NATIONAL Center on Domestic Violence, Trauma & Mental Health

A Systematic Review of Trauma-Focused Interventions for Domestic Violence Survivors

Carole Warshaw, MD
National Center on Domestic Violence, Trauma & Mental Health

Cris M. Sullivan, PhD
Echo A. Rivera, MA
Michigan State University

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Abstract

Intimate partner violence (IPV) is a form of trauma that can result in significant mental health distress for victims. Rates of clinical depression and posttraumatic stress disorder are higher among abused versus non-abused women, particularly if victims have experienced other lifetime trauma. While there are numerous interventions designed to reduce trauma-induced mental health symptoms, most were originally developed to address events that have occurred in the past (e.g., combat, childhood sexual abuse). Many IPV survivors are still under threat of ongoing abuse or stalking, which not only directly impacts their physical and psychological safety but impacts treatment options, as well. Little is known about the extent to which existing evidence-based trauma treatment modalities are applicable to, or require modification for, IPV survivors. This paper, then, reviews the trauma-based treatments that have been designed or modified specifically for IPV survivors and provides cautions and recommendations for moving forward.

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Introduction

Intimate partner violence (IPV) is a widespread and devastating phenomenon, with millions of women being assaulted by intimate partners and ex-partners across their lifespan (Black et al., 2011).[1] The term IPV refers to an ongoing pattern of coercive control maintained through physical, psychological, sexual, and/or economic abuse that varies in severity and chronicity. It is not surprising, then, that IPV survivors' responses to this victimization would vary, as well. Many women recover relatively quickly from IPV, particularly if the abuse is shorter in duration and less severe and they have access to resources and support (Bonanno, 2004). Others, particularly those who experience more frequent or severe abuse, may develop symptoms that make daily functioning more difficult. Ongoing abuse and violence can induce feelings of shock, disbelief, confusion, terror, isolation, and despair, and can undermine a person's sense of self. These, in turn, can manifest as psychiatric symptoms (e.g., reliving the traumatic event, hyperarousal, avoiding reminders of the trauma, depression, anxiety, and sleep disruption). Some trauma survivors experience one or more of these symptoms for a brief period of time, while others develop chronic posttraumatic stress disorder (PTSD), a disorder that is a common response to overwhelming trauma and that can persist for years. Survivors are also at risk for developing depression, which has been found to significantly relate to the development of PTSD (Cascardi, O'Leary, & Schlee, 1999; Stein & Kennedy, 2001). For those who have also experienced abuse in childhood and/or other types of trauma (i.e., cumulative trauma), the risk for developing PTSD is elevated (Campbell,

1 Although many couples engage in mutual or low-level violence that does not alter the power dynamics within their relationship, the larger social problem of "battering" is a form of gender-based violence characterized by a pattern of behavior, generally committed by men against women, that the perpetrator uses to gain an advantage of power and control over the victim (Bancroft, 2003; M. P. Johnson, 1995; Stark, 2007). Such behavior includes physical violence and the continued threat of such violence but also includes psychological torment designed to instill fear and/or confusion in the victim. The pattern of abuse also often includes sexual and economic abuse, social isolation, and threats against loved ones. For that reason, survivors are referred to as "women" and "she/her" throughout this review, and abusers are referred to as "men" and "he/him." This is meant to reflect that the majority of perpetrators of this form of abuse are men and their victims are women. Further, the bulk of the research on trauma and IPV, including the studies that met the criteria for this review, focus on female victims of abuse. It is not meant to disregard or minimize the experience of women abused by female partners nor men abused by male or female partners.

Greeson, Bybee, & Raja, 2008; Pimlott-Kubiak & Cortina, 2003). Experiencing childhood trauma and/or severe longstanding abuse as an adult can also disrupt one's ability to manage painful internal states (affect regulation), leaving many survivors with coping mechanisms that incur further harm (e.g., suicide attempts, substance use). Trusting others, particularly those in caregiving roles, may be especially difficult.

While keeping in mind that victimization can lead to mental health symptoms, it is also important to remember that for women who are currently experiencing IPV what may look like psychiatric symptomatology (e.g., an "exaggerated" startle response on hearing a door slam) may in fact be an appropriate response to ongoing danger. Although wariness, lack of trust, or seemingly paranoid reactions *may* be manifestations of previous abuse, this "heightened sensitivity" may also be a rational response that could protect a woman from further harm. Similarly, a survivor's seemingly passive response to abuse can be misinterpreted, as well. While passivity *might* be a response to previous experiences of trauma, for survivors of IPV, it may be an intentional strategy used to avoid or minimize abuse that is beyond their control (Goodkind, Sullivan, & Bybee, 2004; Stark, 2007). Choosing to remain in an abusive relationship is often based on a strategic analysis of safety and risk (Davies, Lyon, & Monti-Catania, 1998). It is also influenced by culture, religion, and the hope (not always unfounded) that abusers can change (Warshaw, Brashler, & Gill, 2009).

Some IPV survivors turn to professionals for help with PTSD, depression, or anxiety symptoms that are interfering with their functioning and well-being. Trauma-focused treatments often include some form of either cognitive therapy (CT) or cognitive behavioral therapy (CBT), and a great deal of evidence indicates that these approaches are effective across a variety of populations in reducing PTSD and depression (Mendes, Mello, Ventura, Passarela, & Mari, 2008; N. P. Roberts, Kitchiner, Kenardy, & Bisson, 2009). However, these therapies are not effective for, desired by, or accessible to all trauma survivors, nor do they address many of the domains affected by longstanding interpersonal trauma.

There are a number of issues that may influence how, where, and in what manner to provide trauma treatment to IPV survivors. For example, women still dealing with IPV are generally dealing with a myriad of pressing concerns (e.g., protecting their children, dealing with the legal system, becoming financially more stable). They may have little time and insufficient funds for ongoing therapy sessions or completing homework outside of treatment. Low-income women in particular may have difficulty affording the needed childcare to attend therapy, and as a result of structural oppression, people of color may have less access to insurance to pay for trauma treatment (Dutton, Bermudez, Matas, Majid, & Myers, 2011; Snowden, 2001). In addition, perpetrators of abuse may prevent women from seeking treatment or use their knowledge of their partner's treatment to continue their violence or threats. If the couple has children together, it is not uncommon for perpetrators to use women's helpseeking against them, claiming that they are too "mentally ill" to effectively care for the children, which may discourage women from seeking treatment, as well.

Thus, a number of factors specific to experiencing IPV can impact both treatment accessibility and treatment outcomes. Clearly, more research is needed to test the effectiveness of trauma-focused mental health treatments for IPV survivors, especially if they are still being abused or are at risk for re-abuse. Treatments designed to

reduce PTSD and trauma-related depression were originally created to address single event traumas (e.g., non-partner sexual assault, motor vehicle accidents) or traumatic experiences that occurred in the past and were unlikely to recur (e.g., combat). For many IPV survivors, the abuse or fear of future abuse is ongoing, regardless of their relationship status (Campbell, et al., 2008; Fleury, Sullivan, & Bybee, 2000). Under these circumstances, some treatment components may be especially difficult to tolerate, requiring modifications. For example, "reliving" the abuse through some forms of exposure therapy can potentially escalate rather than decrease women's distress. While exposure therapy is intended to make a prior traumatic incident "lose its power" through repeated recall and verbalization, this technique is based on recalling events from the past. For a person who is still in danger, repeated recall of frightening events may have a very different and adverse effect.

