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The Combined and Independent Impact of Witnessed Intimate Partner Violence and Child Maltreatment

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Intimate partner violence (IPV) is a pervasive issue, generating startling facts regarding its detrimental societal effects. There is also considerable overlap between witnessing IPV and experiencing childhood maltreatment. The current article reviews the state of the knowledge about the short- and long-term impact of witnessing IPV as well as a review of the literature exploring the unique impact of experiencing both IPV and maltreatment compared to witnessing only. Seventy-three articles were included in the present review. Negative outcomes in youth have been reported in both the internalizing and externalizing domains of functioning, in health and cognitive domains, as well as in youth's relationships with family, peers, and romantic partners. The current literature suggests that these negative impacts persist into adulthood. Mixed results, whether there are significant additive effects of witnessing IPV and child maltreatment compared to witnessing IPV only, were found in youth and again into adulthood. Policy implications and recommendations for future research are suggested.

KEYWORDS: intimate partner violence; mutual physical violence; male-perpetrated violence; female-perpetrated violence; child maltreatment; childhood; adulthood

Intimate partner violence (IPV) is a pervasive issue, generating startling facts regarding its detrimental societal effects. IPV results in considerable use of mental health services, amounting to approximately 18.5 million visits per year with a cost of $4.1 billion going toward medical and mental health services (National Coalition Against Domestic Violence [NCADV], 2007). Each year, women experience approximately 4.8 million intimate

ONLINE TABLES: Detailed summaries of the 73 studies reviewed in this article can be found in six tables available online at http://www.springerpub.com/pa. Click on the link to the "Partner Abuse State of Knowledge Project" and go to Topic 7 in the online document.

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partner perpetrated physical assaults and rapes, whereas men are the victims of 2.9 million partner-perpetrated physical assaults (Tjaden & Thoennes, 2000). Complicating matters further are statistics showing 30%–60% of IPV perpetrators also abuse children within the household (NCADV, 2007). These statistics, in combination with the knowledge that IPV is one of the most chronically underreported crimes, suggest not only an underrepresentation of the true incidence of IPV but also a need for greater understanding of the outcomes associated with IPV.

The Centers for Disease Control and Prevention (CDC; 2010) defines IPV as any behavior within an intimate relationship that causes physical, psychological, or sexual harm to those within the relationship. Research on IPV has largely focused on violence against women; however, the publishing of *Behind Closed Doors* (Straus, Gelles, & Steinmetz, 1980), a controversial book demonstrating the reciprocal perpetration of IPV, called into question the notion that females are always the victim. The current review will explore the literature on the differential impact of male-perpetrated and female-perpetrated IPV. For the purpose of the current review, an intimate partner will include current or former spouses, dating partners, and all physically violent incidents along the continuum from a single occurrence to ongoing battering.

Children and adolescents have been referred to as the "invisible victims" (Osofsky, 2003) or the "unintended victims" (Rosenbaum & O'Leary, 1981) with respect to their exposure to IPV. Children witnessing IPV does not only include watching the violence occur but also hearing the altercations and observing the aftermath, such as seeing bruises/marks and the destruction of property, accompanying the victim to seek medical attention, or observing police intervention or arrests. It is therefore not surprising that exposure to IPV has been consistently reported to have detrimental effects on children and adolescents (Carlson, 2000; Carpenter & Stacks, 2009; Edelson, 1999a; Evans, Davies, & DiLillo, 2008; Fantuzzo & Mohr, 1999; Holt, Buckley, & Whelan, 2008; Kitzmann, Gaylord, Holt, & Kenny, 2003; Kolbo, Blakely, & Engleman, 1996; Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003). Furthermore, an overlap exists between witnessing IPV and experiencing childhood maltreatment (Appel & Holden, 1998; Fantuzzo & Mohr, 1999; Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008; Jouriles, McDonald, Slep, Heyman, & Garrido, 2008; Wolfe et al., 2003), suggesting further risk for adverse outcomes for those exposed.

Childhood maltreatment is a broad term encompassing all types of abuse or neglect experienced by individuals younger than the age of 18 years (CDC, 2010). Abuse can be physical, sexual, and psychological or emotional. *Neglect* is defined as the lack of providing the basic needs for the child, including housing, food, clothing, education, or access to medical care (CDC, 2010). The consequences of childhood maltreatment both in the short and long terms have been well documented (Glaser, 2000; Hildyard & Wolfe, 2002; Kaplan, Pelcovitz, & Labruna, 1999; Lansford et al., 2002; Maas, Herrenkohl, & Sousa, 2008; Smith & Thornberry, 1996; Widom, 1989; Widom, 1999; Zingraff, Leiter, Myers, & Johnsen, 1993); however, the exploration of the overlap between childhood maltreatment and witnessing IPV has been more closely examined over the last two decades. According to Appel and Holden (1998), this is largely because IPV and child

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abuse were explored as separate topics until both were recognized as falling within the context of family violence. The comparison of children exposed to both IPV and child maltreatment versus those who are only victims or only witnesses allows for the exploration of the "double whammy" (Hughes, Parkinson, & Vargo, 1989) or additive effects of experiencing both forms of violence. This comparison will also be evaluated within the current review. Because of the vast research base exploring the effects of youth exposure to IPV and/or maltreatment, the Partner Abuse State of the Knowledge (PASK) Project strives to summarize and catalog all relevant literature. As part of this project, the current article reviews what is known about the short- and long-term impact of witnessing IPV as well as a review of the literature reporting the unique impact of experiencing both IPV and maltreatment compared to witnessing IPV only.

