# A Methodological Review and Critique of the "Intergenerational Transmission of Violence" Literature

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#### Abstract

Exposure to interpersonal or interparental violence (EIPV) and child abuse and maltreatment (CAM) are associated with an increased risk of maladaptive outcomes, including later involvement in adulthood intimate partner violence (IPV; often referred to as the theory of intergenerational transmission of violence). Recent meta-analyses, however, have documented a weak effect size when examining this association. By focusing on young adulthood, a development stage in which identity development and romantic relationship formation are salient tasks, we can provide insight into the association between EIPV, CAM, and IPV. Guided by the methodological critiques from the IPV and EIPV literatures, the present study reviewed the methodology used in 16 studies (published between 2002 and 2016) that tested the theory of intergenerational transmission of violence. The review study focused on how EIPV, CAM, and young adult dating violence were measured and analyzed, with the initial goal of better understanding how methodological decision informed the study's findings. Ultimately, we determined that there was simply too much methodological variability and yet too little methodological complexity to truly inform a review and discussion of the results; therefore, our review solely focused on the study's methodological decisions. Based on our review, we suggest that both of these challenges, too much variability and too little complexity, hinder our ability to examine the theory of intergenerational transmission of violence. Future research must strike a balance between methodological consistency and complexity to better understand the intricate nuances of IPV experiences and inform practice.

## Keywords

child abuse, children exposed to domestic violence, domestic violence, dating violence, intergenerational transmission of trauma

Exposure to interpersonal or interparental violence (EIPV) impacts millions of children and adolescents before the age of 18 (Edleson, Ellerton, Seagren, Kirchberg, & Ambrose, 2007). Exposure to IPV is associated with a range of maladaptive outcomes in the short and long term (see Haselschwerdt, 2014; Haselschwerdt et al., 2016; Holden, 2003; and Smith-Marek et al., 2015 for reviews), including an increased risk of involvement in violent or abusive relationships in adolescence (Foshee, Bauman, & Linder, 1999), young adulthood (Baker & Stith, 2008), and adulthood (Smith-Marek et al., 2015). In addition, EIPV often co-occurs with child abuse and maltreatment (CAM: Hamby, Finkelhor, Turner, & Ormond, 2010a, 2010b; Jouriles, McDonald, Smith Slep, Heyman, & Garrido, 2008). Exposure to both forms of family violence (hereafter referred to as dual exposure), however, is associated with an increased risk of maladaptive outcomes over time above and beyond sole IPV exposure (Hamby et al., 2010a, 2010b; Jouriles et al., 2008). These associations are most often explained by the theory of intergenerational transmission of violence, stemming from social learning theory (Kalmuss, 1984). Researchers, practitioners, and policy makers alike often

document family violence exposure as one of the strongest risk factors or predictors of later IPV involvement, and yet, empirical findings supporting this association are not consistent. Further, recent meta-analyses only document a small effect size linking family violence exposure and IPV involvement during adulthood (Smith-Marek et al., 2015; Stith et al., 2000)—providing substantial evidence that the association is not as strong or linear as is often presumed.

It is apparent that there is at least some association between EIPV and later IPV involvement, but the pathways between these two adverse life events have not been definitively addressed. Smith-Marek and colleagues (2015) provide support for a more nuanced approach in examining this association—a

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developmental-interactional perspective-that emphasizes the role of family violence exposure, along with additional risk factors in various contexts (e.g., peers relationships) to best explain this complex phenomena. An additional or complementary explanation for the weak association and contradicting findings, warranting further exploration, is rooted in methodological critiques from the adult IPV literature (e.g., DeKeseredy & Schwartz, 2011; Grych & Hamby, 2014; Lindhorst & Tajima, 2008). Therefore, informed by the methodological critiques from the adult IPV literature, and more recently, the EIPV (e.g., Haselschwerdt, 2014; Haselschwerdt et al., 2016; Jouriles & McDonald, 2015) and adolescent dating violence literatures (e.g., Messinger, Fry, Rickert, Catallozzi, & Davidson, 2014; Teten, Ball, Valle, Noonan, & Rosenbluth, 2009), we reviewed 16 studies' methodological decisions to examine how these decisions might influence our understanding of the association between family violence exposure and IPV during young adulthood (young adult dating violence [YADV]) with the goal of providing recommendations for future research. Specifically, the review focuses on how EIPV, CAM, and YADV were measured and analyzed in 16 recently published studies.

# Operationalization and Methodological Critiques of Intimate Partner Violence (IPV)

There have been decades of debate both within and across disciplines regarding the operationalization of IPV, particularly within the adult literature. While some researchers take a broader, more inclusive approach in defining and measuring IPV (e.g., physical violence, psychological abuse), a substantial number of researchers still limit their focus to discrete acts of physical violence (DeKeseredy & Schwartz, 2011; Follingstad & Bush, 2014; Hardesty et al., 2015). By narrowing the definition and measurement of IPV solely to acts of physical violence, researchers likely overlook additional, influential aspects of IPV (DeKeseredy & Schwartz, 1998, 2011; Grych & Hamby, 2014). For example, although the Conflict Tactics Scale (CTS; Straus, 1979) and the Revised-Conflict Tactics Scale (CTS-2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) are the most commonly used measures of IPV, researchers have noted their shortcomings without the addition of complementary measures tapping into the complexity of IPV over time versus measurement of discrete acts of violence (DeKeseredy & Schwartz, 1998, 2011; Grych & Hamby, 2014; Lehrner & Allen, 2014).

This critique, along with the goal of addressing the longstanding debate over IPV operationalization, has contributed to some adult IPV researchers shifting toward assessing the greater complexity and variability within IPV. Specifically, there has been a growing focus on making distinctions between the types of IPV based on the presence or absence or degree of coercive control (Hardesty et al., 2015; Johnson, 2008; Stark, 2007). IPV with a high degree of coercive control (i.e., intimate terrorism or coercive controlling violence) is associated with greater fear of partner and with negative physical and mental health outcomes over time when compared to IPV with no or low degrees of coercive control (i.e., situational couple violence; Johnson & Leone, 2005).

