Journal of Family Psychology

Male Intimate Partner Violence: Examining the Roles of Childhood Trauma, PTSD Symptoms, and Dominance

Ohad Gilbar, Casey Taft, and Rachel Dekel
Online First Publication, April 30, 2020. http://dx.doi.org/10.1037/fam0000669

CITATION

Gilbar, O., Taft, C., & Dekel, R. (2020, April 30). Male Intimate Partner Violence: Examining the Roles of Childhood Trauma, PTSD Symptoms, and Dominance. *Journal of Family Psychology*. Advance online publication. http://dx.doi.org/10.1037/fam0000669



© 2020 American Psychological Association ISSN: 0893-3200

http://dx.doi.org/10.1037/fam0000669

Male Intimate Partner Violence: Examining the Roles of Childhood Trauma, PTSD Symptoms, and Dominance

Ohad Gilbar and Casey Taft VA Boston Healthcare System, Boston, Massachusetts, and Boston University School of Medicine

Rachel Dekel Bar-Ilan University

One approach to understanding perpetration of intimate partner violence (IPV) by men focuses upon their childhood exposure to abuse or neglect as traumatic experiences, which may lead to PTSD symptoms; these symptoms can serve as risk factors for IPV perpetration. Another approach looks at the societal aspects of inequality between men and women as promoting male dominance over women and leading to IPV. The aim of the current study was to incorporate elements of each approach based on social learning theory through examining the role of dominance as a mediator between early childhood trauma, PTSD symptoms, and IPV perpetration severity. Participants consisted of 234 men drawn randomly from those receiving treatment at 66 domestic violence centers throughout Israel. They completed versions of the Revised Conflict Tactics Scale for IPV and Conflict Tactics Scale Parent-Child for history of family exposure to violence and physical neglect, the International Trauma Questionnaire for PTSD, and the Dominance Scale. The results indicated an indirect association between physical neglect in childhood and psychological, physical IPV severity, via PTSD and dominance. The results suggest a more integrated way of conceptualizing trauma, PTSD, and power and control issues for the perpetration of IPV. In addition, they emphasize the need to develop trauma-informed interventions that focus on dominance alongside other important trauma-relevant core themes that increase risk for IPV.

Keywords: child abuse and neglect, coercive control, dominance, intimate partner violence, posttraumatic stress disorder

Intimate partner violence (IPV) is a major social problem and a significant health issue for women (World Health Organization [WHO], 2013). The rate of male-perpetrated IPV is high, impacting 10-50% of women worldwide (WHO, 2013). In Israel, based on the latest nationally representative survey, 6% of women experience physical IPV and 56% experience psychological IPV annually, and 13% are exposed to physical IPV during their lifetimes (Eisikovits, Winstok, & Fishman, 2004). Approaches emphasizing different areas of social learning have been used as models for understanding exposure to child abuse and neglect and male IPV, and for developing interventions (Magdol, Moffitt, Caspi, & Silva, 1998; O'Leary, Tintle, & Bromet, 2014). The "trauma model" similarly views violence as a learned behavior and

relies on a social information processing framework to help describe the etiology of IPV (see Taft, Murphy, & Creech, 2016). This theory posits that trauma disrupts the victim's ability to process social information (Taft et al., 2015). Instead, the victim misinterprets others' speech and actions; this, in turn, results in relationship conflict and in the failure to generate and enact nonaggressive responses (Taft et al., 2015). In the "feminist" model, patriarchy promotes social gender inequality, leading to male dominance behaviors and IPV (Lawson, 2012). Based on this model, "Duluth Model" IPV programs focus on the methods by which men maintain power and control over women (Pence & Paymar, 1993). The aim of the current study was to reconcile these two models by considering them in tandem, focusing on the associations among these variables and the unique and combined roles of trauma, PTSD, and dominance in IPV behaviors.

Ohad Gilbar, VA Boston Healthcare System, Boston, Massachusetts, and Department of Psychiatry, Boston University School of Medicine; Casey Taft, National Center for PTSD, VA Boston Healthcare System, and Department of Psychiatry, Boston University School of Medicine; Rachel Dekel, The Louis and Gabi Weisfeld School of Social Work, Bar-Ilan University

Funding for this research was provided in part by the Israel Ministry of Social Affairs and Social Services. The views expressed in this article do not necessarily reflect the views of the funding agencies.

Correspondence concerning this article should be addressed to Ohad Gilbar, 211 South Cooper Street, Arlington, TX 76019. E-mail: ogilbar@bu.edu

The Trauma Model for IPV

Consistent direct correlations have been found between a male's exposure to violence between his parents in childhood and his subsequent adult IPV (Delsol & Margolin, 2004; Taft, Schumm, Marshall, Panuzio, & Holtzworth-Munroe, 2008), between childhood neglect and adult IPV (Milaniak & Widom, 2015), between sexual childhood assault and adult IPV (Berthelot et al., 2014), and between other traumatic events that take place over the course of the life span and adult IPV (Maguire et al., 2015). Moreover, there is a link between the severity of male childhood abuse and the severity of his adult IPV (Lisak, Hopper, & Song, 1996; Taft et al., 2008). These findings are typically interpreted as supporting social learning models of IPV whereby individuals model parental behavior to solve intimate conflicts in their own adulthood and fail to learn constructive conflict resolution methods (O'Leary, 1988). Development of PTSD may also create a persistent sense of tension and heightened threat, keeping individuals in a "survival mode" way of interpreting and responding to various situations, even benign situations (Novaco & Chemtob, 2015). Trauma negatively impacts social information processing, and, thus, increases impulsive aggressive responses as a means of dealing with the perceived threat (Novaco & Chemtob, 2015; Taft et al., 2008, 2015). Such trauma responses may lead the individual to cognitive bias, interpreting relationship situations in an irrationally threatening way, and a dysfunctional reaction including IPV may ensue (Taft et al., 2016).

