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Child Maltreatment, Youth Violence, Intimate Partner Violence, and Elder Mistreatment: A Review and Theoretical Analysis of Research on Violence Across the Lifecourse

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Introduction

Broadly defined, child maltreatment includes physical, emotional, and sexual forms of abuse, as well as neglect and, in some jurisdictions, children’s exposure to domestic violence (Anda et al., 1999; Appleyard, Egeland, van Dulman, & Sroufe, 2005). Although prospective longitudinal studies on these and related topics are rare (Capaldi, Knoble, Shortt, & Kim, 2012; Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008), existing research links each of these forms of child maltreatment to a range of problems later in life, including repeated victimization and perpetration of violence and abuse (Fuller-Thomson, Sawyer, & Agbeyaka, 2019; Herrenkohl & Rousson, 2018; Widom, 1989; Widom & Maxfield, 2001). In this review, we focus on studies relevant to this lifecourse pattern, also called the “cycle of violence,” with a goal of reviewing evidence on the connections between child maltreatment and later forms of violence that extend to and beyond mid-life. We discuss the developmental associations between child maltreatment, violence in adolescence, and intimate partner violence (IPV) and elder mistreatment. We also review evidence, albeit limited, on the more proximal association between adult IPV and elder mistreatment. We examine what is known about the persistence of violence in and across relational contexts, noting where gaps in knowledge remain and where research is particularly strong. In reviewing the literature, we also draw on theories to help explain the mechanisms by which early violence exposure leads to later violence victimization and perpetration, as well as factors that mitigate risks and promote resilience in individuals who encounter and are at-risk for violence at different points in the lifecourse. Specifically, we aim to address the following questions:

1. What is known about the developmental connections between early forms of abuse and later victimization and perpetration of violence, including youth violence, IPV, and elder mistreatment (elder abuse)?
2. What are the plausible theoretical connections between early and later forms of abuse that span the developmental lifecourse?
3. What are the protective and resiliency factors hypothesized to break the cycle of violence and prevent recurrent patterns of abuse?

Methods

This article summarizes a review and synthesis of the research literature on violence experienced by children, adolescents, and adults. Methods conform to those of a scoping review, in which the goal is to “map relevant literature in a field of interest”(Arksey & O'Malley, 2005). Accordingly, we sought to identify and combine research relevant to several research questions, noting the strengths and limitations in published research. Articles appearing in this review were located by searching relevant databases (e.g., ERIC, PsycINFO, Pubmed, and Google Scholar) and assessing information in published reports and online resources. Inclusion criteria were broad; articles and other resources were included if they were: (1) relevant to the topic of lifecourse patterns of violence; (2) published in a reliable scholarly journal or online resource; and (3) addressed one or more of the above referenced research questions. Materials were excluded if they did not include information pertaining to topics of child maltreatment, dating or youth violence, IPV or elder mistreatment. Throughout the review, we use the term “exposure” to refer to violence experienced as a victim of abuse by a caregiver or partner, and to refer to violence that is witnessed when others are victimized (primarily in the home).

Results

Child Maltreatment

According to research compiled by the Centers for Disease Control and Prevention (CDC), each year, around 1 in 7 children experience abuse or neglect in the United States (Fortson, Klevens, Merrick, Gilbert, & Alexander, 2016). This approximation, based on official records of child protection reports, is most definitely an underestimation of all annual maltreatment cases because many instances of abuse and neglect go unreported (Cicchetti, 2013; Fortson et al., 2016). Worldwide, the numbers are even more alarming. A review of meta-analyses by Stoltenborgh and colleagues (2015) estimated the global prevalence of child maltreatment at around 127/1000 for sexual abuse, 226/1000 for physical abuse, 363/1000 for emotional abuse, 163/1000 for physical neglect, and 184/1000 for emotional neglect.

The costs of child maltreatment are substantial. A recently compiled report by the CDC estimated that nearly \$2 trillion are incurred annually for investigated and substantiated child maltreatment incident cases (Peterson, Florence, & Klevens, 2018). Each incident of

fatal and nonfatal child maltreatment renders lifetime per victim costs of \$1.2 million and \$210,012, respectively (Fang, Brown, Florence, & Mercy, 2012).

