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Victims’ Influence on Intimate Partner Violence Revictimization: A Systematic Review of Prospective Evidence

Karlijn F. Kuijpers¹, Leontien M. van der Knaap¹, and Ilse A. J. Lodewijks²

Abstract
Foa, Cascardi, Zoellner and Feeny developed two models of women’s influence on intimate partner violence (IPV), which integrate victim-related variables associated with the cessation or continuation of partner violence (i.e., repeat IPV). One of the models focuses on psychological factors while the other centers on environmental factors. Central to both models are three key factors: partner violence; psychological difficulties; and resilience. Despite the appeal of these models, empirical, prospective research that specifically tests these models appears to be lacking. This article describes a systematic review of the available literature that examines the prospective link between the three key factors of the models and the risk of IPV revictimization. A synthesis of 15 studies reveals that Foa et al.’s models of revictimization are partly supported by prior prospective research. It is beyond doubt that the key factor partner violence (involving the severity and frequency of prior IPV) is a strong predictor for IPV revictimization; the evidence regarding victims’ psychological difficulties and resilience is more mixed. Findings are discussed in terms of implications for practice and research and might enable practitioners to help victims to take control of their situations and to contribute to their empowerment. The importance of future prospective research into dynamic, victim-related variables is emphasized, in order to further support Foa’s models of victims’ influence on IPV revictimization.

Keywords
partner violence, psychological difficulties, resilience, victim-related risk factors, revictimization

Introduction
Intimate partner violence (IPV) is one of the most pervasive social problems all over the world. Although both men and women are victims of IPV, women suffer the most serious forms of abuse by an intimate partner (Archer, 2000, 2002). Estimates of the proportion of women who are physically assaulted by an intimate male partner at some point in their lives range from 10% to 69% (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). Furthermore, a large proportion of IPV victims is victimized repeatedly (Walby & Allen, 2004). During the last decades, a large amount of research has focused on a wide array of perpetrator characteristics that influence risk for (repeat) partner violence (see, e.g., Dutton, 1995; Hilton et al., 2004; Norlander & Eckhardt, 2005). Surprisingly, though, research on victim-related risk factors seems to lag behind. For instance, Bennett, Cattaneo, and Goodman (2005) systematically reviewed 64 studies across several disciplines and samples for both perpetrator- and victim-related predictors for reabuse. They concluded that victim-related variables were the “significant minority,” and a “major gap in the extant research” into risk factors for repeat IPV (p. 168). Knowledge on risk and protective factors that victims themselves can influence is important, however. For one, interventions for male batterers have shown mixed results with regard to their efficacy (e.g., Babcock, Green, & Robie, 2004; Feder & Wilson, 2005). Second, research also shows that characteristics of both members of the couple increase risk for IPV (Moffitt, Robins, & Caspi, 2001), which means that interventions to prevent future violence could be more effective if they also target victims of IPV. Most importantly, though, knowledge on risk and protective factors that are within victims’ sphere of influence can help victims take control and thereby empower them (Goodman, Dutton, Vankos, & Weinfurt, 2005; Perez & Johnson, 2008). Or, as articulated by Foa, Cascardi, Zoellner, and Feeny (2000), psychological and environmental interventions for victims “will facilitate women’s agency in reducing partner violence” (p. 69).

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In order to stimulate the development of forms of victim support that enable practitioners to help victims take control over their lives, Foa and her colleagues (2000) developed two models of women’s influence on IPV, which integrate victim-related variables associated with the cessation or continuation of partner violence (i.e., repeat IPV). One of the models focuses on psychological factors while the other centers on environmental factors. Central to both models are three key factors: partner violence, psychological difficulties, and resilience. Because these factors are multidimensional and complex, they are described along multiple aspects.

First, Foa et al.’s (2000) key factor partner violence involves the severity and frequency of prior partner violence, which is hypothesized to relate to repeat IPV. This key factor is operationalized as incorporating physical and emotional abuse, perceived threat, and psychological reactions to the abuse. In defining their construct of partner violence, Foa et al. refer to literature showing that physical and emotional abuse are distinct but highly correlated phenomena. According to various studies, emotional abuse is more common than physical abuse (e.g., Dutton & Starzomski, 1993; Straus, Gelles, & Steinmetz, 1980), emotional and physical abuse often occur together (Follingstad, Rutledge, Berg, Hause, & Polek, 1990; Walker, 1984), and emotional abuse predicts future physical abuse (Malamuth, Linz, Heavey, Barnes, & Acker, 1995; O’Leary, Malone, & Tyree, 1994). As a second aspect of partner violence, perceived threat involves the victim’s assessment of the likelihood of future abuse by her partner. This perceived threat not only concerns fear for the victim’s own safety but also for the safety of her children, family, and friends (Campbell, 1995). Foa and her colleagues hypothesized that the victim’s own perception of threat within the relationship might be an important predictor of actual partner violence. Lastly, psychological reactions of the victim to the abuse are assumed to form part of the construct of partner violence as well. They involve the victim’s perceptions of susceptibility to physical and psychological danger and the loss of power and control within the violent relationship. These psychological reactions are thought to distinguish battered women from non-battered women (see Smith, Tessaro, & Earp, 1995). Although victims’ perceptions of susceptibility to physical and psychological danger seem to be similar to victims’ perceived threat described above, Foa et al. suggest perceived threat to refer to danger from the partner in specific, whereas the other seems to concern a more general susceptibility to physical and psychological danger.

The second key factor of Foa et al.’s (2000) model of women’s influence on IPV relates to psychological difficulties; victims of partner violence suffer from a variety of psychological difficulties (e.g., Follingstad, Hause, Rutledge, & Polek, 1992). During the last decades, research has mainly focused on symptoms of depression, anxiety, posttraumatic stress disorder (PTSD), and substance abuse among IPV victims (Campbell, 2002; Coker et al., 2002; Dutton et al., 2006; Follingstad, Brennan, Hause, Polek, & Rutledge, 1991; Golding, 1999; Kemp, Green, Hovanitz, & Rawlings, 1995; Pico-Alfonso, Garcia-Linares, Celda-Navarro, Herbert, & Martinez, 2004). These adversities are classified as psychological difficulties in Foa et al.’s models, hypothesizing that they serve as precipitating factors by increasing a victim’s risk for future partner violence.

Finally, the third key factor hypothesized to affect women’s influence on IPV is resilience, which involves the ability to successfully cope with, adjust to, or recover from major life stressors, such as partner violence. Resilience can thus be viewed as a protective factor against IPV revictimization. Indeed, battered women employ a wide variety of actions to escape, avoid, and protect themselves (Campbell, Rose, Kub, & Nedd, 1998). According to Foa et al. (2000), a central, relatively stable characteristic to resilience is the victim’s physical health. Research showed a positive association between health problems and the continuation of partner violence (Campbell & Soeken, 1999). Furthermore, Foa and colleagues suggest optimism, self-esteem, and cognitive flexibility (i.e., the ability to perceive different aspects of events) to be important correlates of physical health and to serve to promote victims’ resilience as well. Therefore, they hypothesize that optimism, self-esteem, flexibility, and physical health of the victim combine to represent resilience.

Central to the models of women’s influence on repeat IPV are the mechanisms between the above key factors: partner violence, psychological difficulties, and resilience. Foa et al. (2000) hypothesize that partner violence and psychological difficulties interact in a vicious cycle whereby partner violence causes psychological difficulties that, in turn, put women at greater risk of revictimization by hindering the victim’s ability to curtail future violence. They further argue that victims’ intra-personal resources—resilience—temper the negative psychological impact of partner violence and, thereby, serve to reduce the risk of revictimization.

The relevance of these conceptual models in the field of IPV revictimization is apparent as Foa et al. (2000) are in this journal’s top 10 of most cited articles.¹ However, there appears to be little empirical, longitudinal research that specifically tests these models. Although Foa et al. based their models on a review of the literature, most research was cross-sectional, which only allows statements regarding correlates of IPV revictimization. In order to describe factors that predict future IPV revictimization, studies with a prospective design are required. We therefore set out to systematically review the existing literature that prospectively links (aspects of) Foa et al.’s three key factors—partner violence, psychological difficulties, and resilience—to the risk for IPV revictimization.