METHODS

A comprehensive literature search was conducted using PsycINFO, Science Direct, and Social Science Index databases with the keywords of "witness," "domestic violence," "intimate partner violence," "child," "adolescent," "child maltreatment," and "child abuse." This search was supplemented using the bibliographies of related articles, specifically the references from the 15 prior literature reviews and meta-analyses published on these topics between 1990 and 2011. A limit was placed on the publication dates, including only articles published between 1990 and March 2011; however, seminal papers published prior to 1990 were also included.

The search elicited 592 articles relating to this substantial topic area, thus exclusion criteria were used to select the most pertinent studies. The present review does not include dissertations, book chapters, or articles not published in peer-reviewed journals. To be included, articles had to contain data; therefore, no theoretical papers were reviewed. Outcomes related to either witnessing IPV or experiencing childhood maltreatment and witnessing IPV had to be reported in order for the article to be reviewed. Subsequently, articles using aggregate definitions of all types of IPV were not permitted; hence, all included papers report outcomes specific to witnessing *physical* IPV. Lastly, some articles were excluded because IPV and/or child maltreatment were present in the comparison group. After taking into account exclusion criteria, 73 articles were included in the present review. They were further separated into six subtopics, with each article summarized in a table format (see Online Tables 1 through 6). Articles that reported outcomes specific to multiple subtopics were listed in each corresponding table; however, entries only include relevant outcomes.[1]

FINDINGS

Impact of Witnessing Intimate Partner Violence

Sixty-three of the reviewed studies reported on the impact of witnessing mutual IPV in youth and the long-term effects into adulthood. Fewer articles specifically reported outcomes related to the impact of witnessing IPV perpetrated by males

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(six studies) or females (eight studies). As mentioned previously, there has been a paradigm shift in the way researchers view IPV in that it is not exclusively male perpetrated. Although many of the articles reviewed comprised samples recruited from, for example, battered women's shelters, a definition of IPV as only male perpetrated was not explicitly stated. Accordingly, a conservative approach was taken and reviewed articles that did not explicitly state their IPV definition as male perpetrated were instead included in the discussion of outcomes of mutual IPV.

Impact of Witnessing Mutual Intimate Partner Violence in Childhood and Adolescence (Table 1). Several cross-sectional studies have reported issues related to internalizing and externalizing behaviors in children and adolescents who have been exposed to mutual IPV. Most of these studies have used the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983, 1986) and its youth report counterpart the Youth Self-Report (YSR; Achenbach & Edelbrock, 1987) in their assessment of these outcomes. Significantly greater internalizing problem scores (Bauer et al., 2006; Kernic et al., 2003; Maikovich, Jaffee, Odgers, & Gallop, 2008; McFarlane, Groff, O'Brien, & Watson, 2003; Moylan et al., 2010; O'Keefe, 1994, 1995; Sternberg, Baradaran, Abbott, Lamb, & Guterman, 2006), lower social competence scores (Marks, Glaser, Glass, & Horne, 2001), greater adjustment problem scores (Wolfe, Jaffe, Wilson, & Zak, 1985), greater social problem scores and attention problem scores (Bauer et al., 2006), and greater externalizing problem scores (Bauer et al., 2006; Kernic et al., 2003; Mahoney, Donnelly, Boxer, & Lewis, 2003; Marks et al., 2001; McFarlane et al., 2003; Moylan et al., 2010; Sternberg, Lamb, Guterman, & Abbott, 2006; Wolfe et al., 1985; Wolfe, Zak, Wilson, & Jaffe, 1986) in exposed youth when compared to nonexposed youth.

Other studies not using the CBCL or YSR have been used to assess internalizing problems in exposed youth. Reported negative outcomes include lower levels of self-esteem (Hughes, 1988), increased levels of anxiety and depression (Carlson, 1990; Hughes, 1988; Moylan et al., 2010; Sternberg et al., 1993), greater incidence of trauma symptoms (Bogat, DeJonghe, Levendosky, Davidson, & von Eye, 2006; Kulkarni, Graham-Bermann, Rauch, & Seng, 2010; Moretti, Obsuth, Odgers, & Reebye, 2006; Saltzman, Holden, & Holahan, 2005), decreased feelings of self-worth (Kolbo, 1996), and increased feelings of self-blame (Jouriles, Spiller, Stephens, McDonald, & Swank, 2000) in exposed youth as compared to nonexposed youth.