Additionally, the likelihood that survivors have experienced multiple types of trauma (e.g., childhood abuse, community violence, sexual harassment, sexual assault, immigration-related trauma) is relatively high (Campbell, et al., 2008), making trauma treatment more complex. Yet treatment modalities that address the longstanding effects of interpersonal violence (e.g., complex trauma treatment models) are not well researched generally nor specifically for survivors of IPV. Recently, there has been a growing interest in trauma treatments developed or modified specifically for IPV survivors. Thus, the purpose of this review was to examine and critique the evidence related to these models and to provide cautions and recommendations for moving forward.

Method

A rigorous and systematic strategy was employed to identify empirical studies that had created or modified trauma-based treatments specifically for IPV survivors. First, we searched for potential programs and treatments using national registries of evidence-based practices (Campbell Collaboration, Canadian Best Practices Portal, Blueprints for Violence Prevention, Cochrane Reviews, Community Guide, Evidence for Policy & Practice Information & Coordinating Center, Home Visiting Evidence of Effectiveness, Crime Solutions, Promising Practices Network on Children, Families, and Communities, Coalition for Evidence-Based Policy Social Programs That Work, and the National Registry of Evidence Based Programs and Practices). The keywords trauma, PTSD, domestic violence, intimate partner violence, intimate partner abuse, traumatic, rape, sexual assault, and depression were used in combination for each registry that had search functions. In those cases where the registry did not have a search function, we browsed the provided categories for programs.

Second, empirical studies were located using ProQuest (PsycINFO, PsycARTICLES, PILOTS, ProQuest Psychology Journals, and ProQuest Research Library), PubMed, and Web of Science scientific databases. Three sets of search terms were included in every search. All searches used the key words "intimate partner violence," "battered women," or "domestic violence." In addition, all searches used the key words healing, intervention, or treatment, cross-referenced with the above terms. The third set of terms was cross-referenced with the previous two and each search was conducted one at a time. These key terms were trauma, PTSD, "complex trauma," "complex PTSD," "mental health," depression, and substance.

Results were limited to peer-reviewed,

empirical articles published after 1999 and written in English. The focus of the review was to identify non-pharmacological trauma-based interventions that (1) specifically focused on adult survivors of IPV and (2) included comparison or controls groups to examine treatment impact on trauma-related mental health symptoms or well-being. A total of 6,668 articles were initially located from the searches and reviewed. Many were duplicate articles, were not experimental or quasi-experimental (with comparison conditions), or did not include trauma interventions designed or modified for IPV survivors. Articles that fit the criteria were reviewed in order to locate additional relevant studies. Nine articles, referencing eight distinct interventions, met the inclusion criteria for this review. Methodological information about each study is summarized in Table 1, and clinical information about each treatment is summarized in Table 2.

Results

Five of the nine studies that met our criteria described modifications of CBT for IPV survivors, three of which were conducted in the United States (Crespo & Arinero, 2010; D. M. Johnson, Zlotnick, & Perez, 2011; Kim & Kim, 2001; Kubany, Hill, & Owens, 2003; Kubany et al., 2004). We also located programs that targeted the needs of specific populations of IPV survivors, such as suicidal women, low-income women, African American women (Kaslow et al., 2010), abused women seeking treatment for drug addiction (Gilbert et al., 2006), and low-income pregnant survivors (Zlotnick, Capezza, & Parker, 2011). Finally, we located one treatment designed to work on the mind-body connection through yogic breathing and giving testimony (Franzblau, Echevarria, Smith, & Van Cantfort, 2008).

Modifying Cognitive Behavioral Therapy for IPV Survivors

Cognitive behavioral therapy (CBT) is a broad term that encompasses a variety of short-term treatments that include both cognitive techniques (such as learning to think about something differently) and behavioral components (education and skill-building to put new thoughts into practice). The therapy is generally offered once a week for a few weeks to several months and involves homework to put new concepts and skills into practice. When used with trauma victims it sometimes includes "prolonged exposure," or recalling and repeating the traumatic event in order to reduce the emotional response to it (Foa et al., 1999; Foa et al., 2005; Resick, Nishith et al., 2002).

While CBT has been shown to be efficacious with a range of trauma survivors, many clinical trials have intentionally excluded women experiencing IPV from their studies (Foa et al., 1999; Foa et al., 2005; Foa, Rothbaum, Riggs, & Murdock, 1991; Foa, Zoellner, Feeny, Hembree, & Alvarez-Conrad, 2002; McDonagh et al., 2005; Resick et al., 2008; Resick, Nishith, Weaver, Astin, & Feuer, 2002; Resick, Williams, Suvak, Monson, & Gradus, 2012). Not all investigators provided a rationale for this decision, but one noted that this exclusion was due to the treatment focusing on healing from prior traumas only (Foa et al., 2005). One clinical trial did not specifically exclude women experiencing IPV (Chard, 2005) but did not examine whether they responded differentially to the treatment, either by level of engagement or strength of outcomes. In response to these limitations, four investigative teams have specifically focused on testing the efficacy of CBT with IPV survivors, after making IPV-specific modifications to the treatments (Crespo & Arinero,

2010; Gilbert, et al., 2006; D. M. Johnson, et al., 2011; Kubany, et al., 2003; Kubany, et al., 2004). These interventions are reviewed next.

Kubany and colleagues (2003; 2004) conducted the first clinical trials of a cognitive trauma therapy tailored specifically for IPV survivors suffering from PTSD. Their treatment, labeled *Cognitive Trauma Therapy for Battered Women (CTT-BW)*, was designed in collaboration with advocates and survivors. Their model included standard modalities such as psychoeducation about PTSD and stress management and exposure (talking about the trauma, homework, watching movies about domestic violence) but also included components to address four unique areas of concern they had identified as salient to abused women. These included (1) trauma-related guilt that many survivors reported (guilt about failed marriage, effects on children, decisions to stay or leave); (2) histories of other traumatic experiences; (3) likelihood of ongoing stressful contact with the abuser in relation to parenting; and (4) risk for subsequent revictimization. Modules were designed to address these concerns, including assessing and reframing negative beliefs about the self and inaccurate cognitions that help to maintain trauma symptoms; assertiveness and self-advocacy skills training; strategies for managing contact with former partners particularly around custody and visitation; and strategies for identifying and avoiding potential perpetrators in the future. Therapy was provided in an individual format in eight to eleven 90-minute sessions for most clients (Kubany et al., 2003).