Children living in poverty are at higher risk for child maltreatment than are children not living in poverty because of the chronic stress and strain imposed on families by extreme financial hardship (Pelton, 1994). Children of very low-and no-income households also tend to reside in communities with high rates of unemployment and residential turnover, low cohesion, and social disconnection, which add to their vulnerability and risk for violence (Centers for Disease Control & Prevention, 2019; Wilkins, Tsao, Hertz, Davis, & Klevens, 2014). Evidence pertaining to the economic and social conditions of communities and corresponding rates of child maltreatment is strong and irrefutable (Belsky, 1980; Coulton, Crampton, Irwin, Spilsbury, & Korbin, 2007; Coulton, Richter, Korbin, Crampton, & Spilsbury, 2018; Lamont, 2011). This fact, coupled with awareness of the existing gaps in child welfare systems and service models (Herrenkohl, Lonne, Scott, & Higgins, 2019), has led some in the fields of child maltreatment and family violence to propose new models of community-level prevention and mutual assistance (Abramsky et al., 2016; Graham-Bermann & Miller-Graff, 2015; Kimbrough-Melton & Campbell, 2008; Mancini, Nelson, Bowen, & Martin, 2006; Melton, 2014). The intent of these models is to increase access to both formal and informal supports so that families with limited resources can receive assistance before crises emerge and violence is imminent.

Retrospective, self-report studies of adverse childhood experiences, also called “ACEs,” which include physical, sexual, and psychological child abuse, provide additional data on the incidence and prevalence of child maltreatment and other risk factors for children (e.g., mental illness and substance abuse in the household) (Merrick et al., 2019). These studies estimate that around six in ten individuals are exposed to at least one type of ACE in their lifetimes (Brown et al., 2015; M. Dong et al., 2004; Felitti et al., 1998; Gilbert et al., 2014; Hughes et al., 2017; Merrick et al., 2019). A report by Merrick and colleagues (2019), based on data from the Behavioral Risk Factor Surveillance System (BRFSS), found that one in six adults self-reported four or more types of ACEs from their childhoods, including abuse. This rate is substantially higher than a previous estimate of around 6% for high-level ACE exposure reported by Felitti et al. (1998), following their study of health risk indicators in a large community sample of adults ages 19 to 92. Notably, Merrick et al.’s (2019) study found that prevalence of ACEs was highest among young adults under the age of 34, which could be due to the heightened vulnerability of certain age groups, or differences in recall of past events based on age (e.g., younger adults recall events more accurately than older adults). Further, according to Dong et al., (2004), there is a very high rate of comorbidity among the different types of ACEs. In fact, results of their retrospective study found that 81%–98% of adults exposed to one ACE were also exposed to at least one other ACE in their lifetimes.

Because of the considerable overlap in these events, researchers have tended to rely on unweighted “counts” or overall “dose” measures of ACE exposure rather than trying to disentangle and study unique types of adversity, severity, or chronicity of exposure in relation to later outcomes. To some, this is a notable limitation of the method because it

lacks specificity and implies that all childhood adversities are equally harmful, which is not the case (Herrenkohl, 2011a).

This limitation aside, studies of ACE exposure have helped to increase awareness of the connection between early life trauma and later health outcomes. In Merrick et al.'s (2019) study, 1 in 6 adults reported having encountered 4 or more ACEs in their lifetimes. When compared to those with no ACE exposure, adults with high exposure were significantly more likely to report the onset of chronic health conditions, such as obstructive pulmonary disease and asthma (Adjusted Odds Ratios [AORs] of 2.8 and 2.2, respectively). Depression was also elevated for adults who reported 4 or more ACEs compared to those who reported no ACE exposure (AOR: 5.3).

