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A Systematic Review of Intimate Partner Violence Interventions: State of the Field and Implications for Practitioners

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Abstract

Intimate partner violence (IPV) victimization is a global public health issue and has serious consequences of women's health. While scholars and researchers have made some progress in addressing IPV and its impact across different levels of care, there is a paucity of intervention research in this area. For example, we know little about which intervention models work best for particular groups of IPV survivors. Previous reviews have concluded there is insufficient evidence to recommend specific treatment options for victims, but they have also been limited in scope of target populations or have employed narrow eligibility criteria. This systematic review examined the efficacy and effectiveness of interventions for victims of IPV related to physical and mental health and revictimization. Three large databases were searched and articles were selected using specified criteria. Fifty-seven articles met inclusion criteria. Results indicate that both empowerment-based advocacy and cognitively focused clinical interventions demonstrate positive outcomes on the vast sequelae of violence in the context of an intimate relationship. The heterogeneity of intervention approaches and frameworks makes comparisons across studies challenging, but this review demonstrates that interventions focused on problem-solving/solution seeking, enhanced choice making and the alteration in distorted self-thinking and perception are promising in facilitating and maintaining positive physical and mental health changes for women who experience violence.

Keywords

intimate partner violence, systematic review, interventions

Intimate partner violence (IPV) is a global human rights and public health concern that has gained increased attention in the last 30 years. The World Health Organization (2005) defines IPV as any behavior within an intimate relationship that causes physical, psychological, or sexual harm to those in the relationship, including acts of physical aggression, sexual coercion, psychological abuse, stalking, and controlling behaviors. Global estimates of IPV are staggering with about 30% of women experiencing some form of physical or sexual violence. In the United States, one in three women report lifetime experiences of rape, stalking, or physical IPV (Black et al., 2011; Breiding, Chen, & Black, 2014). Among women who have experienced IPV, 24–30% report physical violence, approximately 10% are raped, 11% experience stalking, and 48% experience psychological aggression (Breiding et al., 2014; Thompson et al., 2006). Fourteen percent of all homicides in the United States and 38% of global homicides were a result of IPV (Black et al., 2011; Catalano, Smith, Snyder, & Rand, 2009; Plichta, 2004; Rennison & Welchans, 2003; Tjaden & Thoennes, 2000). Globally, samples of abused women have higher rates of physical health problems such as chronic pain, sexually transmitted diseases, hypertension and diabetes (Breiding et al., 2014; Dolezal, 2009; Li et al., 2014; Mittal et al., 2013), poor pregnancy outcomes, and higher rates of HIV infection (Devries et al., 2011). Abused women also suffer from poor mental health including depression, anxiety (Carlson, McNutt, & Choi, 2003; Hathaway et al., 2000), posttraumatic stress disorder (PTSD; Golding, 1999; Wuest et al., 2009), eating disorders, substance abuse disorders (Danielson, Moffitt, Caspi, & Silva, 1998), sleep disturbances (Breiding et al., 2014; Hathaway et al., 2000), and suicide attempts (Devries et al., 2011).

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IPV has a significant monetary impact on the society. The Centers for Disease Control estimates the annual costs of IPV in the United States is US$8.3 billion as a result of direct physical and mental health care, lost productivity, and lost potential income (Max, Rice, Finkelstein, Bardwell, & Leadbetter, 2004). Additionally, physically abused women have high utilization of health-care services and have substantially higher health-care costs compared to nonabused women (Bonomi, Anderson, Rivara, & Thompson, 2009). Further, higher health-care costs among abused women were sustained for 3 years following the end of violence, with costs becoming more parallel to nonabused women at the 4- to 10-year mark post-IPV exposure (Fishman, Bonomi, Anderson, Reid, & Rivara, 2010).

Despite the high public health and economic costs of IPV, there is small (but growing) body of literature on empirically validated IPV interventions both globally and nationally. Current IPV victimization interventions address all levels of care: primary (violence prevention), secondary (screening for IPV), and tertiary (advocacy/case management or counseling/clinical care). Several researchers and scholars have conducted reviews of IPV intervention literature; however, most prior reviews are limited in their scope of assessment because of the small number of studies included (Abel, 2000), eligibility criteria was narrow with a focus on specific populations (e.g., pregnancy and primary care; Arroyo, Lundahl, Butters, Vanderloo, & Wood, 2015; M. Bair-Merritt, Zuckerman, Augustyn, & Cronholm, 2013; Wathen & MacMillan, 2003), outcomes (e.g., reduction of IPV or revictimization; Wathen & McMillian, 2003), and research design (e.g., experimental and quasi-experimental; Stover, Meadows, & Kaufmann, 2009).

The goals of this review are to (1) identify and explain theoretical frameworks and practice models that underlie promising tertiary IPV interventions for victims to help inform clinical practice and (2) extend the work of previous reviews and examine tertiary IPV interventions for outcomes related to physical and mental health and revictimization.

Method

Search Strategy

Three large databases were searched—PubMed, CINAHL, and PsychINFO (OVID - Medline)—using the following search terms: intimate partner violence, domestic violence, intervention, therapy, treatment, clinical trial, randomized clinical trial, evaluation, efficacy, and effectiveness. The reference sections of articles identified through the search were examined for additional relevant articles. These two methods, database search and review of article reference sections, produced the final pool of articles. Articles published through the year of 2016 are included.

Eligibility Criteria

Selection of articles for the current review was performed on the article pool in two stages. In the first stage, article titles and abstracts were reviewed to identify articles that discussed an intervention addressing IPV victimization. There was a rather low threshold for inclusion at this first stage of article screening to minimize the omission of relevant articles. In Stage 2, full-text documents were obtained and reviewed for the following inclusion criteria: (1) An intervention was provided to women who experienced some form of IPV (physical, psychological, and sexual); (2) the intervention was administered at the individual or group level; (3) the intervention delivered was counseling, clinical, or advocacy (active support by trained individuals) oriented; (4) the sample was comprised of women who were 17 years of age or older; (5) the purpose of the study was to evaluate the efficacy/effectiveness of the intervention; (6) the study design was experimental or quasi-experimental and included preintervention and postintervention data; (7) the outcomes included measures of physical health, mental health, or revictimization; and (8) the article was published in a peer-reviewed journal in English. Articles were excluded if they were case reports, case series, or other single system designs or were primarily IPV screening or legal interventions (e.g., orders of protection) or couple or perpetrator-based interventions.

Selection Process

The lead author (N.T.) reviewed all identified titles and abstracts to determine eligibility using the abovementioned criteria. Articles were designated as include, exclude, or questionable. Articles were reviewed by another study author (S.W./M.M.) to determine inclusion for this review. Any discrepancies were brought to a third study author (J.M.) for consensus.

Data Abstraction Process

A standard data abstraction format as recommended by Zaza et al. (2000) was used to extract information from each article to promote consistency, reduce bias, and improve reliability and validity. Specifically, information was entered into a table format addressing three key areas: (1) classification information (design features, intervention characteristics), (2) descriptive details (sample, study eligibility, and setting), and (3) quality assessment (measurement, data analysis, interpretation), and (4)outcomes. This process allowed the authors to monitor and review articles, make comparisons across studies, and determine study validity.

Results

One hundred and forty articles were identified during the initial screening for further review of inclusion. In the second stage of the selection process, a careful review of each article revealed 57 articles that met the inclusion criteria and 83 articles that did not and were subsequently excluded. Twenty-one articles were excluded because they did not meet the sample criteria (e.g., age, men only), 23 were excluded because of method (i.e., case

study), 20 did not meet inclusion criteria for study outcomes, 18 were excluded because they did not meet the intervention criteria (i.e., screening), and 1 study was not included because it was published in Spanish.

Study Design

A summary of studies is outlined in the Supplementary Appendix. Of the articles included in this review, 36 were individually based interventions ($n = 19$ were therapeutic and $n = 16$ were advocacy), 18 group-based interventions (all therapeutic), and 2 interventions that were a combination of group and individual session (Gilbert et al., 2006; Mittal et al., 2017). Interventions were guided by numerous theoretical frameworks. Sample size of the studies ranged from $N = 18$ to 1,070 for individually based studies and $N = 20$ to 306 for group-based studies.

Intervention Features

Theoretical frameworks/perspectives/practice models. Diverse theoretical frameworks, perspectives, and practice models were noted among the IPV interventions included in this review. There is a clear distinction of tertiary interventions across the literature and their intent, purpose, and desired outcome. There was a large grouping of interventions termed advocacy. These interventions often provided a trained individual to engage with the victim/survivor for support regarding abuse, to provide referrals to community resources, and to engage in harm reduction approaches such as safety planning. The majority of advocacy-based interventions were guided by person-centered, strengths-based perspectives and were grounded in empowerment theory.