Cognitive impairments and negative health outcomes such as poorer school performance (Huth-Bocks, Levendosky, & Semel, 2001; Peek-Asa et al., 2007; Wolfe et al., 1986), changes in physiological outcomes such as decreased heart rate and increased salivary cortisol (Saltzman et al., 2005), and lower rates of immunization (Bair-Merritt, Blackstone & Feudtner, 2006) have also been found in youth exposed to IPV. It should be noted that few articles to date have explored the association between IPV exposure and these health-related outcomes and all studies reviewed used cross-sectional designs. Further exploration, especially longitudinally, is warranted to elucidate the specific influences of IPV on functioning in child and adolescent functioning.

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The outcomes most evaluated cross-sectionally with respect to exposure are increased externalizing problems. Many negative effects have been reported; specifically, increased use of physical violence within families, among peers, and romantic partners (Carlson, 1990, 1991; Suh & Abel, 1990); greater incidence of running away from home (Carlson, 1991); increased self-harming thoughts and behaviors (Carlson, 1990, 1991; Yexley, Borowsky, & Ireland, 2002); increased occurrence of risk-taking behaviors (Bair-Merrit et al., 2006); increased reports of both bullying perpetration and victimization (Bauer et al., 2006); and increased rates of delinquency (Rosenbaum & O'Leary, 1981) compared to nonexposed youth.

Few longitudinal studies have assessed the effects of witnessing mutual IPV on children and adolescents. Sternberg, Lamb et al. (2006) explored the impact of early and late exposure to violence and reported greater levels of internalizing and externalizing problem scores on the CBCL/YSR tools in exposed children, compared to nonexposed youth at the mean age of 10 years and the mean age of 16 years. Maikovich et al. (2008) longitudinally explored the effect of family violence in four waves over 3 years and reported that witnessing IPV did predict significant changes in children's internalizing symptoms across assessments. Although internalizing problem scores tended to decrease as children aged, those who experienced high levels of violence in their homes showed more gradual declines. Exposure to IPV was also significantly related to aggressive behavior as well as withdrawn and depressive symptoms. Moylan et al. (2010) used data from the Lehigh Longitudinal Study that explored the effects of childhood maltreatment from childhood to adolescence. It was reported that exposure to IPV was related to increased depression and delinquency as well as increased internalizing and externalizing problem scores on the CBCL and YSR tools. Overall, there is evidence that exposure to mutual IPV has an impact on behavioral outcomes longitudinally within childhood and adolescence.

Conversely, some studies have not found significant negative effects of witnessing mutual IPV on children and adolescents. Although Carlson (1990) reported significant differences related to self-injurious behaviors and running away, witnessing mutual IPV was unrelated to the self-reported frequency of being sad or unhappy and approval of dating violence. Subsequently, Carlson (1991) reported that exposed children were not more likely to report approval of or the use of violence, substance abuse, or higher rates of running away compared to those not exposed to mutual IPV.

Despite finding significant differences in their 1985 study, Wolfe et al. (1986) subsequently explored issues related to witnessing parental violence in a sample of current and former shelter residents and found that although exposed children showed internalizing issues, no differences were identified in overall behavior problems, as assessed by the CBCL when they were compared to nonexposed children. Rosenbaum and O'Leary (1981) reported no significant differences between exposed and nonexposed children in behavior problem scores on the Peterson-Quay Behavior Problem Checklist (Quay, 1977), a predecessor assessment tool to the CBCL. Furthermore, Lichter and McCloskey (2004) found that exposure to IPV did not predict an adolescent's dating violence perpetration within their own relationships or the development of patriarchal views (i.e., males are head of the household).

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Possible explanations for why these studies reported no differences include methodological issues such as the types of assessment tools used (Carlson, 1990, 1991), the timing of assessments (Lichter & McCloskey, 2004), the type of sample used (Carlson, 1991; Rosenbaum & O'Leary, 1981), small sample sizes (Rosenbaum & O'Leary, 1981; Wolfe et al., 1986), and respondent's exposure to other forms of dysfunction such as childhood maltreatment or parental psychopathology (Carlson, 1990, 1991).

Regardless of these findings, there is a large amount of research that suggests children and adolescents exposed to mutual IPV are at risk for a wide range of detrimental outcomes. Negative outcomes have been reported in both the internalizing and externalizing domains of functioning, on health and cognitive outcomes, and on youth's relationships with family, peers, and romantic partners. Further longitudinal exploration of these negative impacts is warranted because most of the studies reviewed used cross-sectional designs.