**Method**

**Literature Search**

The search for relevant studies to include in our systematic review was performed using search term combinations including IPV-related terms (*domestic*, *intimate*, *partner*, *viol*), revictimization and risk-related terms (*victim*, *revictim*, *risk*, *protect*, *vulnerab*, *trauma*) and terms relating to the...
All aspects of the three key factors in Foa et al.’s (2000) models concern possible risk and protective factors for revictimization of IPV. We therefore deliberately used these more general search terms instead of terms related to specific key factors to make sure that we would not miss any prospective study in our field of interest. Combinations of above search terms were entered in a variety of databases (Tilburg University Catalogue, JSTOR, Netherlands Central Catalogue, Online Contents book chapters and journal articles Tilburg University and national, PsychArticles, Psychology and Behavioral Sciences Collection, PsychInfo, PubMed, SAGE Journals Online, ScienceDirect, Social Services Abstracts, Sociological Abstracts, SpringerLink, SSRN, Tilburg University Repository, Web of Science, and Wiley InterScience) and Internet search engines (Google/Google Scholar). Furthermore, we examined the reference sections of the studies we decided to include in our review for other potentially relevant studies. We performed our literature search from September 21, 2009 to November 3, 2009, a period of 6 weeks.

Selection of Literature

Studies were included if they used a prospective design; aspects of the key factors had to be measured at a time point prior to the measurement of revictimization of IPV. Furthermore, they had to include revictimization of IPV as an outcome measure, which was defined in the current review as reoccurrence of any physical, psychological, and/or sexual violence, injuries, and/or threats of violence perpetrated by a current partner or ex-partner. Lastly, studies had to report on at least one aspect of one of the three key factors of Foa et al.’s (2000) models in relation to revictimization of IPV to be included in our review. Our literature search resulted in a total number of 219 studies that seemed relevant for our systematic review on the basis of their title. After reading their abstract, the number of possibly relevant studies was further reduced to 44 studies. Of these studies we obtained and read the full article. Twenty-nine studies were excluded after closer reading. Of these, 13 studies measured victimization of IPV among a sample including both victims and non-victims (e.g., Ehrensärf et al., 2003; Moffitt et al., 2001). However, for these studies no information was given on whether these victimization reports actually concerned a first IPV victimization or an IPV revictimization. Similarly, it was not clear whether the reported factors were risk factors for a first IPV victimization or an IPV revictimization and therefore we decided to exclude this type of studies. Furthermore, nine studies were excluded because the design was not prospective (i.e., risk factors relevant for our review were not measured at a time point prior to the measurement of revictimization of IPV), and seven studies were excluded for other reasons (e.g., no aspects of key factors included). This resulted in a total of 15 studies that eventually met the above inclusion criteria (Table 1). For the majority of the studies, the outcome variable revictimization of IPV was assessed based on victim self-reports, but we also included one study that used police and court records (Mears, Carlson, Holden, & Harris, 2001). We did not formulate any restrictions with regard to publication year, but the vast majority of the included studies has been published in the past 10 years, indicating the relatively recent interest in victim-related risk factors for repeat IPV. Another similarity across the 15 included studies concerns the fact that they were all conducted in the United States.

Summarizing and Scoring Risk and Protective Factors

The 15 studies that were included in the review were summarized according to a fixed format in which we documented information about the sample of the study, research design, data and analysis plan, and the results of the study in terms of identified risk and protective factors for revictimization of IPV. Two studies were summarized by both the first and the third author, to reach agreement on what we considered relevant information, and how and at what point in our format this information should be documented. All following studies were summarized by either the first or the third author. After completion, they were read by the other person in order to see if there was any ambiguous information that had to be clarified.

In summarizing the results of the included studies, we specifically focused on risk and protective factors that relate to the key variables included in Foa et al.’s (2000) predictive models of women’s influence on partner violence. In reporting our findings we decided to present the results from multivariate, rather than bivariate analyses, when available.

Description of the Selected Studies

The current systematic review is based on 15 studies that prospectively link aspects of the three key factors from Foa et al.’s (2000) models to the risk for IPV revictimization. Although these studies showed similarities on the inclusion criteria, differences can be identified as well, for instance in the nature of the sample or length of follow-up time. Because these differences might in part account for differences in results across studies, we included them in the overview of reviewed studies (Table 1) and describe them in more detail below.

Nature of the sample. All 15 studies used a victim sample. For seven of them, the sample consisted of women who had contacts with the police or court, three studies used a sample of women who had been living or still lived in a shelter, another three studies included women seeking health care at medical sites, and two studies recruited their samples from a combination of a shelter, protection order court, and criminal court. The majority of the studies we included in this review were conducted among samples consisting of only women (13 studies), one study included couples involved in IPV² (Mears et al., 2001) and one study (Miller & Krull, 1997) included both male and female victims in their sample.