Empowerment theory is focused on increased autonomy, the gaining or regaining of control, and the ability to create individual opportunities and decision-making (Zimmerman, 1995). It is important to note that one longitudinal randomized clinical trial of an advocacy-based intervention for women leaving an IPV shelter report results of this 24-month trial are reported across eight manuscripts included in this review (Campbell, Sullivan, & Davidson, 1995; C. M. Sullivan, 1991a, 1991b, 2003; C. M. Sullivan & Bybee, 1999; C. M. Sullivan, Bybee, & Allen, 2002; C. M. Sullivan, Campbell, Angelique, Eby, & Davidson, 1994; Tan, Basta, Sullivan, & Davidson, 1995) and makeup the majority of the advocacy-focused interventions included. The intervention provided an assessment of needs, referrals to resources, prioritizing of needs, and safety planning.

Other advocacy interventions, also based on empowerment theory, were delivered to diverse international samples of women residing in Hong Kong (Tiwari et al., 2005, 2010), Lima, and Peru (Cripe et al., 2010). These interventions were offered through medical settings (Cripe et al., 2010; McFarlane, Groff, O'Brien, & Watson, 2006). Others were offered to community-dwelling women recruited from a community center that offers health, social, child care, educational, and recreational services (Tiwari et al., 2005, 2010). A multicomponent empowerment-focused advocacy intervention was part of the National Institute of Health - DC (NIH-DC) Initiative to Reduce Infant Mortality in Minority Populations (El-Mohandes, Kiely, Blake, Gantz, & El-Khorazaty, 2010; Joseph et al., 2009; Kiely, El-Mohandes, El-Khorazaty, Blake, & Gantz, 2010). This trial provided advocacy and cognitive–behavioral therapy (CBT) to African American pregnant women with the goal of reducing tobacco smoking, secondhand smoke exposure, depression, and IPV. The advocacy component was designed to target the IPV, and the CBT components were used to reduce the other risk factors. Finally, another differently structured advocacy intervention, which did not discuss the theoretical framework, provided a paraprofessional home visitor in Oahu, Hawaii. The intervention provided referrals to community resources for emotional support and role modeling to families at high risk of child maltreatment (M. H. Bair-Merritt et al., 2010).

In summary, all advocacy-focused interventions, with the exception of one, were rooted in empowerment theory and provided a trained professional to women recruited from a broad array of settings. The focus of the advocacy was to offer community referrals, safety planning, and support around the abuse/violence. The one exception (M. H. Bair-Merritt et al., 2010) focused on reducing child maltreatment by offering parenting education, child development, and community resources such as shelter and mental health treatment.

Some therapeutically centered interventions focused on patients who met inclusion criteria for observable and/or diagnosable symptoms resulting from the IPV such as depression (Cort et al., 2014), PTSD (Crespo & Arinero, 2010; Iverson et al., 2011; Johnson & Zlotnick, 2006; Johnson, Zlotnick, & Perez, 2011), suicide attempt(s; Kaslow et al., 2010), and illicit substance use (Gilbert et al., 2006). Other therapeutic interventions were focused on providing assistance and guidance in resolving issues or problems related to IPV but were not specifically focused on individuals with observable or diagnosable symptoms. Therapeutic interventions were delivered in individual format compared to group formats and were mostly driven by cognitive or behavioral practice models (CBT, cognitive processing therapy, motivational interviewing, and dialectical behavior therapy; Cox & Stoltenberg, 1991; Crespo & Arinero, 2010; El-Mohandes et al., 2010; Enriquez et al., 2010; Iverson et al., 2011; Iverson, Shenk, & Fruzzetti, 2009; Johnson et al., 2011; Johnson & Zlotnick, 2006; Kiely et al., 2010; Kubany, Hill, & Owens, 2003; Kubany et al., 2004; Saftlas et al., 2014; M. Sullivan, Egan, & Gooch, 2004; Weir et al., 2009). Two studies were cognitive and physiologic based and provided a combination of narrative testimony, yoga breathing, and poses (Franzblau, Echevarria, Smith, & Van Cantfort, 2008; Franzblau, Smith, Echevarria, & Van Cantfort, 2006). Two studies used interpersonal therapies (IPTs; Cort et al., 2014; Zlotnick, Capezza, & Parker, 2011) and one individually based intervention utilized forgiveness therapy, a therapy developed from Victor Frankl's Logotherapy/Existential Analysis work (Reed & Enright, 2006).

The remaining interventions were diverse. Multiple interventions were based on empowerment principles, crisis models, and feminist theories (Gilbert et al., 2006; S. Kim & Kim, 2001; Mancoske, Standifer, & Cauley, 1994; M. Sullivan et al., 2004), and there was no reported theoretical orientation for three group interventions: (1) a mutual aid support group (Tutty, Bidgood, & Rothery, 1993), (2) a group intervention offered separately to women and children in Sweden (Grip, Almqvist, & Broberg, 2011), and (3) a social support group intervention (R. Constantino, Kim, & Crane, 2005). In addition, four interventions were shelter-based evaluations of counseling programs, in which the intervention was not clearly defined and often included therapeutic and advocacy components (Bennett, Riger, Schewe, Howard, & Wasco, 2004; Howard, Riger, Campbell, & Wasco, 2003; McNamara, Ertl, Marsh, & Walker, 1997; Melendez, Hoffman, Exner, Leu, & Ehrhardt, 2003) One of the manuscripts described an intervention as an eclectic practice model consisting of feminist principles, existential, solution focused work, and CBT (McNamara, Tamanini, & Pelletier-Walker, 2007).

Psychoeducation was the focus of three heterogeneous interventions (Kaslow et al., 2010; J. C. Kim et al., 2007; Peled, Davidson-Arad, & Perel, 2010; Pronyk et al., 2006). One microfinance intervention delivered in rural South Africa focused on gender norms/roles, leadership, and financial management (Kaslow et al., 2010; J. C. Kim et al., 2007; Pronyk et al., 2006); provided psychoeducation on IPV and suicide to African American women; and (Peled et al., 2010) provided education on parenting to Israeli women. Many other clinical and advocacy-based interventions also provided psychoeducation as part of their intervention. Psychoeducation was incorporated on a broad range of areas, IPV (what is it) safety and safety practices in relation to IPV, PTSD, and its effects, parenting and positive parenting (M. H. Bair-Merritt et al., 2010; R. Constantino et al., 2005; Cox & Stoltenberg, 1991; Grip et al., 2011; Iverson et al., 2011; Johnson et al., 2011; Johnson & Zlotnick, 2006; Kaslow et al., 2010; Kiely et al., 2010; Kubany et al., 2003, 2004; Reed & Enright, 2006; Zlotnick et al., 2011).

Sample characteristics. Sample demographics and characteristics were diverse. Most studies recruited from either clinical or community-based organizations (e.g., health clinics, shelters, and criminal justice services), with one study also recruiting community-based women using newspaper advertisements (Iverson et al., 2011). The mean age across studies ranged from 25 to 45 years. The socioeconomic status (SES) of participants was not consistently reported. However, among studies that provided information on SES, the majority of the samples lived at or slightly above the poverty level. Further, most of the participants reported receiving governmental (public) assistance.

Overall, study samples from the US-based studies predominately included Caucasian and African American women. Most of the individually based clinical interventions and group-based interventions reported samples of majority Caucasian women. Advocacy-based interventions reported more balanced samples comprised of both Caucasian and minority populations (African American and Latina women). Some studies reported outcomes with predominately minority women, one focused on African American women exclusively (Kaslow et al., 2010), four studies reported the majority of the sample being African American (Cort et al., 2014; Johnson et al., 2011; Joseph et al., 2009; Kiely et al., 2010), two with Hispanic women (McFarlane et al., 2006; Zlotnick et al., 2011), and three with Hawaiian women (Bai-Merritt et al., 2010; Kubany et al., 2003, 2004). Four articles reported data with samples of pregnant women (El-Mohandes et al., 2010; Joseph et al., 2009; Kiely et al., 2010; Zlotnick et al., 2011). The majority of studies were conducted within the United States ($n = 39$) and the international studies varied widely with samples from Canada, China, Greece, Peru, South Africa, Israel, Spain, Sweden, and Korea (Crespo & Arinero, 2010; Cripe et al., 2010; Grip et al., 2011; S. Kim & Kim, 2001; Kokka et al., 2016; Michalopoulou, Tzamalouka, Chrousos, & Darviri, 2015; Miller, Howell, & Graham-Bermann, 2014; Peled et al., 2010; Pronyk et al., 2006; Tiwari et al., 2005, 2010).

Intervention outcome:

Reduction in violence. Twenty-eight studies reported on IPV revictimization (physical, psychological, and sexual). Of the 28 studies, 12 were advocacy based and delivered individually (M. H. Bair-Merritt et al., 2010; J. C. Kim et al., 2007; McFarlane et al., 2006; Pronyk et al., 2006; C. M. Sullivan, 1991a, 2003; C. M. Sullivan & Bybee, 1999; C. M. Sullivan et al., 1994; C. M. Sullivan & Davidson, 1991; C. M. Sullivan, Tan, Basta, Rumptz, & Davidson, 1992; Tiwari et al., 2005, 2010) and 8 were individual-level clinically focused interventions (Gilbert et al., 2016; Iverson et al., 2011; Kiely et al., 2010; Miller et al., 2014; Rhodes et al., 2015; Stevens et al., 2015; Weir et al., 2009; Zlotnick et al., 2011). One intervention provided a community-based mutual aid support group which was clinically focused (Tutty et al., 1993), one intervention was a shelter-based intervention providing both a mix of clinical and advocacy services (McNamara et al., 1997), and two were a mixed individual and group clinical interventions. The first was for women with a co-occurring illicit drug use and IPV (Gilbert et al., 2016), and the other was for women who engaged in sexual risk behaviors (Mittal et al., 2016).