The Role of Dominance in IPV

Many researchers have described coercive control, an attempt to maintain power and control over intimate partners (Crossman & Hardesty, 2018; Hamby, 1996; Hester, Jones, Williamson, Fahmy, & Feder, 2017), as a key motivator of violence (Ehrensaft & Vivian, 1999; Hamberger, Larsen, & Lehrner, 2017; Langhinrichsen-Rohling, McCullars, & Misra, 2012). The feminist model focuses on how gender socialization promotes coercive control by men over women (Dobash & Dobash, 1979; Lawson, 2012), including disparities in gender roles and gender role expectations (Stark, 2007). Many studies have found that coercive control is indeed related to more frequent IPV, and mostly enacted by men (Graham-Kevan & Archer, 2003; Hardesty et al., 2015; Verschuere, van Horn, & Buitelaar, 2018). Dominance of one partner over another is a key element in coercive control (Cook & Goodman, 2006; Ehrensaft & Vivian, 1999). Specifically, men use three different forms of dominance (Hamby, 1996): (a) authority—a set of behaviors aimed at reducing the partner's power in decision-making; (b) restrictiveness—a reduction of the partner's daily activities and relationships with others; and (c) disparagement—reducing the partner's self-image and ego strength. Dominance can be distinguished from other power and control components such as sexist beliefs and gender roles that focus on attitudes rather than heightened motivation for control (Hamby, 1996). One study using a multivariate model to examine several risk factors including jealousy, marital adjustment, exposure to family oforigin aggression, anger expression, and perceived social support, demonstrated that dominance was the most proximal variable to IPV (O'Leary, Smith Slep, & O'Leary, 2007). Other studies have shown dominance to be associated with more severe violence (Straus, 2008). Thus, dominance may be a central factor in understanding male-perpetrated IPV. Researchers have suggested that trauma-informed models for IPV and feminist models are not necessarily mutually exclusive (Rosenbaum & Leisring, 2003; Taft et al., 2016). The sense of helplessness and loss of control resulting from traumatic event exposure might help explain how dominance impacts the association between trauma and male-perpetrated IPV. In addition to learning misogynistic relationship behaviors in a patriarchal society, individuals who were exposed to trauma in childhood and whose development takes place in a context of ongoing danger, maltreatment, and inadequate caregiving systems may develop schemas that the world is unsafe and that one's

caretakers are untrustworthy and unreliable (Crittenden, 2006); these individuals may therefore feel a profound sense of power-lessness that contributes not only to PTSD but also to beliefs about power and control, leading to abusive coercion strategies. Others have described power and control difficulties as a central "core theme" or "stuck point" underlying trauma reactions and PTSD development (Resick & Schnicke, 1993). Thus, the men who developed schemas characteristic of PTSD sufferers to survive their childhoods may grow up feeling powerless; as adults, they may perpetrate IPV to feel in control and empowered in their intimate relationships (Voith, Logan-Greene, Strodthoff, & Bender, 2018).

The Current Study

The two above-mentioned explanatory models for male-perpetrated IPV emphasize different elements of social learning: (a) the impact of exposure to trauma in childhood and PTSD, and (b) male dominance and power and control dynamics. These central variables, however, have yet to be studied together in a single investigation. In a structural equation modeling (SEM) analysis of a sample of Israeli men largely court mandated for IPV intervention, we examined how childhood exposure to violence and physical neglect related to IPV through these variables. We hypothesized that childhood exposure to violence and physical neglect would be associated with higher IPV perpetration indirectly through their linkages with ICD-11 PTSD symptoms and higher levels of dominance.

Method

Participants and Procedures

Participants were 234 randomly drawn males from the Israeli Jewish population who received treatment at 30 centers for IPV intervention; that is, national social services which provide intervention to self-referred and court mandated IPV populations. They comprise about 9% of the total number of 2,600 males who were treated at 66 centers during the same period (The Service for the Welfare of the Individual and the Family, 2016). Given that the majority of participants came from a very limited number of treatment centers, it was decided to perform a layered cluster sampling among 25 of the 66 centers located in Jewish areas (i.e., small centers with 1-50 male clients; medium-sized centers with 50–100 male clients; and large centers with 100+ male clients). In addition, we sampled another five centers with special unique cultural characteristics (i.e., those treating ultraorthodox Jews, those treating immigrants, those located in regions of Israel that were not included in the random sampling). In summary, the number of centers that participated in the study, according to center size, were: five large centers, with 30.3% (n = 72) of the participants; 15 (10 random and 5 direct sampling) medium centers, with 40.3% (n = 96) of the participants; and five small centers with 29.4% (n = 70) of the participants. The majority of respondents (88%) sought help after undergoing a legal or social service intervention. The mean age of the study participants was 42.11 (SD = 9.13), and the range was between 21 and 62. More than half (56%) were in a relationship, 37.6% were separated, and 6.4% were single. The average education length was 12.8 years, (SD = 2.58; range = 8-21). In addition, 14.7% were unemployed, 9% had part-time jobs, and 76% had full-time jobs. This study was conducted in collaboration with Israel's Ministry of Social Affairs and Social Services, and ethical approval was received from both at Bar Ilan University's institutional review board (IRB; ethical approval reference number: 021604) and the above-mentioned Ministry's research department. Data collection took place from February to August 2016. Slightly less than half (44.5%) of the questionnaires were distributed to the participants face-to-face by the research team, and the rest were distributed directly to the participants by their therapists in the domestic violence centers. No significant differences between the two groups were found regarding IPV (i.e., those who received the questionnaire from the center social workers vs. those who received the questionnaire from the researchers). All questionnaires were anonymous such that they contained no personal details and the questionnaires were collected separately from the letter of consent. On average, it took 25 min to complete the study assessment. The overall response rate was approximately 70% and there were no differences between both means of collecting data. Of those who did not respond, 10% could not complete the questionnaires due to language issues; 15% declined to participate because they were suspicious of the research purpose; and 5% had attention deficit problems which prevented them from completing the questionnaire. Participants received no remuneration for this study.

Measures

Background variables. Education and age were assessed in years, on a continuous scale. Income was assessed using a categorical scale that ranged from \$10k to \$40k and more. Family status was assessed by a relationship categorical scale that ranged from married, dating, and cohabiting to "not in a relationship at all." Employment was assessed on a categorical scale ranging from unemployed to partially employed to fully employed.

Exposure to violence and physical neglect in childhood: Conflict Tactics Scale—Parent-Child Short Form Version. This adapted version of the Conflict Tactics Scale (CTS)—Parent-Child (PC) Short Form Version (Straus & Mattingly, 2007) was constructed from four items used in a previous study for exposure to violence (Lee, Walters, Hall, & Basile, 2013), and all items from the original scale for measuring physical neglect (Straus & Mattingly, 2007). This scale asked respondents to rate the frequency until the age of 18 with which their father/male guardian or mother/female guardian used specific conflict tactics against (a) each other and (b) the respondent. Questions measuring exposure to violence included "Hitting or throwing something," and "Swore or cursed at you." Physical neglect in childhood was measured by asking about the number of occasions on which the parents did not take care of the child's basic needs and the number of times the child was left alone when an adult should have been present. Respondents rated the frequency with which each tactic was used by their parents or step-parents during what they defined as the worst year of their life before the age of 18 on a 7-point scale from 0 (never) to 6 (more than 20 times), and individual prevalence scores from 1 to 6 were summed as a continuous variable. No cut-off point was used for this scale. The Cronbach's alpha in this study for exposure to violence in childhood was .85 and the Cronbach's alpha for the two items of physical neglect in childhood was .54. This measure was translated into Hebrew according to the WHO criteria, which includes reverse-translation (Gilbar, Hyland, Cloitre, & Dekel, 2018).