Literature on the intersectionality of race and ACEs identify notable disparities in exposure among racial and ethnic groups. For example, studies indicate that Black, Latino, and Native American adults all have higher rates of ACE exposure compared to White adults. Adults in these groups are also more likely than White adults to be exposed to more ACEs over their lifetimes (Sacks & Murphey, 2018; Stropolis, Tucker, Crouch, & Radcliff, 2019). While some studies indicate that there is a connection between ACE exposure, stress, and racial discrimination (Morsy & Rothstein, 2019; Slopen et al., 2016; Vásquez, Udo, Corsino, & Shaw, 2019; Viruell-Fuentes, 2007; Williams & Mohammed, 2009) more research is needed to disentangle how race and adversity intersect (Slack, Font, & Jones, 2017) and how structural inequalities drive disparities both in exposure to violence, and in lifecourse consequences of that exposure.

Intimate Partner Violence (IPV)

IPV is both a consequence of child maltreatment and a risk factor for later violence and poor health (Black et al., 2011; Cronholm, Fogarty, Ambuel, & Harrison, 2011; Leiner, Compton, Houry, & Kaslow, 2008; McLaughlin, O'carroll, & O'connor, 2012). IPV includes any act of violence between current and former intimate or romantic partners in which there is physical, sexual, or psychological abuse, or stalking (Capaldi et al., 2012; Smith et al., 2018). The CDC estimates that 1 in 3 men (33.6%) and 1 in 3 adult women (36.4%) have experienced physical, sexual or psychological IPV or stalking by an intimate partner (Smith et al., 2018). Psychological aggression is the most common form of IPV reported by both men (34.2%) and women (36.4%), followed by physical violence (31%, 30.6%), sexual violence (8.2%, 18.3%), and stalking (2.2%, 10.4%, respectively) (Smith et al., 2018). Additionally, certain types of IPV tend to co-occur (Bates, Graham-Kevan, & Archer, 2014; Carney & Barner, 2012; Fawson, 2015). For example, findings of a national, population-based study of 5,296 women found that a vast majority (93%) of women who experienced physical violence by an intimate partner also experienced psychological violence (Krebs, Breiding, Browne, & Warner, 2011). That same study revealed that about a third (30%) of women exposed to physical violence were also exposed to sexual violence (Krebs et al., 2011). Additionally, studies suggest that perpetrating IPV is a risk factor for later perpetration of violence (Saint-Eloi Cadely et al., 2020).

Predictors of IPV include some of the same factors known to predict child maltreatment, including poverty and unemployment (Benson, Wooldredge, Thistlethwaite, & Fox, 2004;

Breiding, Basile, Klevens, & Smith, 2017; Goodman, Smyth, Borges, & Singer, 2009; Hardesty & Ogolsky, 2020). Earlier forms of violence, both physical and psychological, are themselves risk factors for violence in adulthood (Capaldi et al., 2012; Li, Zhao, & Yu, 2019). However, a meta-analysis by Li and colleagues (2019) revealed only a modest overall effect size for child abuse and IPV (.18). Their analysis of child abuse subtypes and IPV showed the strongest effect was for physical abuse (.19), followed by psychological abuse (.18), sexual abuse (.17), and child neglect (.12). An interesting caveat is that the association between child maltreatment and IPV victimization appeared stronger for dating couples than for married couples, suggesting that less stable and less committed relationships are more vulnerable to violence, or that adults are more likely to report violence that occurs in more transitory relationships. Additionally, couples with higher levels of income and education are more likely to marry and, thus, findings may also capture socioeconomic differences in violence proneness among married and unmarried adults (Parker & Stepler, 2017). Risk for IPV exposure is greatest during adolescence and young adulthood. In fact, the majority of women (71%) and men (55.6%) report a first encounter with intimate partner physical, psychological, and sexual violence or stalking before the age of 25 (Smith et al., 2018). Around a quarter (26%) of all adult women and 15% of men experience IPV before they reach 18 years of age (Smith et al., 2018). As might be expected, exposure to violence in adolescence increases the risk of violence during adulthood (Saint-Eloi Cadely, Mrug, & Windle, 2019; Gómez, 2011). Although limited, some evidence suggests that some forms of IPV remain stable from adolescence into adulthood. In one study of 484 young adults ages 18-25, Saint-Eloi Cadely and colleagues (2017) found distinct patterns of IPV from adolescence to young adulthood for distinctive groups based on gender, socioeconomic status, and relationship characteristics, suggesting continuity of psychological IPV from adolescence to young adulthood, as well as physical IPV from adolescence into young adulthood. Yet, the stability of specific types of IPV (physical, sexual, psychological) and distinct patterns of IPV from adolescence into adulthood, including demographic variations, require further investigation using longitudinal designs (Saint-Eloi Cadely et al., 2018).