To be eligible to participate in the study, IPV survivors had to be out of the relationship for at least 30 days with no desire to reconcile and had to meet the following additional criteria: (1) no physical or sexual victimization by anyone in the prior 30 days; (2) diagnosis for partner-abuse-related PTSD; (3) moderate or higher abuse-related guilt; (4) not currently abusing alcohol or drugs; and (5) no diagnosis of schizophrenia or bipolar disorder. In their initial pilot study, 37 ethnically diverse IPV survivors were randomly assigned to receive either immediate or delayed treatment. Five women (14%) dropped out of treatment. Due to the small sample size of this feasibility study, they were unable to test possible group differences between women who received treatment initially and those in the delayed treatment group. Within-group improvements, however, were promising. IPV survivors improved on PTSD symptoms post treatment, and these improvements were maintained for three months (retention rate = 68%). This outcome was found regardless of whether the investigators included only women who completed treatment or all women.

The second, larger clinical trial conducted by Kubany and colleagues (2004) used the same eligibility criteria. In this trial, 125 ethnically diverse IPV survivors were randomized into receiving either immediate or delayed treatment. Findings again were quite positive: 87% of women who completed treatment no longer met diagnostic criteria for PTSD, and 83% obtained depression scores in the normal range at the conclusion of treatment—an increase from 4% pre-treatment. The intervention also significantly reduced participants' guilt and increased their self-esteem. Improvements were maintained at three- and six-month follow-up assessments. Of additional note, 80% of the ethnically and educationally diverse women who started CBT-BW completed it, and the program worked equally well when delivered by clinically or non–clinically trained therapists.

While Kubany and colleagues' intervention is promising for women who are out of the abusive relationship and no longer in danger, Johnson and colleagues created a CBT program specifically for

women who have experienced recent abuse and are therefore likely still in danger (although in shelter during the intervention) and may or may not continue their relationships (D. M. Johnson, et al., 2011). They intentionally designed a program for women living in domestic violence shelters, which they named *HOPE: Helping to Overcome PTSD through Empowerment*. HOPE involves nine to twelve 60-90 minute individual sessions conducted twice per week over a maximum of eight weeks, addressing issues especially salient to abused women. Based heavily on Herman's (1992) multi-stage model, it involves three stages of recovery: (1) re-establishing safety and a sense of self-care; (2) remembering and mourning; and (3) reconnection (Herman, 1992). The treatment prioritizes women's safety needs, does not include exposure therapy, and focuses heavily on women's empowerment. Specifically, therapists focus on women's individual needs and choices and help them develop any skills needed to reach their personal goals. Later sessions focus on building cognitive and behavioral skills to manage PTSD symptoms and triggers, while optional modules are available that address common co-occurring issues such as dealing with substance abuse and managing grief.

Unlike many clinical trials of CBT's effect on PTSD, women were eligible for this study if they met sub-threshold PTSD criteria, which meant meeting the re-experiencing criteria and either the avoidance or arousal criteria of PTSD. Additional inclusion criteria included (1) no diagnosis of bipolar disorder or psychosis; (2) not concurrently in individual therapy; (3) no changes in psychotropic medications over the prior 30 days; and (4) no significant suicidal ideation or risk. Seventy IPV survivors were randomized to receive HOPE or to continue receiving standard shelter services and were then re-interviewed 1 week, 3 months, and 6 months after they left shelter.

A number of positive findings were reported from this study. Compared to women in the control condition, those in the HOPE condition were less likely to experience abuse six months after leaving shelter. Further, women who received at least five sessions of HOPE were twelve times less likely to experience re-abuse than were women who received shelter services without additional HOPE counseling. With regard to PTSD symptoms, there were no significant condition differences over time except that women who received HOPE reported less emotional numbing. However, those randomized to receive HOPE showed significant improvement over time on depression severity, empowerment, and social support compared to women in the "services as usual" group.

It is also noteworthy that women's satisfaction with the treatment was high, and engagement in treatment while in shelter was equally impressive. Only two women dropped out during this time. Thirty-four of the 35 women assigned to receive HOPE participated in at least one session, and 63% attended at least five sessions (26% attended all 12). Sixty nine percent of the women did not complete all 12 sessions because they left shelter prior to completing HOPE.

Based on these study findings, the authors concluded that while receipt of HOPE appeared superior to receiving only services as usual in a shelter context, a number of modifications may be in order for the future. For example, they recommend that this treatment be available after women leave shelter, given that 63% of the women exited shelter before completing HOPE, and 33% exited before having the opportunity to receive at least five sessions so did not receive any of the trauma-specific CBT modules. A larger sample in a future study might increase power enough to detect PTSD differences that approached but did not reach statistical significance in this study, as well.

Crespo and Arinero (2010) tested a CBT treatment for IPV survivors in Spain that included many of the same components found in Johnson and colleagues' intervention. They too consulted with IPV experts to design a treatment that would be most beneficial for IPV survivors, regardless of their relationship or current abuse status. Similar to HOPE, their intervention focused on (1) psycho-education about IPV and its impact on survivors; (2) raising self-esteem and mood, and (3) problem-solving skills for independent living. They also added diaphragmatic breathing to their treatment, as a means of reducing hyper-alertness.

To be sensitive to the fact that many abused women have other pressing issues to attend to and have to "get on with their lives," the treatment was designed to be delivered through eight 90-minute sessions. The group format was intentionally used in order to reduce the isolation many abused women feel. This trial specifically excluded women with full clinical diagnoses of PTSD[2] (they received different treatment) because the study was designed to determine whether or not the intervention worked for women with sub-threshold symptoms of PTSD.

Crespo and Arinero were also interested in empirically testing the concern that exposure therapy may not be effective for women currently experiencing domestic violence. In response to the concern that some trauma survivors resist exposure therapy as well as the fear that it may be counterproductive for individuals still experiencing trauma, they compared two treatment groups that were identical except that one included exposure treatment and the other included communication skills around anger and self-expression.

Fifty-three women were recruited from a variety of domestic violence agencies in Spain and randomized into one of the two treatments. Interviews were conducted pre, post, and at 1-, 3-, 6-, and 12-month follow-up. Women's mean age was 41. Just over half (51%) were separated from, and more than a third still lived with the abusers. At pre-intervention assessment, even though none met the diagnostic criteria for PTSD, 42% of the women met criteria for re-experiencing, 51% for hyper-alertness, and 21% for avoidance. Mean anxiety was moderate-severe, with 39% reporting suicidal ideation. Over half (53%) were below the cutoff on self-esteem, and mean depression scores were in the severe range.

Results of this study were promising for both treatments. Posttraumatic stress symptoms virtually disappeared within the first month after each treatment and this was maintained across the year. Depression and anxiety significantly decreased within the first month post-treatment, as well, with more pronounced changes in the exposure group, initially. The only significant between-group difference at 12 months was in anger expression, where results were better for the exposure group. This was surprising to the authors, given that the communication skills intervention focused specifically on anger expression. However, women in the Exposure condition had higher educational levels and more prior experience with therapy, which may have confounded the findings. In addition, the same therapist delivered both interventions. Nonetheless, both treatments appear to be effective. For women who are not comfortable with exposure therapy, the communications skills modality offers a useful alternative.