Exposure to childhood sexual assault. Sexual assault in childhood was based on items taken from the Life Events Checklist (LEC-5; Weathers et al., 2013) assessing sexual assault-rape, attempt to rape, made to perform any type of sexual act through force or threat of harm. For these items, the respondent checks responses including (a) "happened to me," (b) "witnessed it happening to somebody else," (c) "learned about it happening to someone close to me," (d) "was part of my job," (e) "not sure it applies," or (f) "doesn't apply to my experience." Based on the ICD-11 PTSD diagnosis, a direct exposure to the traumatic event is needed for the disorder (unlike the DSM-V, which includes witnessing the traumatic event when happening to somebody else), and thus the items were recoded into binary variables with happened to me responses being coded as 1 and all other responses coded as 0. In the current study, we used the formal Hebrew translation of this scale, which has been used in many studies conducted in Israel (e.g., Gilbar et al., 2018).

PTSD: International Trauma Questionnaire. The International Trauma Questionnaire (ITQ; Cloitre et al., 2018) is a selfreport measure for screening ICD-11 PTSD symptomatology "that may develop following exposure to an extremely threatening or horrific event or series of events" (World Health Organization. 2018). PTSD symptoms comprise three clusters: reexperiencing of the traumatic events, avoidance, and sense of threat. Seven items represent the three PTSD clusters (three items of reexperiencing, two items of avoidance, and two items for sense of threat) which asked respondents to rate the frequency during the last month of a certain experience, for example, "Are you having upsetting dreams that replay part of the experience or are clearly related to the experience?" Symptom endorsement is scored on a Likert-type scale, indicating how bothersome a symptom has been in the past month, from 0 (not at all) to 4 (extremely). This measure was translated into Hebrew in accordance with the WHO criteria (Gilbar et al., 2018). Composite reliability findings, based on estimates of standardized factor loadings and error variances derived from the structure measurement, was .92, indicating that the ICD-ITQ possessed excellent internal reliability for the Hebrew version (Gilbar et al., 2018).

Dominance: Dominance Scale. The Dominance Scale (Hamby, 1996) is intended to assess patterns of dominance relating to or thinking about one's partner without any direct time frame; the instructions read: "People have different ways to relate to each other. The following statements are all different ways of relating to or thinking about your partner. Please read each statement and decide how much you agree with it." We used the nine-item short form of the Dominance Scale, as suggested by the scale's authors (Straus, Hamby, Boney-McCoy, & Sugarman, 1999), that assess three different dominance forms: three items of authority (Au; e.g., "Sometimes I have to remind my partner of who's boss"), three items of restrictiveness (Res; e.g., "I insist on knowing where my partner is at all times"), and three items of disparagement (Dis; e.g., "My partner doesn't have enough sense to make important decisions"). Dominance endorsement is scored on a 4-point, Likert-type scale, indicating the participant's agreement level with each item, from 1 (strongly agree) to 4 (strongly disagree). A high score is indicative of having a higher propensity to dominate and control one's partner. Composite reliability findings, based on estimates of standardized factor loadings and error variances derived from the structure measurement, was 0.93. This measure was translated into Hebrew in accordance with the WHO criteria.

IPV: CTS2S Conflict Tactics Scale, Short Form. Three subscales of IPV: CTS2S Conflict Tactics Scale, Short Form (Straus & Douglas, 2004) were used in this study. The questionnaire asks respondents to recall the number of IPV acts that occurred during the previous 12 months. Two items of physical IPV, two items of psychological IPV, and two items of sexually coercive IPV were examined via this scale. The instrument has eight response categories ranging from 0 (has never happened) to 6 (more than 20 times in the past year). We then used the summed scores of each type of violence which took place within the past year (item responses 0-6). The standardized Cronbach's coefficient alpha in this study for psychological IPV perpetration was .88, for physical IPV perpetration it was .79, and for sexually coercive IPV it was .88. In addition, the intercorrelations between the IPV types were .65 (p < .01) .74, (p < .01), and .75 (p < .01). We used the formal Hebrew translation of this subscales in this study which have been used in many studies in Israel.

Statistical Analysis

We first computed descriptive statistics and assessed the correlations between study variables. We then applied SEM estimated by Mplus 7 (Muthén & Muthén, 2013). We examined the direct and indirect associations of the mediators, where the direct association was the path coefficient from exposure to violence and physical neglect in childhood and childhood sexual assault, to physical, psychological and sexually coercive IPV. The indirect association was the path coefficient from exposure to violence and physical neglect in childhood to physical, psychological and sexually coercive IPV via PTSD and dominance. To assess these associations, we used the weighted least squares means and variance adjusted (WLSMV) estimation based on the polychromic correlation matrix of latent continuous response variables. Other methods of analysis, such as maximum likelihood estimation, tend to produce incorrect standard errors, attenuate the relationships between observed variables, and produce possible pseudofactors (Brown, 2006). The WLSMV estimator has been shown to produce correct parameter estimates, standard errors, and test statistics (Flora & Curran, 2004). Unstandardized regression coefficients (B), SEs, and standardized regression coefficients (β) were reported for all analyses.

In our study, the 95% confidence intervals (CIs) of the unstandardized mediated estimates were used to test the hypothesized relationships. Goodness of fit for each model was assessed with a range of fit indices including the chi-square, the comparative fit index (CFI), and the Tucker-Lewis index (TLI). A nonsignificant χ^2 and values greater than 0.90 for the CFI and TLI are considered to reflect acceptable model fit. In addition, the root mean square error of approximation (RMSEA) was reported with a value less than 0.05 indicating close fit, and with values up to 0.08 indicating reasonable errors of approximation (Hu & Bentler, 1999).

Results

Psychometric characteristics of all measures are reported in Table 1. A preliminary test of rates of missing values showed less than five percent missing across the research variables, except for two items in the PTSD factors, in which the missingness rates were six and eight percent. There were 199 observations with full information across the 234 survey respondents. A test of missing completely at random revealed an insignificant pattern of missingness distribution (Little's test of missing completely at random: χ^2 (df = 256) = 264.72, p = .341). In weighted least square estimators, the first step in dealing with missing data is based on the full information maximum likelihood (FIML; Asparouhov & Muthén, 2010). This step-generated reference parameter estimates for the unknown parameters; in the current study, the final parameter estimates were consistent with the full information maximum likelihood.

Bivariate Correlations Among Study Variables

Bivariate correlations among all study variables are presented in Table 2. Regarding exposure to traumatic experiences, only exposure to violence in childhood was significantly correlated with IPV—specifically, with psychological IPV. Childhood physical neglect exhibited strong positive associations with PTSD symptoms and dominance. Exposure to violence in childhood also evidenced significant associations with PTSD symptoms and dominance. Sexual assault in childhood had significant associations with PTSD symptoms. As expected, dominance symptoms were positively related to physical, psychological, and sexually coercive IPV. However, PTSD was significantly correlated only with psychological IPV.