Advocacy-focused interventions generally showed reductions in violence over time. However, when available, many studies did not show statistical differences between intervention and control groups. One 10-week individual-based, advocacy-oriented randomized controlled trial (RCT) for post-shelter women showed reduced rates of physical and psychological violence over various 2-year follow-up points except for the 6-month follow-up, which showed a slight peek in physical violence. There was a Time $\times$ Condition interaction with the immediate postintervention and 2-year measure being the only time points reaching statistical significance between intervention and control groups. Further, ongoing contact/relationship with the perpetrator demonstrated higher rates of

physical violence (C. M. Sullivan, 1991a, 2003; C. M. Sullivan & Bybee, 1999; C. M. Sullivan & Davidson, 1991; C. M. Sullivan et al., 1994, 2002). Another study based on this advocacy intervention coupled with motivational interviewing for women who presented to a pediatric emergency department did not see statistical differences between groups (Stevens et al., 2015).

Most of the other advocacy interventions measured revictimization between 3 and 6 months, with the exception of two studies. These two studies measured long-term reductions in verbal abuse, threats, sexual violence, physical violence, injuries, danger, and homicide risk at 1–3 years. One of these studies was a home visitation intervention for families at high risk of child maltreatment and involved psychoeducation groups focused on violence and safety. The second study was microfinance intervention that provided credit and savings services along with education on gender norms and partner violence to poor, rural African women (M. H. Bair-Merritt et al., 2010; J. C. Kim et al., 2007; McFarlane et al., 2006; Pronyk et al., 2006). Pronyk et al. (2006) reported a 50% reduction at the end of 1 year, and M. H. Bair-Merritt et al. (2010) reported a 16% reduction in IPV; however, M. H. Bair-Merrit et al. also reported a significant attrition rate, retaining 50% of the sample at the 1-year follow-up and 25% of the sample at the 3-year follow-up.

A couple of international advocacy-focused interventions had varied impact on revictimization. Two interventions delivered to women in Hong Kong showed reductions in minor forms of abuse and violence, with reductions in psychological abuse (at 9 months follow-up; Tiwari et al., 2005, 2010) and minor physical violence (6-week follow-up; Tiwari et al., 2005). There was no impact on severe physical or sexual violence.

Eleven clinically focused yet diverse interventions delivered in group and individual formats reported reduced IPV over time (Gilbert et al., 2006, 2016; Johnson et al., 2011; Kiely et al., 2010; McNamara et al., 1997; Miller et al., 2014; Mittal et al., 2017; Tutty et al., 1993; Weir et al., 2009; Zlotnick et al., 2011). There was wide diversity in the clinical interventions and some were more promising than others. Cognitive-focused or CBT interventions demonstrated greater potential in the reduction of revictimization compared to other clinical interventions. In a high-risk sample of women who experienced recent (within 90 days) IPV and illicit drug use, an empowerment- and cognitive-focused intervention saw a 50% reduction in minor, physical, sexual, or injurious IPV at the 3-month follow-up relative to 13% in the control conditions and serious physical or sexual IPV saw a reduction of 50% compared to 20% and severe psychological abuse reductions of 32% compared to 20% (Gilbert et al., 2006). Iverson et al. (2011) delivered a cognitive-processing therapy to women with PTSD and reported a 40% reduction in reabuse over a 6-month follow-up for women who received varying doses (five to eight sessions). Kiely, El-Mohandes, El-Khorazaty, Blake, and Gantz (2010) delivered a CBT intervention to pregnant African American women and reported reduced rates of minor violence during the second and third trimester of pregnancy and postpartum time points.

IPT, a therapy focused on addressing interpersonal concerns and motivational interviewing a behavioral intervention, did not report consistent reductions in violence across 3–9 months postintervention (Rhodes et al., 2015;Weir et al., 2009; Zlotnick et al., 2011) with vulnerable samples of women (pregnant women and recently incarcerated women). There was one 10- to 12-week community-based mutual aid support group that reported significant reduction in physical and nonphysical IPV posttreatment. However, only 67% of the sample ($N = 76$) completed the group and 53% completed the 6-month follow-up (Tutty et al., 1993).

Physical health. Eight studies reported outcomes across a range of physical health and obstetric outcomes. Four were individual-based and three were group-based interventions (R. Constantino et al., 2005; Cripe et al., 2010; El-Mohandes et al., 2010; Joseph et al., 2009; Kiely et al., 2010; M. Sullivan et al., 2004; Tiwari et al., 2005, 2010). Studies were mostly clinical in orientation ($n = 5$), with the remaining being advocacy oriented ($n = 3$). The SF12 or SF36 (Short Form Health Survey), quality of health measures with multiple subscales across a broad range of health functioning, was used in numerous included studies (Cripe et al., 2010; Tiwari et al., 2005, 2010).

All clinically focused interventions demonstrated improvements in overall health as indicated by homogeneous measures on parenting stress index, reduced preterm births (less than 33 weeks gestation), and improved (higher) mean gestational age and birth weight at delivery relative to the women in control groups postintervention (El-Mohandes et al., 2010; Kiely et al., 2010; M. Sullivan et al., 2004). All advocacy-focused interventions were conducted in international settings. Two of the three individual-based advocacy-focused interventions did not find differences in overall quality of life between the intervention and the control conditions (Cripe et al., 2010; Tiwari et al., 2010). However, Tiwari et al. (2005) did find significant improvements in physical functioning and role limitations among pregnant women residing in Hong Kong.

Depression. Twenty-nine articles measured changes in depression symptoms. Ten were advocacy-focused interventions (R. E. Constantino et al., 2015; Stevens et al., 2015; C. M. Sullivan, 2003; C. M. Sullivan et al., 1992, 1999, 2002; Tan et al., 1995; Tiwari et al., 2005, 2010), while the rest were clinically focused ($n = 19$). Ten of the 19 clinically focused interventions were delivered individually (Franzblau et al., 2008; Iverson et al., 2009; Johnson & Zlotnick, 2006; Johnson et al., 2011; Kubany et al., 2003, 2004; Michalopoulou et al., 2015; Reed & Enright, 2006; Saftlas et al., 2014; Zlotnick et al., 2011), 7 were delivered in a group format (Cort et al., 2014; Crespo & Arinero, 2010; Iverson et al., 2011; Kaslow et al., 2010; S. Kim & Kim, 2001; Kokka et al., 2016; M. Sullivan et al., 2004), and 2 were a group/individual intervention (Gilbert et al., 2006; Mittal et al., 2017).

Advocacy-focused interventions showed short-term improvements in depressive symptoms with the treatment effects diminishing over time, yielding no clinical or statistical differences between intervention and control groups. For example, an online advocacy intervention focused on psychoeducation, safety, and resources showed significant improvements in depression (26.4–14.9) scores from pre- to postmeasures. However, the reduction in the same intervention delivered face-to-face had smaller yet still significant changes in depressive symptoms (26.1–25.2; R. E. Constantino et al., 2015). A longitudinal RCT of an advocacy-focused intervention for women leaving a domestic violence (DV) shelter reported that 42% of the participants experienced remediation for all depressive symptoms at the 10-week postintervention follow-up (C. M. Sullivan et al., 1992, 2002). These reductions were maintained 4 months postintervention (C. M. Sullivan et al., 2002) but not across the 24-month follow-up period (C. M. Sullivan & Bybee, 1999). Stevens et al. (2015) utilized this advocacy intervention and added motivational interviewing and reported no significant improvements in depression scores in a sample of women recruited from a pediatric emergency department over 6 months.

Clinical interventions showed reductions in depression or depressive symptoms as well. Clinically focused interventions based on cognitive frameworks demonstrated the most significant promise for reductions in depression. Five studies utilized an individually based cognitive therapy or trauma-based cognitive therapy model for women diagnosed with PTSD or with subthreshold PTSD symptoms (Iverson et al., 2011; Johnson et al., 2011; Johnson & Zlotnick, 2006; Kubany et al., 2003, 2004). Intervention doses in these studies ranged from 8 to 12 sessions, and each session was 1–1.5 hr in length. These five studies showed a significant decrease in depressive symptoms from pretreatment to 1-week, 3-month, and 6-month follow-ups (moderate partial regression coefficient .02 to .9 Cohen's *d*; Iverson et al., 2011; Johnson & Zlotnick, 2006; Johnson et al., 2011; Kubany et al., 2003, 2004) with large effect sizes reported for trauma-based cognitive therapy (2.1–1.6; Kubany et al., 2003, 2004). Group-based CBT and behavioral-based (dialectical behavioral therapy [DBT]) therapies also showed significant reductions in depression (effect size ranged from 0.5 to 2.53; Crespo & Arinero, 2010; Iverson et al., 2009) with effects maintained at the 1-year follow-up (effect size increased over time; Crespo & Arinero, 2010). A combined group and individual intervention (three individual and five group sessions) based on social–cognitive theory delivered for women who report IPV and engage in sexual risk behavior reported improvements in depression at the post and 3-month follow-up (Mittal et al., 2017). A stress management intervention delivered in both individual (Michalopoulou et al., 2015) and group formats (Kokka et al., 2016) in Greece showed improvements. The group format reported significant reductions in depression with an effect size of .8, and the individual format did not show significant reductions and reported an effect size of .2.

