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The Pathway from Family Violence to Dating Violence in College Students' Relationships: A Multivariate Model

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ABSTRACT

The potential transmission of family violence in adults' dating relationships was examined in a multiple mediator model among 807 college students in Greece. The Dimensions of Discipline Inventory-Adult Recall form measured students' retrospective accounts of their parents' discipline methods used at the age of 10, the Conflict Tactics Scales-Between Parents measured mutual interparental violence (mIV), and the Conflict Tactics Scales-Dating Relationship measured mutual dating violence (mDV). Path analysis indicated that mother's punitive discipline affected mDV through the mediation of violence approval (VA) and negative relating to others, whereas mIV had a direct effect on mDV and an indirect effect via VA, negative relating to mother, and less closeness to mother. Adverse intrafamilial experiences may increase the risk of adult mDV. Risk and protective factors pertaining to intrapersonal and interpersonal constructs should be the target of prevention and intervention efforts to combat adults' mDV.

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Conflict Tactics Scales; domestic violence; intimate partner violence; punitive discipline; transmission of family violence

Introduction

Childhood exposure to family violence is a major public health concern, which has devastating effects, such as perpetuation of the cycle of violence (Maneta, Cohen, Schulz, & Waldinger, 2012). The two most common forms, parent-to-child violence and witnessing of interparental violence, frequently co-occur (Hamby, Finkelhor, Turner, & Ormrod, 2010) and they have deleterious impacts across an individual's life course. A voluminous literature has unequivocally shown that growing up in a violent family environment can increase the chance of involvement in dating violence (DV) in adulthood (Capaldi, Knoble, Shortt, & Kim, 2012; Kaukinen, 2014). In this study, the term "violence" (between parents, dating partners, or against the offspring) refers to physical

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aggression or assault (Saltzman, 2004; Straus, 2007), whereas "abuse" refers to all forms of aggression and coercion.

For the purpose of this study, a dating relationship was defined as a romantic relationship between two intimate partners. The World Health Organization has recognized that DV is a rapidly growing topic of interest for social scientists and a serious public health issue due to its high prevalence and remarkable health consequences (Sugg, 2015). Interestingly, studies have shown DV to be more prevalent among college couples than the rest of the population (e.g., Straus, 2001). The International Dating Violence Study reviewed a sample of 13,601 students at 68 universities in 32 countries and showed that almost a third of students had physically assaulted a dating partner in the year before the study (Straus, 2007). These results are comparable with those found in a Greek college student sample (Kalaitzaki, Birtchnell, & Kritsotakis, 2010). Perhaps most notably, studies have shown that the so-called reciprocal or mutual violence (i.e., both partners being violent) is the predominant form of DV (Palmetto, Davidson, Breitbart, & Rickert, 2013). Although these findings have also been corroborated in Greece (Kalaitzaki, Birtchnell, & Kritsotakis 2010), and mutual violence has attracted little attention, this study will examine the mutual violence both between parents and between dating young partners. Due to the different terms (e.g., reciprocal) and the controversies on the meaning of "mutual violence," a conceptual definition of the term is necessary. In the present study, mutual violence may include violent exchange between partners in a single episode or over separate ones, acts of self-defence, retaliation, or initiation of violence by each partner. However, it should be acknowledged that unilateral violence, such as intimate terrorism (see the well-known typologies by Johnson (2008)), might be more serious than mutual violence in terms of the severity of the physical and psychological injury inflicted upon the victim. The theoretical conceptualization used in this study is the "Intergenerational Transmission of Violence" (ITV) hypothesis (Straus, Gelles, & Steinmetz, 1980), sometimes also called the "violence begets violence" hypothesis or "cycle of violence." Supporting this assertion, Amato's (2000) review of a 12-year longitudinal study showed that young adults who had experienced interparental violence during childhood were 189% more likely than those not having experienced to repeat this violent behavior in their own adult relationships. The theoretical underpinnings for this widely accepted hypothesis can be sought in social learning theory (Bandura, 1977). According to this theory, children learn violent behavioral patterns through direct observation and modeling processes of the behavior communicated by their parents (i.e., violence exerted on children or committed between parents), which in turn contributes to the perpetuation of a cycle of violence in their adult relationships (Delsol & Margolin, 2004; Simons & Wurtele, 2010; Straus et al., 1980).

Understandably, precursors of DV have been sought within the family, the most salient of which have been either witnessing interparental violence during childhood or receiving violent parenting (for a review, see Capaldi et al., 2012). First and foremost, witnessing interparental violence is one of the most well-known predictors of engaging in adult's violent relationships (dating, cohabitating, or marital) (e.g., Aizpitarte, Alonso-Arbiol, Van de Vijver, 2017; Black, Sussman, & Unger, 2010; Delsol & Margolin, 2004; van Wijk & De Bruijn, 2012). However, Franzese, Menard, Weiss, and Covey (2017) concluded that witnessing interparental violence does not predict adult violence. On the other hand, Bevan and Higgins (2002) indicated that witnessing interparental violence was associated with psychological (but not physical) spouse abuse.

The parent-to-child violence has also been at the forefront of the research. The literature has shown that parent-to-child violence increases the risk associated with DV (e.g., Fulu et al., 2017; Gómez, 2011; Kaufman-Parks, DeMaris, Giordano, Manning, & Longmore, 2017; Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003). This robust association found by many studies (e.g., Hipwell et al., 2014; Maneta et al., 2012) has been replicated by Jennings et al. (2014), who found that victims of childhood physical abuse were significantly more likely to report later DV. However, using a propensity score matching technique to approximate a quasi-experimental research design, Jennings et al. (2014) found that when matched, physically abused children were equally likely to perpetrate or experience DV later in life with nonphysically abused children. This finding seriously questioned the causal relationship between childhood abuse and DV.

A growing body of research suggests a more complex mechanism, in which the family violence would be a distal factor that directly relates to more proximal mediating factors (Olsen, Parra, & Bennett, 2010). Searching the literature for mediators (both vulnerability/risk and resilience/protective ones), it was found that intrapersonal factors, such as normative beliefs or attitudinal acceptance of violence (Vagi et al., 2013), have received a fair amount of attention. There is some empirical support for normative beliefs about DV as a mediator of the association between family violence and dating aggression (Reyes et al., 2015; Wolfe, Wekerle, Scott, Straatman, & Grasley, 2004). This is supported by social learning theory, too (Bandura, 1977); violent experiences communicate permissiveness of violence and beliefs/attitudes that are more accepting of DV.

Kaufman-Parks et al. (2017) have suggested that although most children exposed to family violence do not perpetrate DV in later life, family characteristics, such as the quality of parent–child relationship, might account for the association and need to be taken into consideration. The role of the parent–child relationship quality as a mediator is also supported by social learning theory (Bandura, 1977); the individuals learn how to interact with

others based on the experiences they have with their parents. Attachment theory (Bowlby, 1988) may also explain the mediational process. Based on the experiences they have with their parents, the children develop internal working models which guide their future interactions with others. Exposure to family violence leads to poor attachment styles with others, which in turn may increase the likelihood of DV (Caldwell, Swan, Allen, Sullivan, & Snow, 2009). Interpersonal constructs, such as the negative mother–child relationship (Kaufman-Parks et al., 2017; Vagi et al., 2013), interpersonal difficulties (Murphy & Blumenthal, 2000), and relationship discord (for a review, see Capaldi et al., 2012), have also been found to be predictive of later violence, whereas a positive relationship between parents (Vagi et al., 2013), social support, and relationship satisfaction (see Capaldi et al., 2012) has been recognized as protective or resilience factors that may buffer and/or mitigate the negative consequences of childhood exposure to family violence.