Table 1
Descriptive Statistics for Observed Study Model Variables

Variable	M	SD	Range	Skewness	Kurtosis
PTSD	0.83	0.73	0–4	0.63	-0.35
Dominance	1.95	0.43	1–4	-0.23	-0.49
Childhood physical neglect	1.28	1.80	0–6	1.27	0.55
Exposure to violence in childhood	2.03	1.87	0–6	0.61	-0.79
Sexual assault in childhood	0.21	0.53	0–2	2.42	4.75
Physical IPV	0.74	0.90	0–6	1.85	5.63
Psychological IPV	2.05	1.50	0–6	-0.50	-0.30
Sexually coercive IPV	0.31	0.85	0–6	3.84	19.45

Note. PTSD = posttraumatic stress disorder symptoms; IPV = intimate partner violence.

Table 2				
Estimated	Correlation	Matrix	of Study	Variables

Variable	1	2	3	4	5	6	7	8
1. PTSD								
2. Dominance	.22**							
3. Childhood physical neglect	.30**	.17*	_					
4. Exposure to violence in childhood	.21**	.16*	.18**	_				
5. Sexual assault in childhood	.29**	.07	.19**	.28**	_			
6. Physical violence	.03	.27**	.02	.10	05	_		
7. Psychological violence	.13*	.27**	.10	.18**	.04	.49**	_	
8. Sexually coercive IPV	.03	.14*	.01	.06	.01	01	.10	_

Note. PTSD = posttraumatic stress disorder symptoms; IPV = intimate partner violence. * p < .05. ** p < .01.

Multivariate SEM Analyses

We next examined the direct and indirect effects of the predictors: exposure to childhood violence/sexual/physical neglect on psychological, physical and sexually coercive IPV perpetration within the SEM-based model presented in Figure 1. The model involved six variables that were identified by their corresponding observed scale scores: exposure to violence in childhood, exposure to sexual violence in childhood physical neglect, psychological IPV perpetration, physical IPV perpetration, and sexually coercive IPV perpetration.

The measurement model included two second order latent variables: PTSD symptoms and dominance. For PTSD, we identified the factor by three first order latent factors: reexperiencing (Re), avoidance (Av), and sense of threat (Th) based on two items in each category. The second order latent dominance factor was also identi-

fied by three latent factors: authority (Au), disparagement (Dis), and restrictiveness (Res). For the measurement model, results provided construct validity by means of fit indices: RMSEA = 0.040, 90% CI [.019, .081], CFI = 0.987, and TLI = 0.984: In addition, the full SEM model fit indices suggest that the data fit the model well, RMSEA = 0.033, 90% CI [.016, .047], CFI = 0.982, TLI = 0.976. For more detailed results of the measurement model, see Appendix Table A1.

The results (see Figure 1) showed that dominance was the only variable to exhibit a direct effect on all types of IPV behaviors—physical, psychological, and sexually coercive. The results (see Table 3) showed indirect effects of exposure to physical neglect in childhood on physical and psychological IPV (indirect = .035, 95% CI [.003, .066]; indirect = .032, 95% CI [.002, .061], respectively) through PTSD and dominance, and a marginally significant indirect effect on sexually coercive IPV perpetration (p < .10).

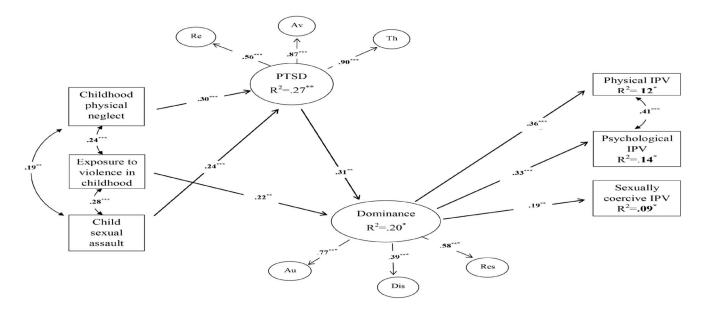


Figure 1. SEM model for predicting intimate partner violence (IPV), leading from exposure to violence, sexual abuse and physical neglect in childhood to IPV perpetration via PTSD and dominance. PTSD = posttraumatic stress disorder; Re = reexperiencing; Av = avoidance; Th = sense of threat; Au = authority; Dis = disparagement; Res = restrictiveness. Standardized Mplus structural equation modeling results; Rectangles indicate measured variables, and circles indicate latent variables. comparative fit index = 0.982, Tucker-Lewis index = 0.976, root mean square estimate of approximation = 0.033, 90% confidence interval [.016, .047]. * p < .05. ** p < .01. *** p < .001.

Table 3
Unstandardized and Standardized Indirect Effects of Model Predictors on Psychological, Physical, and Sexual Abuse Perpetration in the Structural Model

Pathways	В	SE	β	95% CI
Childhood physical neglect → PTSD → dominance → physical IPV Childhood physical neglect → PTSD → dominance → psychological IPV Childhood physical neglect → PTSD → dominance → sexually coercive IPV Exposure to violence in childhood → PTSD → dominance → physical IPV Exposure to violence in childhood → PTSD → dominance → psychological IPV Exposure to violence in childhood → PTSD → dominance → sexually coercive IPV Sexual assault in childhood → PTSD → dominance → physical IPV Sexual assault in childhood → PTSD → dominance → psychological IPV Sexual assault in childhood → PTSD → dominance → psychological IPV Sexual assault in childhood → PTSD → dominance → sexually coercive IPV	.018* .027* .009† .007 .01 .003 .045* .068† .022†	.008 .013 .005 .005 .008 .003 .023 .036	.035* .032* .018† .014 .013 .008 .027† .025† .014†	[.003, .066] [.002, .061] [001, .037] [006, .035] [006, .032] [004, .019] [001, .055] [001, .050] [001, .030]

Note. PTSD = posttraumatic stress disorder symptoms; IPV = intimate partner violence; *B* for unstandardized and β for standardized estimated coefficients; 95% CI = 95% confidence interval based on bootstrapping results ($n_{repeats} = 1,000$). p = 1,000 p = 1,000.

These three indirect effects provided an alternative mechanism to the insignificant direct effect, by which childhood neglect affected IPVs. In addition, the indirect effect of childhood sexual assault on the three IPV measurements was found significant at p < .10 through PTSD and dominance. These again provided an indirect mechanism that may substitute for the direct effect from childhood sexual assault on the IPVs.

