention or Followup. Code if the effect size is related to an intervention or a followup after the intervention.
 - a. 1 = Post-intervention
 - b. 2 = Followup after intervention completion

Effect Size Data

9. Type of data effect size based on.
 1. *r* correlation or *d* coefficient

2. Means and standard deviation
 3. t -value or F -value
 4. chi-square ($df = 1$)
 5. frequencies or proportions, dichotomous
 6. frequencies of proportions, polychotomous
 7. researcher assessment (specify)
 8. other (specify)
10. Page number where the data for this effect size was found.
11. Which group shows better adjustment? Code posttest if both are exactly equal.
1. Pretest/Control Group
 2. Posttest/Treatment Group
12. Group A sample size.
13. Group B sample size.
14. Type of Group. Code if the effect size is related to an intervention or a control group.
- a. 1 = Intervention
 - b. 2 = Control
15. Same or Different. Are the groups same or different?
- a. 1 = Same
 - b. 2 = Different
16. Type of Comparison. Compared to the same group, control group, or another treatment group.
- a. 1 = Same

- b. 2 = Compared to control group
 - c. 3 = Compared to another treatment group
17. Group A Mean and Standard Deviation.
18. Group A Mean Difference and Standard Deviation. If comparing to a control group, compute the mean difference, and write the posttest standard deviation.
19. Group A Definition. Define exactly the characteristics of the group you are reporting scores for (i.e. control, pretest, depression)
20. Group B Mean and Standard Deviation.
21. Group B Mean Difference. If comparing to a control group, compute the mean difference, and write the posttest standard deviation.
22. Group B Definition. Define exactly the characteristics of the group you are reporting scores for (i.e. control, pretest, depression)
23. Type of Adjustment. Code the type of adjustment being measured.
- a. Maltreatment events
 - b. Internalizing problems
 - c. Quality of life
 - d. Social support
 - e. Stress/distress
 - f. Parent-child relationship
 - g. Behavior problems (child only)
 - h. PTSD
 - i. Psychopathology
 - j. Domestic violence skills

k. Self-concept

If means and standard deviations are not available:

24. t -value (write in value, if available).
25. F -value (df for the numerator must equal 1; write in the value, if available).
26. chi-square value ($df = 1$; write in value, if available).

Calculated Effect Size

27. Effect size. Should be drawn straight from the article. If not, calculate through a software program or by hand. Report to three decimals with an algebraic sign in front: plus if posttest showed better adjustment or if treatment group showed more improvement.
28. Confidence rating in effect size computation.
 1. No estimation (have descriptive data such as means, standard deviations, frequencies, proportions, etc. and can calculate the effect size directly).
 2. Slight estimation (must use significance testing statistics rather than descriptive statistics, but have complete statistics of conventional sort).
 3. Some estimation (have unconventional statistics and must convert to equivalent t -values or have conventional statistics but incomplete, such as exact p – level).
 4. Moderate estimation (have complex but relatively complete statistics, such as multifactor ANOVA, as basis for estimation).
 5. Highly estimated (have N and crude p -value only, such as $p < .10$, and must reconstruct via rough t -test equivalence).

29. Effect size adjustment. Was the effect size adjusted for its unique contribution controlling for the other variables?

1. Yes

2. No

30. Report the standard error if this is given instead of a standard deviation.