Long-Term Impact of Witnessing Mutual Intimate Partner Violence Into Adulthood (Table 2). Compared to the exploration of effects on youth, fewer studies have explored associations between youth exposure to mutual IPV and adult outcomes. Similarities to findings from studies exploring youth samples were observed regarding internalizing issues reported in youth-exposed adults. Increased symptoms of anxiety (Forsstrom-Cohen & Rosenbaum, 1985) and depressive symptoms (Davies, DiLillo, & Martinez, 2004; Forsstrom-Cohen & Rosenbaum, 1985; Maker, Kemmelmeier, & Peterson, 1998), greater incidence of trauma symptoms (Davies et al., 2004; Feerick & Haugaard, 1999; Maker et al., 1998; Silvern et al., 1995), increased levels of psychological distress (Henning, Leitenberg, Coffey, Turner, & Bennett, 1996), and lower self-esteem (Davies et al., 2004) were all found in exposed adults when contrasted with nonexposed adults.

The cross-sectional assessment of externalizing problems in youth-exposed adults also reported similar effects as those of exposed children and adolescents. Increased use of aggression with their families and among romantic partners was found in several studies (Forsstrom-Cohen & Rosenbaum, 1985; Jankowski, Leitenberg, Henning, & Coffey, 1999; Maker et al., 1998; McKinney, Caetano, Ramisetty-Mikler, & Nelson, 2008) as well as increased rates of being victimized by others, most often their romantic partners (Feerick & Haugaard, 1999; Jankowski et al., 1999; Maker et al., 1998; McKinney et al., 2008). Greater involvement in antisocial activities (Maker et al., 1998) and an increased incidence of alcohol-related problems (Caetano, Field, & Nelson, 2003) were also reported as long-term effects among youth-exposed adults.

Two longitudinal studies explored the impact of youth exposure to mutual IPV into adulthood, both of which assessing the intergenerational transmission of partner abuse. Fergusson, Boden, and Horwood (2006) used a New Zealand birth cohort and assessed outcomes at age 18, 21, and 25 years. Exposure to IPV was associated with increased reports of experiencing psychological partner violence within their

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current relationships. Also, exposed respondents had higher rates of self-reported violent crime at all assessments; however, these associations were greatly reduced after controlling for confounding variables (i.e., previous behavioral problems).

Renner and Slack (2006) used data from the Illinois Family Study that longitudinally tracked families receiving Temporary Assistance for Needy Families (TANF). They reported that youth-exposed adult females were almost twice as likely to be involved in IPV in their own dating and marital relationships. Interestingly, although exposure to mutual IPV in youth was not associated with maltreatment of their children alone, it was associated with the co-occurrence of IPV and maltreatment of children within their household.

In summary, the negative impacts of witnessing mutual IPV in childhood and adolescence persist into adulthood. Despite overall consistency in these findings, further research, particularly longitudinal studies, is warranted. Cross-sectional studies assessing this topic rely on retrospective reports of IPV exposure, some of which involving exposure that occurred a decade prior to assessment. Also, none of the reviewed studies explored the impact on health or intellectual outcomes in adulthood, and because these outcomes were found in youth exposed to IPV, it is of interest to the field to assess whether these deficits are maintained long term.

Impact of Witnessing Gender-Specific Perpetration of Intimate Partner Violence (Tables 3 and 4). Few articles to date have explored the effect of perpetrator gender on exposure outcomes; however, articles that did, found interesting differences.

Male-Perpetrated Intimate Patient Violence. All studies examining male-perpetrated IPV used cross-sectional designs. With respect to internalizing behavior issues, children exposed to male-perpetrated IPV have been found to exhibit more trauma symptoms (Kilpatrick & Williams, 1997), higher levels of distress (Henning et al., 1996), and more depressed affect (Dube, Anda, Felitti, Edwards, & Williamson, 2002) than nonexposed children. Associations have been observed with greater externalizing problems, assessed using the CBCL and YSR, in adolescence (Mahoney et al., 2003): greater use of aggression against their fathers in adolescent girls (Moretti et al., 2006); and greater use of aggression toward their peers in adolescent boys (Moretti et al., 2006). In adulthood, increased self-reported alcoholism and illicit drug use (Dube et al., 2002) and higher rates of dating violence perpetration in adult females (Kaura & Allen, 2004).

Female-Perpetrated Intimate Partner Violence. Again, cross-sectional designs were the predominant method used to assess the impact of witnessing female-perpetrated violence. Only one article was found to examine associations between female-perpetrated IPV and internalizing problems, and no articles looked at the impact of exposure into adulthood. Regarding externalizing behavior problems, however, exposure was found to be associated with clinical levels of externalizing behavior on the CBCL (Kernic et al., 2003; Mahoney et al., 2003; Marks et al., 2001): greater

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aggression toward peers and romantic partners in adolescent girls (Moretti et al., 2006) and greater aggression toward romantic partners in adolescent boys (Kaura & Allen, 2004; Moretti et al., 2006).