Despite this shift toward examining the greater complexity of IPV in the adult literature, the youth exposure literature, however, has been largely focused on exposure to acts of physical violence, neglecting the full scope or complexity of IPV (Haselschwerdt, 2014; Haselschwerdt et al., 2016; Jouriles & McDonald, 2015). Exposure to IPV is operationalized and measured in a variety of ways. Some researchers explicitly define exposure as directly observing or witnessing IPV, whereas others are less explicit and conceptualize exposure based on whether the mother (or father) reports experiencing the acts of IPV. Children and adolescents are typically cognizant of IPV in their home regardless of parental awareness of their exposure, but as Holden (2003) documented in his EIPV taxonomy, there are many distinct ways in which a child might be exposed to IPV (e.g., prenatal exposure, intervening), and different exposure experiences are associated with different outcomes over time (Edleson et al., 2007). Holden identified and recommended the measurement of key IPV characteristics when measuring EIPV, including the severity and chronicity of the physical violence and the context in which IPV occurs. Yet, as the growing number of researchers examines EIPV from diverse disciplines, Holden's empirical recommendations appear unheeded. Instead, sole emphasis on exposure to discrete acts of physical violence has held relatively stable. Similar methodological inconsistencies and challenges exist within the CAM literature.

There is a well-documented co-occurrence between EIPV and CAM-often referred to as dual exposure (Hamby et al., 2010a, 2010b; Haselschwerdt, 2014; Haselschwerdt et al., 2016; Jouriles et al., 2008). Unfortunately, the inconsistencies in operationalization and measurement of EIPV and CAM likely hinder our ability to fully understand the complex association between these two types of family violence exposure and their subsequent influence on development over time. Nevertheless, EIPV and CAM, measured together or independently, are associated with an increased risk of IPV involvement in adulthood, although these associations have been recently questioned due to relatively weak effect sizes (Smith-Marek et al., 2015; Stith et al., 2000). The pathways or mechanisms through which family violence exposure is associated with IPV involvement during adulthood are not well understood to date. Therefore, the present study focuses on this association during young adulthood, as this is a salient developmental period for identity development and romantic relationship formation (Arnett, 2000)-potentially providing insight into EIPV and adult IPV.

Unfortunately, like the family violence exposure literature, operationalization inconsistencies and physical violencefocused measurement decisions have made it challenging to examine the pathways between EIPV and dating violence in young adulthood. To date, there is a lack of consensus regarding the operationalization of the term "dating violence" in the adolescent and young adult literature (Jackson, 1999; Lewis & Fremouw, 2001; Teten et al., 2009). In addition, YADV researchers have provided a similar critique of solely using the CTS2 to measure physical violence, as findings suggest that this measure does not tap into meaning and context and may miscategorize the acts of violence (Lehrner & Allen, 2014). For example, using a mixed-methods study design, Lehrner and Allen (2014) found that a substantial portion of young women who reported perpetrating severe acts of dating violence on the CTS, qualitatively described how these acts of violence occurred in the context of play or "mock violence" (e.g., wrestling). The varying conceptualizations of dating violence, along with reliance on measures that only tap into discrete acts of violence out of context, limit our ability to fully examine and better understand linkages between family violence exposure and YADV. Therefore, the purpose of the current study was to examine the measurement and data analysis decisions for family violence (i.e., EIPV and CAM) and YADV in 16 recent studies with the goal of making methodological recommendations for future research.

## **Review Strategy**

The empirical studies included in this review were identified through a variety of library and online databases (e.g., PsychInfo, Web of Science, PubMed, and Google Scholar). We used key words, including, "young adult," "college age," or "emerging adult" in combination with "domestic abuse," "domestic violence," "domestic aggression, " "partner abuse," "partner violence," "partner aggression," "dating violence," or "dating aggression." We narrowed down the initial pool of studies by including studies that met the following inclusion criteria: peer-reviewed journal articles, only U.S. samples, samples that only included young adults between the ages of 18 and 29, utilized quantitative methods, and studies that were published between 2002 and 2016. However, our main inclusion criteria were that the studies must have examined EIPV and YADV-excluding studies that only assessed CAM and YADV. Our final sample is 16 studies based on these inclusion criteria. Our review focused on each study's measurement and analysis decisions. Despite our goal of better understanding the influence of methodological decisions on the associations between family violence and subsequent involvement in dating violence during young adulthood, we summarize the measurement and analytical decisions for EIPV, CAM, and YADV separately to highlight the complexity in making comparisons given the variation across the 16 studies.

## **Methodological Review Findings**

Before describing the measurement and analysis decisions for EIPV, CAM, and YADV (in the order of family violence [EIPV and CAM] measurement followed by family violence analytic decisions, and YADV measurement followed by YADV analytic decisions), we provide basic information regarding these selected studies' general design and sampling approach. Table 1 provides a breakdown of each study's sample description, measurement and analysis of EIPV and YADV, and relevant findings. Eleven studies utilized crosssectional study design and primarily sampled undergraduate students from universities and colleges, whereas five studies reported findings from ongoing longitudinal studies; two of the five recruited individuals and communities living in impoverished conditions. Seven of the studies sampled roughly equal men and women, five samples either predominantly or exclusively sampled men, and four samples included mostly women. With the exception of three studies (Black, Sussman, & Unger, 2010; Ireland & Smith, 2009; Nowakowski Sims, Dodd, & Tejeda, 2008), the samples were largely comprised of European American participants.

## Family Violence Measurement and Analyses

All but two examined studies measured both EIPV and CAM, but only two examined or reported findings pertaining to dual exposure (i.e., EIPV and CAM). The EIPV data by and large came from young adults' self-report on their exposure experiences (n = 13), whereas two studies relied on mothers' selfreports of victimization or perpetration as proxies for EIPV (e.g., Ireland & Smith, 2009; Narayan, Englund, & Egeland, 2013; Narayan, Englund, Carlson, & Egeland, 2014), and only one study included the young adult, mother, and father reports (Han & Margolin, 2016). A few studies (n = 5) using young adult self-report provided a specified age range or time period in which EIPV occurred, but the two studies with maternal report had collected EIPV data from when the participants' were in early childhood or adolescence. The only study in which responses were collected from young adults, mothers, and fathers specified within the past year, though data were collected when the young adult was in early adolescence (Han & Margolin, 2016). Similar to the EIPV measurement, 10 studies elicited young adults' self-report of CAM, but there was some additional variation such that two studies also included court records (Ehrensaft et al., 2003; Ireland & Smith, 2009), one study included mothers' report (Ehrensaft et al., 2003), and one study assessed CAM in early adolescence from the child and both parents (Han & Margolin, 2016). Eleven of the 14 studies asked about CAM before the young adult turned 18, and 4 studies specified time frames, including between birth and 64 months (Narayan et al., 2014), between ages 10 and 14 (Nowakowski Sims et al., 2008), before age 14 (Edwards, Dixon, Gidycz, & Desai, 2014), and in the past year during early adolescence (Han & Margolin, 2016).