Follow-up time. The length of follow-up time varies from 3 months (Bennett, Cattaneo, & Goodman, 2003) to 2 years.
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<th>Definition and Measurement of Revictimization of IPV at Follow-Up (Dependent Variable)</th>
<th>Measurement of Aspects of Key Factors From Foa's Models (Independent Variables)</th>
<th>Statistical Analyses</th>
<th>Reported Aspects of Key Factors From Foa's Models and Their Relation With Revictimization of IPV (+ = Positive, − = Negative, and 0 = No Relationship)</th>
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</thead>
<tbody>
<tr>
<td>Bennett et al. (2003)</td>
<td>96 women who appeared at a court intake center in Washington (United States)</td>
<td>3 months</td>
<td>Victim interview</td>
<td>27.7%</td>
<td>Any physical abuse, physical threats, sexual abuse, and/or destruction of the victim's property by the index partner, and/or unwanted contact between victim and index partner, measured by several items (broad definition)</td>
<td>Physical abuse: CTS, psychological abuse: PMWI, victim's assessment: one question about their own assessment of dangerousness, often within 24 h after offense</td>
<td>Bivariate: optimal data analysis (ODA)†</td>
<td>Physical abuse in year prior to baseline (+), dominance/isolation related psychological abuse in year prior to baseline (+), victim's assessment of likelihood of further abuse (+)</td>
</tr>
<tr>
<td>Bybee and Sullivan (2002)</td>
<td>267 women of a domestic violence shelter program in Michigan (United States)</td>
<td>1 year</td>
<td>Victim interview</td>
<td>Not reported</td>
<td>Severity of physical abuse perpetrated by any partner (original and/or new), measured by CTS</td>
<td>Quality of life: 9-item scale adapted from Andrews and Withey (1976)</td>
<td>Multivariate: structural equation modeling</td>
<td>Victim's quality of life (−)</td>
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<td>Bybee and Sullivan</td>
<td>123 women of a domestic violence shelter program in Michigan (United States). Of baseline sample (N = 141) 46% was White, 42% African American, 7% Latina, 2% Asian American, 4% Native American, Arab American, or mixed heritage. Primarily low-income women</td>
<td>1 year</td>
<td>Victim interview</td>
<td>19%</td>
<td>Severity of physical abuse perpetrated by any partner (original and/or new), measured by CTS</td>
<td>Physical abuse: CTS, quality of life: 9-item scale adapted from Andrews and Withey (1976), social support: 9-item scale Adult’s Social Support Questionnaire</td>
<td>Multivariate: hierarchical logistic regression analysis</td>
<td>Physical abuse in 6 months prior to baseline (+), victim’s quality of life (−), victim’s social support (−)</td>
</tr>
<tr>
<td>Cole et al. (2008)</td>
<td>632 women who recently had obtained a PO against a male intimate partner (United States). Of baseline sample (N = 756) 83.1% was White, 13.4% Black, 3.5% other races, or biracial. Primarily low-income women</td>
<td>1 year</td>
<td>Victim interview</td>
<td>23.7%*</td>
<td>Any physical and/or sexual abuse (measured by CTS), psychological abuse (measured by PMWI), and/or stalking (measured by several items) by a new partner</td>
<td>PTSD: items from Diagnostic Interview Schedule,6 depressive symptoms: items adapted from Mini International Neuropsychiatry Interview,6 alcohol and drug abuse: items from Addiction Severity Index,6 social support: social support items from the Social Support and Social Obstruction Scale6</td>
<td>Multivariate: logistic regression analysis</td>
<td>Victim’s PTSD (0), victim’s clinical depression (0), victim’s alcohol abuse/dependence in year prior to baseline (+),6 victim’s drug abuse/dependence in year prior to baseline (+),6 victim’s social support (0)</td>
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<td>Crandall et al. (2004)</td>
<td>354 women with a police- or court-reported episode of IPV (Washington, United States). Of these women, 57.1% was Caucasian, 19.5% African American, 7.1% Asian or Pacific Islander, 16.4% other. 51.1% full-time and 48.3% under full-time employment</td>
<td>9 months</td>
<td>Victim interview</td>
<td>17.2%</td>
<td>Any IPV related injury inflicted by index partner, measured with one question about any injuries experienced due to IPV</td>
<td>Physical abuse: CTS, psychological abuse: measure not reported, clinical depression: CES-D, alcohol abuse: NET measure, drug abuse: measure not reported</td>
<td>Multivariate: stepwise logistic regression analysis</td>
<td>Physical abuse on the incident date (+), prior psychological abuse (0), victim's clinical depression (0), victim's alcohol abuse (0), victim's drug abuse (0)</td>
</tr>
<tr>
<td>Fleury et al. (2000)</td>
<td>135 women who had left a domestic violence shelter program in a medium-sized industrial city in the United States and who were still separated from their batterers 10 weeks after shelter exit. Of these women, 54% was African American, 36% White, 6% Latina, 1% Asian American, 3% other. 42% was employed</td>
<td>2 years</td>
<td>Victim interview</td>
<td>36%</td>
<td>Any physical abuse perpetrated by index partner, measured by CTS</td>
<td>Physical violence: CTS, emotional abuse: two questions about frequency of threats by perpetrator</td>
<td>Multivariate: event history analysis (this method uses logistic regression analysis)</td>
<td>Frequency of prior physical violence (0), prior emotional abuse (threats) (+)</td>
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<td>Goodman et al. (2005)</td>
<td>324 women who had been victims of IPV in the past year and who were seeking services for violence at three sites in the United States (shelter, protection order court, and criminal court). Of these women, 80.5% was African American, 19.5% other. 60.4% was employed</td>
<td>1 year</td>
<td>Victim interview</td>
<td>38.3%</td>
<td>Any physical and/or sexual abuse perpetrated by index partner, measured by CTS</td>
<td>Social support: Interpersonal Support Evaluation List, quality of life: 9-item scale adapted from Andrews and Withey (1976)</td>
<td>Multivariate: logistic regression analysis</td>
<td>Social support victim (-), victim’s quality of life (0)</td>
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<td>Hirschel and Hutchison (2003)</td>
<td>240 female victims who had called to the police for an incident of IPV (Charlotte, North Carolina, United States). Of baseline sample (N = 419) 70.3% was Black, 29.0% White, 0.7% other. Most women were at the poverty level and working class level</td>
<td>close to 6 months</td>
<td>Victim interview</td>
<td>Not reported</td>
<td>Any physical abuse and/or psychological abuse perpetrated by index partner, measured by CTS and some additional items from National Institute of Justice-funded Spouse Assault Replication Projects concerning e.g. threatening or hitting</td>
<td>Desire for arrest: question about what victim wanted to happen when they called the police, physical IPV: question about number of times victim was hit</td>
<td>Multivariate: logistic regression analysis</td>
<td>Victim desire for arrest (+), frequency of physical IPV between IPV incident for which the victim called the police and baseline interview (+)</td>
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<tr>
<td>Krause et al. (2006)</td>
<td>324 women who had been victims of IPV in the past year and who were seeking services for violence at three sites in the United States (shelter, protection order court and criminal court). Of baseline sample (N = 405) 81% was African American, 13% White, 1% Latina, 5% other. Primarily low-income women</td>
<td>1 year</td>
<td>Victim interview</td>
<td>36.7%</td>
<td>Any physical and/or sexual abuse perpetrated by index partner, measured by CTS</td>
<td>Physical and sexual IPV: CTS, PTSD: PTSD Checklist-Civilian Version*</td>
<td>Multivariate: logistic regression analysis</td>
<td>Severity of physical and sexual IPV in year prior to baseline (+), victim’s PTSD numbing symptoms (+)</td>
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<td>Mears et al. (2001)</td>
<td>336 couples of which the female victim recently had obtained a PO against the intimate partner and/or of which the abusive partner was arrested recently (Travis County, United States). Of these women, 34% was Hispanic, 34% White, 32% Black. Primarily low-income and medium-income women</td>
<td>2 years</td>
<td>Police and court records</td>
<td>23%</td>
<td>Any physical abuse perpetrated by male half of the couple which has been reported to the police, measured by CTS</td>
<td>Physical IPV: information derived from police and court records</td>
<td>Multivariate: Cox regression analysis</td>
<td>Number of prior physical IPV victimizations (0)</td>
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<td>Miller and Krull (1997)</td>
<td>Reanalysis of three domestic violence studies including cases in which a domestic violence incident resulted in a police call: - Milwaukee (United States): 678 male and female victims. Of baseline sample (N = 705) 70.8% was Black, 25.3% White, 2.8% Hispanic, 1.1% Asian or Native American. 31.8% was employed - Colorado Springs (United States): 626 male and female victims. Of baseline sample (N = 1078) 60.3% was White, 22.9% Black, 13.6% Hispanic or Native American, 2.4% Asian. 62.6% was employed - Omaha (United States): 357 male and female victims. Of baseline sample (N = 470) 54.1% was White, 38.7% Black, 2.9% Hispanic or Native American, 2.9% Asian. 48.7% was employed</td>
<td>- Milwaukee: 6 months</td>
<td>Victim interview</td>
<td>- Milwaukee: 50.4% - Colorado Springs: 3 or 6 months - Omaha: 6 months</td>
<td>Severity of threats, property damage, physical abuse, and/or attempts to restrict victim’s behavior by index partner, measured by several items</td>
<td>Alcohol problem: question during interview, injury: question during interview</td>
<td>Multivariate: linear regression analysis</td>
<td>Milwaukee: victim’s alcohol problem (+) Colorado Springs: victim’s alcohol problem (0), severity of injury from initial incident (+) Omaha: victim’s alcohol problem (+)</td>
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<th>Measurement of Aspects of Key Factors From Foa's Models (Independent Variables)</th>
<th>Statistical Analyses</th>
<th>Reported Aspects of Key Factors From Foa's Models and Their Relation With Revictimization of IPV (+ = Positive, = Negative, 0 = No Relationship)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perez and Johnson (2008)</td>
<td>320 women seeking health care at medical sites in inner-city Chicago (United States) who had been victims of IPV in the past year (CWHRS). Of these women, 68% was African American, 23% Hispanic, 8% European. Primarily low-income women</td>
<td>10 months (range 3-23 months)</td>
<td>Victim interview 50%</td>
<td>Severity of physical, sexual, and/or psychological abuse perpetrated by any partner (original and/or new), measured by the Campbell Incident Severity Scale</td>
<td>Physical IPV: Campbell Incident Severity Scale, PTSD: PSS, depressive symptoms: 4 items from Medical Outcome Study, social support: Social Support Network Scale from the CWHRS</td>
<td>Multivariate: hierarchical linear regression analysis</td>
<td>Physical IPV severity in year prior to baseline (+), victim's PTSD (+), victim's depressive symptoms (0), victim's social support (−)</td>
<td></td>
</tr>
<tr>
<td>Sonis (2008)</td>
<td>321 women seeking health care at medical sites in inner-city Chicago (United States) who had been victims of IPV in the past year (CWHRS). Of these women, 68% was African American, 23% Hispanic, 8% other. Primarily low-income women</td>
<td>3-23 months (85% of sample follow-up after 4-15 months)</td>
<td>Victim interview 50%</td>
<td>Any physical, sexual, and/or psychological abuse perpetrated by any partner (original and/or new), measured by CTS Severity of physical, sexual, and/or psychological abuse perpetrated by any partner (original and/or new), measured by the Campbell Incident Severity Scale</td>
<td>PTSD: PSS</td>
<td>Multivariate: logistic regression analysis</td>
<td>Victim's PTSD (0)*</td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Nature of Sample</td>
<td>Follow-Up Time</td>
<td>Source of Follow-Up Information</td>
<td>Amount of Revictimization of IPV During Follow-Up Period</td>
<td>Definition and Measurement of Revictimization of IPV at Follow-Up (Dependent Variable)</td>
<td>Measurement of Aspects of Key Factors From Foa’s Models (Independent Variables)</td>
<td>Statistical Analyses</td>
<td>Reported Aspects of Key Factors From Foa’s Models and Their Relation With Revictimization of IPV (+ = Positive, − = Negative, 0 = No Relationship)</td>
</tr>
<tr>
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</tr>
<tr>
<td>Sonis and Langer (2008)</td>
<td>321 women seeking health care at medical sites in inner-city Chicago (United States) who had been victims of IPV in the past year (CWHRS). Of these women, 68% was African American, 23% Hispanic, 8% other. Primarily low-income women</td>
<td>3-23 months (85% of sample follow-up after 4-15 months)</td>
<td>Victim interview</td>
<td>50.5%</td>
<td>Any physical abuse perpetrated by any partner (original and/or new), measured by CTS</td>
<td>Physical IPV: CTS, emotional abuse: Power and Control Scale, PTSD: PSS, depressive symptoms: four of five items from Mental Health Inventory-5, social support: 4-item scale developed for CWHRS</td>
<td>Multivariate: logistic regression analysis</td>
<td>Frequency of physical IPV in year prior to baseline interview (+ for any; 0 for severity), partner’s use of power and control tactics (emotional abuse) (+ for any; 0 for severity), victim’s PTSD (0), victim’s depressive symptoms (0), victim’s social support (0)</td>
</tr>
</tbody>
</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Study</th>
<th>Nature of Sample</th>
<th>Follow-Up Time</th>
<th>Source of Follow-Up Information</th>
<th>Amount of Revictimization of IPV During Follow-Up Period</th>
<th>Definition and Measurement of Revictimization of IPV at Follow-Up (Dependent Variable)</th>
<th>Measurement of Aspects of Key Factors From Foa’s Models (Independent Variables)</th>
<th>Statistical Analyses</th>
<th>Reported Aspects of Key Factors From Foa’s Models and Their Relation With Revictimization of IPV (+ = Positive, — = Negative, and 0 = No Relationship)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weisz et al.</td>
<td>177 female victims of IPV whose perpetrator was recently charged with IPV (United States). Of these women, 71.6% was European American, 27.7% African American, 0.6% Asian, 0.6% missing, 58.5% was full-time employed, 13.6% was part-time employed, 27.7% not employed</td>
<td>4 months</td>
<td>Victim interview</td>
<td>Not reported</td>
<td>Any &amp; severity of severe physical abuse and/or severe psychological abuse perpetrated by index partner, measured by CTS</td>
<td>Physical abuse: CTS, psychological abuse: CTS, victim’s assessment: one question about likelihood that partner will become violent in next year</td>
<td>Multivariate: logistic and linear regression analysis</td>
<td>Factors for both any and severity of IPV revictimization: Prior physical abuse (0), prior psychological abuse (0), victim’s assessment of likelihood of further abuse (+)</td>
</tr>
</tbody>
</table>