One study specifically controlled for male-perpetrated violence when exploring the impact of witnessing female-perpetrated violence (McDonald, Jouriles, Tart, & Minze, 2009). The authors found that female-perpetrated IPV was significantly associated with children's externalizing problem scores on the CBCL. However, no significant relationship was found between exposure and children's CBCL internalizing problem scores or threat appraisals as assessed by the Partner Abuse State of the Knowledge (PASK) Project (Grych, Seid, & Fincham, 1992).

Fergusson and Horwood (1998) longitudinally assessed the impact of witnessing female-perpetrated IPV in youth on adult psychosocial adjustment. Similarly to McDonald et al. (2009), male-perpetrated IPV was controlled for because the two forms of violence were highly correlated. Before controlling for male-perpetrated IPV, female-perpetrated IPV was significantly associated with all negative mental health and violent outcomes at age 18 years. However, after controlling for male-perpetrated IPV, female perpetrated-IPV only significantly predicted alcohol abuse/dependence at age 18 years, supporting the importance of exploring the effects of gender-specific perpetration.

Surprisingly, few articles have looked at the differential impacts of perpetrator gender on outcomes associated with IPV exposure. As evidenced by the results mentioned earlier, there are clear indications that outcomes can differ depending on the gender of the perpetrator as well as the gender of the witness (see Moretti et al., 2006). It is therefore imperative that future studies further assess the role of gender of the perpetrator in these associations, most appropriately through assessing perpetration by gender separately while controlling for violence perpetrated by the other gender. This allows for a clearer picture of the impact of witnessing IPV.

Impact of Exposure to Intimate Partner Violence and Child Maltreatment

Childhood maltreatment has been found to overlap significantly with IPV (Appel & Holden, 1998; Edelson, 1999b; Herrenkohl et al., 2008; Jouriles et al., 2008; Wolfe et al., 2003). This section reviews the additive impact on children who are not only witnesses to IPV but are also victims of childhood maltreatment. These children have been described as being dealt a double whammy because they are exposed to two forms of family violence, each individually found to result in significant negative outcomes both in the short and long terms (Carlson, 2000; Edelson, 1999a, 1999b; Fantuzzo & Mohr, 1999; Glaser, 2000; Hildyard & Wolfe, 2002; Hughes et al., 1989; Kaplan et al., 1999; Kolbo et al, 1996; Maas et al., 2008; Widom, 1989, 1999). Many of the reviewed studies compared four groups: a nonviolence comparison group, an IPV-witness only group, a maltreatment-victim only group, and an abused-witness group. This section will review the outcomes reported when comparing the abused-witness and witness only groups. More detail is available on comparisons with the other groups in the corresponding PASK Online Tables 5 and 6.

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Impact of Witnessing Intimate Partner Violence and Experiencing Maltreatment in Childhood and Adolescence (Table 5). Several cross-sectional studies have explored the additive impact of experiencing both IPV and childhood maltreatment. Outcomes in youth exposed to both IPV and maltreatment include higher levels of attention problems (Jouriles, Barling, & O'Leary, 1987), lower sense of well-being (Carlson, 1991), more depressive symptoms (Kaslow & Thompson, 2008; Moylan et al., 2010), more trauma symptoms and dissociation (Kaslow & Thompson, 2008), increased exhibition of aggressive behaviors (O'Keefe, 1995), and greater engagement in delinquency (Moylan et al., 2010) compared to youth who have only witnessed IPV.

The CBCL and YSR were consistently used to assess outcomes of abused-witnesses in childhood and adolescence. Only a few studies reported significant differences between the abused-witness and witness only groups with greater internalizing problem scores (O'Keefe, 1996), externalizing problem scores (Kernic et al., 2003; O'Keefe, 1995, 1996; Sternberg et al., 1993), and total behavior problem scores (Kernic et al., 2003) in the abused-witnesses. These findings support the notion of the double whammy effect, with abused-witnesses displaying more adverse outcomes than youth who only witnessed IPV.

Evidence contradicting this conclusion, however, has been found in several other articles using the CBCL. Increased internalizing problem scores (Hughes et al., 1989; Mahoney et al., 2003; Sternberg, Baradaran et al., 2006; Sternberg et al., 1993), externalizing problem scores (Hughes et al., 1989; Mahoney et al., 2003; Sternberg, Baradaran et al., 2006; Sternberg et al., 1993), and total behavioral problem scores (Hughes et al., 1989) were all reported for children and adolescents who experienced both child maltreatment and witnessed IPV compared to nonviolence-exposed control groups. However, in all of these studies, when outcomes of the abused-witness and witness only groups were compared, no significant differences were found. Suggesting that experiencing both forms of family violence may not necessarily have additive effects over and above experiencing just one form.