*Exposure to IPV measurement.* The majority of studies asked about mother- and father-perpetrated IPV (n = 10), including two studies that additionally asked about parents' mutual violence (Baker & Stith, 2008; Lundeberg, Stith, Penn, & Ward, 2004). However, four studies made no distinctions in who perpetrated IPV. For example, Luthra and Gidycz (2006) asked young adults how often they witnessed their parents committing particular acts against each other, and Ehrensaft and colleagues (2003) assessed young adults' reports of seeing or hearing physical fights between parents. Two studies solely

Author (Year)	Sample	EIPV and CAM Measurement	YADV Measurement	Findings
Baker and Stith (2008)	474 Undergraduate students (72% female; 81% European American)	EIPV: Yes/no for F-IPV, M-IPV, or mutual-IPV (physical); collapsed into one dichotomous variable CAM: Most severe physical discipline they experienced on a continuum without parental distinction	Frequency of YADV-P/V in the past year using the CTS2 (physical, psychological); frequency score for YADV-P/V for physical and psychological aggression	<ul> <li>EIPV was correlated with YADV-P (women only)</li> <li>CAM was correlated with YADV-P (men only)</li> <li>EIPV and CAM do not significantly predict YADV-P with other variables in the model current relationship variables were more strongly associated with YADV-P than EIPV and CAM</li> </ul>
Black, Sussman, and Unger (2010)	223 Undergraduate students (40% female; 38.6% European American)	EIPV: Frequency (physical and psychological) for both F/M-IPV in the past year using the CTS2: summed frequency scores without parental distinctions were created for physical and psychological EIPV, and physical and psychological IPV were multiplied to create an interaction term to determine joint effect	Frequency of YADV-P in the past year using the CTS2 (physical and psychological); annual frequency and prevalence scores for both types of YADV-P	<ul> <li>EPV was associated with YADV-P         <ul> <li>Physical EIPV was associated with physical YADV-P and psychological EIPV with psychological YADV-P             (small effect sizes)</li> <li>Joint effect of physical and psychological EIPV was not significantly associated with joint types of YADV-P             (insufficient power to detect             interaction effect)</li> </ul> </li> </ul>
Carr and VanDeusen (2002)	99 Male undergraduate students (90% European American)	EIPV and CAM: Frequency (never, once more than once) and severity (mild, and severe) of physical violence without parental distinction using the CTS; relevant analyses were conducted using a collapsed dichotomous variable for EIPV and CAM	Frequency of YADV-P without a specified time frame using 10 items from the CTS (physical only): categorized and separated mild and severe YADV Sexual behaviors (e.g., sexual coercion, rape) using the Sexual Experiences Survey (Koss & Oros, 1982)	<ul> <li>EIPV predicted YADV-P but not sexual aggression</li> <li>CAM (largely mild or spanking) did not predict YADV-P</li> </ul>
Edwards, Dixon, Gidycz, and Desai (2014)	228 Male undergraduate students (86.8% European American)	EIPV: Yes/no for three questions (physical and verbal) with no parental distinctions; collapsed into one dichotomous variable CAM: Yes/no for five questions (physical abuse, neglect) using the Early Trauma Inventory Self-Report-Short Form without any parental distinctions dichotomous variable if endorsed one question; Yes/no for 8 items (sexual abuse) using the Childhood Sexual Victimization Questionnaire with no parental or familial distinctions; dichotomous variable	Physical, psychological, and sexual YADV-P using the CTS2 from age 14 to present with no assessment of severity or frequency: three dichotomous variables for endorsing 1 item on each subscale	<ul> <li>EIPV predicted hostile-dominant interpersonal problems but did not directly predict any form of YADV-P</li> <li>Physical CAM predicted physical YADV-P</li> </ul>
Ehrensaft et al., (2003)	543 Randomly selected participants from a community as a part of the Children in the Community cohort (55% female, 91% European American)	EIPV: Seeing or hearing physical fight between parents or parent and parent's partner without parental distinctions; collapsed into one dichotomous variable CAM: Severe physical and sexual abuse and neglect at age 18 through three questions and court records without parental distinction; three dichotomous variables	Physical, sexual, and injurious YADV-P and YADV-V using 6 items from the CTS within the last year; two dichotomous variables (YADV-P and YADV-V)	<ul> <li>Conduct disorder, EIPV, and CAM were associated with an increased risk of YADV-P</li> <li>Injurious childhood physical abuse was associated an increased risk of injurious-P</li> <li>EIPV was the strongest predictor of YADV-V</li> </ul>