Levels of IPV seemed to moderate treatment responses; specifically, women experiencing lower levels of IPV reported more improved depression compared to women experiencing higher levels of IPV (Iverson et al., 2011). The other clinical interventions were extremely diverse and reported mixed results. Interventions showing promise with specific samples of women included forgiveness therapy, an unlimited dose of therapy, which was determined by the participant. When the participants felt they had reached self-defined gains in forgiveness of their abusive partner, they terminated services. This intervention was offered to emotionally abused women 2 years post the relationship, and there was a large reduction (.93 effect size) in depression posttherapy when compared to the comparison condition (Reed & Enright, 2006). A culturally informed psychoeducation group also showed a significant reduction in depression at the postintervention measure when compared to treatment as usual (Kaslow et al., 2010). There was a slight increase in symptoms at the 6-month follow-up, but overall reductions in depression were more rapid in the intervention group. This intervention was specifically for abused African American women who had experienced a suicide attempt in the past year. Women in this study did not report reductions in suicidal ideation; however, they reported less severe suicidal thoughts with continued physical and nonphysical violence/abuse (Kaslow et al., 2010).

Two group-based clinical interventions informed by empowerment and feminist frameworks showed mixed short-term reductions (S. Kim & Kim, 2001; M. Sullivan et al., 2004). S. Kim and Kim (2001) reported a 13-point reduction in depression for the intervention group at postintervention compared to the control group, but the differences between the two groups were not sustained at the 3-month follow-up. C. M. Sullivan, Egan, and Gooch (2004) reported no differences from the pre- to posttreatment in depression measures. Motivational interviewing and IPT generally did not show improvements in depression in the intervention group relative to the control group. Saftlas et al. (2014) delivered an individual motivational interviewing intervention (four sessions, one 60-min face-to-face sessions and three 10–15 min session via phone) and found reductions in depression in women attending a rural family planning clinic. However, when compared to the control group, the differences did not reach statistical significance between baseline and 6-month follow-up. After four 60-min individual sessions of IPT, Zlotnick, Capezza, and Parker (2011) did not find changes in depression at the 3-month follow-up among low-income, postpartum women. However, moderate effect sizes (Cohen's $d = .6$) were reported across the pregnancy to postpartum time points. A study using IPT reported statistically significant improvements in depression scores after an 8-week group intervention for women residing in an IPV shelter (Cort et al., 2014).

Trauma/PTSD. Fourteen of the included articles reported on PTSD or trauma symptoms. All but one (Stevens et al., 2015) were clinically focused, seven were individual-based interventions (Iverson et al., 2011; Johnson & Zlotnick, 2006; Johnson et al., 2011; Kubany et al., 2003, 2004; Reed & Enright, 2006; Zlotnick et al., 2011), four were group-based (Cort et al., 2014; Crespo & Arinero, 2010; Grip et al., 2011; Kaslow et al., 2010),

and two were mixed individual and group intervention (Gilbert et al., 2006; Mittal et al., 2017). Half of the interventions were cognitive or cognitive and behavioral, with one CBT intervention being CBT and exposure therapy (Crespo & Arinero, 2010) and the other seven studies varied widely, which provided IPT (Cort et al., 2014; Zlotnick et al., 2011), an empowerment-focused psychoeducation group (Kaslow et al., 2010), dyadic therapy to mothers and children (Grip et al., 2011), forgiveness therapy (Reed & Enright, 2006), and an advocacy-focused intervention paired with motivational interviewing (Stevens et al., 2015).

Cognitive and CBT interventions showed the most promise in reductions in PTSD symptoms with moderate to large effect sizes across the studies. Improvements were generally maintained 3- to 6-month postintervention follow-up for individual therapy. There was some variability on how overall PTSD versus the various clusters of PTSD responded to interventions. Avoidance and hypervigilance symptom clusters responded better to the CBT plus exposure intervention, but more reductions in reexperiencing symptoms were observed in the CBT-only group (Crespo & Arinero, 2010). Cognitive trauma therapy had very successful remittance rates of overall PTSD. Women who completed the treatment protocol reported higher rates of remittance of numbing and avoidance symptoms in particular (Kubany et al., 2003, 2004). Johnson, Zlotnick, and Perez (2011) also did not find significant differences between the intervention and the control group for overall PTSD reduction but found significant differences in emotional numbing symptoms. The lack of results across different studies was often attributed to inadequate doses of CBT therapy and continued contact with the perpetrator. It seems that treatment effects might be moderated by IPV victimization. Women who had better treatment responses had lower levels of IPV when compared to women with less treatment responses at the 6-month follow-up (Iverson et al., 2011).

IPT also showed promise in reducing PTSD symptoms when delivered in a group or individual format to pregnant women in a health setting and women residing in an IPV shelter (Cort et al., 2014; Zlotnick et al., 2011). Improvements showed remediation of PTSD symptoms at 3 months (Cort et al., 2014). While there were no significant differences between the intervention and the control group, moderate effect sizes (Cohen's $d = .59$) were shown for measurement points during pregnancy and large effect sizes (Cohen's $d = .78$) were shown at the 3-month postpartum (Zlotnick et al., 2011). It is important to note studies that provided IPT had small sample sizes.

The other interventions showed mixed results. An empowerment-based psychoeducation intervention and the advocacy-focused intervention did not see differences in PTSD between the treatment and the control group (Kaslow et al., 2010; Stevens et al., 2015). The combined intervention targeted at women with IPV and illicit drug use saw some reduction in avoidance symptoms, but the difference did not reach statistical significance (Gilbert et al., 2006). The other mixed individual and group intervention for women engaging in sexual risk behaviors did report statistically improved trauma symptoms at the postmeasure but not the 3-month follow-up (Mittal et al., 2017). The dyadic mother and child intervention and forgiveness therapy interventions also reported reductions in PTSD symptoms that were maintained on average 8–12 months postinterventions (Grip et al., 2011; Reed & Enright, 2006) in small samples of diverse women.

Anxiety. Five manuscripts reported data on anxiety, and all but one (R. E. Constantino et al., 2015) were clinically focused. One study provided an individual-based forgiveness therapy (Reed & Enright, 2006) and the other two studies provided group-based interventions, one was CBT plus exposure therapy, the other was an empowerment-focused advocacy intervention (Crespo & Arinero, 2010; S. Kim & Kim, 2001), and the last was a mixed individual and group intervention (Mittal et al., 2017). All interventions were heterogeneous in delivery format and sample participants. All found improvements in anxiety from pre- to postmeasures (large effect sizes). Further, the Crespo and Arinero (2010) study noted improvements in anxiety symptoms across 12-month measures for both the CBT and the CBT plus exposure intervention.

Psychological well-being. Twenty-nine manuscripts reported results on a broad range of psychological well-being outcomes. Seventeen were individual-based interventions (Bennett et al., 2004; Franzblau et al., 2006; Howard et al., 2003; Johnson & Zlotnick, 2006; Johnson et al., 2011; Kubany et al., 2003, 2004; McNamara et al., 2007; Michalopoulou et al., 2015; Reed & Enright, 2006; Saftlas et al., 2014; C. M. Sullivan, 2003; C. M. Sullivan & Bybee, 1999; C. M. Sullivan et al., 1992, 1994, 2002; Tan et al., 1995), 10 were group-based interventions (Cox & Stoltenberg, 1991; Crespo & Arinero, 2010; Enriquez et al., 2010; Iverson et al., 2009; Kaslow et al., 2010; Kikka et al., 2016; S. Kim & Kim, 2001; Mancoske et al., 1994; M. Sullivan et al., 2004; Tutty et al., 1993), and 2 were mixed (Gilbert et al., 2006; Mittal et al., 2017). Samples, intervention modality, dose, and follow-up periods were extremely heterogeneous. Overall, improvements in self-esteem, self-efficacy, empowerment (decision-making, control, and self-confidence), self-blame, guilt, shame, hopelessness, life/perceived stress, locus of control, social adjustment, and perceived quality of life were seen across most studies from pre- to postintervention measurement points. Many studies reported sustained improvements over time. These include an ecologically focused and empowerment-based advocacy intervention, for postshelter women demonstrated sustained improvements in self-esteem and quality of life through multiple follow-up points up until 2 years when compared to the control group (Campbell et al., 1995; C. M. Sullivan, 1991a, 2003; C. M. Sullivan & Davidson, 1991; C. M. Sullivan et al., 1994, 2002; Tan et al., 1995). A CBT-informed individually delivered intervention also demonstrated improvements in social adjustment and empowerment at 6 months largely with African American women residing in urban shelters (Johnson et al., 2011). A motivational interviewing intervention, which improved self-efficacy at the 6-month follow-up with women from rural family planning clinics

(Saftlas et al., 2014), and a mixed individual and group intervention focused on women who engage in sexual risk behaviors maintained improvements in self-esteem at the 3-month follow-up (Mittal et al., 2017). However, one crisis-driven, problem-focused group intervention did not report differences in self-esteem between the experimental and the control groups among shelter-residing women in Korea (S. Kim & Kim, 2001).