Treatment adherence was fairly typical for this study. Twenty-six percent of participants dropped out of treatment before completion. Eighty percent attended all sessions of the exposure

2 Women with diagnoses of PTSD received a different treatment that was part of a separate research study.

condition, while 63% attended all sessions of the communication skills condition, but this difference was not significant. The most notable limitation of this study was its lack of a "services as usual" condition against which to compare the two treatments. However, this small clinical trial was promising, corroborating some of the main findings from D. M. Johnson and colleagues (2011) as well as Kubany and colleagues (2003, 2004). Specifically, all three of the interventions reduced posttraumatic stress symptoms and depression over time.

Kim and Kim (2001) designed a trauma-focused intervention for abused Korean women residing in shelters that was not explicitly described as cognitive-behavioral therapy but that included similar foci. They based their intervention in a feminist analysis of IPV, focusing on empowerment-based education and skill-building rather than on "psychological healing." Model components followed Robert's (1998) Seven-Stage Crisis Intervention model, which involve (1) assessing the situation, including safety concerns; (2) establishing rapport; (3) examining the dimensions of the problem; (4) exploring feelings; (5) assessing past coping responses; (6) implementing a plan to restore cognitive functioning; and (7) providing the option of a follow-up or "booster" session three and/or six months later (A. R. Roberts & Burman, 1998). Groups lasted 90 minutes and were offered once a week over eight weeks; desired outcomes were changes in depression, anxiety, and self-esteem.

Sixty women were recruited from two shelters in Korea, with 30 from one shelter assigned to the intervention and 30 from the other shelter serving as a comparison group. No woman declined to participate, but 45% dropped out before the post survey could be administered. The primary reason for dropout was that women exited the shelter. Of the original 30 women assigned to receive the treatment, the 16 who remained in the study (53%) completed all 8 sessions. The only difference found between the groups post-intervention was that those who received the treatment scored lower on trait anxiety (an overall pattern of anxiety proneness) than did the comparison group. However, due to the small sample size, significant attrition rate, and missing information about rates of depression, anxiety, and self-esteem at Time 1, results from this study should be viewed with caution. As the authors themselves noted, a more rigorous test would include a larger number of women, a longitudinal design, and measures that have been validated for Korean women.

Trauma Treatments for Specific Groups of IPV Survivors

Three randomized clinical trials were located that involved testing trauma-based treatments with specific groups of abused women. One focused on low-income Black and Latina women who were also seeking help for drug addiction (Gilbert et al., 2006), one focused on suicidal, African American women (Kaslow et al., 2010), and one targeted low-income, pregnant abused women (Zlotnick et al., 2011). Two of these three were also culturally specific, infusing cultural values and strengths into their treatments (Gilbert et al., 2006; Kaslow et al., 2010). These interventions are reviewed next.

Gilbert and colleagues' (2006) trauma treatment for IPV survivors focused specifically on women who were also seeking help for drug addiction. As they noted, the percentage of women seeking drug treatment who have also experienced recent IPV ranges from 25-57%, making this an important group to target for intervention

(Chermack, Fuller, & Blow, 2000; El-Bassel, Gilbert, Schilling, & Wada, 2000; El-Bassel, Gilbert, Wu, Go, & Hill, 2005). Their contention was that if safety and treatment access issues related to IPV are addressed in drug treatment, survivors will be more likely to stay in the program and report more positive outcomes pertaining to both drug use and IPV victimization. To that end, they developed a treatment for abused women currently participating in a Methadone Maintenance Treatment Program. This program, named *Relapse Prevention and Relationship Safety (RPRS)*, includes 11 two-hour group sessions and one individual session, all spanning six weeks.

RPRS primarily focuses on IPV and relationship safety, as well as reducing drug use among low-income Black and Latina women. Additional desired outcomes were decreased PTSD and depression and fewer risky sexual behaviors. The authors used empowerment and social cognitive theories to guide their treatment content, and did not try to pressure women to leave the abusive relationship; the focus was on promoting safety, within or outside of the relationship. Treatment content was culturally specific to low income Black and Latina women, bringing in traditional and contemporary African American and Latina references throughout the program, and portraying self-worth, ethnic pride, and risk avoidance as important to honoring and preserving one's culture. Participation, however, was limited to women who could speak at least conversational English. Modules included cognitive skill building specifically around coping, boundary setting, negotiating, and communicating. Although 11 of the sessions were in a group format, one individual session was used to encourage women to speak more openly about their abuse experiences and safety concerns that they might not want to disclose within a group.

Thirty-four women from a Methadone Maintenance Treatment Program were randomly assigned to receive either RPRS or a brief, informational control session. Women were assessed at baseline and at three-month follow-up. There was a trend for reduced overall drug use, binge drinking, and crack cocaine use among women in RPRS, but no differences were found for heroin or marijuana use. Regarding PTSD, there was a trend for significant improvement in avoidance ($p=.06$), but no changes were noted for hyperarousal or re-experiencing symptoms. Investigators did find a significant improvement in depression for women in RPRS compared to the control condition. Women in the RPRS group were also seven times more likely to report a decrease in "minor" IPV than were women in the control group ($p<.05$). They were five times less likely to experience any abuse, but this did not reach statistical significance ($p=.07$). Finally, women in the RPRS condition were significantly less likely over time to have sex while high on illicit drugs compared to women in the control group.

The fact that 41% of the screened women from the Methadone Maintenance Treatment Program were eligible for this study attests to the importance of identifying and attending to IPV within drug treatment programs. The intervention appears to have been acceptable to participants as well, as attendance rates were remarkably high. The fact that the intervention was delivered at a program women were already attending on a daily basis and that participants received a stipend after each session in addition to transportation and childcare costs may have contributed to the high retention rates. Half of the women completed all 12 sessions, and the other half completed 9-11 sessions. While promising, this study did suffer from some methodological limitations impacting its validity. The small sample prompted the

investigators to dichotomize their outcomes in order to increase the likelihood of noting group differences. A larger sample with a longer follow-up period would allow the research team to have the statistical power needed to detect change over time, using measures in their original form.

Grady Nia is a culturally specific intervention that was designed for low-income African American IPV survivors who are also suicidal (Kaslow, et al., 2010). The treatment was developed in response to the concerns that abused women are at much higher risk for suicide than are non-abused women (Ellsberg, Jansen, Heise, Watts, & Garcia-Moreno, 2008; Pico-Alfonso et al., 2006), that low-income African American women are at increased risk for negative mental health outcomes related to IPV (Kaslow et al., 2000; Paranjape et al., 2007; Thompson et al., 2000), and that many low-income Black women are reluctant to access formal mental health services (Snowden, 2001). Nia derives its name from the Kwanza term that means purpose, and the program focuses not just on intrapersonal factors but on women's support networks and communities, as well. Program components include helping women (1) build skills and enhance self-efficacy; (2) increase social connectedness; (3) decrease trauma-related distress through gender-focused, Afrocentric empowering practices; and (4) access comprehensive mental health care. The intervention is 10 sessions long, and seven sessions are the minimal attendance needed for completion. In a randomized, controlled trial of 217 women, 130 were randomized to receive Nia and 87 women received services as usual. Women were recruited from a large, public hospital serving an indigent, urban population, and were eligible to participate if they had experienced IPV anytime within the previous year and had made at least one suicide attempt. Women were not excluded if they were currently in the relationship or living with their assailant.