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Author (Year)	Sample	EIPV and CAM Measurement	YADV Measurement	Findings
Gover, Kaukinen and Fox (2008)	2,541 Undergraduate students (60.2% female; 68.2% European American)	EIPV: Yes/no for F-IPV or M-IPV hitting: two dichotomous variables distinguishing perpetrator CAM: Physical abuse using the CTS2 without parental distinction; dichotomous variable	Physical and psychological YADV-P and YADV-V in the past year using the CTS2; two dichotomous variables (YADV-P and YADV-V)	<ul> <li>EIPV was not associated with physical or psychological YADV-P; F-IPV was associated with physical YADV-V (women only)</li> <li>M-IPV increased likelihood of physical YADV-V; F-IPV increased likelihood of physical YADV-V (women only)</li> <li>CAM was associated with psychological YADV-P and physical YADV-V (women only) and physical YADV-P (women only)</li> </ul>
Han and Margolin (2016)	125 Participants from two cohorts of a longitudinal study (46.4% female; 57.6% European American)	EIPV: Frequency (physical, psychological) for both F/M-IPV in the past year using 9 CTS items (adolescent report) and 9 matched items from Domestic Conflict Scale (Margolin, John, & Foo, 1998; parent report), measured during past year while participant was an adolescent. Items (adolescent, mother, father) were summed to yield measures of F-IPV and M-IPV. CAM: Frequency of F-CAM and M-CAM (physical, psychological) using the Parent Child Conflict measure (adolescent, mother, father report; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). The highest reported score from each reporter was calculated for each item, and the scores were summed to yield F-CAM and M-CAM	Frequency of YADV-V (physical, psychological, sexual, and electronic) during the part year from the CADRI (Wolfe et al., 2001), single average score used for analyses based on average across all items	<ul> <li>Father Call was associated with YADV-V (women only)</li> <li>Overall family agression, F/M-IPV, and M-CAM, were not associated YADV-V</li> </ul>
Hendy et al. (2003)	608 Undergraduate students (73% females; 81% European American)	EIPV and CAM: Frequency of physical IPV using CTS for F-IPV, M-IPV, and mother and father perpetrated childhood physical abuse: summed score for each	Frequency (never, once/twice, or many times) of YADV-P and YADV-V using 8 items from the CTS (physical) for their past (YADV-V only) and current romantic partner (YADV-P and V); summed frequency scores for YADV-P and YADV-V Fear or concerns of leaving current relationship using the Decision to Leave Scale (Hendy et al., 2003)	<ul> <li>Exposure to more models of family violence was associated with more YADV-P/V</li> <li>Mother perpetrated physical CAM and YADV-P by past and current partners (YADV-V only) associated with YADV-P/V (men only)</li> <li>M-EIPV, mother perpetrated physical CAM (YADV-V only), and YADV-P from current partners associated with vADV PV/ (men partners asso</li></ul>
Ireland and Smith (2009)	929 Participants recruited from high-crime rate urban communities as part of the Rochester Youth Development Study (27.3% female; 15.5% European American)	EIPV: Parent (95% mother) report of F-IPV and M-IPV using CTS while participant was an adolescent; dichotomous variable for mild or severe IPV without distinctions between F-IPV and M-IPV (severe EIPV group was also exposed to most frequent IPV) CAM: Child Protective Services records of substantiated childhood physical abuse; dichotomous variable without distinctions	Physical YADV-P using the CTS without a specified time frame, collapsed items into two dichotomous variables (mild or severe)	<ul> <li>TDV-F/V (women omly)</li> <li>EIPV of severe violence predicted YADV-P but not EIPV of mild violence</li> <li>CAM does not predict YADV</li> </ul>
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Table I. (continued)				
Author (Year)	Sample	EIPV and CAM Measurement	YADV Measurement	Findings
Lundeberg, Stith, Penn, and Ward (2004)	115 Male undergraduate students (86% European American)	EIPV: Yes/no to witnessing physical F-IPV, M- IPV, or mutual IPV; one dichotomous variable CAM: Yes/no on severe physical discipline (e.g. hitting, punching, slapping, or beating) during childhood; one dichotomous variable	Frequency of physical and psychological YADV-P using the CTS2 within the past year; computed score by summing ratings of each subscale item	<ul> <li>Neither EIPV nor CAM were associated with YADV-P (physical or psychological)</li> </ul>
Luthra and Gidycz (2006)	200 Undergraduate students (50% female; 93.5% European American)	EIPV and CAM: How often they witnessed parents committing nine acts against each other (assuming physical) or against them as a child using the CTS with unclear parental distinctions: one dirth-promous wrighte	Frequency of physical YADV-P and YADV-V against their most recent dating partner using the CTS (used 9 of the 18 items); one dichotomous variable each for YADV-P and YADV-V	<ul> <li>EIPV was not associated with YADV-P</li> <li>Father perpetrated physical CAM was predictive of YADV-P (women only; less significant than other variables)</li> </ul>
Milletich, Kelley, Doane, and Pearson (2010)	658 Undergraduate students (72.2% female; 65.6% European American)	EIPV: Frequency and injurious nature of physical F-IPV and M-IPV using the CTS2- CA; two frequency scores were created. Higher scores represent more exposure to IPV. CAM: Frequency of physical and verbal CAM using the Exposure to Abusive and Supportive Environments Parenting Inventory (Nicholas & Bieber, 1997) without parented distinctions; frequency score was created	Frequency of physical YADV-P and YADV-V using the CTS2 in their current or most recent relationship; frequency scores were summed to create two scores (YADV-P and YADV-V)	<ul> <li>M-to-F IPV predicted YADV-P and YADV-V (women only), F-to-M IPV predicted YADV-P (men only) and YADV-V (both men and women, but stronger for men).</li> <li>Childhood physical abuse predicted increased frequency of YADV-P and YADV-V(women only), and childhood emotional abuse predicted YADV-P and YADV-V (men only)</li> </ul>
<ul> <li>(1) Narayan, Englund, and Egeland (2013)</li> <li>(2) Narayan, Englund, Carlson, and Egeland (2014)</li> </ul>	168 and 182 Children respectively of single impowerished teenage mothers as a part of the Minnesota Longitudinal Study of Risk and Adaptation (48% female, 46% in Study 2; 67% European American) 2; 67% European American)	EIPV: Mother report on physical and psychological F-IPV using the Life Events Scales interview protocol when the child was between ages 0 and 5 and Grades 1 and 3 (ranging from no evidence of EIPV to most severe EIPV); scores were collapsed and most severe EIPV); scores were collapsed and most severe score was selected CAM: Combination of participant (in adolescence; only 2013 study) and mother report, child protective service reports, and home observations of childhood physical and sexual abuse and neglect beginning in infancy without parental distinctions; dichotomous variable (two confirming sources needed if retrospectively reported; 2013); dichotomous variable if one incident between birch and 64 months (2014);	Frequency of physical YADV-P and YADV-V using 8 items from the CTS within their current or past relationships in the past 2 years (at ages 23 and 26); separate scores for YADV-P and YADV-V were created based on total number of endorsed behaviors in the two time points	<ol> <li>F-EIPV during early childhood (but not middle childhood) directly predicted YADV-P/V at age 23 without additional impact from CAM         <ul> <li>Severity of F-EIPV was associated with greater number of distinct YADV-P acts</li> <li>No support for CAM to YADV-P/V</li> <li>F-EIPV in early childhood directly predicted YADV-V</li> <li>F-EIPV in early childhood directly predicted YADV-V</li> <li>F-EIPV in early childhood predicted conflict with best friends, which then predicted YADV-P/ through</li> </ul> </li> </ol>
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Author (Year)	Sample	EIPV and CAM Measurement	YADV Measurement	Findings
Nowakowski Sims, Noland Dodd, and Tejeda (2008)	422 Community college students (51% female; 50% European American)	EIPV and CAM: Severity of physical and psychological F-IPV and M-IPV and childhood physical abuse using the CTS2 when participants were between ages of 10 and 14; created a summed score for mild, moderate, or severe for EIPV (physical and psychological combined) and CAM without parental distinctions; scoring and summing process created in conjunction with local IPV professionals	Severity of physical and psychological YADV-P using the CTS2 within the past year; summed score of mild, moderate, or severe; scoring and summing process created in conjunction with local IPV professionals	<ul> <li>Severe EIPV and childhood physical abuse significantly predicted YADV-P (men only)</li> <li>Only minor childhood physical abuse was significantly associated with minor YADV-P (women only)</li> <li>Strong association between all forms of severe family violence (i.e., significant overlap between severe EIPV and CAM)</li> </ul>
Rivera and Fincham (2015)	285 Undergraduate students (86% female; 70% European American)	EIPV: Frequency of 12 physical (8 items) and psychological (4 items) F-IPV and M-IPV from CTS2; two summed and averaged frequency scores (one at T1 and one at T2) for F/M-IPV with no distinction between physical and psychological	Physical and psychological YADV-P (6 items) and YADV-V (7 items) using 13 items from the CTS2 without a specified time frame; a summed score of both YADV types was created for YADV-P and YADV-V and averaged based on two time points	<ul> <li>F-EIPV and M-EIPV was associated with YADV-P/V</li> <li>Higher levels of EIPV was associated with higher levels of YADV-P/V</li> <li>Forgiveness of mother mediated M- EIPV and YADV-V (not YADV-P or middle EIDV)</li> </ul>
Roberts, Gilman, Fitzmaurice, Decker, and Koenen (2010)	<ul> <li>14,564 Males from National Epidemiologic Survey on Alcohol and Related Conditions (67% European American; estimate based on our analysis of demographic information)</li> </ul>	EIPV: Frequency and severity of physical F-IPV of 4 items before age 18, one dichotomous variable for EIPV, one dichotomous variable for severe or frequent EIPV; two models were created using propensity scores to indicate severity and frequency CAM: Frequency of childhood physical abuse (2 items), neglect (summed frequency score of 5 items), and psychological abuse (summed frequency score of 3 items), and sexual abuse (not family specific); used as covariates	Frequency of physical, injurious, and sexual YADV-P using 6 items from the CTS within the past year; collapsed all acts into one dichotomous variable	<ul> <li>F-EIPV increased the risk for later YADV-P with greater risk for those exposed to severe or frequent EIPV; however, the risk of perpetrating was still low (91% had not perpetrated in the past year)</li> <li>Note: CAM were used as covariates to isolate impact of witnessing YADV</li> </ul>