Discussion

The current study examined the role of dominance in an attempt to examine, simultaneously, elements of two models of IPV—the trauma model and the feminist model. Our expectation that exposure to stressful or traumatic events in childhood would relate to IPV severity indirectly through its relationship with dominance and PTSD was supported. The model pathway that received the greatest support was the indirect effects of physical neglect on physical, psychological, and sexually coercive IPV perpetration severity; this pathway led from physical neglect to PTSD, then to dominance, and finally to physical/psychological/sexually coercive IPV perpetration severity. These findings support the central role of power and control in IPV (Hamberger et al., 2017; Hamby, 1996; Johnson, 2008; Straus, 2008) while simultaneously demonstrating that trauma and PTSD contribute to the power and control dynamics that are associated with IPV perpetration (Rosenbaum & Leisring, 2003; Taft et al., 2016). That is, both the power and control model and the trauma-informed social information processing model received support, and the data suggest that they may complement each other in explaining IPV severity.

Trauma and PTSD seem to be associated with dominance behaviors. To the best of our knowledge, no prior studies have examined these associations; rather, most of the focus has been on the role of socialization to gender norms and their effects on power and control difficulties. The data suggest that traumatic childhood events and PTSD may contribute to a sense of powerlessness that increases one's need for power or domination over others—a powerlessness that heightens the risk for IPV perpetration (Finkelhor & Browne, 1985; Voith et al., 2018).

We did not find a direct association between exposure to violence in childhood and IPV. However, a link between childhood physical neglect and IPV severity was indirect via PTSD and then by dominance. Prior research has shown small (but significant) associations between childhood physical violence exposure and IPV in adulthood (see Ehrensaft, 2009; Stith et al., 2000), and neglect to be the strongest predictor of PTSD in abusive men and the main childhood traumatic event associated with IPV (Taft et al., 2008). In addition, prior work suggests that exposure to psychological IPV is a relatively stronger predictor of PTSD symptoms than is physical abuse among children (Levendosky & Graham-Bermann, 1998) and women (Taft, Murphy, King, Dedeyn, & Musser, 2005). Nonphysical forms of abuse may be particularly detrimental as they can create an atmosphere of fear, undermining victims' overall sense of well-being and self-worth (Godbout et al., 2019; Levendosky & Graham-Bermann, 1998; Taft et al., 2005). This abuse also may relate to the emotional dysregulation that has been suggested to be associated with PTSD and IPV (Briere, 2002), and to experiential avoidance strategies among survivors of childhood trauma that contribute to IPV (Bell & Higgins, 2015).

Our results support the notion that PTSD plays an important role in the way trauma increases the risk of IPV severity through its influence on men's cognitive and emotional systems. Other studies have similarly shown that the most explanatory models include additional cognitive and emotional systems, such as social information processing deficits (Taft et al., 2008) and emotion dysregulation (Miles, Menefee, Wanner, Teten Tharp, & Kent, 2016; Swopes, Simonet, Jaffe, Tett, & Davis, 2013). We are hopeful that such pathways will become more fully explicated through additional research. However, alternative, and competing mechanisms should be examined in further research, too. For example, some children may have a traumatogenic response to witnessing or experiencing IPV in childhood, whereas others might see this behavior as normative and thus simply learn that IPV is what one does during conflict (Zarling et al., 2013). In addition, it is important to examine other risk factors found to promote IPV and to be highly related to PTSD, which also may contribute to the association of PTSD and IPV. These risk factors include, for example, personality traits (Jose, O'Leary, Gomez, & Foran, 2014) and alcohol/drug use (Foran & O'Leary, 2008; Stuart, Meehan, Moore, Morean, Hellmuth, & Follansbee, 2006).

In summary, this research integrates two theoretical perspectives for understanding the association between exposure to child abuse, neglect, and IPV perpetration severity among a largely mandated population. It emphasizes the possibility that men who experience traumatic events in childhood, and particularly those who develop PTSD, may use violence as a tool for achieving and maintaining a feeling of control over their lives, by exerting power over others (Lee et al., 2013).

Limitations

This study has several limitations. Because of the use of a cross-sectional design, causal interpretations should be made cautiously. Specifically, the timeframe for the reporting of trauma symptoms (past month) and IPV (past year) might have caused a bias given that our model assumed that trauma symptoms preceded the occurrence of IPV severity. In addition, we didn't include in our assessment of PTSD any specific A criterion for child abuse, potentially resulting in a bias regarding the source of the PTSD symptoms. Longitudinal data using structured clinical interviews are needed to better understand the role of PTSD in the etiology of dominance among men who perpetrate IPV. This sample is very different from many studies published in the United States, as the sample of men is largely employed, more educated than many samples of men mandated to batterer groups in the US, and half are in relationships (O'Leary et al., 2014).

Relatedly, future research should consider using multiple methods of assessment to explore these constructs. Based on the literature review and the most recent meta-analysis in the field, which found that close effect size differences between direct and indirect violence in childhood could predict male IPV (Godbout et al., 2019), we examined exposure to both direct and indirect violence in childhood in one combined variable. With this approach we may have lost information about the results of the specific role played by each type of violence exposure. In addition, it would be important to ascertain whether it was father-only (i.e., observing the same-sex parent perpetrate the violence), mother-only (i.e., observing the opposite sex parent perpetrate the violence), or both mother and father perpetration of violence that had an influence on this model specifically in the area of dominance. Childhood physical neglect was defined only as the lack of fulfillment of a child's basic needs; additional forms of neglect should be examined in future studies.

Our examination of a fairly homogeneous group of participants is a study limitation. Further, the generalizability of our findings is limited since the rate of IPV in Israel is lower than that found in other countries, including representative studies in the United States. Although we used a well-validated scale to examine IPV in this study, it is important that researchers replicate current study findings across different populations before we can have good confidence that these results generalize to other cultures and countries.

Based on the social context of dominance, it is essential to study the role of dominance in the trauma model's explanation of violence among additional cultural groups. Also, social desirability biases for reporting on PTSD, IPV, and other factors may have deflated associations (Hamby, 2016).

Clinical and Policy Implications

Many intervention programs for IPV perpetrators focus solely on abusive behavior, and many therapists do not assess comorbid mental health and behavioral problems (Semiatin, Torres, LaMotte, Portnoy, & Murphy, 2017). The current findings support the idea of giving more attention to mental health problems among this population, specifically the need to screen for traumatic experiences and resultant PTSD (LaMotte, Gower, Miles-McLean, Farzan-Kashani, & Murphy, 2019; Semiatin et al., 2017). In addition, they emphasize the need to develop trauma-informed interventions that focus on dominance and other important traumarelevant core themes that increase the risk of IPV (Taft et al., 2016). In the last few years, trauma-informed interventions have been shown efficacious in randomized controlled trials of both veterans (Creech, Benzer, Ebalu, Murphy, & Taft, 2018) and civilians (Zarling, Lawrence, & Marchman, 2015). Hopefully, current findings and promising data for emerging trauma-informed interventions will encourage policymakers in the field to suggest guidelines that emphasize the importance of mental health and emotional problems in court-mandated interventions for IPV perpetrators (Voith et al., 2018).