Despite the research findings suggesting a strong link between family violence and adult DV, important gaps in knowledge remain. First, studies are often confined to single forms of childhood victimisation (i.e., either child abuse/maltreatment or interparental violence) and only a few studies have simultaneously examined multiple types of family violence. Rada (2014) indicated that witnessing and experiencing violence in the family of origin was significantly related to all types of violence suffered by women and perpetrated by men in their family of procreation, with the highest proportion exhibited by those being both witnesses and victims of family violence. A 20-year prospective study of 543 children showed that exposure to interparental violence and power-assertive punishment were the second and third strongest predictors (conduct disorder was the first) of both violence perpetration and victimization in adult life (Ehrensaft et al., 2003). A systematic review of longitudinal studies (Costa et al., 2015) also indicated that the most consistent predictors of domestic violence were child abuse and family of origin risks (witnessing parental violence being one of them). However, a meta-analysis conducted by Stith et al. (2000) provided weak support of the effect of witnessing or experiencing family violence on the likelihood of being involved in a violent marital relationship. Although children may be exposed to a variety of violent experiences (Hamby et al., 2010), it is not yet clear which one is the robust predictor of later DV. It seems worth studying both types of violence, because a "double whammy" effect may exist (Hotaling & Sugarman, 1986), suggesting that the individuals experiencing both types of violence are potentially at a higher risk for future violence perpetration compared to those experiencing either only one type or no violence at all in their family of origin.

Second, studies have provided moderate support to the hypothesis that childhood abuse (e.g., harsh physical punishment) is related, directly or indirectly, to increased likelihood of violence in young adults (Jennings et al., 2014; Tomsich, Jennings, Richards, Gover, & Powers, 2017), and specifically to

reciprocal violence (Afifi, Mota, Sareen, & MacMillan, 2017). To the authors' knowledge, very few studies have tried to concurrently examine the effects of many modifiable constructs (mediators), risk and protective, interpersonal, and intrapersonal (i.e., attitudinal/cognitive, emotional, and behavioral). In the Reyes et al.'s (2015) pathway model, cognitive–emotional mediators (i.e., beliefs about dating aggression, anger dysregulation, and depression) were included in the relationship between both experiencing and witnessing family violence and DV. Furthermore, fewer studies have examined the role of the protective factors that may attenuate this relationship. Also, little is known about the long-term effects of family violence in young adults' life span.

The present study

The present study aims to examine the hypothesis that exposure to family violence during childhood (i.e., receiving punitive discipline and/or witnessing mutual interparental violence (mIV)) may be associated with involvement in mutual dating violence (mDV) in adulthood, through the mediating effects of four risk factors (e.g., violence approval (VA), negative relating to others, and negative relating to mother and father) and two protective/resilient factors (i.e., closeness to mother and father). Whereas corporal punishment (CP) and psychological aggression (PA) are the most widespread discipline methods (Davidov & Khoury-Kassabri, 2013), the separate effects of these two practices were also examined. All relationships were assumed to be positive, except those with the protective mediators, which were assumed to be negative. More specifically, both types of family violence were hypothesized to have an indirect positive effect on adults' risk factors and a negative effect on adults' protective factors, which in turn were assumed to lead to increased and decreased probability of adults' mDV, respectively. The direct effects were also examined. By comprehending the pathways through which children are involved in later mDV, preventive efforts can be initiated to address the modifiable antecedents, by both extinguishing the risk factors and empowering the protective ones.

Method

This study is part of the International Parenting Study (IPS) which was conducted by a consortium of researchers in over 20 countries all over the world and supervised by M. Straus and A. Fauchier. The data presented here have not been reported on elsewhere.

Participants

A convenience sample of a large university located in southern Greece was administered a questionnaire booklet during regularly scheduled classes. A

sample of 1,327 students was initially approached; excluding those not in a dating relationship (n = 303) and those who declined to participate (n = 41), the sample enumerated 983 participants. After excluding 10 participants due to large amounts of missing data, the sample consisted of 973 participants. Of them, 83% reported to recall very clearly, pretty clearly or in general sense what happened when they were 10 years old. Data from only these respondents were used for further analyses. Thus, the final sample enumerated 807 participants with a mean age of 20.89 years (SD = 3.54). They were predominantly Greek (91.7%) and female (72.5%). Students' biological parents were married (83.4%), had over 12 years of education (54% of fathers and 51.7% of mothers), and their income was moderate to high (18,000–44,999 euro; 42.2%).

Measures

The questionnaire booklet included the following

Dimensions of Discipline Inventory-Adult Recall form (DDI; Straus & Fauchier, 2007). The DDI was used to measure students' retrospective accounts of the parental discipline methods used at their age of 10. This age was selected because children are both still young enough to be engaged in misbehaviors and parents are likely to still be using disciplinary methods (e.g., CP) regularly, and also students are more likely to accurately recall that period than earlier ones (Straus & Fauchier, 2007). After the age of 6, adult retrospective reports are more accurate and after the age of 10 major behavior problems, such as delinquency, may typically occur (Van Leeuwen, Fauchier, & Straus, 2012). Nine discipline methods (e.g., CP, deprivation of privileges, diversion, explanation, ignore misbehavior, penalty tasks and restorative behavior, PA, reward, monitoring) are derived from 26 questions, which are repeated for mothers and fathers. Typical items are "How often did your mother/father explain to you what the rules were to try to prevent you from repeating misbehavior?" and "How often did your mother/father shout or yell at you?" The 10 responses ranged from N = never through 9 = two or more times a day. The nine discipline methods can be grouped into two scales (power-assertive/punitive and inductive/nonpunitive; Van Leeuwen et al., 2012). In this study, only the frequency of the power-assertive/punitive scale (i.e., CP, deprivation of privileges, PA, penalty tasks, and restorative behavior) was used, with an alpha reliability of .84 and .87 for the mother and father, respectively.

Conflict Tactics Scales-Between Parents (CTS2-short form). Participants reported on their mothers and fathers' use of physical violence toward each other, as recalled when they were 10 years old, by completing a two-item inventory for each parent, adapted from the CTS2 (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). Many studies have shown that the scales have

good reliability and validity (e.g., Straus & Douglas, 2004). The items were "My mother/father pushed, shoved, or slapped my father/mother" and "My mother/father punched or kicked or beat-up my father/mother." The eight-response categories ranged from *N* (never happened) through 6 (over 20 times in that year). Because the same question is asked for both the mother and father's behavior, the mutuality types can be extracted (1 = father only violent, 2 = mother only violent, and 3 = both violent; Straus & Douglas, 2004). The frequency of the mutuality type (both perpetrators) was used in this study with an alpha reliability of .90.