Note: CES-D, Center for Epidemiologic Studies-Depression; CTS, Conflict Tactics Scale; CWHS, Chicago Women’s Health Risk Study; IPV, intimate partner violence; PMWI, Psychological Maltreatment of Women Inventory; PO, protective order; PSS, PTSD Symptom Scale; PTSD, post-traumatic stress disorder. The number in the “Nature of sample” column refers to the number of respondents at follow-up on which the results regarding risk and protective factors for revictimization of IPV were based. Percentages concerning race, income, and employment are based on the follow-up sample as well, unless specified otherwise. In the column “Definition and measurement of revictimization of IPV at follow-up” we sometimes refer to the index partner. This is the partner or ex-partner who perpetrated the violence reported at baseline/study enrollment. In the column “Reported aspects of key factors from Foa’s models and their relation with revictimization of IPV,” variables with (+) hold a positive, significant relationship (p < .05), variables with (−) a negative, significant relationship (p < .05), and variables with (0) no significant relationship with revictimization of IPV.

Follow-up time represents the amount of time between measurement of the aspects of the three key factors of Foa’s models and measurement of revictimization of IPV.

The ODA method identifies the model that uses the predictor score in a manner such that it discriminates those revictimized from those not revictimized with optimal accuracy.

This percentage concerns the amount of revictimization of IPV during follow-up period by a new partner.

Alcohol abuse was significantly and positively related to future revictimization at p < .05. However, in reporting their results Cole et al. (2008) adjusted the p value to .01.

Exact follow-up time was not reported; baseline victim interviews took place shortly after the IPV incident for which victims called the police, the follow-up victim interview was scheduled 6 months after the IPV incident that resulted in a police call.

Although police records were used as source of follow-up information as well, the analyses which produced the risk factors reported in this table only used revictimization reports obtained from victim interviews.

Alcohol abuse showed a moderate unadjusted association with revictimization of any IPV, after controlling for important confounding factors (such as severity of previous abuse and use of control tactics by the partner) PTSD was not a significant risk factor anymore.

From the Canadian Violence Against Women Survey.

(Fleury, Sullivan, & Bybee, 2000; Mears et al., 2001). Most of
the studies used a follow-up period with a maximum of 1 year
(10 of 15 studies).

**Source of follow-up information.** To measure revictimization,
three different sources of follow-up information were used in
the studies included in our systematic review. The vast majority
of studies retrieved their information directly from the victim
through a victim interview (14 studies). One study used police
and court records as their source of follow-up information
(Mears et al., 2001).

**Amount of revictimization of IPV during follow-up.** An important
difference between studies included in our systematic review is
the amount of revictimization during the follow-up period.
This amount ranged from 17.2% (Crandall, Nathens, Kernic,
Holt, & Rivara, 2004) to 74.1% (Colorado Springs sample of
Miller & Krull, 1997). This might have been influenced by
various factors such as the source of follow-up data (police and
court records vs. victim interviews), the length of the follow-up
time (ranging from 3 months to 2 years) and to what extent
researchers were able to retain all the respondents in the study.

**Definition of revictimization of IPV.** The way in which
revictimization of IPV was defined differs strongly across the
15 studies. First, a difference can be identified in the variety of behaviors that have been categorized under IPV. Some studies only include physical partner violence, whereas others use a broader definition also including psychological violence, sexual violence, and/or IPV-related injury (e.g., Cole, Logan,
& Shannon, 2008; Crandall et al., 2004). A second dimension
on which the definition of IPV revictimization varies across
studies is whether IPV was conceptualized as a dichotomous
(i.e., any IPV) or continuous (i.e., severity of IPV) variable. However, the majority of studies defined their outcome variable as any IPV (8 studies). Third, IPV revictimization is
operationalized differently in terms of the perpetrator of the
violence. Some studies consider all subsequent IPV victimiza-
tion by any partner (original and/or new partner, e.g., Bybee &
Sullivan, 2002, 2005). Other studies measure IPV revictimiza-
tion by one specific partner, such as IPV revictimization by the
index partner (e.g., Krause, Kaltman, Goodman, & Dutton,
2006). Here, the focus is on the abusive partner described at
baseline and whether this partner perpetrated IPV again during
follow-up against the same victim. Furthermore, another study
measured any physical, sexual, or psychological abuse perpe-
trated by a new partner (Cole et al., 2008).