assessed father-perpetrated IPV (Narayan et al., 2013, 2014; Roberts, Gilman, Fitzmaurice, Decker, & Koenen, 2010), but no studies solely assessed exposure to mother-perpetrated IPV.

Most studies solely assessed physical violence exposure (n = 10); however, six studies also assessed psychological aggression (or verbal abuse) exposure. Nine studies utilized either the original CTS (n = 4; Straus, 1979) or the CTS2 (n = 4; Straus et al., 1996). Narayan, Englund, and Egeland (2013) and Narayan, Englund, Carlson, and Egeland (2014) used an additional measure; mothers reported on EIPV using responses from the Life Events Scale (Egeland, Breitenbucher, & Rosenberg, 1981) that were then transformed into a rating scale from 0 (never) to 7 (most severe form of violence interaction). Han and Margolin (2016) had both mother and father report on the frequency of physical violence and psychological aggression perpetration and victimization using 9 items from the Domestic Conflicts Scale (Margolin, John, & Foo, 1998), which matched onto 9 items from the CTS. The remaining six studies used author created EIPV items. Five of these studies asked dichotomous "yes/no" EIPV question(s), whereas Roberts, Gilman, Fitzmaurice, Decker, and Koenen (2010) measured the frequency of physical, psychological, sexual abuse, and neglect. None of the studies in this review measured exposure to coercive control or the context in which the IPV occurred.

Exposure to IPV analysis. The variation in EIPV measurement (i.e., who perpetrated, types of IPV, and types of measures or items) was largely excluded or reduced in the actual analysis of the data-limiting our understanding of the diversity of EIPV experiences. Two main analytic approaches were utilized. The predominant method entailed dichotomizing physical EIPV (n = 9; only one study also assessed verbal abuse). Regardless of whether the authors had collected data that distinguished between the IPV perpetrator (i.e., mother or father) or assessed a range of EIPV acts (e.g., hitting, punching) and characteristics (e.g., severity, frequency), seven studies either continued their analyses consistent with a dichotomous EIPV question or collapsed all EIPV items and created a dichotomous EIPV variable. Three studies provided more nuance. Gover, Kaukinen, and Fox (2008) created two EIPV dichotomous variables for mother- versus father-perpetrated violence, and Ireland and Smith (2009) and Roberts et al. (2010) allowed for distinctions between mild and severe EIPV exposure with their creation of two dichotomous variables.

Seven studies created summed frequency (n = 6, consistent with the CTS and CTS2; or with Han & Margolin, 2016, items that mapped onto the CTS) or severity (n = 1) scores to analyze the association between EIPV and later dating violence experiences; however, there was still substantial variability within these studies. For example, Hendy et al. (2003), Milletich et al. (2010), and Rivera and Fincham (2015) utilized the same approach—assessing father- and mother-perpetrated physical violence that resulted in two summed frequency scores. Black, Sussman, and Unger (2010) made no perpetrator distinctions but did distinguish between physical violence and psychological aggression by creating two frequency scores. Han and Margolin (2016) created a summed frequency score based on the adolescent and two parents' reports, merging physical violence and psychological abuse, differentiating between father- and mother-perpetrated EIPV. Nowakowski Sims, Dodd, and Tejeda (2008) created a sophisticated measure of EIPV in conjunction with local IPV professionals, as they created a summed score of mild, moderate, and severe physical and psychological violence, but they did not distinguish between mother- versus father-perpetrated IPV. Narayan et al. (2013, 2014) did not fit into the two predominant EIPV analytic approaches, as they collapsed EIPV scores across multiple time points and the most severe EIPV act was selected.

CAM measurement. Fourteen of the reviewed studies measured CAM along with EIPV. Unlike the measurement of EIPV, the majority of the studies (n = 10) did not make any distinctions in who was perpetrating the CAM, although it was often stated or implied that the perpetrator was a family member. One additional study did not make clear whether or not perpetrator distinctions were made, so this study was then subsumed into the "no distinction" group. The remaining three studies made distinctions and either asked about father and mother perpetrated separately (n = 3) or fathers only (n = 1).

Eight of the 14 studies solely measured childhood physical abuse, whereas six studies examined physical abuse along with other forms of maltreatment, such as neglect and sexual abuse (n = 3; Edwards et al., 2014; Ehrensaft et al., 2003; Narayan et al., 2013, 2014); verbal (n = 1; Milletich, Kelley, Doane, & Pearson, 2010); psychological (n = 1; Han & Margolin, 2016); and neglect, psychological, and sexual abuse (n = 1; Roberts et al., 2010). Unlike the measurement of EIPV, only five studies used the CTS (n = 3) or CTS2 (n = 2) to examine CAM. It was more common for authors to create their own items (n =3), use another form of measurement (n = 4), or a combination of the two (n = 2). The non-CTS/CTS2 measurement of CAM was quite diverse. For example, the author created items included participants' reported most severe discipline during childhood (Baker & Stith, 2008) or responding yes/no to a question pertaining to severe physical discipline (Lundeberg et al., 2004). Other forms of measurement included the substantiated records of physical child abuse (Ireland & Smith, 2009) along with self- and mother reports (Ehrensaft et al., 2003) and home observations (Narayan et al., 2013, 2014). Three studies (Edwards et al., 2014; Han & Margolin, 2016; Milletich et al., 2010) used measures, such as the Exposure to Abusive, Supportive Environments Parenting Inventory (Nicholas & Bieber, 1997), and the Parent-Child Conflict Measure (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998).