Conflict Tactics Scales-Dating Relationship (CTS2-short form). Participants reported on their own and their partners' perpetration of physical violence toward each other in their current dating relationship by completing a four-item scale, adapted from the CTS2 (Straus et al., 1996). The CTS2-short form provides similar results to the original CTS2 (Straus & Douglas, 2004). Selective items from the short form have been used in several studies with maintained psychometric properties (e.g., Jennings et al., 2014; Kim, Kim, Choi, & Emery, 2014). The items asked about the previous year: "I/My partner pushed, shoved, or slapped my partner/me," and "I/My partner punched or kicked or beat-up my partner/me." The eight-response categories ranged from *N* (never happened) through 6 (over 20 times in that year). Since the CTS2 asks the respondent the same question for his/her own and his/her partner's behavior, the mutuality types were extracted (1 = partner only violent, 2 = self only violent, and 3 = both violent; Straus & Douglas, 2004). The frequency of the mutuality type (both perpetrators) was used for the purpose of this study with an alpha reliability of .92.

VA. The six-item scale from the personal and relationships profile (PRP; Straus, Hamby, Boney-McCoy, & Sugarman, 1999/2000) measures the degree to which use of physical violence is acceptable in various interpersonal situations. Specimen items are "I can think of a situation when I would approve of a husband slapping a wife's face" and "It is sometimes necessary to discipline a child with a good, hard spanking." Responses range from 1 (strongly disagree) to 4 (strongly agree). In this study, the alpha reliability was .72.

The shortened Person's Relating to Others Questionnaire (PROQ3; Birtchnell, Hammond, Horn, De Jong, & Kalaitzaki, 2013). This is a measure of maladaptive or undesirable relating tendencies to others, based on Relating Theory (Birtchnell, 1993/1996). It comprises 48 items, rated on a four-item Likert scale ranging from 3 = nearly always true to 0 = rarely true, which contribute to eight scales (i.e., upper neutral, upper close, neutral close, lower close, lower neutral, lower distant, and upper distant). In this study, only the total score was used. Higher scores represent more relating deficits. Specimen items are "I have a tendency to cling to people" and "I tend to get back at people who offend me." Good psychometric properties have been referred for all translations (Greek, Irish, Dutch, and Italian), which compare well to the English ones (Birtchnell et al., 2013). Its scales correlate with

specific personality disorders (Birtchnell & Shine, 2000) and it discriminates between non-patients and psychotherapy patients (Birtchnell et al., 2013), as well as between perpetrators and victims of aggression in dating relationships (Kalaitzaki, Birtchnell, & Kritsotakis 2010). In this study, the alpha reliability was .86.

The shortened Family Members' Interrelating Questionnaire (FMIQ3; Kalaitzaki, Birtchnell, & Nestoros, 2009, 2010). This is a 48-item measure of the interrelating difficulties within families. It is based on Relating Theory (Birtchnell, 1993/1996) and has similar construct to the PROQ3 (number of items, scales, scoring instructions, etc.). Each family member rates his/her relating to the other member (self-rating questionnaire) and the other's relating toward himself/herself (other-rating questionnaire). Specimen items are "I rely on him more than I should" and "When he gets too close to me it makes me feel uneasy." The psychometric properties of the Greek longer version (i.e., the FMIQ) are fairly acceptable (Kalaitzaki et al., 2009). For the purpose of this analysis, only the total score of the participant's relating to mother was used, with an alpha reliability of .87.

Parent–Child Closeness Scale (PCC; Buchanan, Maccoby, & Dornbusch, 1991). This is a nine-item scale to measure a child's closeness to his/her mother and father separately. Specimen items are "How well does your mother/father know what you are really like?" and "How confident are you that your mother/father would help you if you had a problem?" The items received a score from 1 (not at all) to 4 (very). In this study, the alpha reliability was .79.

Limited Disclosure Scale. Six items of the Limited Disclosure Scale of the PRP (Straus et al., 1999/2000) measured the tendency of some participants to be defensive or unwilling to disclose socially undesirable behaviors. Typical items, such as "I sometimes try to get even rather than forgive and forget" and "I sometimes feel resentful when I don't get my way," receive a score from 1 (strongly disagree) to 4 (strongly agree). In this study, the alpha reliability was .56.

Translation of the measures

The author translated the questionnaire booklet from English into Greek and another bilingual person back-translated it into English. Slight modifications, agreed between the author and the study coordinator, were made. The already existing measures in Greek (i.e., the PROQ3 and the FMIQ3) were included in the current study as are

Procedure

The questionnaires were administered in person. The purpose of the study and the participants' rights (e.g., voluntary participation, anonymity, and confidentiality) were introduced both orally and in the cover of the booklet to all purported

participants. Upon completion, the participants were given a list of local social and mental health services should they need assistance. The study was reviewed and approved by the Departmental Committee of Theses and Research Ethics of the institute to which the senior author is affiliated. Questionnaires were sent to the International Parenting Study (IPS) coordinators' team to obtain the scores of the measures and produce the final data file, which was then sent to the authors.

Analysis

With the aim of examining a potential path from the independent variables (i.e., receiving punitive discipline and/or witnessing mIV) to the outcome variable (mDV), while accounting for a number of intermediary variables (see Figure 1), path analysis was used. The mDV was chosen to be the outcome variable as it was reportedly the predominant type of DV in this and other studies (Palmetto et al., 2013). The mediators were included in the Structural Equation Modeling (SEM) if there was theoretical rationale or if they were significantly correlated with the independent and/or dependent variables. Robust Maximum Likelihood estimation method was used. The χ^2/degrees of freedom ratio (CMIN/DF) below 3 (Kline, 2005), the standardized root mean square residual (SRMR) between 0.06 and 0.08 or less, the Tucker–Lewis index (TLI) and the comparative fit index (CFI) between 0.90 and 0.95 or above, the coefficient of determination (CD) above 0.90, and finally the root mean square error of approximation (RMSEA) no greater than 0.06 suggest good model fit (Hu & Bentler, 1999). In comparing the models, the smaller the values of the Akaike's information criterion and Bayesian information criterion, the better the fit. SEM was conducted using Stata 12 software (2011). All other statistical analyses were conducted with the IBM SPSS 20.0 (Nie et al., 2011). All statistical tests were two-tailed, and the level of significance was $p < 0.05$.

The hypothesized effects of child's exposure to family violence on adults' mDV through the mediating effects of six variables were examined. Data analyses followed three main steps. Initially, three independent variables were used to predict adults' mDV: the mother's punitive discipline, the father's punitive discipline, and the mIV. Then, using an explorative approach, two models were compared: a fully mediated model (model Ia), where the effects of the independent variables were assumed to have only an indirect effect on adults' mDV through the full mediation of the intermediary variables and a partially mediated model (model Ib), where the independent variables were assumed to have a direct effect on adults' mDV and an indirect effect through the mediation of the intermediary variables. A final analysis took into account the separate effects of CP and PA, with the aim to examine which one had the most deleterious effect on mDV.