Research Implications

Our results suggest a more integrated way of conceptualizing trauma, PTSD, and power and control issues for IPV. Future research should examine the risks conveyed by specific PTSD symptom clusters. Our findings suggest a need for additional research to examine mediational pathways involving frequent posttraumatic cognitions, changes in social information processing, and arousal dysregulation in an effort to link specific PTSD symptoms to IPV in different populations. Such results may provide additional support for the trauma theory's explanation for predicting IPV and the importance of developing trauma-informed IPV treatment strategies.

Disturbances in self-organization such as interpersonal dysfunction, negative self-concept, and emotion dysregulation are key components of other conditions often associated with trauma, including complex PTSD (e.g., Brewin et al., 2017; Cloitre et al., 2018). Further studies are needed to determine whether posttraumatic reactions beyond PTSD help explain the links between trauma exposure, dominance, and IPV. Hopefully, these findings will stimulate further investigation into the effects of trauma, PTSD symptoms, and dominance on IPV perpetration, and into the development and testing of more effective interventions.

References

Asparouhov, T., & Muthén, B. (2010). Weighted least squares estimation with missing data. *Mplus Technical*, 2010, 1–10.

Bell, K. M., & Higgins, L. (2015). The impact of childhood emotional abuse and experiential avoidance on maladaptive problem solving and intimate partner violence. *Behavioral Sciences*, 5, 154–175. http://dx.doi.org/10.3390/bs5020154

Berthelot, N., Hébert, M., Godbout, N., Goulet, M., Bergeron, S., & Boucher, S. (2014). Childhood maltreatment increases the risk of intimate partner violence via PTSD and anger personality traits in individuals consulting for sexual problems. *Journal of Aggression, Maltreatment & Trauma*, 23, 982–998. http://dx.doi.org/10.1080/10926771.2014 960631

Brewin, C. R., Cloitre, M., Hyland, P., Shevlin, M., Maercker, A., Bryant, R. A., . . . Reed, G. M. (2017). A review of current evidence regarding the ICD-11 proposals for diagnosing PTSD and complex

- PTSD. Clinical Psychology Review, 58, 1–15. http://dx.doi.org/10.1016/j.cpr.2017.09.001
- Briere, J. (2002). Treating adult survivors of severe childhood. In J. E. Myers, L. Berliner, J. Briere, C. T. Hendrix, T. Reid, & C. Jenny (Eds.), The APSAC handbook on child maltreatment (pp. 175–196). London, UK: Sage.
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York, NY: Guilford Press.
- Cloitre, M., Shevlin, M., Brewin, C. R., Bisson, J. I., Roberts, N. P., Maercker, A., . . . Hyland, P. (2018). The International Trauma Questionnaire (ITQ): Development of a self-report measure of ICD-11 PTSD and Complex PTSD. Acta Psychiatrica Scandinavica, 138, 536–546. http://dx.doi.org/10.1111/acps.12956
- Cook, S. L., & Goodman, L. A. (2006). Beyond frequency and severity: Development and validation of the brief coercion and conflict scales. Violence Against Women, 12, 1050–1072. http://dx.doi.org/10.1177/ 1077801206293333
- Creech, S. K., Benzer, J. K., Ebalu, T., Murphy, C. M., & Taft, C. T. (2018). National implementation of a trauma-informed intervention for intimate partner violence in the Department of Veterans Affairs: First year outcomes. *BMC Health Services Research*, 18, 582. http://dx.doi.org/10.1186/s12913-018-3401-6
- Crittenden, P. M. (2006). A dynamic-maturational model of attachment. ANZJFT Australian and New Zealand Journal of Family Therapy, 27, 105–115. http://dx.doi.org/10.1002/j.1467-8438.2006.tb00704.x
- Crossman, K. A., & Hardesty, J. L. (2018). Placing coercive control at the center: What are the processes of coercive control and what makes control coercive? *Psychology of Violence*, 8, 196–206. http://dx.doi.org/ 10.1037/vio0000094
- Delsol, C., & Margolin, G. (2004). The role of family-of-origin violence in men's marital violence perpetration. *Clinical Psychology Review*, 24, 99–122. http://dx.doi.org/10.1016/j.cpr.2003.12.001
- Dobash, R. E., & Dobash, R. P. (1979). Violence against wives: A case against the patriarchy. New York, NY: Free Press.
- Ehrensaft, M. K. (2009). Family and relationship predictors of psychological and physical aggression. In K. D. O'Leary & E. M. Woodin (Eds.), Psychological and physical aggression in couples: Causes and interventions (pp. 99–118). Washington, DC: American Psychological Association.
- Ehrensaft, M. K., & Vivian, D. (1999). Is partner aggression related to appraisals of coercive control by a partner? *Journal of Family Violence*, *14*, 251–266. http://dx.doi.org/10.1023/A:1022862332595
- Eisikovits, Z., Winstok, Z., & Fishman, G. (2004). The first Israeli national survey on domestic violence. *Violence Against Women, 10, 729–748*. http://dx.doi.org/10.1177/1077801204265549
- Finkelhor, D., & Browne, A. (1985). The traumatic impact of child sexual abuse: A conceptualization. *American Journal of Orthopsychiatry*, *55*, 530–541. http://dx.doi.org/10.1111/j.1939-0025.1985.tb02703.x
- Flora, D. B., & Curran, P. J. (2004). An empirical evaluation of alternative methods of estimation for confirmatory factor analysis with ordinal data. *Psychological Methods*, 9, 466–491. http://dx.doi.org/10.1037/1082-989X.9.4.466
- Foran, H. M., & O'Leary, K. D. (2008). Alcohol and intimate partner violence: A meta-analytic review. *Clinical Psychology Review*, 28, 1222–1234. http://dx.doi.org/10.1016/j.cpr.2008.05.001
- Gilbar, O., Hyland, P., Cloitre, M., & Dekel, R. (2018). ICD-11 complex PTSD among Israeli male perpetrators of intimate partner violence: Construct validity and risk factors. *Journal of Anxiety Disorders*, 54, 49–56. http://dx.doi.org/10.1016/j.janxdis.2018.01.004
- Godbout, N., Vaillancourt-Morel, M. P., Bigras, N., Briere, J., Hébert, M., Runtz, M., & Sabourin, S. (2019). Intimate partner violence in male survivors of child maltreatment: A meta-analysis. *Trauma, Violence & Abuse*, 20, 99–113. http://dx.doi.org/10.1177/1524838017692382