Discussion

This review examined and synthesized research on the theoretical frameworks, perspectives, and practice models and reports on the overall state of IPV interventions and their influence on physical and mental health and revictimization. We report findings for advocacy-focused and clinical interventions on a variety of health, mental health, and violence outcomes. Individual-based interventions comprised the majority of research addressing health, mental health outcomes, or revictimization for women who have experienced IPV. Results indicate both empowerment-based advocacy and cognitively focused clinical interventions demonstrate positive outcomes to women across various settings. The impact of interventions varied by outcome; however, moderate effect sizes were noted for depression and trauma/PTSD with larger effect sizes on these outcomes with cognitive trauma therapy. While there was limited reporting of effect sizes for advocacy-focused interventions, moderate effects were noted.

Interventions in this review varied regarding purpose, goals, delivery, frequency, and duration. However, most of clinical interventions were short term and cognitively based ranging from 4 to 12 sessions, with the majority designed to deliver 9–12 sessions. The advocacy-based interventions were largely informed by empowerment theory and provided psychoeducation, social support, community referrals, financial counseling, safety planning, and problem-solving support and were largely from one longitudinal trial for postshelter women who were followed for 2 years.

While the vast use of multiple theoretical perspectives and practice models makes it difficult to make comparisons across studies, key features emerged: (1) Clinical interventions showing efficacy and effectiveness have elements of problem-solving/solution seeking, aspects to facilitate choice making, and include techniques for the alteration of distorted self-thinking. Interventions that included these elements demonstrated promise in facilitating improved physical and mental health and quality of life for women who experience IPV; (2) Intensive advocacy-focused interventions for women leaving shelter are useful for improving safety and quality of life; (3) Cognitive and CBT interventions in individual or group setting showed reductions in depression, anxiety, and trauma symptoms/PTSD. While there were only a few studies that considered anxiety, exposure therapy in addition to CBT seems to have an additive effect. Neither clinical nor advocacy-oriented interventions were able to sustain reductions in depression among abused women. However, cognitive and CBT interventions in individual and group setting showed short-term reductions in depression, anxiety, and PTSD. Cognitive therapy demonstrated the most promise in reducing PTSD symptoms; however, clinical interventions targeting PTSD or trauma showed variations in outcomes by symptom cluster. This suggests there may be nuanced pathways of intervention effectiveness by PTSD symptom cluster. Many studies included secondary outcomes that were characterized into general psychological well-being measures. Improvements were seen across all studies, regardless of intervention type, and the advocacy-focused intervention post-shelter showed long-term moderate improvement, which were maintained up to 2 years. Few studies considered outcomes relative to health; however, the ones that did tended to focus more on overall health and function with no specificity on health conditions. Most of the studies considered obstetric/perinatal health outcomes. Clinically focused interventions demonstrated some health improvements but advocacy-focused interventions delivered to international samples of women reported inconsistent improvements in health outcomes.

This review extends the work of other reviews and reveals changing trends in the literature. Previous reviews have found that IPV interventions were largely group oriented, with a feminist, social support, or cognitive-based framework (Abel, 2000). They found that studies had small sample sizes and limited, if any, comparison or control groups (Abel, 2000). A review of the 22 studies in which interventions delivered within primary care settings found limited evidence to recommend effective interventions for women experiencing abuse/violence (Wathen & MacMillan, 2003). However, a later review (M. H. Bair-Merritt et al., 2014) involving 17 articles of primary care–based IPV interventions reported that IPV interventions benefited patients by leading to IPV/community referrals. Another review with strict inclusion criteria found limited evidence of long-term effectiveness of interventions for victims and reported minimal effects on repeat abuse, but found promising results on combined interventions focused on CBT and substance abuse treatment for couples and trauma-focused interventions for the dyadic parent–child relationships (Stover et al., 2009).

A Cochrane review of advocacy-focused interventions concluded that intense advocacy with a dose of 12 or greater hours of contact with a professional may reduce physical abuse for women leaving shelter, improve mental health, and may improve their quality of life at 1 year postintervention (Ramsay et al., 2009; Ramsay, Richardson, Carter, Davidson, & Feder, 2002). Trauma-focused treatments designed for IPV survivors are promising for reducing PTSD and depression symptoms if they completed treatment, and strong support for CBT in reducing negative symptomatic effects of IPV was also found (Eckhardt et al., 2013). Previous reviews often employed a narrow focus, and as such fewer articles were included. The current review of 57 published studies demonstrates that the majority of interventions are short term, individually focused, and very diverse in terms of theoretical orientations and models of care. Results continue to be promising for advocacy, trauma-focused cognitive, behavioral, and CBT models of care. However, the methodological limitations across the literature continue to impede recommendations.

Table 1. Critical Findings and Implications.

Critical Findings	
Outcome	Summary
Revictimization	• Advocacy and clinical interventions showed reductions in reabuse over time, however, not consistently different between intervention and control • Time × Intervention interaction—reductions in physical and psychological abuse over 2 years, with peek at 6 month • Questionable interaction of continued relationship with partner • Clinically focused heterogeneous intervention saw reductions • Common intervention features are CBT and empowerment
Health	• Broad range of health outcomes reported across studies • Clinically focused interventions delivered in either group or individual formats demonstrated improvements in overall health • Obstetric outcomes (preterm birth and birth weight) largely the focus • Advocacy-focused interventions delivered in individual formats generally did not see differences in the quality of life between intervention and control conditions, with the exception on differences in physical functioning of pregnant women
Depression	• Advocacy-focused interventions saw short-term reductions in depression, with diminished effects over time • Cognitive-focused interventions saw reductions in depression short term and at 3–6 months post the intervention. Trauma-focused cognitive intervention had large effect sizes. Level of IPV appears to moderate the outcome • Cognitive behavioral and behavioral (DBT) group interventions saw positive reductions, which were maintained at 1 year • Some promising reductions in depression with empowerment intervention, but no reduction in suicidal ideation (SI) • Mixed results for interpersonal therapy • No improvements for motivational interviewing
Trauma/PTSD	• All interventions clinically focused and the majority of the interventions were cognitive or cognitive–behavioral • Variations in symptom cluster response to intervention: (1) Cognitive trauma intervention had high remittance rate of PTSD, particularly numbing and avoidance; (2) CBT + exposure had positive influence on avoidance and hypervigilance; (3) some CBT did not show positive response, except for numbing, likely inadequate doses delivered in shelter setting
Anxiety	• Heterogeneous interventions with mixed results • CBT and CBT + exposure and empowerment intervention showed positive reductions
Psychological well-being	• Interventions, samples, and dose extremely heterogeneous. However, pre- and postimprovements noted for self-esteem, self-efficacy, decision-making, self-blame, guilt shame, and hopelessness
Implications	
Implications for research	• Larger samples • Develop research protocols to fully engage women • Consider CBPR approach • Multisite RCT • Further test cognitive/CBT models • Include trauma-informed treatment models • Engagement into care and consideration of readiness to change as a mechanism to address treatment and research adherence
Implications for practice	• Cognitive and cognitive behavioral models promising in a clinical setting and reducing clinical mental health outcomes • Trauma-informed practices appears to enhance treatment effects, thus considering the environment you deliver care • Advocacy-focused interventions promising for reductions in revictimization, thus consider using an empowerment outreach focus in settings such at shelters, courts
Implications for policy	• Efforts to increase translation of evidence to community settings • More access to funding dollars for implementation research • Improve care delivery systems for violence involved individuals

Note. PTSD = post-traumatic stress disorder; CBT = cognitive behavioral therapy; IPV = intimate partner violence; CBPR = community-based participatory research; RCT = randomized controlled trial.

Implications for Practice

While evidence for effective interventions remains in the early stages across the field, there are important practice implications gathered from this extensive review (Table 1). Evidence is emerging suggesting cognitive and cognitive behavioral models of care are promising in a clinical setting and reduce clinical mental health outcomes specifically. Engaging in cognitive restructuring techniques seem to be most helpful currently. Along with changing cognitions, literature from the mental health field points to the importance of teaching people

how to engage in positive behaviors. There is ample theoretical and empirical evidence on the impact of behavioral activation on mental health outcomes. The main components of behavioral activation include helping people identify key life areas (e.g., work, couple, and parenting) and important values in each of those life areas. The next steps involve simplifying these values into regular activities and providing structure and support as people make these changes to live a valued life.