Further support for the lack of an additive effect is found in several other studies that did not use the CBCL. No significant differences were found between abused-witness and witness only groups on intellectual functioning (Huth-Bocks et al., 2001), frequency of problem behaviors (Hughes, 1988) as assessed using the Eyberg Child Behavioral Inventory (Eyberg & Ross, 1978; Robinson, Eyberg, & Ross, 1980), and depression scores (Hughes, 1988; Hughes et al., 1989; Sternberg et al., 1993) on the Child Depression Inventory (CDI; Kovacs & Beck, 1977), as well as approval of and the use of violence, substance abuse, and increased frequency of running away (Carlson, 1991).

The longitudinal impact of witnessing IPV and experiencing child maltreatment compared to only witnessing IPV were explored by Sternberg, Lamb et al. (2006). Youth were assessed in childhood and again in adolescence regarding their mental health and adjustment using the CBCL, YSR, and CDI. At Time 1, abused-witnesses were found to have significantly higher scores on all outcome measures than those who had only witnessed IPV. Support for additive effects did not persist for all

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outcomes however, because at Time 2, only internalizing problem scores were significantly greater for abused-witnesses. About why this was found, the authors suggest that younger children are susceptible to the effects of family violence; and if the violence continued, these respondents, when assessed in adolescence, may have adapted and therefore exhibit fewer overt problems. When outcomes were looked at by gender, male abused-witnesses had significantly more problems than males in each of the witness only, abused only, and nonviolence comparison groups, suggesting that the additive effects may differ across genders. English, Marshall, and Stewart (2003) longitudinally explored the effects of IPV within a sample of children who had been referred to Child Protective Services for maltreatment, finding that IPV exposure did not have a direct impact on behavior problems on the CBCL and total health problems when all control variables were included in the model. However, considerable indirect effects on these childhood outcomes were found for IPV exposure as the occurrence of IPV within the home negatively impacted relationship quality, parental well-being, and overall family functioning.

In conclusion, there are mixed results about whether there are significant additive effects of witnessing IPV and child maltreatment compared to witnessing IPV only. With some studies, finding more negative outcomes for double whammy youth and others concluding that additive effects do not exist. It is clear that further research is needed. A suggestion about how these additive effects could be better assessed would be approaching this research question similarly to the unique effects of gender-specific perpetration of IPV reviewed previously. Assessing both witnessing IPV and exposure to maltreatment in the entire sample and then controlling for the other type of violence may provide a clearer assessment of the additive effects. A method similar to this was used in studies reviewed within the next section.

Long-Term Impact of Witnessing Intimate Partner Violence and Experiencing Maltreatment Into Adulthood (Table 6). Much less is known about the additive long-term impact of witnessing IPV and experiencing maltreatment in youth. None of the reviewed articles specifically compared an abused-witness group with a witness only group as in studies focusing on youth outcomes. Instead, most articles explored the additive effects in adulthood by assessing both exposure to IPV in youth and exposure to child maltreatment in the whole sample and then controlling for their unique effects.

Silvern et al. (1995) found that in females, witnessing IPV significantly predicted increased depression, reduced self-esteem, and increased trauma symptomology. However, controlling for child abuse experiences eliminated the relationship with trauma symptoms, suggesting that child abuse largely contributed to the relationship between witnessing IPV and trauma symptomology. Maker et al. (1998) also reported that associations between witnessing IPV and trauma symptoms were no longer significant after controlling for childhood exposure to sexual and physical abuse. Similarly, increases in depressive symptoms and self-reports of antisocial behavior were no longer significantly predicted by witnessing IPV after controlling for

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abuse exposure. These studies suggest that maltreatment exposure is driving the negative impacts when children are exposed to both IPV and maltreatment.

In contrast, Davies et al. (2004) reported that witnessing IPV in childhood continued to significantly predict low self-esteem, increased depression, and increased trauma symptomology in adulthood after controlling for child maltreatment experiences. Furthermore, Henning et al. (1996) found that in females, witnessing IPV was significantly related to a higher likelihood of clinically significant symptoms on the Brief Symptom Inventory (Derogatis, 1993) and social adjustment impairments after controlling for child abuse exposure. Feerick and Haugaard (1999) reported no interaction effect of witnessing IPV and childhood physical and sexual abuse on anxious, depressive, somatic, obsessive-compulsive, and interpersonal sensitivity symptomology; dysfunctional sexual behavior; and distress. However, a significant interaction was found for social avoidance, with those with histories of childhood physical abuse reporting increased social avoidance. Although Kulkarni et al. (2010) found that women who had both witnessed IPV and experienced childhood maltreatment reported more adulthood trauma, more lifetime non–abuse-related exposure to trauma, and had the highest percentages of both current and lifetime diagnoses of posttraumatic stress disorder (PTSD) compared to those who had only witnessed IPV. Lastly, Caetano et al. (2003) explored combined impacts of exposure to IPV and maltreatment on alcohol-related problems across race. Interestingly, it was also reported that the presence of both childhood physical abuse and witnessing IPV was seen as protective for males, regardless of race. However, the authors suggested that their self-report and retrospective assessment of childhood abuse might be a reason behind this counterintuitive finding, and this methodological issue will be explored further in the discussion with respect to overall challenges in this research area.