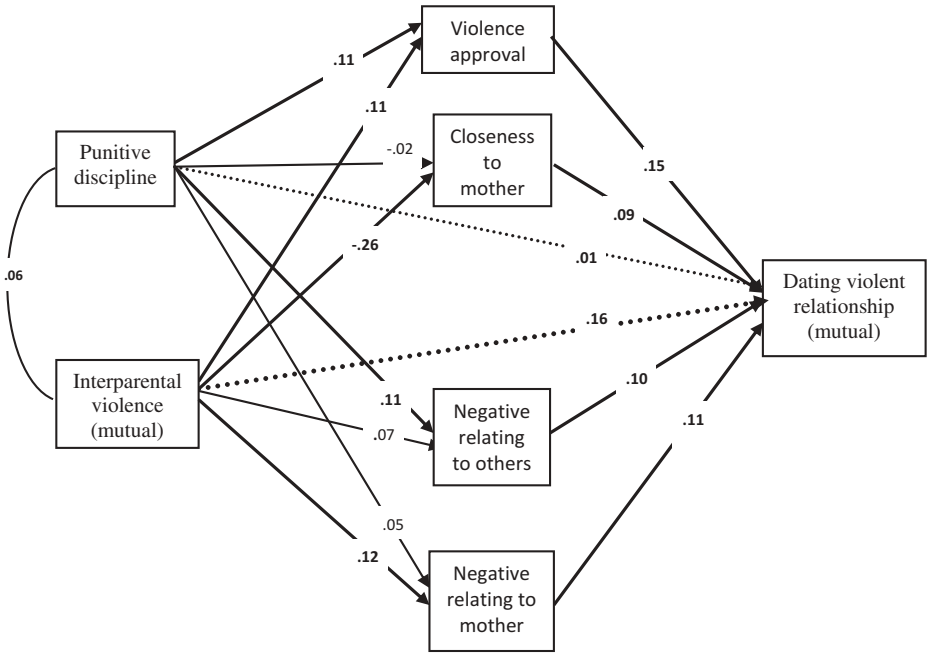

Figure 1. The path diagram with the estimated standardized beta coefficients of model Ib. Significant paths and coefficients are bold typed.

Note. This is a simplified version of the model of mutual violence in adults' dating relationships. The full model includes as independent variables: (1) the parents' five predominant types of punitive discipline (i.e., corporal punishment, psychological aggression, deprivation of privileges, penalty tasks, and restorative behavior) and (2) the two violent behaviors (assault) between parents (i.e., push, shove, or slap; punch or kick or beat-up). The complete mediation effect is indicated with the indirect paths to dependent variable through the mediators (i.e., violence approval, well-being, closeness to mother, negative relating to others, depression, and negative relating to mother), represented with the lines, without the direct paths from independent variables to dependent variable, which are represented with dotted lines; the latter indicates a partial mediation effect.

Results

Tendency to avoid revealing socially undesirable behaviors was relatively low, which supports the validity of the study findings. The tendency was higher for females than males (2.9 vs. 2.7, $t(964) = -4{,}598$, $p < .001$).

Prevalence rates of violence

ince multiple types of parenting discipline could be reported by the respondents, 94.7% and 89.7% of them reported the use of power-assertive/punitive discipline at any frequency by their mother and father, respectively, at the age of 10, whereas 99.2% and 98.3% reported inductive/non-punitive discipline by mother and father at any frequency, respectively. mIV was reportedly the most frequent type of violence between parents (8.2%), compared to the

father only (6.4%) and mother only (1.6%). mDV was reported by 12.7% of the respondents compared to partner only (2.5%) and self only (8.6%).

Intercorrelations between the measures

As expected, both independent and dependent variables correlated positively with the risk factors and negatively with the protective ones (Table 1). The independent variables – mIV, power-assertive/punitive discipline by mother and by father – correlated positively with VA, negative relating to others and negative relating to mother and father, and negatively with the mother/father–child closeness. mDV correlated with mIV and with punitive discipline by both the mothers and fathers.

The mediational model

The model, in which the mother's punitive discipline, the father's punitive discipline, and the mIV were used as independent variables to predict adults' mDV, failed to provide acceptable fit to the data (χ^2 = 15.5, SRMR = 0.079, TLI = 0.843, CFI = 0.866, RMSEA = 0.081, CD = 0.8670). Nonsignificant regression paths were dropped gradually and two variables (i.e., the father's

Table 1. Intercorrelations between the variables of the study.

	PD-M	PD-F	mDV	PCCM	PCCF	VA	PROQ3	FMCQ-M	FMCQ-F
Mutual interparental violence (mIV)	.14**	.13**	.18**	−.24**	−.27**	.12**	.07	.10**	.09**
Power-assertive/punitive discipline-mother (PD-M)		.52**	.15**	−.39**	−.42**	.12**	.18**	.03	.04
Power-assertive/punitive discipline-father (PD-F)			.13**	−.32**	−.38*	.10**	.10**	.07*	.09*
Mutual dating violence (mDV)				−.05	−.07*	.16**	.08*	.14**	.14**
Parent–child closeness–mother (PCCM)					.56**	−.14**	−.16**	.01	−.08*
Parent–child closeness–father (PCCF)						−.11**	−.22**	−.15**	.04
Violence approval (VA)							.17**	.14**	.17**
Person's negative relating to others (PROQ3)								.56**	.51**
Negative relating to mother (FMCQ-M)									.81**

FMCQ-F: negative relating to father.
**Correlation is significant at the 0.01 level. *Correlation is significant at the 0.05 level.

punitive discipline and the participant's closeness to father) were eventually left out.

The comparison of a fully mediated model (model Ia) with a partially mediated model (model Ib) showed that the partial model fit the data best (Table 2). The final model is depicted in Figure 1. Mother's punitive discipline during childhood had a positive effect on VA and negative relating to others during adulthood, whereas mIV had a positive effect on VA, and negative relating to mother, and a negative effect on closeness to the mother. All mediators, in turn, had a positive effect on adult's mDV. mIV, but not mother's punitive discipline also had a direct positive effect on mDV. The standardized coefficients (beta weights) of the partial mediation model are shown in Table 3. Overall, the results showed that mother's PD at age 10 has an indirect effect on mDV in later life, through the mediating role of violence attitudes and negative relating to others, whereas mIV has both a direct and an indirect effect on mDV, through the mediating role of violence attitudes, depression, negative relating to mother, less closeness to mother, and well-being.

Table 2. Summary goodness-of-fit statistics of the models of the adults' mutual violent dating relationship.

	CMIN/DF	SRMR	TLI	CFI	RMSEA	CD	AIC	BIC
Model Ia	2.24	0.04	1.00	1.00	0.02	0.99	12362.10	12623.83
Model Ib	1.98	0.01	1.00	1.00	0.000	1.00	12349.89	12620.50
Model IIa	2.19	0.04	0.98	0.99	0.04	0.96	13531.04	13775.03
Model IIb	2.00	0.04	0.98	0.99	0.03	0.96	13521.33	13774.19

Note. Models Ia, b: independent variables: punitive discipline by mother and mutual interparental violence (mIV); dependent variable: mutual dating violence (mDV). Model Ia: full mediation; model Ib: partial mediation. Models IIa, b: independent variables: corporal punishment by mother, PA by mother and mutual interparental violence (mIV); dependent variable: mDV. Model IIa: full mediation; model IIb: partial mediation (paths from all three independent variables).