**Measurement of revictimization of IPV.** The instruments for
measuring IPV as an outcome variable varied across the
15 studies as well. Some studies based their measure of IPV
on only one question. For instance, Crandall and colleagues
(2004) simply asked whether victims had experienced any inju-
ries due to repeat IPV (Crandall et al., 2004). However, most
studies used standardized questionnaires to obtain information
about the presence and severity of IPV revictimization.

The majority used the Conflict Tactics Scale (CTS; Straus,
1979; Straus & Douglas, 2004; Straus, Hamby, Boney-McCoy,
& Sugarman, 1996) or a modified version of it. Other instruments
included the Psychological Maltreatment of Women Inventory
(PMWI; Tolman, 1989) and the Campbell Incident Severity
Scale (Campbell, 1986).

**Measurement of aspects of key factors.** Similar aspects of Foa
et al.’s (2000) key factors were often measured differently, for
example, in case of depression that was measured in four stud-
ies by four different instruments. In contrast, prior abuse
(especially prior physical abuse) was quite consistently mea-
sured with the CTS. Furthermore, in some studies aspects of
key factors were operationalized as binary variables (e.g.,
depression absent or present), whereas in other studies they
were operationalized as continuous variables (e.g., number
of depressive symptoms).

**Statistical analyses.** For all studies in our review, multivariate
analyses were conducted except for one (Bennett et al., 2003).
Multivariate analyses report on the effect of a particular vari-
able on the outcome while controlling for the effects of other
variables in the model, whereas bivariate analyses examine the
effect of one variable on the outcome without taking into
account the effects of other variables. Logistic regression
analysis was the multivariate statistical technique that was used
the most among the 15 studies, followed by linear regression
analysis.

**Results**

**Construct of Partner Violence**

Starting with synthesizing the evidence on the prospective
relation between prior partner violence and revictimization,
the construct of partner violence consists of three aspects:
(a) physical and emotional abuse, (b) perceived threat, and
(c) psychological reactions to the abuse. Table 2 summarizes
the results from this review of the evidence on the link between
partner violence and revictimization.

**Physical and emotional abuse.** A fair number of studies
included prior physical abuse as predictor and the majority of
these studies show a significant and positive relation between
prior physical abuse and revictimization of IPV (see Table 2).
Several studies used different measures of prior abuse, includ-
ing a count of the number of prior victimizations, frequency of
prior abuse, and measures of severity of prior abuse. This rela-
tionship was furthermore reported in different samples of
victims, ranging from victims with a police- or court-reported
case (Bennett et al., 2003; Crandall et al., 2004; Hirschel &
Hutchison, 2003; Miller & Krull, 1997), to victims seeking
help in shelters (Bybee & Sullivan, 2005), mixed samples
(Krause et al., 2006), and victims selected in a population
sample of hospital patients (Perez & Johnson, 2008). Although
Bennett et al. (2003) only used bivariate analysis to show a
significant relationship between physical abuse and IPV revictimization, there were other studies that showed this relationship in multivariate analyses as well. The majority of the studies used the CTS (Straus, 1979; Straus & Douglas, 2004; Straus et al., 1996) to assess prior abuse, but other measures such as the Campbell Incident Severity Scale (Perez & Johnson, 2008) and items from National Institute of Justice-funded Spouse Assault Replication Projects (Hirschel & Hutchison, 2003) were also used. These differences in definitions of prior abuse, sample selection, and measures to assess prior abuse result in a convincing substantiation of the predictive effect of prior physical abuse. Nevertheless, there is also a number of studies that report no significant effect of prior physical abuse (Fleury et al., 2000; Mears et al., 2001; Weisz, Tolman, & Saunders, 2000) or significance for specific aspects of prior abuse but not for others (Sonis & Langer, 2008). However, Fleury et al. (2000) restricted their analyses to women who left their abusive partners and only included revictimization by that same man. Furthermore, whereas all studies that reported a significant relation between prior physical abuse and revictimization used victim interviews to collect their data, Mears et al. (2001) had to rely exclusively on police records. As not all incidents of victimization are reported to the police, this might have hampered this study’s power. Finally, Weisz et al. (2000) appear to have included a measure of repeat victimization as independent variable in their analyses by adding violent disputes between the focal incident and the court date to their analyses. In sum, studies using different samples, different measures of prior physical abuse and different measures of revictimization overwhelmingly show prior physical abuse to predict future victimization of IPV.

Three out of five studies that assessed the predictive relevance of prior emotional abuse reported a significant and positive relation between emotional abuse and revictimization of IPV. Specifically, this predictive effect of emotional abuse was reported for the use of power and control tactics (i.e., psychological dominance-isolation), rather than for verbal abuse (Bennett et al., 2003). Apparently contradicting these results, two other studies fail to report any predictive relationship between emotional abuse and revictimization of IPV (Crandall et al., 2004; Weisz et al., 2000). However, when comparing the five studies a difference emerges that further refines this relationship. Crandall et al. (2004) and Weisz et al. (2000) studied risk factors for revictimization of severe violence: Crandall et al. (2004) assessed repeat injury while Weisz et al. (2000) focused on eight of the more severe forms of physical and sexual violence from the CTS. This leads us to conclude that the empirical evidence suggests that prior emotional abuse

Table 2. Evidence for the Relation Between Foa et al.’s Construct of Partner Violence and Revictimization of IPV

<table>
<thead>
<tr>
<th>Construct</th>
<th>Study</th>
<th>Positive (+), Negative (−) or No (0) Relationship to Revictimization of IPV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partner violence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical and emotional abuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse</td>
<td>Bennett et al. (2003)</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Bybee and Sullivan (2005)</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Crandall et al. (2004)</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Fleury et al. (2000)</td>
<td>0 (frequency of prior violence)</td>
</tr>
<tr>
<td></td>
<td>Hirschel and Hutchison (2003)</td>
<td>+ (frequency of prior violence)</td>
</tr>
<tr>
<td></td>
<td>Krause et al. (2006)</td>
<td>+ (severity of prior violence)</td>
</tr>
<tr>
<td></td>
<td>Mears et al. (2001)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Miller and Krull (1997) ^a (Colorado Springs sample)</td>
<td>+ (IPV-related injury)</td>
</tr>
<tr>
<td></td>
<td>Perez and Johnson (2008)</td>
<td>+ (severity of prior violence)</td>
</tr>
<tr>
<td></td>
<td>Sonis and Langer (2008)</td>
<td>0 (severity of prior violence) + (frequency of prior violence)</td>
</tr>
<tr>
<td></td>
<td>Weisz et al. (2000)</td>
<td>0</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>Bennett et al. (2003)</td>
<td>+ (psychological dominance-isolation b)</td>
</tr>
<tr>
<td></td>
<td>Crandall et al. (2004)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Fleury et al. (2000)</td>
<td>+ (threats)</td>
</tr>
<tr>
<td></td>
<td>Sonis and Langer (2008)</td>
<td>+ (power and control tactics)</td>
</tr>
<tr>
<td></td>
<td>Weisz et al. (2000)</td>
<td>0</td>
</tr>
<tr>
<td>Perceived threat</td>
<td>Bennett et al. (2003)</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Hirschel and Hutchison (2003)</td>
<td>+ (desire to have perpetrator arrested)</td>
</tr>
<tr>
<td></td>
<td>Weisz et al. (2000)</td>
<td>+</td>
</tr>
<tr>
<td>Psychological reactions to the abuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No studies included measures of psychological</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reactions to the abuse</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. IPV, intimate partner violence.