**CAM** analysis. Similar to the measurement of EIPV, two main analytic approaches were used to assess CAM: dichotomizing CAM (n = 8) and creating a summed frequency or severity score (n = 5). Additionally, Baker and Stith (2008) used a single continuous variable to assess CAM. Six of the eight studies that dichotomized CAM created one dichotomous

variable, whereas two studies created separate dichotomous variables differentiating between the types of abuse. Edwards, Dixon, Gidycz, and Desai (2014) created two dichotomous variables, one for physical and psychological abuse and a second for sexual abuse. Similarly, Ehrensaft et al. (2003) created three dichotomous variables, one each for physical abuse, sexual abuse, and neglect. In the six studies that used one dichotomous CAM variable, five included only physical violence or "severe physical discipline," and none of these studies made parental perpetrator distinctions. Two studies that created physical abuse frequency scores maintained distinctions in who perpetrated parental abuse (Han & Margolin, 2016; Hendy et al., 2003). Two additional studies utilized either summed frequency (Milletich et al., 2010) or severity (Nowakowski Sims et al., 2008) scores but neither made perpetrator distinctions.

Family violence methods summary. The studies' EIPV and CAM measurement and analysis summary highlights the challenge in making comparisons across studies, even when the researchers' goal is essential the same-understand the later risk associated with EIPV and CAM. Many of these studies initially assessed key characteristics that researchers (e.g., Holden, 2003) have identified as salient for the examination of EIPV, such as the type of IPV (e.g., physical, psychological), the nature of specific acts (e.g., frequency, severity), and the perpetrator's relation to child (e.g., mother, father), yet nearly all of the studies reduced this potential variance during subsequent analytic stages by, for example, dichotomizing EIPV into one or two variables or collapsing physical violence and psychological aggression into a summed score. In the CAM summary, it was noted that nearly all of the studies created a dichotomous variable without differentiating who the perpetrator was, nor making distinctions between the various types of CAM (i.e., physical abuse, neglect). Additionally, two studies (Han & Margolin, 2016; Nowakowski Sims et al., 2008) assessed the cumulative impact of EIPV and CAM (or dual exposure), although Roberts and colleagues (2010) used CAM as a covariate to try and isolate the impact of EIPV.

## YADV Measurement and Analysis

Young adults provided self-report of their YADV experiences in all 16 studies. Eight studies measured both perpetration and victimization, seven studies solely measured perpetration (e.g., Ireland & Smith, 2009), and one study solely measured victimization (Han & Margolin, 2016). Six studies did not provide a specific time frame of when the IPV occurred (e.g., Carr & VanDeusen, 2002), whereas nine studies referenced the past year or two (e.g., Narayan et al., 2013, 2014), and one study referenced age 14 through time of the study (Edwards et al., 2014).

YADV measurement. All of the reviewed studies examined physical YADV, but there were variations in the measurement of other YADV types (e.g., psychological). Five studies solely

assessed physical violence (e.g., Ireland & Smith, 2009), whereas six studies also assessed psychological aggression (e.g., Lundeberg et al., 2004); three assessed sexual violence (e.g., Carr & VanDeusen, 2002); one study assessed both sexual violence and psychological aggression in addition to physical abuse (e.g., Edwards et al., 2014); and one study assessed psychological, sexual, and electronic aggression in addition to physical violence (Han & Margolin, 2016). Ehrensaft et al. (2003) and Roberts et al. (2010) also measured injurious physical violence. Researchers measured many types of YADV, but there was virtually no variability in measure selection; 15 studies utilized either the CTS (n = 7) or the CTS2 (n = 8). However, two studies added a complementary measure, including the Sexual Experiences Survey (Koss & Oros, 1982) and the Decision to Leave Scale (Hendy et al., 2003). Han and Margolin (2016) were the only researchers to use a different measure of YADV, the Conflict in Adolescent Dating Relationships Inventory (CADRI; Wolfe et al., 2001).

YADV analysis. Although two studies (Carr & VanDeusen, 2002; Hendy et al., 2003) added additional YADV measures, only one study (Carr & VanDeusen, 2002) reported results based on these additional measures. Thus, we assumed YADV was analyzed based on CTS or CTS2 responses with the exception of Han and Margolin (2016) who measured YADV victimization using CADRI. Although YADV measurement was quite consistent across the reviewed studies, the YADV perpetration and victimization analytic decisions varied.

The two most common procedures used were frequency or summed scores and transformation of items into a dichotomous variable. More specifically, nine studies created a frequency or summed scores for each type of violence (i.e., physical, psychological) and perpetration/victimization. Four studies solely used a frequency score of YADV perpetration (e.g., Black et al., 2010), and Han and Margolin (2016) solely used a summed frequency score of YADV victimization based on the average across all YADV items. Only Lundeberg, Stith, Penn, and Ward (2004) created a score for each type of violence perpetrated. Of the five studies that included both perpetration and victimization, four studies only analyzed data based on physical violence but created separate frequency scores for perpetration and victimization (e.g., Hendy et al., 2003). Baker and Stith (2008) scored each type of violence separately for perpetration and victimization, and Rivera and Fincham (2015) collapsed across type of violence but created a separate score for perpetration and victimization. Few studies appeared to take severity into account during these types of analyses; Nowakowski Sims et al. (2008) made analytic comparisons based on the categorization of mild or severe YADV (Nowakowski Sims et al., 2008). The remaining six studies transformed YADV responses into one or more dichotomous variable, with only one of these studies analyzing severity (i.e., mild or severe; Ireland & Smith, 2009). The other dichotomization approaches varied across studies. For example, Ehrensaft et al. (2003) and Roberts et al. (2010) assessed physical and sexual violence separately but collapsed them into one

dichotomous variable. Edwards et al. (2014) and Gover et al. (2008) assessed multiple types of YADV and created dichotomous variables for each type.

YADV methods summary. The measurement and analysis decisions made in the YADV section initially appeared less variable, making it easier to compare across the studies since the studies by and large used the CTS or CTS2 to measure YADV. Upon examining the analytic decisions, however, there was quite a bit of variability. Although the measurement consistency could be beneficial in making cross-study comparisons, the limitations of the selected measures and the further reduction of variability during analysis prevented us from gaining a holistic understanding of YADV beyond discrete acts or at least one time experiences of physical violence.