- Graham-Kevan, N., & Archer, J. (2003). Intimate terrorism and common couple violence. A test of Johnson's predictions in four British samples. *Journal of Interpersonal Violence*, 18, 1247–1270. http://dx.doi.org/10 .1177/0886260503256656
- Hamberger, L. K., Larsen, S. E., & Lehrner, A. (2017). Coercive control in intimate partner violence. *Aggression and Violent Behavior*, 37, 1–11. http://dx.doi.org/10.1016/j.avb.2017.08.003
- Hamby, S. L. (1996). The Dominance Scale: Preliminary psychometric properties. Violence and Victims, 11, 199–212. http://dx.doi.org/10.1891/0886-6708.11.3.199
- Hamby, S. (2016). Self-report measures that do not produce gender parity in intimate partner violence: A multi-study investigation. *Psychology of Violence*, 6, 323–335. http://dx.doi.org/10.1037/a0038207
- Hardesty, J. L., Crossman, K. A., Haselschwerdt, M. L., Raffaelli, M., Ogolsky, B. G., & Johnson, M. P. (2015). Toward a standard approach to operationalizing coercive control and classifying violence types. *Journal of Marriage and Family*, 77, 833–843. http://dx.doi.org/10.1111/ jomf.12201
- Hester, M., Jones, C., Williamson, E., Fahmy, E., & Feder, G. (2017). Is it coercive controlling violence? A cross-sectional domestic violence and abuse survey of men attending general practice in England. *Psychology* of Violence, 7, 417–427. http://dx.doi.org/10.1037/vio0000107
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6, 1–55. http://dx.doi.org/ 10.1080/10705519909540118
- Johnson, M. P. (2008). A typology of domestic violence: Intimate terrorism, violent resistance, and situational couple violence. Boston, MA: Northeastern University Press.
- Jose, A., O'Leary, K. D., Gomez, J. L. G., & Foran, H. M. (2014). Risk factors for men's intimate physical aggression in Spain. *Journal of Family Violence*, 29, 287–297.
- LaMotte, A. D., Gower, T., Miles-McLean, H., Farzan-Kashani, J., & Murphy, C. M. (2019). Trauma's influence on relationships: Clients' perspectives at an intimate partner violence intervention program. *Journal of Family Violence*, 34, 655–662. http://dx.doi.org/10.1007/s10896-018-0004-2
- Langhinrichsen-Rohling, J., McCullars, A., & Misra, T. A. (2012). Motivations for men and women's intimate partner violence perpetration: A comprehensive review. *Partner Abuse*, 3, 429–468. http://dx.doi.org/10.1891/1946-6560.3.4.429
- Lawson, J. (2012). Sociological theories of intimate partner violence. Journal of Human Behavior in the Social Environment, 22, 572–590. http://dx.doi.org/10.1080/10911359.2011.598748
- Lee, R. D., Walters, M. L., Hall, J. E., & Basile, K. C. (2013). Behavioral and attitudinal factors differentiating male intimate partner violence perpetrators with and without a history of childhood family violence. *Journal of Family Violence*, 28, 85–94. http://dx.doi.org/10.1007/ s10896-012-9475-8
- Levendosky, A. A., & Graham-Bermann, S. A. (1998). The moderating effects of parenting stress on children's adjustment in woman-abusing families. *Journal of Interpersonal Violence*, 13, 383–397. http://dx.doi.org/10.1177/088626098013003005
- Lisak, D., Hopper, J., & Song, P. (1996). Factors in the cycle of violence: Gender rigidity and emotional constriction. *Journal of Traumatic Stress*, 9, 721–743. http://dx.doi.org/10.1002/jts.2490090405
- Magdol, L., Moffitt, T. E., Caspi, A., & Silva, P. A. (1998). Developmental antecedents of partner abuse: A prospective-longitudinal study. *Journal* of Abnormal Psychology, 107, 375–389. http://dx.doi.org/10.1037/0021-843X.107.3.375
- Maguire, E., Macdonald, A., Krill, S., Holowka, D. W., Marx, B. P., Woodward, H., . . . Taft, C. T. (2015). Examining trauma and posttraumatic stress disorder symptoms in court-mandated intimate partner vi-

- olence perpetrators. *Psychological Trauma: Theory, Research, Practice and Policy, 7,* 473–478. http://dx.doi.org/10.1037/a0039253
- Milaniak, I., & Widom, C. S. (2015). Does child abuse and neglect increase risk for perpetration of violence inside and outside the home? *Psychology of Violence*, 5, 246–255. http://dx.doi.org/10.1037/a0037956
- Miles, S. R., Menefee, D. S., Wanner, J., Teten Tharp, A., & Kent, T. A. (2016). The relationship between emotion dysregulation and impulsive aggression in veterans with posttraumatic stress disorder symptoms. *Journal of Interpersonal Violence*, 31, 1795–1816. http://dx.doi.org/10.1177/0886260515570746
- Muthén, L. K., & Muthén, B. O. (2013). *Mplus user's guide* (7th ed.). Los Angeles, CA: Author.
- Novaco, R. W., & Chemtob, C. M. (2015). Violence associated with combat-related posttraumatic stress disorder: The importance of anger. *Psychological Trauma: Theory, Research, Practice and Policy, 7*, 485–492. http://dx.doi.org/10.1037/tra0000067
- O'Leary, K. D. (1988). Physical aggression between spouses: A social learning theory perspective. In V. B. Van Hasselt, R. L. Morrison, A. S. Bellack, & M. Hersen (Eds.), *Handbook of family violence* (pp. 31–55). New York, NY: Plenium Press. http://dx.doi.org/10.1007/978-1-4757-5360-8_3
- O'Leary, K. D., Smith Slep, A. M., & O'Leary, S. G. (2007). Multivariate models of men's and women's partner aggression. *Journal of Consulting* and Clinical Psychology, 75, 752–764. http://dx.doi.org/10.1037/0022-006X.75.5.752
- O'Leary, K. D., Tintle, N., & Bromet, E. (2014). Risk factors for physical violence against partners in the U.S. *Psychology of Violence*, *4*, 65–77. http://dx.doi.org/10.1037/a0034537
- Pence, E., & Paymar, M. (1993). Education groups for men who batter: The Duluth model. New York, NY: Springer Publishing. http://dx.doi.org/10.1891/9780826179913
- Resick, P. A., & Schnicke, M. K. (1993). Cognitive processing therapy for rape victims: A treatment manual. Thousand Oaks, CA: Sage.
- Rosenbaum, A., & Leisring, P. A. (2003). Beyond power and control: Towards an understanding of partner abusive men. *Journal of Comparative Family Studies*, 34, 7–22. http://dx.doi.org/10.3138/jcfs.34.1.7
- Semiatin, J. N., Torres, S., LaMotte, A. D., Portnoy, G. A., & Murphy, C. M. (2017). Trauma exposure, PTSD symptoms, and presenting clinical problems among male perpetrators of intimate partner violence. *Psychology of Violence*, 7, 91–100. http://dx.doi.org/10.1037/vio0000041
- Stark, E. (2007). Coercive control: How men entrap women in personal life. New York, NY: Oxford University Press.
- Stith, S. M., Rosen, K. H., Middleton, K. A., Busch, A. L., Lundeberg, K., & Carlton, R. P. (2000). The intergenerational transmission of spouse abuse: A meta-analysis. *Journal of Marriage and the Family, 62*, 640–654. http://dx.doi.org/10.1111/j.1741-3737.2000.00640.x
- Straus, M. A. (2008). Dominance and symmetry in partner violence by male and female university students in 32 nations. *Children and Youth Services Review*, 30, 252–275. http://dx.doi.org/10.1016/j.childyouth.2007.10.004
- Straus, M. A., & Douglas, E. M. (2004). A short form of the Revised Conflict Tactics Scales, and typologies for severity and mutuality. Violence and Victims, 19, 507–520. http://dx.doi.org/10.1891/vivi.19.5.507 .63686
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. (1999). *Manual for the personal and relationships profile (PRP)*. Durham: University of New Hampshire.
- Straus, M. A., & Mattingly, M. J. (2007). A short form and severity level types for the Parent-Child Conflict Tactics Scales. Durham: University of New Hampshire.