Women were assessed at pre- and post-intervention and at 6- and 12-month follow-up, and desired outcomes were reduced suicidal ideation as well as reduced depression, PTSD symptoms, and general psychological distress. Of the 121[3] women randomized into treatment, 86 completed the minimal number of sessions (66%) and the mean number of sessions completed was nine. While it appeared that 63% of the sample was retained over time, complete data on outcome measures was quite low: 43% at post-assessment, 33% at 6-month follow-up, and 30% at 12 months.

Hierarchical linear modeling (HLM) was used to examine individual change as well as group difference change over time on psychological symptomatology (depression, PTSD, general psychological distress, and suicidal ideation). Women in both groups improved on depression and psychological distress between the pre- and post-intervention time points; however, women in Nia had a steeper decrease in symptoms during the treatment period, and the difference in depressive symptoms remained at the 12-month follow-up. HLM was then used to model whether participation in Nia attenuated the relationship between IPV victimization and psychological symptomatology. Although no direct treatment effect was found on women's symptomatology, an indirect effect was noted. Specifically, for women in the comparison condition, ongoing IPV was significantly related to increased suicidal ideation. For women who received Nia, however, ongoing IPV was less likely to be associated with suicidality, and suicidal ideation scores remained relatively low.

The modest findings from this study and

3 Figure 1 within their article states that 130 women were randomized into treatment, but the body of the manuscript uses 121, and analyses appear to have included 121 women.

high attrition rate speak both to the complexity of addressing the myriad needs facing low-income African American women who are victims of abuse and to the difficulty in successfully locating and re-interviewing them for research. However, it is noteworthy that 66% of the women assigned to treatment completed at least seven sessions (averaging nine). Given the numerous competing demands they were facing in their lives, this suggests that this culturally specific, empowerment-based intervention may hold promise, with some modifications.

Zlotnick and colleagues (2011) developed an intervention for low-income pregnant survivors of IPV designed to (1) increase their knowledge about IPV and its impact; (2) increase knowledge about motherhood, postpartum depression, and pregnancy; (3) enhance stress management skills; and (4) increase their social support networks. The intervention included five 60-minute sessions and was based on the principles of Interpersonal Psychotherapy (IPT; Klerman et al., 1984), which focuses on social relationships (Klerman, Weissman, Rounsaville, & Chevron, 1984). As evidence has shown IPT to reduce postpartum depression in low-income women (Zlotnick, Miller, Pearlstein, Howard, & Sweeney, 2006), the authors hypothesized that by addressing the causes and psychological consequences of IPV directly in the treatment, it could reduce the risk for re-abuse, postpartum depression, and PTSD among IPV survivors.

Fifty-four pregnant women were recruited from primary care or OB/GYN clinics. Inclusion criteria included (1) IPV victimization within the prior year; (2) low income; and (3) no evidence of affective disorders, PTSD, or substance abuse. Participants were assessed at intake, 5-6 weeks thereafter, 2 weeks after delivery, and 3 months post-partum. The attrition rate was relatively low (15%) once participants had been randomized to treatment or services as usual. Women in the treatment condition attended three out of the five sessions on average. Findings from this study indicated that the intervention did not lead to better outcomes for women than did services as usual (Zlotnick, et al., 2011). However, some between-group changes that approached but did not reach significance, including the reduction of PTSD symptoms during and after pregnancy, suggest that a larger trial may be warranted.

Integrative Interventions Addressing Trauma for IPV Survivors

While traditional Western psychotherapeutic approaches generally address the cognitive and emotional elements of trauma, they focus far less on body-oriented therapies (e.g., acupuncture, yogic breathing) to promote healing. Those who view psychopathology as a disruption in the balance of body-mind-environment-spirit suggest that effective treatment must always work with the whole person (Allmer, Ventergodt, Kandel, & Merrick, 2009; Lodrick, 2007; Ogden & Minton, 2000). In response to this, there has been a burgeoning of trauma treatments in the United States that focus on the mind-body connection, and such interventions are even more prevalent internationally. These interventions include but are not limited to Mindfulness Based Stress Reduction (e.g., Arias, Steinberg, Banga, & Trestman, 2006; Bedard et al., 2005; Gordon, Staples, Blyta, Bytyqi, & Wilson, 2008; Roemer, Orsillo, & Salters-Pedeault, 2008; Toneatto & Nguyen, 2007), biofeedback (Tan, Dao, Farmer, Sutherland, & Gevirtz, 2011; Zucker, Samuelson, Muench, Greenberg, & Gevirtz, 2009), acupuncture (Hollifield, Sinclair-Lian, Warner, & Hammerschlag, 2007; Zhang, Feng, Xie, Xu, & Chen, 2011), and body-oriented therapy (Price, 2005, 2006). Empirical support for such interventions

with IPV survivors, however, is unfortunately virtually nonexistent.

The only treatment addressing the mind-body connection in reducing trauma for IPV survivors that met the criteria for this review involved having women "give testimony" about the abuse they had experienced and/or use yogic breathing techniques to alleviate depression (Franzblau et al., 2008). A community sample of 40 women (half Black, half Caucasian) who self-identified as having experienced IPV within the prior two years were randomly assigned (within race) to one of four conditions: giving testimony, yogic breathing, giving testimony plus yogic breathing, and control. Each intervention condition lasted 45 minutes over four consecutive days (90 minutes for the combined intervention), and no participants dropped out of treatment. Participants received $100 for their participation, spread out over the course of the four days. Women in the combined testimony/breathing program as well as those in the breathing condition demonstrated significant pre-post reductions in their depression scores, while depression scores for women in the control group did not change. However, given the small size of this study, the lack of demographic information, and the fact that there was no follow-up after the intervention ended, findings should be interpreted cautiously.

Discussion

The results of this review indicate that trauma-focused treatments designed for IPV survivors hold promise for reducing at least some symptomatology over time. A number of the studies demonstrated that their treatment improved women's PTSD and/or depression symptoms if they completed treatment (Crespo & Arinero, 2010; D. M. Johnson, et al., 2011; Kaslow, et al., 2010; Kubany, et al., 2003; Kubany, et al., 2004). Additionally, improvements were often maintained over time (Crespo & Arinero, 2010; D. M. Johnson, et al., 2011; Kaslow, et al., 2010; Kubany, et al., 2003; Kubany, et al., 2004). The interventions differed from each other in numerous important ways, including whether they were offered in group settings or individually, number of sessions offered, curriculum content, and inclusion criteria, making it premature to determine if there are specific components that might be more essential for all survivors, beneficial to some survivors, or irrelevant to treatment success.

A strength of all of the studies was the racial and ethnic diversity across the samples. A number also included or intentionally focused on low-income women. These are important considerations, as these are women who have little access to mental health treatment and/or for whom therapy often has little appeal. Given the relatively high treatment retention rates of some of these studies as well as their potential efficacy, additional such clinical trials with appropriate modifications appear warranted.