CMIN/DF: The χ^2/degrees of freedom ratio; SRMR: standardized root mean square residual; TLI: Tucker–Lewis index; CFI: comparative fit index; RMSEA: root mean square error of approximation; CD: coefficient of determination; AIC: Akaike's information criterion; BIC: Bayesian information criterion.

Table 3. Standardized coefficients and significance levels for the partial mediation model depicted in Figure 1.

Measurement model estimates	Standardized coefficients	*p*
Mother's punitive discipline → Violence approval	.11	.007
Mother's punitive discipline → Closeness to mother	−.02	0.561
Mother's punitive discipline → Negative relating to others	.11	.006
Mother's punitive discipline → Negative relating to mother	.05	0.167
Mother's punitive discipline → Mutual dating violence	.01	0.754
Mutual interparental violence → Violence approval	.11	.006
Mutual interparental violence → Closeness to mother	−.26	.000
Mutual interparental violence → Negative relating to others	.07	.098
Mutual interparental violence → Negative relating to mother	.12	.002
Mutual interparental violence → Mutual dating violence	.16	.000
Violence approval → Mutual dating violence	.15	.000
Closeness to mother → Mutual dating violence	.09	.011
Negative relating to others → Mutual dating violence	.10	.009
Negative relating to mother → Mutual dating violence	.11	.022

The examination of the separate effects of CP and PA showed that the partial mediation model (model IIb) fit the data best as compared to the full mediation model (model IIa), though both displayed worst fit indices than the model of the joined effects of the punitive discipline methods. The results showed that CP ($\beta = .11$, $p < .01$), but not PA, directly affected mDV, along with mIV ($\beta = .15$, $p < .01$). CP affected negative relating with others ($\beta = .11$, $p < .01$) and PA affected VA ($\beta = .13$, $p < .01$), which, in turn, affected mDV ($\beta = .12$, $p < .001$ and $\beta = .11$, $p < .01$, respectively).

Discussion

Using retrospective self-reports by Greek students, the study builds on previous theoretical and empirical evidence. The ITV model was expanded to include both the two well-known predictors of DV (i.e., witnessing mIV and experiencing punitive discipline) and a number of risk and protective factors, both intrapersonal (VA) and interpersonal (negative relating to parents and to others, and emotional contact with the parents), were assumed to mediate the link with mDV.

Acknowledging the lack of research in the father–child relationship within violent families (Guille, 2004), this study examined the presumed impact of father's discipline methods upon participants' mDV. In line with other findings (e.g., Hendy et al., 2003; Lewis & Lamb, 2007), the results demonstrated that the mother–child relationship had a more significant impact on later mDV than that with the father. Given the cultural context of Greece, this finding might not be surprising. Traditionally in Greece, the mother has the main responsibility of raising the children, whereas the father is more distant, the role of whom is mainly to financially support of the family.

One hypothesis of this study was that the children who were exposed to either type of violence within the family (i.e., witnessing mIV or experiencing punitive discipline) are more likely to be involved in mutual violent relationships in adulthood. This was confirmed for the mIV. It was a surprise though, that receiving punitive discipline during childhood failed to be directly associated with mDV, as there is voluminous research on this topic (e.g, Afifi et al., 2017; Hipwell et al., 2014; Jennings et al., 2014; Kim et al., 2014; Lee, Reese-Weber, & Kahn, 2014). In our data, mIV appears to have a more robust impact on mDV than parenting punitive discipline However, when CP was considered separately, consistent with other findings (e.g., Simons, Burt, & Simons, 2008), it directly influenced mDV. It seems quite plausible that the effects might have been even more significant should only extreme discipline practices, such as harsh punishment (e.g., physical abuse), have been taken into account. Future studies should examine separately each punitive method and also the combined effects of all discipline practices, as

most parents frequently use both punitive and non-punitive methods (Fauchier & Straus, 2008).

One of the most important findings of this study is that the relationship between family violence and adult's mDV is mediated by a range of risk and protective factors. Consistent with the results of other studies (e.g., Wolfe et al., 2004), punitive discipline by mother was found to be a distal risk factor for adults' mDV, and both VA and negative relating with others mediated this relationship. Negative relating with others is considered to be a destructive, disadvantageous, and undesirable interpersonal behavior to others (Kalaitzaki, Birtchnell, & Hammond, 2014). It can take the form of a clumsy, awkward, and anxious relating behavior or the form of a self-centered and inconsiderate relating toward other persons (Birtchnell, 1993/1996; Kalaitzaki et al., 2014). It was found to be positively correlated with mDV (i.e., the more the negative relating with others the more mutual dating violent relationships), which makes absolute sense. Attachment difficulties may occur in response to punitive discipline by the mother or other early traumatic experiences (Sonkin & Dutton, 2003) and children may internalize a conflict-oriented model of relating to others, which they reproduce in their dating relationships (Levendosky, Huth-Bocks, & Semel, 2002).

The findings converged with others in revealing that VA mediates the effect of both types of family violence upon mDV (Simons et al., 2008). Silverman and Williamson (1997) have shown that attitudes and beliefs that favor violent behavior toward women endorsed through socializing with violent peers may play a mediating role in the relationship between witnessing paternal domestic violence and DV.

This study was also concerned with the assumed impact of participants' protective factors. As anticipated, the detrimental effects of mIV to a person's emotional distance from the mother (Bailey & Eisikovits, 2015) were confirmed. Less closeness to the mother, in turn, was associated with lower probability of mDV. The findings were not replicated for the punitive discipline. It seems that the closer a person is to his/her mother, which has been internalized as a violent model, the more likely the person is to replicate this behavior in his/her own dating relationships (Delsol & Margolin, 2004; Olsen et al., 2010) and vice versa. Thus, mIV seems to lead to more negative relating and less closeness to mother, which in turn leads to higher probability of engaging in adult mDV.

In essence, although less closeness to mother was significantly associated with mIV, the strongest predictors of mDV were the direct effect of mIV and the indirect effect of VA derived from both mIV and punitive discipline. The ITV hypothesis underlines the study's findings, and the continuation of violence through the victim's developmental stages seems a plausible explanation. The study findings can be interpreted by the social learning theory (Bandura, 1977; Straus et al., 1980). It is likely that children acquire their parents' violent behavioral patterns, which they later reproduce in their own dating

relationships. It was the mIV that directly impacted the mutual DV after all. Bowlby (1988) has also suggested that impoverished early parent–child relations may impact negatively on the parent–child bond, causing, in turn, harmful ramifications to the child's development and future relationships.

In many ways, the findings of this study invite more questions than they answer. Future studies should study separately the effects of the various punitive practices upon mDV, examine possible gender differences, and also include diverse samples (e.g., of less educated respondents). Validation of participants' data with their parents' reports about their own behavior would be welcomed. Parents' reports of violence within their own family-of-origin would also be an added value. This study did not assess the context within which discipline methods occurred or the mode of implementing discipline. Positive parenting practices may be protective for children exposed to mIV (Gámez-Guadix, Almendros, Carrobles, & Muñoz-Rivas, 2012). Replication of this study using a longitudinal design is highly recommended so that the direction of effects may be ascertained.