Implementation of therapeutic interventions (e.g., CBT) in crisis settings has been challenging, specifically women often left shelter before receiving the full dose of treatment. However, advocacy services especially after an acute crisis or shelter services were particularly useful. The use of resource mobilization, social support, and problem-solving leads to reductions in revictimization; thus, considering using mobile empowerment-focused advocacy in settings such as shelters and courts is recommended. The literature also suggests there is a hierarchy of needs, specifically meeting basic life needs (e.g., food, shelter) and safety are necessary before women are able to focus solely on emotional well-being or improved mental health outcomes through individual or group therapeutic approaches. Additionally, when focused on mental health outcomes, trauma-specific interventions such as cognitive-processing therapy or cognitive trauma therapy are most promising in the reduction of depression and PTSD symptoms; thus, training in these would be beneficial for clinicians who provide care to women who experience IPV. This review also provides insight into the context and environment through which IPV interventions are delivered. The evidence for empowerment- and trauma-specific interventions suggests the adaptation of a trauma-informed care approach to delivery of IPV interventions. This involves creating a safe space that takes into account potential for revictimization but also includes identifying the impact trauma and the individual response to trauma while helping rebuild a sense of control and empowerment (see Substance Abuse and Mental Health Services Administration (SAMHSA); Hopper, Bassuk, & Olivet, 2009).

Implications for Research

The studies included in this review had numerous methodological concerns. Sample sizes tended to be small; many studies appeared to be largely pilot studies and were not replicated in other settings. Attrition rates were high in both treatment completion and protocol completion. The lack of follow-up was attributed to the complex circumstances of the sample population, for example, leaving shelter/relocating. While samples were diverse across intervention studies, there was a lack of diversity within study samples, improving internal validity of each study, but overall impacting the generalizability of outcomes. Ongoing abuse appears to moderate treatment, specifically if severity of abuse is high, treatment effects are reduced. Depression and PTSD symptoms saw more robust reductions in women who experienced less IPV at follow-up measures. Future multiple site RCTs with larger samples would enhance the level of knowledge and recommendations for intervention delivery.

Conducting experimental research with women who experience IPV has numerous ethical and safety challenges (Feder et al., 2011); however, adopting a community-based participatory research (CBPR) approach to further develop research protocols might address some of the methodological limitations seen within the field. CBPR has been used within the public health domain to investigate social and environmental determinants of health and entails a collaborative approach with equitable involvement of community members, organizational representatives, and researchers in all aspects of the research process from project development, design, and engagement to dissemination. Fully engaging with community and organization leaders aids in research procedures. For example, the lack of a positive response to cognitive therapy in one study was attributed to inadequate doses of the intervention received by women residing in a shelter setting. Due to the transient nature of the setting, many women were unable to complete the entire short-term intervention; thus, partnering with community and organizational individuals would be an important approach to better deliver interventions.

Also, research that further explores mechanisms of engagement and change is necessary. It is important to note that the translation of IPV interventions into community settings is challenging, thus research to understand engagement is important. The high attrition rates across various studies must be explored and addressed. Along with other factors that might influence attrition, interventions for this population need to consider readiness of change and wanting/being able to engage in care. Some literature has proposed a psychosocial readiness to care model for the delivery of interventions (Cluss et al., 2006). Ongoing abuse/violence appears to influence the success of treatment on mental health outcomes; thus, considering the person within the context of the environment may prove useful in the delivery of IPV care.

This review sheds light on the broad base of interventions for women who experience IPV. The settings and venues for the delivery of interventions are broad, advocacy is focused on the concrete and immediate emotional needs of IPV victims/survivors, and clinical-focused interventions are generally focused on treating and reducing negative symptoms of the IPV. There were also numerous studies that focused on a wide array of well-being outcomes, and interestingly, these studies tended to see significant pre–post changes after the intervention, and in a few trials, these improvements were maintained at up to 2 years postintervention. This might be suggestive of the need to focus on protective factors as an important pathway to remediating the negative outcomes. Thus, incorporating a person-centered and flexible resiliency model to improve upon protective factors, enhance healing, and promote successful life fulfillment, in addition to focusing on reduction of symptoms, would enhance the IPV literature (Grych, Hamby, & Banyard, 2015). Further health services research on engagement and connection into care would be useful to inform what

interventions work for whom and under what conditions (M. H. Bair-Merritt et al., 2014).

Conclusion

IPV is a complex phenomenon and a very specific type of trauma that is repetitive, personal, and often fluctuates between acute and chronic phases. The IPV intervention literature demonstrates a vast heterogeneity in treatment modalities and complexities in delivering care to victims/survivors. Overall, there are few well-controlled randomized trials and numerous methodological weaknesses of study designs which limit conclusions; however, there is promising evidence on a few intervention strategies. Overall, the most compelling evidence is for cognitive- and behavioral-based interventions on improved mental health. Clinically focused interventions that delivered CBT in relatively small doses demonstrate promise in the reduction of revictimization over short-term follow-up (6 months). Advocacy-based interventions, mostly from one specific 2-year trial, are promising for long-term remittance of reabuse. However, continued contact and relations to the perpetrator appears to moderate the effect with significant implications on outcomes. Interventions designed to improve psychological well-being outcomes such as self-efficacy, self-esteem, self-blame, and guilt appear to demonstrate positive outcomes regardless of the intervention modality and delivery in pre–post test scores; however, this evidence should be interpreted as preliminary. What emerged from this review is the heterogeneity of intervention types across a spectrum of victimization typologies, treatment, and relationship stages, specifically from crisis (shelter based) to postshelter to multiple years past a violent/abusive relationship. Additionally, women remaining in the abusive/violent relationship emerged as a potential moderator, which should be considered in treatment development and implementation. Although not every intervention improved outcomes for every group, evidence indicates that implementation of an array of different targeted intervention approaches can effectively improve physical and mental health, well-being, and revictimization outcomes among women experiencing IPV.

Future IPV research should incorporate larger more heterogeneous samples, engage in research protocols that retain participants in treatment and research participation by potentially using a community-engaged approach, and multisite randomized trials. Also, it appears the use of trauma-informed strategies further enhanced outcomes and appears to be something further to build on in future research. Understanding what interventions work, for whom, and under what conditions (M. H. Bair-Merritt et al., 2014) is needed to move the IPV field forward.

Authors' Note

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Supplemental Material

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References

Abel, E. M. (2000). Psychosocial treatments for battered women: A review of empirical research. *Research on Social Work Practice*, *10*, 55–77.

Arroyo, K., Lundahl, B., Butters, R., Vanderloo, M., & Wood, D. S. (2015). Short-term interventions for survivors of intimate partner violence: A systematic review and meta-analysis. *Trauma, Violence, & Abuse*. doi:1524838015602736

Bair-Merritt, M., Zuckerman, B., Augustyn, M., & Cronholm, P. F. (2013). Silent victims—An epidemic of childhood exposure to domestic violence. *The New England Journal of Medicine*, *369*, 1673–1674.

Bair-Merritt, M. H., Jennings, J. M., Chen, R., Burrell, L., McFarlane, E., Fuddy, L., & Duggan, A. K. (2010). Reducing maternal intimate partner violence after the birth of a child: A randomized controlled trial of the Hawaii healthy start home visitation program. *Archives of Pediatrics & Adolescent Medicine*, *164*, 16–23.

Bair-Merritt, M. H., Lewis-O'Connor, A., Goel, S., Amato, P., Ismailji, T., Jelley, M., … Cronholm, P. (2014). Primary care–based interventions for intimate partner violence: A systematic review. *American Journal of Preventive Medicine*, *46*, 188–194.

Bennett, L., Riger, S., Schewe, P., Howard, A., & Wasco, S. (2004). Effectiveness of hotline, advocacy, counseling, and shelter services for victims of domestic violence: A statewide evaluation. *Journal of Interpersonal Violence*, *19*, 815–829. doi:10.1177/0886260504265687

Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., & Stevens, M. (2011). *National intimate partner and sexual violence survey*. Atlanta, GA: Centers for Disease Control and Prevention, 75.

Bonomi, A. E., Anderson, M. L., Rivara, F. P., & Thompson, R. S. (2009). Health care utilization and costs associated with physical and nonphysical-only intimate partner violence. *Health Services Research*, *44*, 1052–1067.

Breiding, M. J., Chen, J., & Black, M. (2014). *Intimate partner violence in the United States—2010*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

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

Carlson, B. E., McNutt, L. A., & Choi, D. Y. (2003). Childhood and adult abuse among women in primary health care: Effects on mental health. *Journal of Interpersonal Violence*, *18*, 924–941.

Catalano, S., Smith, E., Snyder, H., & Rand, M. (2009). *Bureau of justice statistics selected findings—Female victims of violence* (No. NCJ 228356). Washington, DC: U.S. Department of Justice Office of Justice Programs.

Cluss, P. A., Chang, J. C., Hawker, L., Scholle, S. H., Dado, D., Buranosky, R., & Goldstrohm, S. (2006). The process of change for victims of intimate partner violence: Support for a psychosocial readiness model. *Women's Health Issues*, *16*, 262–274.

Constantino, R., Kim, Y., & Crane, P. A. (2005). Effects of a social support intervention on health outcomes in residents of a domestic violence shelter: A pilot study. *Issues in Mental Health Nursing*, *26*, 575–590.