The impact of familial violence on the intergenerational transmission of the perpetration of IPV and child maltreatment has also been examined in several studies. Langhinrichsen-Rohling, Neidig, and Thorn (1995) reported that for males, experiencing childhood abuse was predictive of IPV perpetration within their own relationships over and above simply witnessing IPV. Renner and Slack (2006) found that females who reported experiencing childhood physical and sexual abuse and witnessing IPV were likely to experience IPV in adulthood. However, the authors did not look at the unique effects of each type of violence or whether increased rates of IPV in adulthood were the result of these individuals becoming perpetrators or victims of violence.

McKinney et al. (2008) also explored the intergenerational transmission of IPV and child abuse but did so by separating adulthood perpetration/victimization by gender. Of those who experienced both IPV exposure and maltreatment, males were 3 times more likely to perpetrate nonreciprocal male-to-female partner violence (MFPV), and females were twice as likely to be the victims of nonreciprocal MFPV compared to those who did not experience both forms of family violence in youth. Regarding nonreciprocal female-to-male partner violence (FMPV), for those who experienced both forms of family violence, males were more likely to be the victims of FMPV and females were more likely to perpetrate this type of partner violence. In terms of

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reciprocal IPV, in those exposed to both forms of family violence, males were twice as likely and females more than 3 times as likely to engage in reciprocal IPV as those who did not experience both forms of violence. Unfortunately, this study did not include a group of participants who only witnessed IPV, which would have allowed for the assessment of the unique effects of exposure to maltreatment and IPV on later perpetration and/or victimization in adult relationships.

In summary, compared to youth outcomes, less is known about the long-term impact of experiencing both childhood maltreatment and witnessing IPV on adult functioning. It was consistently reported that witnessing IPV was significantly associated with negative outcomes related to adjustment (i.e., depression and trauma symptoms); however, it was experiencing child abuse specifically that was found to contribute to the intergenerational transmission of family violence when it occurred. These mixed results support the need for further exploration into the long-term impacts of experiencing maltreatment and witnessing IPV into adulthood.

CONCLUSION AND DISCUSSION

Overall, it is clear that witnessing IPV has a detrimental impact in both the short and long terms. However, there are areas within this research that require more attention. Exploring the long-term impact on health or intellectual outcomes in adulthood as well as a greater focus on examining IPV by assessing gender-specific perpetration is necessary. Although there have been several studies exploring the negative influence of experiencing maltreatment and witnessing IPV, there are mixed results about whether experiencing both has a significant impact over and above witnessing IPV. More research is needed to assess whether there is, in fact, an additive effect of experiencing both types of violence in both the short and long terms. As evidenced through this review, the negative impacts of witnessing IPV and the combined impacts of IPV with child maltreatment have deleterious effects in childhood and well into adulthood. Therefore, family violence needs to be addressed and an emphasis placed on the creation and implementation of interventions as well as policy changes aimed at preventing these types of violence from occurring.

Implications for Intervention and Policy

A large number of battered women's shelters exist and provide supports to mothers and their children when leaving violent relationships; however, such services are either rare or do not exist for men. As evidenced in the current review, men are not the only perpetrators of IPV but also are victimized by IPV at a staggering rate each year (NCADV, 2007). Therefore, it is important to provide an option for men who need support to leave violent relationships.

Increased funding for the programs that are in place is needed to further bolster those that support parents who are leaving violent relationships. More funding for these services would allow for additional counseling programs in shelters aimed at

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reducing the negative impacts on children exposed to family violence as well as providing job skills training and/or helping the parent find a new place to live. Also, resources should be provided with respect to helping the parent reestablish support systems, such as those with parents, siblings, and friends, which may have been lost while they were entrenched in the cycle of abuse.

Although there are mixed results, significant detrimental effects exist for those considered to be abused-witnesses. Because there is evidence of a meaningful overlap of IPV and child maltreatment, it is imperative that a greater emphasis be placed on assessing for both issues when a family comes in contact with social services for one of the issues. Furthermore, regarding social welfare policy, suggestions have been made to include witnessing IPV under the classification of "child maltreatment" (James, 1994). This cannot be a firm decision, however, because each case is different and the negative impacts vary based on several factors including the child's age and gender (Moretti et al., 2006; Sternberg, Baradaran et al., 2006; Sternberg, Lamb et al., 2006). However, there is the argument that regardless of the severity of negative effects, any negative effects are not appropriate. Both sides of this argument deserve further empirical focus.