^a The article of Miller and Krull (1997) reported results from three domestic violence studies, based on three distinct samples from Milwaukee, Colorado Springs, and Omaha. We report aspects of Foa et al.’s key factors for each of these samples.

b Bennett et al. (2003) concluded that psychological dominance-isolation, and not emotional-verbal abuse, was a significant predictor for revictimization of IPV.
(controlling behavior) is predictive of future victimization in general but does not predict severe revictimization.

**Perceived threat.** Contrary to the number of studies that included prior physical and emotional abuse as predictors of revictimization of IPV, the victim’s assessment of the likelihood of further abuse is rarely studied. Two studies report on the victim’s perception of threat within the relationship (Bennett et al., 2003; Weisz et al., 2000) and one study assessed whether the victim wanted the police to arrest their abusive partner after reporting the abusive incident to the police (Hirschel & Hutchison, 2003). As the authors make a case for regarding this as an indication of the victim’s assessment of the likelihood of further abuse, we have regarded this accordingly. All three studies report a positive and significant relationship between perceived threat and revictimization, thereby supporting Foa et al.’s (2000) assumption that these aspects are related.

**Psychological reactions to the abuse.** Perhaps surprisingly, no studies could be included in this review that assessed the prospective relation between victims’ psychological reactions to the abuse and future revictimization of IPV. As elaborated on in the introduction to this article, Foa et al. (2000) refer to victims’ perceptions of being coerced and intimidated, when discussing psychological reactions to the abuse. These include perceptions of susceptibility to physical and psychological danger, loss of power, and loss of control. Apparently, these perceptions have not yet been studied in relation to the risk of revictimization.

### Construct of Psychological Difficulties

Foa et al. (2000) included the following four indices of psychological difficulties in their model of revictimization: PTSD, depression, anxiety, and substance abuse. Table 3 summarizes the results from this review of the evidence on the link between psychological difficulties and revictimization of IPV.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Study</th>
<th>Positive (+), Negative (−) or no (0) Relationship to Revictimization of IPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological difficulties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td>Cole et al. (2008)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Krause et al. (2006)</td>
<td>+^a</td>
</tr>
<tr>
<td></td>
<td>Perez and Johnson (2008)</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Sonis (2008)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sonis and Langer (2008)</td>
<td>0</td>
</tr>
<tr>
<td>Depression</td>
<td>Cole et al. (2008)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Crandall et al. (2004)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Perez and Johnson (2008)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sonis and Langer (2008)</td>
<td>0</td>
</tr>
<tr>
<td>Anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance abuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol abuse/problems</td>
<td>Cole et al. (2008)</td>
<td>+^b</td>
</tr>
<tr>
<td></td>
<td>Crandall et al. (2004)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Miller and Krull (1997)^c (Milwaukee sample)</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Miller and Krull (1997)^c (Omaha sample)</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Miller and Krull (1997)^c (Colorado Springs sample)</td>
<td>0</td>
</tr>
<tr>
<td>Drug abuse/dependence</td>
<td>Cole et al. (2008)</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Crandall et al. (2004)</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. IPV, intimate partner violence; PTSD, post-traumatic stress disorder.

^a Only PTSD numbing symptoms were positively and significantly related to revictimization of IPV.

^b Alcohol abuse was significantly and positively related to future revictimization at p < .05. However, in reporting their results Cole et al. (2008) adjusted the p value to .01.

^c The article of Miller and Krull (1997) reported results from three domestic violence studies, based on three distinct samples from Milwaukee, Colorado Springs, and Omaha. We report aspects of Foa et al.’s key factors for each of these samples.
Diagnostic and Statistical Manual of Mental Disorders-4th edition (DSM-IV) criteria for a diagnosis of PTSD; Sonis and Langer used a binary measure of PTSD; and the other studies included a measure of symptom severity in their analyses. Krause et al. studied the predictive effect of symptom clusters, while the other studies included total symptom scores. As the use of dichotomous variables decreases variance and effect size (see Field, 2009, p. 339), it is possible that the studies by Cole et al. and Sonis and Langer might have limited the variance in their analyses to such a degree that they were unable to detect any predictive relation between PTSD and revictimization.  

That would leave us with three studies, of which two report that PTSD symptom severity significantly predicts future violence (Krause et al., 2006; Perez & Johnson, 2008) and one study reporting no significant effect of PTSD on increasing the risk of revictimization (Sonis, 2008). Strangely enough, however, Perez and Johnson report on the same sample as Sonis. Whereas Perez and Johnson present strong evidence for the predictive effect of PTSD, Sonis argues that the association between PTSD and revictimization is close to zero when controlling for other characteristics, such as severity, frequency, and recency of IPV and perpetrator characteristics. The difference might be caused by a different choice in dependent variables. Perez and Johnson use a measure indicating the severity of revictimization that ranges from 0 no revictimization to 6 weapon involved. Sonis used a dichotomous variable indicating if participants were revictimized or not and only included revictimized participants in their analyses. However, another important aspect should also be discussed. Whereas both studies take into account the level of violence experienced in the year previous to the inclusion in the study, Sonis also controls for perpetrator characteristics. The question could be raised whether, if one is interested in victim characteristics that influence the chances of revictimization, perpetrator characteristics should be controlled for.

Depression. Four studies on the predictive effect of depression on revictimization were included in this review (Cole et al., 2008; Crandall et al., 2004; Perez & Johnson, 2008; Sonis & Langer, 2008). Crandall and colleagues (2004) used clinical depression (yes/no) to predict injury, Cole and colleagues (2008) used clinical depression (yes/no) to predict revictimization, and the other two studies used a measure of depressive symptoms to predict revictimization (not necessarily leading to injury). None of these studies reported a significant effect of depression on revictimization.

Anxiety. Although a fair number of studies have reported on elevated levels of anxiety among victims of partner violence (e.g., Follingstad et al., 1991; Pico-Alfonso et al., 2004), no studies appeared in our literature search that examined the predictive relation between anxiety and revictimization.

Substance abuse. Three studies included in our review report on the relation between substance abuse and revictimization of IPV (Cole et al., 2008; Crandall et al., 2004; Miller & Krull, 1997). All studies measured substance abuse or dependence at the time of the IPV incident that led to the inclusion in the separate studies; in other words, all assessed current substance abuse. Empirical evidence for the relation between substance abuse and revictimization is mixed at best: neither alcohol abuse nor drug abuse appears to be consistently linked with the risk of revictimization. However, a number of differences between the studies reporting on this association calls for a more detailed discussion of this link. First, whereas most studies used a general measure of revictimization (any revictimization), Crandall et al. (2004) reported on the relationship between substance abuse and future injury. Furthermore, Cole et al. (2008) studied the predictive association between substance abuse and revictimization at the hands of a new partner. Interestingly, they found a significant relation between substance abuse and future revictimization of IPV. Two of the three experiments described by Miller and Krull (1997) also reported a significant association between substance abuse (i.e., alcohol abuse) and revictimization. Worth noting in this case is the fact that these were the experiments that were most truthful to the original design of the experiment, with the Milwaukee experiment even reaching 98% random assignment of victims to the experimental and control conditions. Summarizing these results, it appears that current substance abuse (especially alcohol abuse) might be related to the risk of any future revictimization but not to the risk of future injury. More specifically, it might even be related to revictimization by a new partner.

Construct of Resilience

Resilience has often been defined as the ability to achieve good developmental outcomes while experiencing negative circumstances that pose a risk to normal development (e.g., Masten, 1994). Similarly, in victims of domestic violence resilience can be viewed as a protective factor against the development of psychological difficulties (Foa et al., 2000). As such, Foa and her colleagues (2000) describe resilience as the ability to adjust and recover from adverse circumstances. In operationalizing their construct of resilience, Foa et al. (2000) included optimism, self-esteem, flexibility, and physical health. In elaborating on their operationalization, they further specify that flexibility is to be understood as cognitive flexibility or “monitoring.” Whereas the other aspects of resilience are thought to constitute a positive aspect of resilience, high monitoring is thought to lead to a less flexible cognitive-emotional response to life stressors (e.g., heightened levels of concern and distress, see Miller, 1995) and is therefore regarded as an aspect of low resiliency. Optimism is described as a tendency to take a hopeful view of life circumstances and self-esteem is defined as confidence in one’s competence and worthiness (Foa et al., 2000). These aspects of resilience are hypothesized to contribute to physical health that is regarded as a relatively stable characteristic and an important aspect of resilience.