The limitations of this study must be acknowledged. Most importantly, data were retrospective self-reports, and both social desirability and bias recall may have affected the results. Given the high rates of reported violence within the family, the low rate of social desirability response bias, and the high rate of respondents' adequate recollection (83%), it would appear that the retrospective reports were accurate. However, it is likely that some respondents may have underreported their own and their partner's violent behavior. Other Greek studies (e.g., Kalaitzaki, Birtchnell, & Kritsotakis 2010) have found significantly higher rates of mDV (53.4% for females and 76.7% for males). Either way, it is likely that any reporting bias would be in the direction of underestimating, rather than overestimating violence. Other important mediating variables should have been studied, such as violent peers' attitudes (Silverman & Williamson, 1997). Although "mutual" violence typically occurs very often, unidirectional violence probably should have also been examined. There was also an imbalance in the sampling in favor of the females. Although students in this sample were not selected to be necessarily representative of all students, this may have affected the generalizability of the findings. However, there is no theoretical reason to expect that the results would be specific to this sample and not to other samples too. Furthermore, the cross-sectional nature of the study relying on retrospective reports makes the causal inferences impossible. Another limitation of this study is the limited number of items to measure various concepts, such as the outcome variable (DV). Furthermore, the study of the harsh discipline practices alone (e.g., CP) might have provided a clearer picture of the findings compared to that of the study of all punitive methods together (e.g., deprivation of privileges and PA).

Despite the limitations, the study has important implications. The results of this study support the cycle of violence and the ITV model, showing that experiencing violence in childhood may be associated with one's adult intimate relationships (Straus et al., 1980). First, our findings suggest that parents who use punitive discipline toward their child increase the probability that their offspring will grow up to consider violence as acceptable and behave negatively in their relationships with others. Moreover, the offsprings of parents who are violent to each other are more likely to approve of violence, demonstrate more relating difficulties, and have less emotional contact with their mother. Those exposed to such effects (and also directly to mIV) are more likely to be involved in mDV. Overall, the results imply that early dysfunctional parent–child relationships might be important in guiding some individuals' later behavior, by increasing the probability for them to be involved in dysfunctional intimate relationships similar to their family's.

The study findings contribute to the empirical research literature in many important ways. A multivariate model was examined, in which two potential independent predictors (i.e., mIV and mother's punitive discipline) and a number of mediators were simultaneously entered. A crucial implication of the study is that it seems that there is not one path to involvement in mDV. It would be useful for future research endeavors to keep exploring the differential effects of parents' punitive discipline and mIV to mDV.

The theoretical implication of the study is that the findings extend current knowledge regarding the ITV model. The identification of variant factors and mediators will lead to more accurate prediction models and, in turn, to the designing of empirically guided efforts, focusing differentially on the developmental trajectories from punitive discipline and mIV to mDV, thus more effectively decreasing the occurrence of mDV (Olsen et al., 2010; Vagi et al., 2013).

The conclusions and implications drawn from these findings for practitioners, who are tasked with designing DV treatment and prevention programs, though not new, are important. Prevention and intervention efforts should target the parents' violent behaviors and the factors that may increase the likelihood of mDV. First and foremost, interventions should promote positive parenting by teaching competent parenting skills (e.g., Ansari, Purtell, & Gershoff, 2016; Keeshin, Oxman, Schindler, & Campbell, 2015) and thus help parents become better role models for their children. Practitioners should advise parents to eschew using violence against them or as a disciplinary method, as it could be detrimental for their offspring's attitudes and behaviors (Simons & Wurtele, 2010). Prevention and treatment efforts should also address one's potential negative relating behaviors and modify the attitudes approving violence. Finally, practitioners should target violence victims' maintenance of emotional distance from their violent parents. In addition to reducing childhood adversity, developing resilience in children is crucial (Bernard, 1995). A comprehensive review on intervention programs for children exposed to domestic abuse offered either to children

directly and/or to caregivers has been conducted by Rizo, Macy, Ermentrout, and Johns (2011), which may offer additional guidelines. All these efforts conjointly may lessen or even eliminate any potential adverse influence of punitive discipline and mIV on mDV.

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Compliance with ethical standards

All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all patients for being included in the study.

References

Afifi, T. O., Mota, N., Sareen, J., & MacMillan, H. L. (2017). The relationships between harsh physical punishment and child maltreatment in childhood and intimate partner violence in adulthood. *BMC Public Health*, *17*, 1. doi:10.1186/s12889-017-4359-8

Aizpitarte, A., Alonso-Arbiol, I., & Van de Vijver, F. J. R. (2017). An explanatory model of dating violence risk factors in Spanish adolescents. *Journal of Research on Adolescence*, *27*(4), 797–809.

Amato, P. R. (2000). Consequences of divorce for adults and children. *Journal of Marriage and the Family*, *62*, 1269–1287. doi:10.1111/j.1741-3737.2000.01269.x

Ansari, A., Purtell, K. M., & Gershoff, E. T. (2016). Parenting gains in head start as a function of initial parenting skill. *Journal of Marriage and Family*, *78*(5), 1195–1207. doi:10.1111/jomf.12296

Bailey, B., & Eisikovits, Z. (2015). Violently reactive women and their relationship with an abusive mother. *Journal of Interpersonal Violence*, *30*(11), 1905–1928.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bernard, B. (1995). *Fostering resilience in children*. Urabana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education.

Bevan, E., & Higgins, D. J. (2002). Is domestic violence learned? The contribution of five forms of child maltreatment to men's violence and adjustment. *Journal of Family Violence*, *17*, 223–245.

Birtchnell, J. (1993/1996). *How humans relate: A new interpersonal theory. Hardback, Westport, Con.: Praeger; Paperback*. Hove, Sussex: Psychology Press.

Birtchnell, J., Hammond, S., Horn, E., De Jong, C., & Kalaitzaki, A. E. (2013). A cross-national comparison of a shorter version of the person's relating to others questionnaire. *Clinical Psychology & Psychotherapy*, *20*(1), 36–48. doi:10.1002/cpp.789

Birtchnell, J., & Shine, J. (2000). Personality disorders and the interpersonal octagon. *British Journal of Medical Psychology*, *73*, 433–448.

Black, D. S., Sussman, S., & Unger, J. B. (2010). A further look at the Intergenerational Transmission of Violence: Witnessing interparental violence in emerging adulthood. *Journal of Interpersonal Violence*, *25*(6), 1022–1042. doi:10.1177/0886260509340539

Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. London, UK: Routledge.

Buchanan, C. M., Maccoby, E. E., & Dornbusch, S. M. (1991). Caught between parents: Adolescents' experience in divorced homes. *Child Development*, *62*, 1008–1029. doi:10.1111/j.1467-8624.1991.tb01586.x

Caldwell, J. E., Swan, S. C., Allen, C. T., Sullivan, T. P., & Snow, D. L. (2009). Research examining the motivation for women's use of intimate partner violence. Why I hit him: Women's reasons for intimate partner violence. *Journal of Aggression, Maltreatment & Trauma*, *18*, 672–697.