Constantino, R. E., Braxter, B., Ren, D., Burroughs, J. D., Doswell, W. M., Wu, L., . . . Greene, W. B. (2015). Comparing online with face-to-face HELPP intervention in women experiencing intimate partner violence. *Issues in Mental Health Nursing*, *36*, 430–438.

Cort, N. A., Cerulli, C., Poleshuck, E. L., Bellenger, K. M., Xia, Y., Tu, X., . . . Talbot, N. L. (2014). Interpersonal psychotherapy for depressed women with histories of intimate partner violence. *Psychological Trauma: Theory, Research, Practice, and Policy*, *6*, 700.

Cox, J. W., & Stoltenberg, C. D. (1991). Evaluation of a treatment program for battered wives. *Journal of Family Violence*, *6*, 395–413.

Crespo, M., & Arinero, M. (2010). Assessment of the efficacy of a psychological treatment for women victims of violence by their intimate male partner. *The Spanish Journal of Psychology*, *13*, 849–863.

Cripe, S. M., Sanchez, S. E., Sanchez, E., Ayala Quintanilla, B., Hernandez Alarcon, C., Gelaye, B., & Williams, M. A. (2010). Intimate partner violence during pregnancy: A pilot intervention program in Lima, Peru. *Journal of Interpersonal Violence*, *25*, 2054–2076. doi:10.1177/0886260509354517

Danielson, K. K., Moffitt, T. E., Caspi, A., & Silva, P. A. (1998). Comorbidity between abuse of an adult and DSM-III-R mental disorders: Evidence from an epidemiological study. *American Journal of Psychiatry*, *155*, 131–133.

Devries, K., Watts, C., Yoshihama, M., Kiss, L., Schraiber, L. B., Deyessa, N., . . . Jansen, H. (2011). Violence against women is strongly associated with suicide attempts: Evidence from the WHO multi-country study on women's health and domestic violence against women. *Social Science & Medicine*, *73*, 79–86.

Dolezal, T. (2009). *Hidden costs in health care: The economic impact of violence and abuse*. East Prairie, MN: Academy on Violence and Abuse.

Eckhardt, C. I., Murphy, C. M., Whitaker, D. J., Sprunger, J., Dykstra, R., & Woodard, K. (2013). The effectiveness of intervention programs for perpetrators and victims of intimate partner violence. *Partner Abuse*, *4*, 196–231.

El-Mohandes, A. A., Kiely, M., Blake, S. M., Gantz, M. G., & El-Khorazaty, M. N. (2010). An intervention to reduce environmental tobacco smoke exposure improves pregnancy outcomes. *Pediatrics*, *125*, 721–728. doi:10.1542/peds.2009-1809

Enriquez, M., Cheng, A. L., Kelly, P. J., Witt, J., Coker, A. D., & Kashubeck-West, S. (2010). Development and feasibility of an HIV and IPV prevention intervention among low-income mothers receiving services in a Missouri day care center. *Violence Against Women*, *16*, 560–578. doi:10.1177/1077801210366869

Feder, L., Holditch Niolon, P., Campbell, J., Wallinder, J., Nelson, R., & Larrouy, H. (2011). The need for experimental methodology in intimate partner violence: Finding programs that effectively prevent IPV. *Violence Against Women*, *17*, 340–358.

Fishman, P. A., Bonomi, A. E., Anderson, M. L., Reid, R. J., & Rivara, F. P. (2010). Changes in health care costs over time following the cessation of intimate partner violence. *Journal of General Internal Medicine*, *25*, 920–925.

Franzblau, S. H., Echevarria, S., Smith, M., & Van Cantfort, T. E. (2008). A preliminary investigation of the effects of giving testimony and learning yogic breathing techniques on battered women's feelings of depression. *Journal of Interpersonal Violence*, *23*, 1800–1808. doi:10.1177/0886260508314329

Franzblau, S. H., Smith, M., Echevarria, S., & Van Cantfort, T. (2006). Take a breath, break the silence: The effects of yogic breathing and testimony about battering on feelings of self-efficacy in battered women. *International Journal of Yoga Therapy*, *16*, 49–57.

Gilbert, L., El-Bassel, N., Manuel, J., Wu, E., Go, H., Golder, S., . . . Sanders, G. (2006). An integrated relapse prevention and relationship safety intervention for women on methadone: Testing short-term effects on intimate partner violence and substance use. *Violence and Victims*, *21*, 657–672.

Gilbert, L., Goddard-Eckrich, D., Hunt, T., Ma, X., Chang, M., Rowe, J., . . . Almonte, M. (2016). Efficacy of a computerized intervention on HIV and intimate partner violence among substance-using women in community corrections: A randomized controlled trial. *American Journal of Public Health*, *106*(7), 1278–1286.

Golding, J. M. (1999). Intimate partner violence as a risk factor for mental disorders: A meta-analysis. *Journal of Family Violence*, *14*, 99–132.

Grip, K., Almqvist, K., & Broberg, A. G. (2011). Effects of a group-based intervention on psychological health and perceived parenting capacity among mothers exposed to intimate partner violence (IPV): A preliminary study. *Smith College Studies in Social Work*, *81*, 81–100.

Grych, J., Hamby, S., & Banyard, V. (2015). The resilience portfolio model: Understanding healthy adaptation in victims of violence. *Psychology of Violence*, *5*, 343.

Hathaway, J. E., Mucci, L. A., Silverman, J. G., Brooks, D. R., Mathews, R., & Pavlos, C. A. (2000). Health status and health care use of Massachusetts women reporting partner abuse. *American Journal of Preventive Medicine*, *19*, 302–307.

Hopper, E. K., Bassuk, E. L., & Olivet, J. (2009). Shelter from the storm: Trauma-informed care in homelessness services settings. *The Open Health Services and Policy Journal*, *2*, 131–151.

Howard, A., Riger, S., Campbell, R., & Wasco, S. (2003). Counseling services for battered women: A comparison of outcomes for physical and sexual assault survivors. *Journal of Interpersonal Violence*, *18*, 717–734.

Iverson, K. M., Gradus, J. L., Resick, P. A., Suvak, M. K., Smith, K. F., & Monson, C. M. (2011). Cognitive–behavioral therapy for PTSD and depression symptoms reduces risk for future intimate partner violence among interpersonal trauma survivors. *Journal of Consulting and Clinical Psychology*, *79*, 193.

Iverson, K. M., Shenk, C., & Fruzzetti, A. E. (2009). Dialectical behavior therapy for women victims of domestic abuse: A pilot study. *Professional Psychology: Research and Practice*, *40*, 242.

Johnson, D. M., & Zlotnick, C. (2006). A cognitive—behavioral treatment for battered women with PTSD in shelters: Findings from a pilot study. *Journal of Traumatic Stress*, *19*, 559–564.

Johnson, D. M., Zlotnick, C., & Perez, S. (2011). Cognitive behavioral treatment of PTSD in residents of battered women's shelters: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology*, *79*, 542–551.

Joseph, J. G., El-Mohandes, A. A., Kiely, M., El-Khorazaty, M. N., Gantz, M. G., Johnson, A. A., … Subramanian, S. (2009). Reducing psychosocial and behavioral pregnancy risk factors: Results of a randomized clinical trial among high-risk pregnant African American women. *American Journal of Public Health*, *99*, 1053–1061.

Kaslow, N. J., Leiner, A. S., Reviere, S., Jackson, E., Bethea, K., Bhaju, J., … Thompson, M. P. (2010). Suicidal, abused African American women's response to a culturally informed intervention. *Journal of Consulting and Clinical Psychology*, *78*, 449.

Kiely, M., El-Mohandes, A. A., El-Khorazaty, M. N., Blake, S. M., & Gantz, M. G. (2010). An integrated intervention to reduce intimate partner violence in pregnancy: A randomized controlled trial. *Obstetrics and Gynecology*, *115*, 273–283. doi:10.1097/AOG.0b013e3181cbd482

Kim, J. C., Watts, C. H., Hargreaves, J. R., Ndhlovu, L. X., Phetla, G., Morison, L. A., … Pronyk, P. (2007). Understanding the impact of a microfinance-based intervention on women's empowerment and the reduction of intimate partner violence in South Africa. *American Journal of Public Health*, *97*, 1794–1802.

Kim, S., & Kim, J. (2001). The effects of group intervention for battered women in Korea. *Archives of Psychiatric Nursing*, *15*, 257–264.

Kokka, A., Mikelatou, M., Fouka, G., Varvogli, L., Chrousos, G. P., & Darviri, C. (2016). Stress management and health promotion in a sample of women with intimate partner violence: A randomized controlled trial. *Journal of Interpersonal Violence*. doi:10.1177/0886260516658759

Kubany, E. S., Hill, E. E., & Owens, J. A. (2003). Cognitive trauma therapy for battered women with PTSD: Preliminary findings. *Journal of Traumatic Stress*, *16*, 81–91.

Kubany, E. S., Hill, E. E., Owens, J. A., Iannce-Spencer, C., McCaig, M. A., Tremayne, K. J., & Williams, P. L. (2004). Cognitive trauma therapy for battered women with PTSD (CTT-BW). *Journal of Consulting and Clinical Psychology*, *72*, 3.