- Stuart, G. L., Meehan, J. C., Moore, T. M., Morean, M., Hellmuth, J., & Follansbee, K. (2006). Examining a conceptual framework of intimate partner violence in men and women arrested for domestic violence. *Journal of Studies on Alcohol*, 67, 102–112. http://dx.doi.org/10.15288/isa.2006.67.102
- Swopes, R. M., Simonet, D. V., Jaffe, A. E., Tett, R. P., & Davis, J. L. (2013). Adverse childhood experiences, posttraumatic stress disorder symptoms, and emotional intelligence in partner aggression. *Violence and Victims*, 28, 513–530. http://dx.doi.org/10.1891/0886-6708.VV-D-12-00026
- Taft, C. T., Murphy, C. M., & Creech, S. K. (2016). Trauma-informed treatment and prevention of intimate partner violence. Washington, DC: American Psychological Association. http://dx.doi.org/10.1037/14918-000
- Taft, C. T., Murphy, C. M., King, L. A., Dedeyn, J. M., & Musser, P. H. (2005). Posttraumatic stress disorder symptomatology among partners of men in treatment for relationship abuse. *Journal of Abnormal Psychology*, 114, 259–268. http://dx.doi.org/10.1037/0021-843X.114.2.259
- Taft, C. T., Schumm, J. A., Marshall, A. D., Panuzio, J., & Holtzworth-Munroe, A. (2008). Family-of-origin maltreatment, posttraumatic stress disorder symptoms, social information processing deficits, and relationship abuse perpetration. *Journal of Abnormal Psychology*, 117, 637– 646. http://dx.doi.org/10.1037/0021-843X.117.3.637
- Taft, C. T., Weatherill, R. P., Scott, J. P., Thomas, S. A., Kang, H. K., & Eckhardt, C. I. (2015). Social information processing in anger expression and partner violence in returning U.S. veterans. *Journal of Traumatic Stress*, 28, 314–321. http://dx.doi.org/10.1002/jts.22017
- The Service for the Welfare of the Individual and the Family. (2016). *sicum peilut venetunim lishnat 2015* [Summery of activities and data of 2015]. Jerusalem, Israel: Social Welfare Ministry.
- Verschuere, B., van Horn, J., & Buitelaar, N. (2018). The role of control in intimate partner violence: A study in Dutch forensic outpatients. *Journal* of *Interpersonal Violence*. Advance online publication. http://dx.doi.org/ 10.1177/0886260518775152
- Voith, L. A., Logan-Greene, P., Strodthoff, T., & Bender, A. E. (2018). A paradigm shift in batterer intervention programming: A need to address unresolved trauma. *Trauma, Violence, & Abuse.* Advance online publication. http://dx.doi.org/10.1177/1524838018791268
- Weathers, F. W., Blake, D. D., Schnurr, P. P., Kaloupek, D. G., Marx, B. P., & Keane, T. M. (2013). *The Life Events Checklist for DSM-5 (LEC-5)*. Retrieved from the National Center for PTSD at www.ptsd.va.gov
- World Health Organization. (2013). Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence. Retrieved from http://www.who.int/reproductivehealth/publications/violence/9789241564625/en/
- World Health Organization. (2018). *ICD-11 for Mortality and Morbidity Statistics (ICD-11 MMS) 2018 version*. Retrieved from https://icd.who.int/browse11/l-m/en
- Zarling, A., Lawrence, E., & Marchman, J. (2015). A randomized controlled trial of acceptance and commitment therapy for aggressive behavior. *Journal of Consulting and Clinical Psychology*, 83, 199–212. http://dx.doi.org/10.1037/a0037946
- Zarling, A. L., Taber-Thomas, S., Murray, A., Knuston, J. F., Lawrence, E., Valles, N. L., . . . Bank, L. (2013). Internalizing and externalizing symptoms in young children exposed to intimate partner violence: Examining intervening processes. *Journal of Family Psychology*, 27, 945–955. http://dx.doi.org/10.1037/a0034804

Appendix

The Measurement Model Results

Table A1
The Measurement Model Results: Factor Loadings for First and Second Latent Factors

Factor	Item Loading estimate		SE	
	PTSD first-order latent t	factors		
Re-experiencing	Item 1	.78***	.07	
1 0	Item 2	.91***	.09	
Avoidance	Item 1	.96***	.04	
	Item 2	.86***	.04	
Sense of threat	Item 1	.73***	.07	
	Item 2	.69***	.06	
	PTSD second-order latent	factors		
PTSD	Re-experiencing	.53***	.08	
	Avoidance	.85***	.08	
	Sense of threat	.94***	.08	
	Dominance first-order later			
Authority	Item 1	.89***	.03	
	Item 2	.69***	.04	
	Item 3	.86***	.04	
Disparagement	Item 1	.72***	.09	
	Item 2	.72***	.08	
	Item 3	.57***	.08	
Restrictiveness	Item 1	.72***	.04	
	Item 2	.86***	.03	
	Item 3	.88***	.03	
	Dominance second-order late			
Dominance	Authority	.85***	.14	
	Disparagement	.35***	.10	
	Restrictiveness	.54***	.09	
	Correlation			
Dominance with PTSD		.37***	.09	

Note. PTSD = posttraumatic stress disorder symptoms. Comparative factor index = .987, Tucker-Lewis index = .984, root mean square error of approximation = .040, chi-square = 114.14, df = 83, p = .01, weighted root mean square residual = .780.

*** p < .001.

Received January 25, 2019
Revision received February 17, 2020
Accepted March 20, 2020