An additional strength of a number of the studies was that the treatment protocol was developed in collaboration with advocates (and sometimes with IPV survivors, as well). Experts in intimate partner violence are in an ideal position to help mental health practitioners effectively consider safety issues for survivors that include not only physical safety as it pertains to therapy (e.g., ensuring survivors are safe getting to and from appointments as well as during sessions), but additional safety concerns, as well. For example, if a woman's abusive partner is continually taking her to court or threatening to kidnap her children, her mental health symptoms may increase. At the same time, she may feel unable to continue treatment due to financial difficulties or time constraints.

Some of the treatments reviewed here intentionally offered fewer sessions than the 8-12 that are more typical of cognitive behavioral therapies, or offered sessions more frequently than once a week in order to be sensitive to competing demands in survivors' lives. D. M. Johnson and colleagues (2011) not only collaborated with advocates to create the intervention but worked with them throughout the intervention so that survivors' concrete needs (e.g., housing, legal assistance) were being met while they were participating in treatment.

A number of study limitations must be considered when interpreting and utilizing the research findings. An important caution is that only nine studies to date have experimentally or quasi-experimentally tested trauma-based treatments for IPV survivors, so the body of evidence under consideration is minimal. Many of the studies were also relatively small, with only two including samples over 100, which resulted in limited statistical power to test group differences. Retention rates were problematic for a number of the longitudinal studies as well. While retention was over 90% for three of the studies (Franzblau et al., 2008; Gilbert et al., 2006; D. M. Johnson et al., 2011), it ranged from 30% to 68% for the others (with Zlotnick not reporting study attrition). In addition, not all of the investigators tracked those who dropped out of treatment over time, limiting the utility of their findings. Finally, although all of the studies attended to issues specific to IPV survivors in their treatment modalities, none used a mixed-method approach that included obtaining qualitative data from the participants about these components. It would be helpful in future research to hear from the survivors themselves in order to understand the extent to which their safety and other IPV-related needs were met.

A note of caution is necessary with regard to the treatments themselves that were described in these studies, as well. For example, attrition for a few of the treatments was problematic and could suggest that the intervention was not palatable for some women. Treatment attrition is a concern with any mental health intervention and can be an indication either that the protocol is not meeting the needs of participants or that barriers exist that prevent continued participation. Authors of the two shelter-based treatments, for example, noted that interest in their interventions was high but that a relatively large percentage of women dropped out because they exited shelter (Johnson et al., 2011; Kim & Kim, 2001). The culturally focused intervention for low-income African American women had a fairly high attrition rate (34%; Kaslow et al., 2010), but when one considers that many of the study participants were homeless or experiencing serious competing demands for their time, this is actually a respectable retention rate. Further, of the women who completed the Nia treatment, the mean number of sessions completed was 9 out of the 10. Clearly, this intervention included elements that resonated with participants, many of whom had to overcome a number of obstacles to continue their participation. It is also noteworthy that the one mind-body intervention (Franzblau et al., 2008), which involved four 45- or 90-minute sessions over four consecutive days, had 100% retention among the 30 participants. However, it is unclear to what extent the nature of the intervention, the stipend offered, or the concentration within a four-day time period contributed to these rates. No demographics (e.g., employment, education, socioeconomic status) other than race were reported and no follow-up was obtained.

Not surprisingly, attrition from treatment was not always random. Younger women with lower incomes, less education, and higher rates of depression, guilt, and shame were the most

likely to drop out of CTT-BW (Kubany, et al., 2004), which suggests that the program might not work for those who may need it the most and that there may be systemic barriers preventing women from completing treatment. Similarly, Crespo and colleagues (2010) found that the women most likely to drop out had reported more frequent and severe victimization (including higher rates of physical and sexual violence) and were more likely to have used alcohol and to have received medical attention and legal support. In addition, two of the studies explicitly excluded women who had more serious mental health conditions. These findings suggest that treatments must be designed to be accessible to the people for whom they are being developed, that assistance might need to be offered to survivors in the form of transportation and child care, and that holding sessions at convenient times and in convenient locations, particularly in settings where women are already receiving other services, can be particularly helpful. It is also clear that treatments need to be developed that are inclusive of women with more complex mental health and substance abuse needs.

Also, while it is laudable that some investigators worked with community advocates to modify treatment dosage and content specifically for women with abusive partners, some of these adaptations (particularly those that reduced the length of treatment or which only included two PTSD-focused sessions) may have contributed to the weaker findings. This points to the challenges of identifying the key elements essential to treatment outcomes while modifying the intervention to make it possible for survivors to participate (reducing length, dose, frequency; incorporating additional IPV-specific elements). It also speaks to the need for more work to clearly identify survivors' goals and priorities and to tailor treatment accordingly, including what it takes for survivors to safely engage in treatment over time.

While a number of the interventions reviewed in this paper included diverse groups of participants and culturally tailored interventions, there are a wide range of culturally specific approaches to trauma recovery that are based on the values and healing traditions of particular communities that not only may be more relevant for those communities but which offer approaches that touch on domains affected by trauma not addressed by existing evidence-based practices. More research on such interventions is sorely needed.

In addition, the available treatments for IPV survivors reviewed here raise issues about whether treatments are geared toward trauma *recovery* or toward trauma *symptom reduction*. The majority of treatments used outcome measures to assess their effectiveness at reducing symptoms of PTSD and depression. Complex trauma treatment models, which have not yet been studied for survivors of IPV, address a more complex array of trauma effects (including effects on providers that must also be attended to) and offer a potentially more meaningful array of outcomes. While designed originally for survivors of childhood abuse and neglect, they may also prove useful to survivors of IPV, particularly those whose experiences of abuse have been more prolonged and severe.

More specifically, complex trauma treatment approaches combine emerging data on the neurobiology of trauma with developmental relational perspectives, cognitive-behavioral techniques for managing overwhelming affect states, skill-building strategies to address developmental disruptions and, in some cases, a feminist emphasis on empowerment and social context. A number of these approaches also incorporate non-cognitively based modalities (e.g., meditation, dance, music, or body-centered

therapies). Some involve traumatic memory recovery work after preparation, while others do not. All address safety as a priority, recognize that symptoms may be coping strategies, and stress the importance of the survivor-therapist relationship, particularly its role in supporting personal and relational experiences that facilitate the reinstatement of disrupted developmental processes (Harris, 1998; Saakvitne, Gamble, Pearlman, & Lev, 2000).

Complex trauma models are typically organized around three treatment phases although in reality the process is not linear and these stages often overlap and/or occur multi-directionally. The first phase involves establishing safety and stability by building a collaborative therapeutic relationship, managing symptoms, developing emotional regulation and stress management skills, and identifying or creating additional supports (Classen et al., 2006; Courtois, 1997; Ford, Courtois, Steele, van der Hart, & Nijenhuis, 2005; Pearlman & Courtois, 2005; van der Kolk & Courtois, 2005; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). The emphasis on establishing physical and emotional safety before proceeding with more in-depth trauma work may make these models particularly salient for survivors of IPV (Warshaw & Brashler, 2009). Phase two work focuses on trauma recovery, including developing a more integrated and emotionally modulated autobiographical narrative and a gradual reorientation to the present and future that is no longer dominated by the past. Phase three involves creating new meaning and purpose, reestablishing important connections and integrating new skills and capacities, and rebuilding a life that is no longer defined by trauma and its effects (Courtois, 2008).