Capaldi, D. M., Knoble, N. B., Shortt, J. W., & Kim, H. K. (2012). A systematic review of risk factors for intimate partner violence. *Partner Abuse*, *3*(2), 231–280. doi:10.1891/1946-6560.3.2.23

Costa, B. M., Kaestle, C. E., Walker, A., Curtis, A., Day, A., Toumbourou, J. W., & Miller, P. (2015). Longitudinal predictors of domestic violence perpetration and victimization: A systematic review. *Aggression and Violent Behavior*, *24*, 261–272. doi:10.1016/j.avb.2015.06.001

Davidov, M., & Khoury-Kassabri, M. (2013). Recollections of harsh discipline in childhood and depressive feelings in adulthood: The roles of culture and gender. *Children and Youth Services Review*, *35*(6), 1007–1014. doi:10.1016/j.childyouth.2013.03.009

Delsol, C., & Margolin, G. (2004). The role of family-of-origin violence in men's marital violence perpetration. *Clinical Psychology Review*, *24*, 99–122. doi:10.1016/j.cpr.2003.12.001

Ehrensaft, M. K., Cohen, P., Brown, J., Smailes, E., Chen, H., & Johnson, J. G. (2003). Intergenerational transmission of partner violence: A 20-year prospective study. *Journal of Consulting and Clinical Psychology*, *71*(4), 741–753. doi:10.1037/0022-006X.71.4.741

Fauchier, A., & Straus, M. A. (2008, March). Violence between mothers and fathers of university students and their methods of correcting children's misbehavior. Paper presented at the Conference of the International Family Aggression Society, Preston, UK: University of Central Lancashire.

Franzese, R. J., Menard, S., Weiss, A. J., & Covey, H. C. (2017). Adolescent exposure to violence and adult violent victimization and offending. *Criminal Justice Review*, *42*(1), 42–57. doi:10.1177/0734016816679228

Fulu, E., Miedema, S., Roselli, T., McCook, S., Chan, K. L., Haardörfer, R., … Johnson, S. (2017). Pathways between childhood trauma, intimate partner violence, and harsh parenting: Findings from the UN multi-country study on men and violence in Asia and the Pacific. *The Lancet Global Health*, *5*(5), e512–e522. doi:10.1016/S2214-109X(17)30103-1

Gámez-Guadix, M., Almendros, C., Carrobles, J. A., & Muñoz-Rivas, M. (2012). Interparental violence and children's long-term psychosocial adjustment: The mediating role of parenting practices. *Spanish Journal of Psychology*, *15*(1), 145–155. doi:10.5209/rev_SJOP.2012.v15.n1.37299

Gömez, A. M. (2011). Testing the cycle of violence hypothesis: Child abuse and adolescent dating violence as predictors of intimate partner violence in young adulthood. *Youth and Society*, *43*(1), 171–192. doi:10.1177/0044118X09358313

Guille, L. (2004). Men who batter and their children: An integrated review. *Aggression & Violent Behavior*, *9*(2), 129–163. doi:10.1016/S1359-1789(02)00119-2

Hamby, S., Finkelhor, D., Turner, H., & Ormrod, R. (2010). The overlap of witnessing partner violence with child maltreatment and other victimizations in a nationally representative survey of youth. *Child Abuse & Neglect*, *34*(10), 734–741. doi:10.1016/j.chiabu.2010.03.001

Hendy, H. M., Weiner, K., Bakerofskie, J., Eggen, D., Gustitus, C., & McLeod, K. C. (2003). Comparison of six models for violent romantic relationship in college men and women. *Journal of Interpersonal Violence*, *18*(6), 645–665. doi:10.1177/0886260503018006005

Hipwell, A. E., Stepp, S. D., Xiong, S., Keenan, K., Blokland, A., & Loeber, R. (2014). Parental punishment and peer victimization as developmental precursors to physical dating violence involvement among girls. *Journal of Research on Adolescence*, *24*(1), 65–79.

Hotaling, G. T., & Sugarman, D. B. (1986). An analysis of risk markers in husband to wife violence: The current state of knowledge. *Violence and Victims*, *1*(2), 101–124.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1–55. doi:10.1080/10705519909540118

Jennings, W. G., Park, M., Richards, T. N., Tomsich, E., Gover, A., & Powers, R. A. (2014). Exploring the relationship between child physical abuse and adult dating violence using a causal inference approach in an emerging adult population in South Korea. *Child Abuse & Neglect*, *38*(12), 1902–1913.

Johnson, M. P. (2008). *A typology of domestic violence: Intimate terrorism, violent resistance, and situational couple violence*. Boston, US: Northeastern University Press.

Kalaitzaki, A., Birtchnell, J., & Nestoros, J. (2010). Does family interrelating change over the course of individual treatment? *Clinical Psychology & Psychotherapy*, *17*, 463–481. doi:10.1002/cpp.687

Kalaitzaki, A. E., Birtchnell, J., & Hammond, S. (2014). Measuring change in relating and interrelating during the early stages of psychotherapy: Comparison with a non-patients' sample. *Psychotherapy Research*, *30*, 1–10. doi:10.1080/10503307.2014.939118

Kalaitzaki, A. E., Birtchnell, J., & Kritsotakis, E. (2010). The associations between negative relating and aggression in the dating relationships of students from Greece. *Partner Abuse: New Directions in Research, Intervention, and Policy*, *1*(4), 420–442. doi:10.1891/1946&U8211;6560.1.4.420

Kalaitzaki, A. E., Birtchnell, J., & Nestoros, J. N. (2009). Interrelating within the families of young psychotherapy outpatients. *Clinical Psychology & Psychotherapy*, *16*(3), 199–215. doi:10.1002/cpp.613

Kaufman-Parks, A. M., DeMaris, A., Giordano, P. C., Manning, W. D., & Longmore, M. A. (2017). Intimate partner violence perpetration from adolescence to young adulthood: Trajectories and the role of familial factors. *Journal of Family Violence*, *1-15*. doi:10.1007/s10896-017-9924-5

Kaukinen, C. (2014). Dating violence among college students: The risk and protective factors. *Trauma, Violence, and Abuse*, *15*(4), 283–296. doi:10.1177/1524838014521321

Keeshin, B. R., Oxman, A., Schindler, S., & Campbell, K. A. (2015). A domestic violence shelter parent training program for mothers with young children. *Journal of Family Violence*, *30*(4), 461–466. doi:10.1007/s10896-015-9698-6

Kim, J. Y., Kim, H. J., Choi, J. W., & Emery, C. (2014). Family violence and dating violence in Korea. *Journal of Family Violence*, *29*(1), 23–33.

Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York, NY: Guilford Press.

Lee, M., Reese-Weber, M., & Kahn, J. H. (2014). Exposure to family violence and attachment styles as predictors of dating violence perpetration among men and women: A mediational model. *Journal of Interpersonal Violence*, *29*(1), 20–43.