# Discussion

The purpose of this study was to examine two key methodological decisions that we hypothesized could be contributing to inconsistent findings and missing linkages in the current "intergenerational transmission of violence" literature. Our review was guided by empirical and theoretical critiques from the adult IPV (e.g., DeKeseredy & Schwartz, 2011; Hardesty et al., 2015; Johnson, 2008), children's exposure (e.g., Haselschwerdt, 2014; Haselschwerdt et al., 2016; Holden, 2003), and adolescent dating violence (e.g., Lehrner & Allen, 2014; Messinger et al., 2014) literatures. Although our review ultimately focused on the 16 studies' measurement and analytic decisions, this was not our initial intent. Initially, we intended to review these studies' methods and results sections to see if the authors' methodological decisions (i.e., measurement and analysis for EIPV, CAM, and YADV) were associated with whether or not their findings supported, partially supported, or refuted the theory of intergenerational transmission of violence. However, as we began reviewing the methods sections, we determined that there was simply too much methodological variability within this small sample to truly inform a review and discussion of the results. Thus, we narrowed in on methodological decisions and posit that these decisions are crucial in understanding the association between family violence exposure and later involvement in dating violence or IPV. We identified two key methodological challenges in comparing across studies that may seem contradictory, but in actuality, are complementary and equally essential to address in future research and clinical applications (see Table 2).

## Challenge #1: Too Much Methodological Variability

The first challenge that we identified in our review of these studies was that there was too much methodological variability to make trustworthy comparisons across studies to further examine the theory of intergenerational transmission of violence. This methodological variability was identified in the measurement and analysis of EIPV, CAM, and YADV, despite the relatively consistent use of the CTS or CTS2 for each of the three constructs. Variability occurred when the researchers made decisions in assessing who perpetrated the IPV that the participants were exposed to (i.e., father, mother, or mutual), which types of violence and abuse the participants were exposed to (i.e., physical only, a combination), and whether severity or frequency of physical violence was measured. For example, six different measurement approaches were used within the 14 studies that measuring CAM. A number of different analytic decisions were made as well, regardless of the noted variability in the measurement sections, such as whether all perpetration (father and mother) was dichotomized into one variable or kept separate and whether the different types of violence and abuse (e.g., physical, psychological) were dichotomized into one variable or kept separate. All of the different methodological decisions within one single study made it too challenging to actually compare across the 16 studies or even

Based on the identified variability that limited our ability to make comparisons across the studies to better understand the association between family violence exposure and YADV, an argument could be made in support of measuring each construct in a more simplistic, uniform manner to move the field further; however, this would not address our second methodological critique of the current literature.

smaller subsamples of the studies.

## Challenge #2: Too Little Methodological Complexity

Although the first challenge makes it difficult to compare across similar studies, we posit that the second challenge, too little methodological complexity, has the potential to cause greater harm to the field of study, reducing our ability to fully understand the impact of family violence exposure on a range of later outcomes, including YADV involvement. We identified two key issues that warrant additional discussion: reliance on the measurement of discrete acts of physical violence and the dichotomization of variables.

As previously noted, researchers studying IPV and EIPV across the life span have critiqued the reliance of measuring only discrete acts of physical violence without additional measures that can attend to the context in which the violence occurs and other forms of abuse that are often associated with some types of IPV, such as coercive controlling violence (DeKeseredy & Schwartz, 1998, 2011; Grych & Hamby, 2014; Haselschwerdt, 2014; Haselschwerdt et al., 2016; Holden, 2003; Lehrner & Allen, 2014). In particular, these critiques have largely been applied to the sole use of the CTS and CTS2. The rather uniform use of these measures does help us better compare across studies, which we addressed with the first challenge, but sole reliance on these measures does not help us address the methodological complexity that has been well documented in mixed-methods and qualitative studies (e.g., Haselschwerdt, 2014; Haselschwerdt et al., 2016; Lehrner & Allen, 2014), as well as quantitative studies (e.g., Hardesty et al., 2015; Johnson & Leone, 2005) that took into consideration characteristics of physical violence, degree of coercive control, and additional factors such as harassment and fear of 

 Table 2. Research and Clinical Implications to Best Examine and Apply Knowledge on Associations between Exposure to Intimate Partner

 Violence (EIPV), Child Abuse and Maltreatment (CAM), and Young Adult Dating Violence (YADV).

Research	<ul> <li>Make clear distinctions when assessing and analyzing key variables. The reviewed studies often did not clarify who the perpetrator was in relation to the child, the type(s) of violence they were exposed to, the severity and frequency of the violence nor the context in which the violence occurs. Holden's (2003) taxonomy provides an excellent template to guide future studies</li> </ul>
	<ul> <li>Add additional measures to assess EIPV, particularly coercive control, to test the application of Johnson's (2008) typology of IPV as it pertains to the transmission or lack of transmission of violence. The Revised-Conflict Tactics Scale, along with additional measures, such as the Psychological Maltreatment of Women Inventory-Short Form would allow for greater</li> </ul>
	examination of coercive control, a salient construct in IPV and EIPV literatures.
	<ul> <li>Steer clear from dichotomizing key independent variables unless explicitly documenting why this approach is needed (e.g., only low levels of physical violence) and what it means about the sample and their experiences. Methodologists and IPV researchers have documented the negative impact of dichotomizing key variables, such as EIPV and YADV, so this should be done with caution. Consider using regression methods and other statistical approaches, such as latent profile analysis that would allow for the examination of multiple variables and better represent the diversity within EIPV and other relevant constructs.</li> <li>Diversify study samples. The reviewed studies were large comprised of European American college students, which limits our</li> </ul>
	ability to understand potential associations between family violence and YADV across all racial and ethnic groups, as well as young adults who are not attending a college or university.
	<ul> <li>Examine the complexity of the pathways between family violence exposure and later IPV involvement to guide prevention and intervention efforts. Smith-Marek and colleagues (2015) documented support for the use of a hybrid theoretical perspective that combined the strengths of developmental and interactional or relational approaches to examine what this pathway. Moderating factors to consider are the role of peers and peer relationships, exposure to community violence, personality</li> </ul>
	types, and the parent-child relationships.
Clinical	<ul> <li>Screen child, adolescents, and young adults for EIPV, CAM, and YADV. Given the commonality of these potential traumas across the life span, direct service providers, including mental health, medical, and court professionals should be using empirical screening tools to assess individuals' experiences in their family of origin and past and present romantic relationships.</li> </ul>
	<ul> <li>Apply research findings judiciously. If the studies under review do not make distinctions as noted above and throughout the review, apply these findings to practice with caution. The lived experiences of a young adult exposed to a few instances of IPV is quite different from that of a young adult exposed to chronic and frequent IPV in the context of coercive control (Haselschwerdt et al., 2016). Make sure that the findings being used to guide practice are informed by studies that are attuned to the nuances and complexities of EIPV and YADV.</li> </ul>
	• Be cautious in making generalizations between family violence exposure and YADV involvement. Meta-analyses confirm a linkage between these two experiences, but the effect sizes are quite weak. This means that a substantial number of young adults who were exposed to IPV or child abuse will not later experience YADV, so be cautious in making this assumption