Defined as such, there were no studies we could include in our review that examined the predictive relation between...
resilience and revictimization. However, we did find a few studies that included variables that might be regarded as proxies for resilience (Table 4). For instance, Bybee and Sullivan (2002, 2005) studied the relation between perceived quality of life and revictimization. Rather similar to this, Goodman et al. (2005) assessed victims' satisfaction with the overall quality of their lives and the predictive effect on the risk of revictimization. Whereas Bybee and Sullivan reported a negative (significant) association between quality of life and revictimization, no significant effect was found by Goodman and colleagues. However, whereas Goodman et al. report data that were collected during the first year after the start of their study, Bybee and Sullivan concluded that quality of life a year after the start of their study was predictive of revictimization another year later. Quality of life at that moment (24 months after the start of the study) was furthermore reported to be predictive of the risk of revictimization at 36 months. This raises the question as to whether specific changes might have occurred in victims’ lives that increased their quality of life and simultaneously reduced the risk of revictimization.

Extending the construct of resilience somewhat further, we included a number of studies in our review that assessed the predictive power of victims’ social support on the risk of revictimization (Bybee & Sullivan, 2005; Cole et al., 2008; Goodman et al., 2005; Perez & Johnson, 2008; Sonis & Langer, 2008). Although social support might be considered an aspect of victims’ social context, for the purpose of this review, we consider victims’ capability to organize social support as an aspect of resilience. As three out of the five studies on social support reported a negative significant effect, there is at least some evidence that social support might serve as a protective factor against revictimization of IPV. However, it should be noted that the association reported by Perez and Johnson (2008) disappears after adding PTSD symptoms to the regression analysis. Goodman and colleagues (2005) further elaborated on their findings by looking at the interaction between social support and the severity of the violence that victims experienced prior to the start of their study. These analyses showed that social support is not related to the risk of revictimization among victims who experienced the most severe prior violence but is very strongly related to the risk of victims from the low violence group. For this group, social support proved to be critical in protecting them from future revictimization.

**Discussion**

Concluding this systematic review, we can state that Foa et al.’s (2000) models of women’s influence on partner violence are partly supported in prospective studies that link the models’ key constructs to IPV revictimization. It is beyond doubt that the key factor partner violence is a strong predictor for IPV revictimization. This includes the severity and frequency of prior physical and emotional violence as well as the victim’s assessment of future risk. Although no studies on the relation between psychological reactions to the abuse and revictimization were included in this study, the general conclusion that Foa et al.’s construct of partner violence is predictive of revictimization can be drawn. The evidence regarding the construct of psychological difficulties is more mixed. Keeping methodological issues of the included PTSD studies in mind, we conclude that PTSD symptom severity seems to predict IPV revictimization. For depression, the evidence is univocal; none of the included studies reported a significant effect on revictimization. Furthermore, we are not able to draw any conclusions regarding the predictive effect of victims’ anxiety on IPV revictimization, because there were no prospective studies that reported on this potential risk factor. For substance abuse, however, some evidence did emerge out of the included studies, although it appears mixed at best. After a closer examination of the different operationalizations and methodologies, we suggest that current substance abuse (including alcohol and drug abuse) is related to IPV revictimization. Thus, although we found preliminary support for PTSD symptom severity and substance abuse, not all psychological difficulties seem to be related to IPV revictimization (i.e., depression), and for some (i.e., anxiety), relations still need to be examined in future prospective research. Resilience, the third key factor, has not been studied prospectively in the definition of Foa et al. who hypothesize optimism, self-esteem, flexibility, and physical health to fall under this construct. However, taking a broader view in our review, we considered quality of life and social support as indicators of victims’ resilience as well. Results regarding

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**Table 4. Evidence for the Relation Between Foa et al.’s Construct of Resilience and Revictimization of IPV**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Study</th>
<th>Positive (+), Negative (−) or No (0) Relationship to Revictimization of IPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of life</td>
<td>Bybee and Sullivan (2002)</td>
<td>−</td>
</tr>
<tr>
<td></td>
<td>Bybee and Sullivan (2005)</td>
<td>−</td>
</tr>
<tr>
<td></td>
<td>Goodman et al. (2005)</td>
<td>0</td>
</tr>
<tr>
<td>Social support</td>
<td>Bybee and Sullivan (2005)</td>
<td>−</td>
</tr>
<tr>
<td></td>
<td>Cole et al. (2008)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Goodman et al. (2005)</td>
<td>−</td>
</tr>
<tr>
<td></td>
<td>Perez and Johnson (2008)</td>
<td>−</td>
</tr>
<tr>
<td></td>
<td>Sonis and Langer (2008)</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. IPV, intimate partner violence.
these factors reveal that victims’ quality of life and social support seem to serve as protective factors against future partner violence, although the evidence is not conclusive.

In the current systematic review, we focused on the three key factors of Foa et al.’s (2000) models on repeat IPV. However, Foa et al. also consider various surrounding factors in their psychological and environmental model, which are thought to interact with these key factors. For instance, their psychological model proposes that psychological difficulties will be exacerbated by the victim’s prior trauma history (e.g., childhood trauma) and negative cognitive schemas. Victims’ positive cognitive schemas are hypothesized to increase resilience. Furthermore, Foa et al. describe victims’ perception of the relationship, which involves dependency, the belief that the partner will change, traditional relationship beliefs, investment in the abusive relationship and unstable attributions about the violence (i.e., assuming that it will not happen again). These perceptions are associated with staying in the abusive relationship and in that way they are thought to increase risk for partner violence. In their environmental model, Foa et al. hypothesize that an adequate level of access to resources (i.e., legal, tangible, institutional, and interpersonal resources) facilitates reduction in partner violence and that contact with the abusive partner is a risk factor for partner violence. In addition, they suggest that interpersonal and institutional resources have a direct, protective effect on victims’ psychological difficulties and that access to legal resources increases victims’ resilience. Given the prospective evidence for the three key factors described in the current review, the next step for future research is to examine the proposed surrounding factors and their interactions with the three key factors. This is not only important for gaining further empirical support for Foa et al.’s models on repeat IPV but also to gain insight in the “larger social context that shapes individual behavior” (Bennett et al., 2005, p. 170).

As formulated in the ecological perspective (Bronfenbrenner, 1977), without consideration of the larger social context individual risk factors might not be fully understood. An ecological approach may help in highlighting “the ways in which factors at the individual, interpersonal, and systemic levels interact to influence the continuation and cessation of violence in relationships” (Goodman et al., 2005, pp. 312-313). Although Foa et al.’s three key factors examined in the current review provide a valuable insight into victims’ individual influence on IPV revictimization, consideration of surrounding factors at the interpersonal and systemic level may provide a more complete picture of how risk factors at various levels interact and influence chances of IPV revictimization. Moreover, such a multilevel ecological approach clearly illustrates that we cannot expect victims to be able to fully control or change their risk by themselves. Victims may be able to change individual risk factors to a certain extent, yet part of these factors probably remain outside victims’ control because they are in continuous interaction with other interpersonal and systemic factors. Making a safety plan might help victims in acquiring strategies to control risk factors at these various levels and might help them in thinking about their level of danger (Davies, 1997).