This review adds strength to the argument for interventions that target families at risk for IPV, most beneficially, prior to birth or when children are very young. Prevention is imperative because clear negative implications are related to exposure to family violence. The implementation of evidence-based programs, such as the Parent–Child Interaction Therapy (Eyberg, 1988) and the Triple-P Parenting Program (Sanders, 1999) aimed at reducing or preventing behavioral problems in children, may aid in reducing or preventing family violence. Although the intent of these programs are to reduce behavioral problems in youth through promoting consistent discipline, increasing warmth in parent–child interactions, and providing parents with anger management assistance, they have shown reductions in child maltreatment (Barth, 2009; Chaffin et al., 2004; Prinz, Sanders, Shapiro, Whitaker, & Lutzker, 2009). Because there is a great overlap between childhood maltreatment and IPV, perhaps these programs, as they focus on increasing warmth and reducing acting out in anger within relationships, would lead to reductions in IPV within these families as well. Unfortunately, these programs have yet to assess this. Prevention and thus reducing exposure to IPV and/or maltreatment would lead to financial benefits because a reduced burden would be placed on child protective agencies, the criminal justice system, and the mental health service system in the long term, as reductions in mental health issues and delinquency perpetrated by children exposed to violence would likely occur.

Recommendations for Future Research

Given the reviewed literature, several strengths and weaknesses exist; and based on these, recommendations can be made for future research. A prominent strength is the stable use of the CBCL and/or YSR to assess youth outcomes. The use of this

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well-validated tool allowed for comparisons across studies because it assured that the same constructs were being assessed. The overwhelming use of the Conflict Tactics Scale (CTS; Straus, 1979; Straus, Hamby, Boney-McCoy & Sugarman, 1996) in the assessment of both IPV and child maltreatment also contributes to this strength within the literature. However, one caution regarding the use of the CTS includes the severity of violence assessed differs based on the use of Form A or B; therefore, hindering comparisons across studies. Form B is less stringent as it includes "hit with an object" in its assessment of child abuse, whereas Form A does not. Comparing percentages garnered from these forms, O'Keefe (1995) reported that when using Form A, 35% of the sample was considered to have experienced child abuse, whereas using Form B, 67% of the sample was considered abused. Many of the articles reviewed did not state which form of the CTS they used in making their classification of child abuse. Thus, comparison across articles may not be completely accurate, especially when comparing papers exploring the additive negative effect of witnessing IPV and experiencing child abuse. This illustrates the issue of not having a generally used definition of what constitutes IPV and/or child maltreatment. These definitions vary across counties, cities, and countries and therefore, across researchers and studies. This poses a clear issue relating to confidently comparing results across multiple studies and should be addressed in future research. Agreement on operational definitions for key terms would improve the quality and comparability of findings.

One weakness is that many of the reviewed studies recruited samples from battered women's shelters or hospital programs where women sought services because of IPV or included women who were listed as victims in police- or court-reported cases. Recruitment from these areas might lead to the overrepresentation of families of lower socioeconomic status (SES); and therefore, these children may have a host of other negative outcomes related to lower SES that are very similar to outcomes attributed to their experiencing IPV and/or child maltreatment. Furthermore, women living in shelters, women who are seeking medical treatment at a hospital, or women who are listed in court proceedings are likely involved in more serious cases, thus outcomes may only be attributable to children exposed to more severe violence. Children from these families are likely to have been exposed to more violence and therefore may exhibit the worst outcomes. Future research should focus on samples that are more representative of the general population.

As with most research, the impact of IPV and/or child maltreatment has been explored primarily through cross-sectional designs. Although these designs are more cost-effective and take a shorter amount of time to implement, they fail to provide a comprehensive picture of the impact of experiencing family violence. More longitudinal research, although costly and time consuming, is imperative for the accurate assessment of the longitudinal effects of witnessing IPV and the experience of childhood maltreatment, especially regarding these effects in adulthood. As mentioned previously, there was an overwhelming use of retrospective reports of experiencing family violence in studies exploring long-term effects in adulthood. Assessing violence exposure and then following respondents longitudinally would allow for a

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prospective approach. Reporting retrospectively on adverse childhood experiences has been plagued by a large number of false negatives, substantial measurement error, and historical bias (Hardt & Rutter, 2004). Therefore, more longitudinal assessments, beginning in childhood, are needed to avoid the use of retrospective reports, and thereby increasing accuracy.

Overall, despite methodological weaknesses and mixed results, there is considerable agreement on the deleterious impact of witnessing IPV as well as the additive negative effects of experiencing child maltreatment in both the short and the long terms. As a great number of cross-sectional studies have been done over the past three decades focused on assessing the impact, greater emphasis must be placed on comprehensive longitudinal designs that will aid in avoiding several pitfalls within the current literature. Also, it is imperative that the field implements interventions that can reduce the negative impact on exposed children and adolescents as well as implement programs aimed at significantly reducing or preventing family violence.

NOTE

1. For an examination of the impact of parental conflict and emotional abuse on children and families, the interested reader may want to read the Partner Abuse State of the Knowledge (PASK) article by Sturge-Apple, Skibo, and Davies (2012).

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