Complex trauma treatment models are strengths-based and empowerment-focused, viewing individuals as survivors rather than as victims, and promoting therapeutic collaboration and choice. They are also attentive to survivors' cultural and spiritual values. Since many IPV survivors have experienced multiple forms of trauma, some of which are ongoing, sequenced multi-dimensional approaches may turn out to be more effective over time. This is important to keep in mind when considering the implications of the current evidence base for trauma treatment in the context of IPV.

Recommendations and Cautions for Practitioners

Providing trauma treatment in the context of ongoing IPV raises a number of practice-related concerns. For example, incorporating an understanding of the dynamics of IPV is essential for responding to the types of issues IPV survivors face related to safety, confidentiality, coercive control, parenting, custody, legal issues, immigration, social support, and economic independence, all of which influence how a survivor is affected by the abuse, her ability to participate in treatment, and her response to treatment. Specifically, when a woman is contending with ongoing IPV, safety issues need to be attended to along with other IPV-specific concerns. These include treatment-related issues such as whether the abuser is undermining the survivor's mental health, access to treatment, or efforts to achieve recovery; isolating the survivor from sources of support; and/or threatening to use a survivor's participation in treatment to undermine her credibility and jeopardize her ability to retain custody of her children. Issues related to engaging in treatment that involves accessing feelings while having to remain on guard when returning home also need to be addressed, and any intervention that enhances survivors' sense of self-esteem

and empowerment may require additional safety planning strategies. The nine studies reviewed here represent an important step forward in ascertaining what types of trauma-based treatment may be helpful to women currently experiencing intimate partner abuse. However, it is still not clear when such treatments should be delivered, for whom they are palatable, nor how effective they are for survivors who are living in situations that are physically or emotionally unsafe.

Of particular interest to practitioners may be the fact that one of these studies examined whether treatment could be delivered by non-clinicians. Kubany and colleagues examined whether their intervention could be delivered by non-professionally trained therapists, and they reported no differences in treatment outcomes on this variable. A great deal more needs to be known about the qualifications needed to offer some of these treatments. If they can indeed be offered by people without advanced degrees, they could prove to be accessible to a larger number of IPV survivors.

In designing or offering any trauma-based treatment to IPV survivors, it is critical to remember that culture influences how individuals define and experience mental health and mental illness, the types of stressors they encounter, the decisions they make in seeking help, the symptoms and concerns they present to clinicians, and their coping styles and sources of social support (Warshaw & Brashler, 2009). Recognizing these concerns and addressing them directly can help reduce some of the barriers survivors face in obtaining help. There may also be specific sources of support that survivors can access through their membership in particular communities. Understanding how particular cultures and communities uniquely affect each survivor entails talking with them about how their experience of culture, as they define it, affects their perceptions of abuse, access to services, response to interventions, perspective on staying with or leaving an abusive partner, and the constraints they may face with either decision.

With these cautions and caveats taken into consideration, the studies reviewed here suggest that brief interventions that offer information on IPV and its effects and that include foci on (1) IPV dynamics and safety concerns; (2) cognitive reframing and skill enhancement; (3) cultural competence; (4) social connection; and (5) that are individualized to survivors' needs, hold promise for helping women heal and thrive.

Recommendations for Research

Clearly, more research is needed on the efficacy of interventions designed or modified for IPV survivors, including interventions for IPV survivors who have experienced multiple forms of victimization, interventions that address culturally specific aspects of trauma and recovery, and interventions that are designed for survivors who are still under siege.

Given that attrition was a problem for many of the studies, it is also important for future research to maximize retention and to test for differential attrition on key factors such as demographics, mental health, ongoing risk, and competing priorities. Studies should also include data from all participants throughout the course of the study, regardless of whether they drop out of treatment.

While most of the studies reviewed here noted improvements on mental health symptomatology post-treatment, long-term follow up assessments are also needed to examine how long treatment effects persist and to assess the optimal length and type of treatment depending on survivors' individual needs. Only two of the studies followed participants for 12 months

(Crespo et al., 2010; Kaslow et al., 2010), and none followed women longer. Studies are also needed that include survivors with a range of mental health and substance abuse-related needs.

The nine studies reviewed here represent an important beginning in a burgeoning field. They used experimental or quasi-experimental designs to test the efficacy of various trauma-based treatments that also dealt specifically with issues relevant to IPV survivors. They were tested with diverse groups of survivors, and two employed culturally specific approaches. And although manualized, the interventions were developed in response to the needs of their study populations. These interventions were designed to reflect the realities of their communities and their ecological validity increases the trustworthiness and utility of the findings.

The dearth of rigorous clinical trials to date, and the fact that the interventions differed from each other in content, length, and delivery style, means that it is premature to generalize from any of the findings presented here. Future studies would benefit from mixed-method designs that include rigorous qualitative components. Hearing from the participants themselves—including those who leave treatment—would answer many questions about the extent to which survivors' needs are being met, whether their other IPV-related concerns are being met, the relevance of the treatment to their lives and beliefs, and what obstacles exist that make participation in treatment difficult. Research on the applicability of complex trauma treatment models for survivors of IPV and research on interventions that incorporate gender-responsive approaches to collective trauma (e.g., cultural, historical, and immigration-related trauma) would also be important contributions going forward.

Conclusion

Trauma treatments that have been modified to meet the specific needs of IPV survivors, especially those who are still being abused, hold promise in helping women recover and successfully move on with their lives. Research is clearly needed to address the additional domains not addressed by these studies, particularly for survivors who have experienced multiple forms of trauma and for survivors from culturally specific communities. While it is too early to know definitively which treatments work best for which survivors, evidence suggests that helpful components may include (1) psychoeducation about the causes and consequences of IPV and its traumatic effects; (2) attention to ongoing safety; (3) cognitive and emotional skill development to address trauma-related symptoms and other life goals and concerns; and (4) a focus on survivors' strengths as well as cultural strengths on which they can draw. Given that IPV survivors have a wide variety of life experiences with a range of mental health effects, there is no single treatment model that will fit the needs of all. A great deal more research is needed to understand how to respond most effectively to survivors with such a diverse range of needs and experiences.