abuser. For example, 15 of the reviewed studies used either the CTS or CTS2 to assess YADV perpetration and/or victimization, and only two added complementary measures though results specific to these measures did not appear in the articles. Lehrner and Allen's (2014) study concluded that these measures do not tap into meaning and the context of violence, which can lead to miscategorizations of acts of violence (e.g., playful and mock violence, such as wrestling). We know from the adult literature that IPV is more complex than acts of physical violence, so we suggest that researchers should be applying this same logic to EIPV and YADV studies. In support of this suggestion, Jouriles and McDonald (2015) found that coercive control, even after accounting for frequency of physical violence, was the strongest predictor of exposed youths' outcomes over time. They stated,

An important conclusion to be drawn from this research is that a more nuanced measurement of IPV—one that considers different relationship dynamics, such as coercive control—may yield a clearer understanding of how and when IPV relates to children's adjustment problems. (Jouriles & McDonald, 2015, p. 12)

In addition to an overreliance on measuring and analyzing discrete acts of physical violence, the reviewed studies measured and/or analyzed EIPV, CAM, and YADV as dichotomous variables with surprising consistency. For example, five studies asked dichotomous questions to address EIPV, but then an additional nine later transformed EIPV variables into one or sometimes a few dichotomous variables. Eight of the 14 studies that assessed CAM used one dichotomous variable, rarely including who the perpetrator was in relation to the child.

Methodologists (e.g., MacCallum, Zhang, Preacher, & Rucker, 2002) have documented the negative consequences (e.g., loss of information regarding individual differences, difficulties in interpreting relationships among variables) of dichotomizing variables, and yet, this was the most common methodological decision in the measurement of family violence and YADV. MacCallum, Zhang, Preacher, and Rucker (2002) stated that researchers often justify dichotomizing variables due to the analytic and interpretive simplicity, but they provide evidence to suggest that this simplification comes at a large cost and we concur. There are few documented, legitimate reasons to dichotomize variables from a methodological perspective, including the rare case in which a variable (e.g., EIPV) is highly skewed (MacCallum et al., 2002). An example of this might be if a study sample highly skewed toward individuals who were exposed to one or two discrete acts of physical violence during childhood. In this case, dichotomization may in fact make sense, so long as the researcher's rationale and discussion of the findings is transparent, so that readers understand that the sample is specific only to youth exposed to rare or infrequent physical violence, not youth in homes with chronic IPV.

Given the complexity of experiences that fall within the general umbrella of EIPV, for example, it is unlikely that a "yes" EIPV group is truly a real group as opposed to an artificial grouping established by researchers. A recent study conducted by our research team included all of the young adults who would fall within the yes group, but indeed, their experiences of family violence exposure were tremendously variable as were their experiences in romantic relationships during young adulthood (Haselschwerdt et al., 2016). These findings suggest that complexity exists in a variety of ways, including but not limited to physical violence exposure that ranges in severity and chronicity, the ways in which a child might be exposed (e.g., directly vs. indirectly), as well as the context in which the IPV occurred (e.g., IPV that escalated from a conflict vs. ongoing patterns of coercive control).

### Limitations of This Review

Although this study makes meaningful contributions to the larger literature, our analysis and interpretations should be considered in the context of several limitations. First, although we utilized a variety of library and online databases with numerous key word combinations, it is possible that this review is not an exhaustive list of all studies examining the associations between early family violence exposure and later YADV involvement. Second, we only reviewed quantitative studies, excluding qualitative and mixed-methods studies that likely examine the key constructs with greater complexity, so our review findings should only be generalized to quantitative studies examining the intergenerational transmission of violence. Third, despite our initial goal of examining how methodological decisions appear to inform the reviewed study's findings, we were unable to carry out this goal, as the reported methods varied too much on one hand, but on the other, the reported methods were too simplistic. These challenges inhibited us from fully addressing our initial study goal. Although not a limitation of our review, a limitation of the studies published between 2002 and 2016 was the use of predominately European American, college student samples, which limits the generalizability of the individual study findings to diverse populations including young adults not enrolled in 4-year colleges or universities as well as young adults from minoritized racial and ethnic groups.

# Conclusion

Despite these limitations, our findings emphasize the importance of striving for a balance between methodological consistency and complexity to continue advancing our empirical understanding associations between family violence exposure and later YADV and IPV involvement to inform prevention and intervention efforts. We encourage researchers to be attuned to the nuances within and across these violence experiences at each stage of the study design, analysis, and reporting of the findings. The review findings provide an opportunity for more specific research and clinical applications as documented in Table 2. First and foremost, researchers should include supplemental measures that tap into the presence/absence or degree of coercive control in both the exposure and YADV measures given its noted salience (e.g., Haselschwerdt, 2014; Haselschwerdt et al., 2016; Jouriles & McDonald, 2015). Edleson, Shin, and Johnson Armendariz (2008) developed a measure (Child Exposure to Domestic Violence) that includes proxy items for coercive control. In addition, a modified version of Tolman's (1989) Psychological Maltreatment of Women Inventory–Short Form, particularly the 7 items from the Dominance/Isolation subscale, could be used to measure EIPV (vs. coercive control victimization), as this measure has been validated for making distinctions between two main types of violence (i.e., coercive controlling vs. situational couple violence; Hardesty et al., 2015) in the adult IPV literature. Using statistical approaches, including latent profile analysis, would allow researchers to account for multiple variables to tap into dual exposure and the complexities of family violence exposure. We also encourage quantitative researchers to pair with qualitative researchers to conduct mixed-methods studies of the supposed intergenerational transmission of violence, so that we can better understand these potential linkages with greater depth and nuance than can be done with purely quantitative studies. Finally, we encourage future researchers to consider applying Smith-Marek and colleagues' (2015) developmental-interactional perspective to better understand the pathways between EIPV and later IPV involvement to better guide prevention and intervention efforts.

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