Li, Y., Marshall, C. M., Rees, H. C., Nunez, A., Ezeanolue, E., & Ehiri, J. (2014). Intimate partner violence and HIV infection among women: A systematic review and meta-analysis. *Journal of the International AIDS Society*, *17*, 18845.

Mancoske, R. J., Standifer, D., & Cauley, C. (1994). The effectiveness of brief counseling services for battered women. *Research on Social Work Practice*, *4*, 53–63.

Max, W., Rice, D. P., Finkelstein, E., Bardwell, R. A., & Leadbetter, S. (2004). The economic toll of intimate partner violence against women in the United States. *Violence and Victims*, *19*, 259–272.

McFarlane, J. M., Groff, J. Y., O'Brien, J. A., & Watson, K. (2006). Secondary prevention of intimate partner violence: A randomized controlled trial. *Nursing Research*, *55*, 52–61.

McNamara, J. R., Ertl, M. A., Marsh, S., & Walker, S. (1997). Short-term response to counseling and case management intervention in a domestic violence shelter. *Psychological Reports*, *81*, 1243–1251.

McNamara, J. R., Tamanini, K., & Pelletier-Walker, S. (2007). The impact of short-term counseling at a domestic violence shelter. *Research on Social Work Practice*, *18*, 132–136.

Melendez, R., Hoffman, S., Exner, T., Leu, C., & Ehrhardt, A. (2003). Intimate partner violence and safer sex negotiation: Effects of a gender-specific intervention. *Archives of Sexual Behavior*, *32*, 499–511.

Michalopoulou, E., Tzamalouka, G., Chrousos, G. P., & Darviri, C. (2015). Stress management and intimate partner violence: A randomized controlled trial. *Journal of Family Violence*, *30*, 795–802.

Miller, L. E., Howell, K. H., & Graham-Bermann, S. A. (2014). The effect of an evidence-based intervention on women's exposure to intimate partner violence. *American Journal of Orthopsychiatry*, *84*, 321.

Mittal, M., Stockman, J. K., Seplaki, C. L., Thevenet-Morrison, K., Guido, J., & Carey, M. P. (2013). HIV risk among women from domestic violence agencies: Prevalence and correlates. *Journal of the Association of Nurses in AIDS Care*, *24*, 322–330.

Mittal, M., Thevenet-Morrison, K., Landau, J., Cai, X., Gibson, L., Schroeder, A., … Carey, M. P. (2017). An integrated HIV risk reduction intervention for women with a history of intimate partner violence: Pilot test results. *AIDS and Behavior*, *21*(8), 2219–2232.

Peled, E., Davidson-Arad, B., & Perel, G. (2010). The mothering of women abused by their partner: An outcome evaluation of a group intervention. *Research on Social Work Practice*, *20*, 391–402.

Plichta, S. B. (2004). Intimate partner violence and physical health consequences: Policy and practice implications. *Journal of Interpersonal Violence*, *19*, 1296–1323. doi:10.1177/0886260504269685

Pronyk, P. M., Hargreaves, J. R., Kim, J. C., Morison, L. A., Phetla, G., Watts, C., … Porter, J. D. (2006). Effect of a structural intervention for the prevention of intimate-partner violence and HIV in rural South Africa: A cluster randomised trial. *The Lancet*, *368*, 1973–1983.

Ramsay, J., Carter, Y., Davidson, L., Dunne, D., Eldridge, S., Feder, G., … Warburton, A. (2009). Advocacy interventions to reduce or eliminate violence and promote the physical and psychosocial well-being of women who experience intimate partner abuse. *Cochrane Database of Systematic Reviews*. doi:10.1002/14651858.CD005043.pub2

Ramsay, J., Richardson, J., Carter, Y. H., Davidson, L. L., & Feder, G. (2002). Should health professionals screen women for domestic

violence? Systematic review. *British Medical Journal (Clinical Research Ed.)*, *325*, 314.

Reed, G. L., & Enright, R. D. (2006). The effects of forgiveness therapy on depression, anxiety, and posttraumatic stress for women after spousal emotional abuse. *Journal of Consulting and Clinical Psychology*, *74*, 920.

Rennison, C. M., & Welchans, S. (2003). *Intimate partner violence*. Washington, DC: Bureau of Justice.

Rhodes, K. V., Rodgers, M., Sommers, M., Hanlon, A., Chittams, J., Doyle, A., . . . Crits-Christoph, P. (2015). Brief motivational intervention for intimate partner violence and heavy drinking in the emergency department: A randomized clinical trial. *JAMA*, *314*, 466–477.

Saftlas, A. F., Harland, K. K., Wallis, A. B., Cavanaugh, J., Dickey, P., & Peek-Asa, C. (2014). Motivational interviewing and intimate partner violence: A randomized trial. *Annals of Epidemiology*, *24*, 144–150.

Stevens, J., Scribano, P. V., Marshall, J., Nadkarni, R., Hayes, J., & Kelleher, K. J. (2015). A trial of telephone support services to prevent further intimate partner violence. *Violence Against Women*, *21*, 1528–1547.

Stover, C. S., Meadows, A. L., & Kaufman, J. (2009). Interventions for intimate partner violence: Review and implications for evidence-based practice. *Professional Psychology: Research and Practice*, *40*, 223.

Sullivan, C. M. (1991a). The provision of advocacy services to women leaving abusive partners an exploratory study. *Journal of Interpersonal Violence*, *6*, 41–54.

Sullivan, C. M. (1991b). The provision of advocacy services to women leaving abusive partners an exploratory study. *Journal of Interpersonal Violence*, *6*, 41–54.

Sullivan, C. M. (2003). Using the ESID model to reduce intimate male violence against women. *American Journal of Community Psychology*, *32*, 295–303.

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

Sullivan, C. M., Bybee, D. I., & Allen, N. E. (2002). Findings from a community-based program for battered women and their children. *Journal of Interpersonal Violence*, *17*, 915–936.

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

Sullivan, C. M., & Davidson, W. S. (1991). The provision of advocacy services to women leaving abusive partners: An examination of short-term effects. *American Journal of Community Psychology*, *19*, 953–960.

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

Sullivan, M, Egan, M., & Gooch, M. (2004). Conjoint interventions for adult victims and children of domestic violence: A program evaluation. *Research on Social Work Practice*, *14*, 163–170.

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

Thompson, R. S., Bonomi, A. E., Anderson, M., Reid, R. J., Dimer, J. A., Carrell, D., & Rivara, F. P. (2006). Intimate partner violence: Prevalence, types, and chronicity in adult women. *American Journal of Preventive Medicine*, *30*, 447–457.

Tiwari, A., Fong, D. Y. T., Yuen, K. H., Yuk, H., Pang, P., Humphreys, J., & Bullock, L. (2010). Effect of an advocacy intervention on mental health in Chinese women survivors of intimate partner violence: A randomized controlled trial. *Journal of the American Medical Association*, *304*, 536–543.

Tiwari, A., Leung, W., Leung, T., Humphreys, J., Parker, B., & Ho, P. (2005). A randomised controlled trial of empowerment training for Chinese abused pregnant women in Hong Kong. *BJOG: An International Journal of Obstetrics & Gynaecology*, *112*, 1249–1256.

Tjaden, P. G., & Thoennes, N. (2000). *Extent, nature, and consequences of intimate partner violence*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.

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

Wathen, C. N., & MacMillan, H. L. (2003). Interventions for violence against women: Scientific review. *Journal of the American Medical Association*, *289*, 589–600.

Weir, B. W., O'Brien, K., Bard, R. S., Casciato, C. J., Maher, J. E., Dent, C. W., . . . Stark, M. J. (2009). Reducing HIV and partner violence risk among women with criminal justice system involvement: A randomized controlled trial of two motivational interviewing-based interventions. *AIDS and Behavior*, *13*, 509–522.

World Health Organization. (2005). *WHO multi-country study on women's health and domestic violence against women: Summary report of initial on prevalence, health outcomes and women's responses*. Geneva, Switzerland: Author.

Wuest, J., Ford-Gilboe, M, Merritt-Gray, M., Varcoe, C., Lent, B., Wilk, P., & Campbell, J. (2009). Abuse-Related injury and symptoms of posttraumatic stress disorder as mechanisms of chronic pain in survivors of intimate partner violence. *Pain Medicine*, *10*, 739–747.

Zaza, S., Wright-De Agüero, L. K., Briss, P. A., Truman, B. I., Hopkins, D. P., Hennessy, M. H., . . . Teutsch, S. M. (2000). Data collection instrument and procedure for systematic reviews in the guide to community preventive services. *American Journal of Preventive Medicine*, *18*, 44–74.

Zimmerman, M. A. (1995). Psychological empowerment: Issues and illustrations. *American Journal of Community Psychology*, *23*, 581–599.

Zlotnick, C., Capezza, N. M., & Parker, D. (2011). An interpersonally based intervention for low-income pregnant women with intimate partner violence: A pilot study. *Archives of Women's Mental Health*, *14*, 55–65.

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