Levendosky, A. A., Huth-Bocks, A., & Semel, M. A. (2002). Adolescent peer relationships and mental health functioning in families with domestic violence. *Journal of Clinical Child and Adolescent Psychology*, *31*(2), 206–218. doi:10.1207/S15374424JCCP3102_06

Lewis, C., & Lamb, M. E. (2007). Understanding fatherhood: A review of recent research. Report. Lancaster University. Joseph Rowntree Foundation.

Maneta, E., Cohen, S., Schulz, M., & Waldinger, R. J. (2012). Links between childhood physical abuse and intimate partner aggression: The mediating role of anger expression. *Violence and Victims*, *27*(3), 315–328. doi:10.1891/0886-6708.27.3.315

Murphy, C. M., & Blumenthal, D. R. (2000). The mediating influence of interpersonal problems on the intergenerational transmission of relationship aggression. *Personal Relationships*, *7*(2), 203–218. doi:10.1111/j.1475-6811.2000.tb00012.x

Nie, N., Hull, C., & Bent, D. (2011). *IBM statistical package for the Social Sciences (SPSS Version 20)*. Chicago, IL: Computer Software. SPSS.

Olsen, J. P., Parra, G. R., & Bennett, S. A. (2010). Predicting violence in romantic relationships during adolescence and emerging adulthood: A critical review of the mechanisms by which familial and peer influences operate. *Clinical Psychology Review*, *30*(4), 411–422. doi:10.1016/j.cpr.2010.02.002

Palmetto, N., Davidson, L. L., Breitbart, V., & Rickert, V. I. (2013). Predictors of physical intimate partner violence in the lives of young women: Victimization, perpetration, and bidirectional violence. *Violence and Victims*, *28*(1), 103–121. doi:10.1891/0886-6708.28.1.103

Rada, C. (2014). Violence against women by male partners and against children within the family: Prevalence, associated factors, and intergenerational transmission in Romania, a cross-sectional study. *BMC Public Health*, *14*, 1. doi:10.118/61471-2458-14-129

Reyes, H. L. M., Foshee, V. A., Fortson, B. L., Valle, L. A., Breiding, M. J., & Merrick, M. T. (2015). Longitudinal mediators of relations between family violence and adolescent dating aggression perpetration. *Journal of Marriage and Family*, *77,1016–1030*. doi:10.1111/jomf.12200

Rizo, C. F., Macy, R. J., Ermentrout, D. M., & Johns, N. B. (2011). A review of family interventions for intimate partner violence with a child focus or child component. *Aggression and Violent Behavior*, *16*(2), 144–166. doi:10.1016/j.avb.2011.02.004

Saltzman, L. E. (2004). Definitional and methodological issues related to transnational research on intimate partner violence. *Violence Against Women*, *10*(7), 812–830. doi:10.1177/1077801204265553

Silverman, J. G., & Williamson, G. M. (1997). Social ecology and entitlements involved in battering by heterosexual college males: Contributions of family and peers. *Violence and Victims*, *12*(2), 147–164.

Simons, D. A., & Wurtele, S. K. (2010). Relationships between parents' use of corporal punishment and their children's endorsement of spanking and hitting other children. *Child Abuse & Neglect*, *34*(9), 639–646. doi:10.1016/j.chiabu.2010.01.012

Simons, L. G., Burt, C. H., & Simons, R. L. (2008). A test of explanations for the effect of harsh parenting on the perpetration of dating violence and sexual coercion among college males. *Violence and Victims*, *23*(1), 66–82. doi:10.1891/0886-6708.23.1.66

Sonkin, D. J., & Dutton, D. (2003). Treating assaultive men from an attachment perspective. *Journal of Aggression, Maltreatment & Trauma*, *7*(1–2), 105–133. doi:10.1300/J146v07n01_06

StataCorp (2011). Stata statistical software: Release 12. College Station, TX, StataCorp LP.

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 Family*, *62*(3), 640–654. doi:10.1111/j.1741-3737.2000.00640.x

Straus, M. A. (2001). *Beating the devil out of them: Corporal punishment in American families and its effects on children* (2nd ed.). New Brunswick, NJ: Transaction Publishers.

Straus, M. A. (2007). Dominance and symmetry in partner violence by male and female university students in 32 nations. *Children and Youth Services Review*, *30*, 252–275. doi:10.1016/j.childyouth.2007.10.004

Straus, M. A., & Douglas, E. D. (2004). A short form of the Revised Conflict Tactics Scales, and typologies for seventy and mutuality. *Violence & Victims*, *19*, 507–520.

Straus, M. A., & Fauchier, A. (2007). *Manual for the Dimensions of Discipline Inventory (DDI)*. Durham, NH: Family Research Laboratory, University of New Hampshire . http://pubpages.unh.edu/□mas2/

Straus, M. A., Gelles, R. J., & Steinmetz, S. K. (1980). *Behind closed doors: Violence in the American family*. Garden City, NY: Anchor Books.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. (1996). The Revised Conflict Tactic Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, *17*(3), 283–316. doi:10.1177/019251396017003001

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. (1999/2000). *Manual for the Personal and Relationships Profile (PRP)*. Durham, NH: University of New Hampshire, Family Research Laboratory. Retrieved from http://pubpages.unh.edu/~mas2/

Sugg, N. (2015). Intimate partner violence: Prevalence, health consequences, and intervention. *Medical Clinics of North America*, *99*(3), 629–649.

Tomsich, E., Jennings, W. G., Richards, T. N., Gover, A. R., & Powers, R. A. (2017). Childhood physical maltreatment and young adult dating violence: A propensity matching approach. *Journal of Interpersonal Violence*, *32*(22), 3475–3496. doi:10.1177/0886260515599657

Vagi, K. J., Rothman, E. F., Latzman, N. E., Tharp, A. T., Hall, D. M., & Breiding, M. J. (2013). Beyond correlates: A review of risk and protective factors for adolescent dating violence perpetration. *Journal of Youth & Adolescence*, *42*(4), 633–649. doi:10.1007/s10964-013-9907-7

Van Leeuwen, K. G., Fauchier, A., & Straus, M. A. (2012). Assessing dimensions of parental discipline. *Journal of Psychopathology and Behavioral Assessment*, *34*(2), 216–231. doi:10.1007/s10862-012-9278-5van

Wijk, N. P. L., & De Bruijn, J. G. M. (2012). Risk factors for domestic violence in curacao. *Journal of Interpersonal Violence*, *27*(15), 3032–3053. doi:10.1177/0886260512441074

Wolfe, D. A., Crooks, C. V., Lee, V., McIntyre-Smith, A., & Jaffe, P. G. (2003). The effects of children's exposure to domestic violence: A meta-analysis and critique. *Clinical Child & Family Psychology Review*, *6*(3), 171–187. doi:10.1023/A:1024910416164

Wolfe, D. A., Wekerle, C., Scott, K., Straatman, A. L., & Grasley, C. (2004). Predicting abuse in adolescent dating relationships over 1 year: The role of child maltreatment and trauma. *Journal of Abnormal Psychology*, *113*(3), 406–415. doi:10.1037/0021-843X.113.3.406