Based on our research findings, we can formulate a number of practical recommendations. First, practice could screen for the risk of revictimization by analyzing the characteristics of prior victimization and, more importantly, by asking victims about their assessment of the danger their partner poses. As the frequency and severity of prior abuse appear to be strong and consistent predictors for future abuse, this is a good way to screen for high risk victims. Here, it is not only physical abuse that counts; emotional abuse increases risk as well. Moreover, studies included in our review suggested that victims’ own assessment of their risk serves as a predictor for revictimization of IPV too. In other words, if a victim indicates that the likelihood of future abuse is high, partner violence often reoccurs factually. Furthermore, a focus on treatment of psychological difficulties as a means to enable women to take control of their situations and to empower them might prove to be effective in reducing risk for future abuse. While more definite conclusions regarding the role of PTSD are awaited, practice should start working with victims on resolving any difficulties in this area as the evidence suggests that PTSD symptom severity might be related to a higher risk for revictimization of partner violence. Victims’ current substance abuse seems to be a relevant factor in the continuation of partner violence too. Therefore, treatment of victims’ abuse problems might be another protective strategy against any future revictimization.

Although the current review enabled us to formulate a number of recommendations for practice, there are several limitations that need to be addressed as well. Limits of the reviewed knowledge are first and foremost related to the lack of prospective studies on the role of psychological difficulties and resilience in predicting future revictimization. Although some evidence suggests PTSD symptom severity and current substance abuse to be predictive of future revictimization, more research is needed to further clarify these relations. The role of resilience in relation to risk for IPV revictimization has not yet been studied prospectively in the definition of Foa et al. (2000). When we extended resilience to involve quality of life and social support, some evidence for the protective quality of this factor emerged, however it remained limited. Further research into psychological difficulties and resilience is particularly necessary because these are the dynamic factors in Foa et al.’s models. By dynamic, we mean changeable or intervenable factors; these factors are within victims’ sphere of influence in ending the abuse they experience at the hands of their partners. Prior research already emphasized the importance of identifying dynamic and victim-related variables in preventing future IPV (Bennett et al., 2005). However, some difficulties related to the analysis of victim-related variables are described as well. As Bennett et al. (2005) formulated, “researchers may worry that identifying victim behaviors that are associated with being revictimized places the responsibility for stopping the violence too much at the victim’s door” (p. 168). This concern of “victim blaming” might explain the lack of prospective studies into victim-related risk factors for IPV. We want to clearly oppose the suggestion that our review is instrumental in blaming victims for what happened to them.
We do, however, believe that research on victim-related risk factors for IPV revictimization is necessary in order to stimulate victim empowerment. Elaborating further, one might wonder whether (future) studies should control for characteristics related to the perpetrator, such as the frequency and severity of his prior violence, when we are interested in factors within victims' sphere of influence. First, these perpetrator-related characteristics cannot be changed by victims. Second, if studies find perpetrator-related factors to contribute to risk for repeat IPV above and beyond all victim-related factors, practice might be discouraged to invest in victim factors and victims' empowerment. However, one could wonder whether such an imbalance in practitioners' attention to perpetrator and victim-related risk factors would be ethical. Furthermore, future research should further examine the role of emotional abuse in predicting revictimization. In the current review, support was particularly found for the use of power and control tactics; however, other forms of emotional abuse, such as verbal aggression and neglect by the partner, should be considered as well. Another, important limitation to the knowledge that has been reviewed in this contribution relates to the nature of the samples that have been used by the included studies. Although some studies selected their participants among the general population (for instance, by recruiting participants in hospitals), all studies focus on disadvantaged women in the United States, thereby restricting the generalizability of the reported findings. Furthermore, most studies recruited their respondents through victim support organizations, courts, or police records. However, not all victims of IPV seek help or report crimes committed against them to the police. Consequently, findings reported in this review relate to a specific subpopulation of battered women and cannot be generalized to other victims. Future research should therefore also focus on victims from less disadvantaged backgrounds and on victims who do not seek help from either victim support organizations or the police and the courts.

Despite these limitations, the current review is the first to present systematically collected and prospective evidence for the three key factors—partner violence, psychological difficulties, and resilience—of Foa et al.'s (2000) models. It makes a meaningful step in identifying not only static (such as prior IPV), but also dynamic, victim-related factors influencing risk for repeat partner violence, which have been the "significant minority" in the research until now (Bennett et al., 2005, p. 168). This knowledge on dynamic risk and protective factors that are within victims' sphere of influence is necessary in empowering victims and helping them to take control of their situations.

**Implications for Practice**
- Practice could screen for the risk of revictimization by analyzing the characteristics of prior victimization and, more importantly, by asking victims about their assessment of the danger their partner poses.
- A focus on treatment of psychological difficulties as a means to enable women to take control of their situations and to empower them might prove to be effective in reducing risk for future abuse.
- While more definite conclusions regarding the role of PTSD are awaited, practice should start working with victims on resolving any difficulties in this area as the evidence suggests that PTSD symptom severity might be related to a higher risk for revictimization of partner violence.
- Victims' current substance abuse seems to be a relevant factor in the continuation of partner violence. Treatment of victims' abuse problems might help protecting them against any future revictimization.

**Implications for Research**
- More prospective research on the role of victims' psychological difficulties is needed, especially with regard to anxiety.
- Prospective research on the role of victims' resilience in decreasing risk for revictimization of partner violence is called for.
- Further research into psychological difficulties and resilience is particularly necessary because these are the dynamic factors in Foa et al.'s (2000) models. By dynamic, we mean changeable or intervenable factors; these factors are within victims' sphere of influence in ending the abuse they experience at the hands of their partners.
- Knowledge on dynamic risk and protective factors that are within victims' sphere of influence is necessary in empowering victims and helping them to take control of their situations.
- Future research should further examine the role of emotional abuse in predicting revictimization. In the current review, support was particularly found for the use of power and control tactics; however, other forms of emotional abuse, such as verbal aggression and neglect by the partner, should be considered as well.
- Research should also include different subsamples of victims, such as victims from less disadvantaged backgrounds and victims who do not seek help from either victim support organizations or the police and the courts.

**Key Points of Research Review**
- The current systematic review of 15 studies reveals that Foa et al.'s (2000) models of victims' influence on IPV revictimization are partly supported by prior prospective research. It is beyond doubt that the key factor partner violence (involving the severity and frequency of prior IPV) is a strong predictor for IPV revictimization; the evidence regarding victims' psychological difficulties and resilience is more mixed.
- The frequency and severity of prior physical and emotional partner violence seem to predict revictimization. Evidence was also found for the victim's own assessment of risk; if a victim indicates that the likelihood of future abuse is high, partner violence often reoccurs factually.
- Although we found preliminary support for PTSD symptom severity and substance abuse, not all psychological
difficulties seem to be related to IPV revictimization (i.e., depression), and for some (i.e., anxiety), relations still need to be examined in future prospective research.

- Resilience has not been studied prospectively in the definition of Foa et al. (2000) that hypothesizes optimism, self-esteem, flexibility, and physical health to fall under this construct. However, taking a broader view, we consider quality of life and social support as indicators of victims’ resilience as well. Results regarding these factors reveal that victims’ quality of life and social support seem to serve as protective factors against future partner violence, although the evidence is not conclusive.

- The importance of future prospective research into particularly psychological difficulties and resilience is emphasized, in order to further support Foa et al.’s (2000) models. Moreover, these are dynamic, intervenable factors within victims’ sphere of influence that can help victims to take control of their situations and contribute to their empowerment.

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**Notes**

1. The article of Foa et al. (2000) that introduced the models of women’s influence on IPV appeared in *Trauma, Violence, & Abuse*. Their ranking of most cited articles, which is monthly updated, can be found at http://tva.sagepub.com/reports/most-cited. We consulted the ranking of October 2010.

2. The couples all consisted of a female victim and a male perpetrator and were registered in police and court records. For obtaining information about victim-related risk factors, we only used the victim self-reports documented in these records.

3. On the other hand, the use of continuous variables, such as number of PTSD symptoms, might have more limited meaningfulness to practice.

**References**


Gurley, D. N. (1990). The social context of recovery from child abuse (Doctoral dissertation), University of Kentucky, Lexington, KY.


characteristics, and validity. *Archives of General Psychiatry, 38*, 381-389.


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