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Table 1. Clinical Trials Included in this Review: Method, Results, Caveats

	Sample	Eligibility re: Abuse	Study Design	Treatment Targets	Race/ Ethnicity	Age	Retention Rate	Results	Limitations/Caveats
Crespo et al., 2010	53 women recruited from domestic violence agency	Abuse anytime	Quasi-experimental; compared groups with either exposure therapy or communication skills at 1, 3, 6, 12 month follow up	PTSD	100% Latina	M=41	68% at 12 mo	Posttraumatic stress symptoms virtually disappeared within 1 mo post treatment for each treatment, and maintained through 12 months. Depression and anxiety decreased 1 month post-treatment, with more pronounced change for exposure group.	No control group of survivors receiving no treatment. Women in the exposure group differed in that had higher education and more prior therapy.
Franzblau et al., 2008	40 women recruited through community	Abuse within prior 2 years	Post only; randomized to yogic breathing, giving testimony, both, or control	Depression	50% African American 50% White	18-45 range	100%	Combined approach and yogic breathing improved depression significantly more than the control.	Small study with no follow-up after intervention ended
Gilbert et al., 2006	34 women recruited from Methadone Maintenance Treatment Program	Abuse in prior 90 days	Control with 3-month follow-up	Depression; PTSD; HIV risk; Substance abuse	59% Latina, 16% African American, 21% White	M=42	91%	Significant improvement in depression. Trends for improvement in PTSD avoidance symptoms and reduced drug use, binge drinking, and crack cocaine use.	Investigators dichotomized outcomes due to small sample; insufficient statistical power.
Johnson et al., 2011	70 women recruited from domestic violence shelter	Abuse 1 month prior to entering shelter	Control with follow-up 3-, and 6-month after leaving shelter	PTSD; Depression; Access to resources; Social adjustment	50% African American, 43% White, 7.5% Other 4.3% Latina	M=33	97% post 94% 3 mo 94% 6 mo	Improvement in emotional numbing, depression severity, empowerment, social support; and less likely to be re-abused	Interviewers not blinded to participants' treatment condition, and study therapists rated adherence and competence rather than outside raters, which could bias findings.
Kaslow et al., 2010	208 African American women recruited from university-affiliated hospital and hospital clinics	Abuse within the past year	Control with 6- & 12- month follow-up	PTSD; Depression; Suicidal ideation; Psychological Distress	100% African American	18-64 range M=35	43% post 33% 6 month 30% 12 month	Nia demonstrated greater reductions in depression during treatment, which remained at 12-months. For general psychological distress, Nia moderated the relationship between subsequent victimization and suicide ideation.	Very high attrition
Kim et al., 2001	33 women recruited from DV shelters	Abuse anytime	Comparison with post only	Depression; Anxiety; Self-Esteem	100% Asian	Experimental (M=36) Control (M=37)	53%	Significant improvement in anxiety.	Small sample, significant attrition, no information about rates of depression, anxiety, self-esteem at Time 1

	Sample	Eligibility re: Abuse	Study Design	Treatment Targets	Race/ Ethnicity	Age	Retention Rate	Results	Limitations/Caveats
Kubany et al., 2003	37 women; most referred from domestic violence agencies but otherwise not specified	No abuse within the prior 30 days	Wait-list control with 3-month follow up	PTSD; Depression; Self-Esteem; Guilt	18 White, 10 Asian, 6 Pacific Islander, 3 other	M=36	68% at 3 month	Therapeutic Success (PTSD) Post: 94% Improvement in depression	Did not test group differences
Kubany et al., 2004	125 women; most referred from domestic violence agencies but otherwise not specified	No abuse within the prior 30 days	Wait-list control with 3- & 6-month follow up	PTSD; Depression; Self-Esteem; Guilt	53% White, 9% Native Hawaiian, 7% Filipino, 6% Japanese, 5% Samoan, 2% American Indian, 14% other or mixed	18-70 range M=42	67% post 48% 3 month 60% 6 month	Therapeutic Success (PTSD) Post: 86% Therapeutic success (depression): Post: 83% Improvement in remaining variables	Did not appear to follow those who dropped out of treatment, resulting in extremely high attrition, and limits utility of findings
Zlotnick et al., 2011	54 women recruited from primary care and private clinics	Abuse within the prior year	Control with follow up 5-6 weeks after intake, 2 weeks after delivery, 3-months postpartum	Depression; PTSD	43% Latina, 39% White, 11% Black, 7% Other.	M=24	Not reported	No significant improvement	Small sample, brief intervention; on average women attended only 3 sessions

Table 2. Clinical Trials Included in this Review: Intervention Components and Foci

	Individual vs. Group	No. Sessions	Treatment Modifications	Treatment Targets	Treatment Dropout
Crespo et al., 2010	Group	Abuse anytime	Focused on (1) education about IPV and its impact on survivors, (2) raising self-esteem and mood, and (3) problem solving skills for independent living. They also added diaphragmatic breathing to their treatment, as a means of reducing hyper-alertness.	PTSD	26% Women more likely to drop out if more victimization, more medical attention, more availability of legal support, more alcohol consumption at pre-
Franzblau et al., 2008	Individual	Abuse within prior 2 years	Compared giving testimony (describing abuse and their responses to it) to yogic breathing, to a combination, with expectation that the combination would be strongest	Depression	0
Gilbert et al., 2006	Group (with one individual session)	Abuse in prior 90 days	Used empowerment and social cognitive theories to promote safety, and did not pressure women to leave the abusive relationship. Treatment content was culturally specific to low income Black and Latina women.	Depression; PTSD; HIV risk; Substance abuse	0 50% of women completed all 12 sessions; 50% completed 9-11
Johnson et al., 2011	Individual	Abuse 1 month prior to entering shelter	Involves 3 stages of recovery: (1) re-establishing safety and self-care; (2) remembering and mourning; (3) reconnection. Focuses heavily on empowerment, and does not include exposure therapy.	PTSD; Depression; Access to resources; Social adjustment	97% attended at least one session, 63% attended 5 or more sessions, 26% attended all 12 sessions No demographic differences in # of sessions attended
Kaslow et al., 2010	Group	Abuse within the past year	Components include helping women (1) build skills and enhance self-efficacy; (2) increase social connectedness; (3) decrease trauma-related distress through gender-focused, Afrocentric empowering practices; and (4) access mental health care.	PTSD; Depression; Suicidal ideation; Psychological Distress	34% Differential attrition not reported
Kim et al., 2001	Group	8; 90-min each	Based on feminist analysis of IPV, focusing on empowerment-based education and skill-building. 7-Stage Crisis Intervention model: (1) assessing the situation – including safety, (2) establishing rapport, (3) examining the dimensions of the problem, (4) exploring feelings, (5) assessing past coping responses, (6) implementing a plan to restore cognitive functioning, and (7) the option of a "booster" session three and/or six months later.	Depression; Anxiety; Self-Esteem	45% Differential attrition not reported
Kubany et al., 2003	Individual	8-11; 90-min each	In addition to typical cognitive therapy, included components to address 4 areas of concern to abused women: 1) trauma-related guilt; 2) histories of other traumatic experiences; 3) likelihood of ongoing stressful contact with the abuser in relation to parenting; and 4) risk for revictimization.	PTSD; Depression; Self-Esteem; Guilt	14% Differential attrition not reported
Kubany et al., 2004	Individual	8-11; 90-min each	See above	PTSD; Depression; Self-Esteem; Guilt	86% attended at least 1 session; 80% completed all Attrition higher if participants were younger, less educated, more depressed, more shame prone, had lower self-esteem at pre-
Zlotnick et al., 2011	Individual	4; 60-min each, plus 1 "booster" within 2 weeks of delivery	Interpersonal psychotherapy designed to (1) increase knowledge about IPV and its impact; (2) increase knowledge about motherhood, postpartum depression, and pregnancy; (3) enhance stress management skills; and (4) increase social support networks.	Depression; PTSD	