While it is generally understood that gender differences in violence exposure and perpetration begin early and persist over time, some research (namely studies based on self-report measures, such as the widely used Conflict Tactics Scale) on IPV suggests that, in adulthood, men and women perpetrate physical and psychological violence at comparable rates (Connor, 2002; Gómez, 2011). In a study of IPV perpetration in adolescence and early adulthood, Johnson and colleagues (2015) found that the risk for IPV perpetration peaked in the early 20's for both genders. Growth trajectories capturing the persistence of IPV perpetration were similar for men and women during adolescence, but higher for women after age 17 (Johnson et al., 2015). Johnson et al. raise the possibility that patterns of IPV perpetration and victimization are distinct for each gender.

Considerations of the type and severity of IPV are important when assessing gender differences. Studies indicate that more men than women perpetrate violence that results in physical injuries to their victims (Capaldi et al., 2012; Hardesty & Ogolsky, 2020; Smith et al., 2018), and far more women than men are victims of sexual violence and stalking (Smith et al., 2018). Of all women, women of color (Black, Native American, Latina) are disproportionately impacted by IPV (Hardesty & Ogolsky, 2020). Findings on IPV and

its association with gender, race, age, and sexual orientation suggest the need for much deeper and more extensive investigation of subgroups differences and intersectionality in violence and social identities, topics relating more generally to social determinants of health (Subirana-Malaret, Gahagan, & Parker, 2019).

As is true of child maltreatment, IPV can have devastating effects on victims (Cronholm et al., 2011). Results of mostly cross-sectional studies suggest there are connections between IPV victimization and later depression, psychological distress, suicidality, and reproductive and chronic health conditions (Black et al., 2011; Cronholm et al., 2011; Leiner et al., 2008; McLaughlin et al., 2012). Although mixed, findings indicate that the consequences of IPV can also differ by gender. For example, one longitudinal study found that young adult females who experienced IPV victimization in adolescence were at significantly higher risk for depression, binge drinking, and suicidal ideation, whereas young adult males who experienced IPV victimization in adolescence were at increased risk for antisocial behavior, marijuana use, and suicidal ideation, after controlling for earlier forms of abuse and sociodemographic factors (Exner-Cortens, Eckenrode, & Rothman, 2013). Using data from a nationally representative sample of men and women, Anderson (2002) investigated reports of IPV victimization and perpetration in married and cohabitating heterosexual couples. She found differences in the associations between mutual IPV (when partners report both victimization and perpetration) and depression and substance abuse, with women appearing the more vulnerable. Findings like these underscore the fact that IPV perpetration can be initiated by men and women, but the consequences of violence for women are, in most cases, more extreme.

Violence in Adolescence and Adulthood: Aggression, Youth Violence, and IPV

Children who were abused and neglected when they were young are at higher risk for aggression and violence well into adulthood (Herrenkohl, 2011a). Once established, these behaviors can be highly resistant to change. In fact, externalizing behaviors, aggression, and other conduct problems in young children and adolescents are among the strongest predictors of IPV in adults (Capaldi et al., 2012). Having assessed the research on these topics, Capaldi and colleagues' (2012) concluded that "conduct problems or antisocial behavior is consistently found to be a substantial risk factor for later IPV involvement (as it is for other kinds of adult violence) [and] is implicated in the developmental histories of both men and women who perpetrate IPV" (p. 16).

In one related study, Herrenkohl and colleagues (2007) investigated the association between violence in youth and IPV at age 24 in a sample of over 800 individuals followed prospectively from elementary school. They found that youth with the highest risk for IPV in early adulthood were those who perpetrated chronic and serious acts of violence from ages 13-18. Youth who increased their use of violence during adolescence were also more likely to perpetrate IPV in early adulthood, after accounting for demographic variables. Findings like these underscore the tendency for violence to persist from adolescence to adulthood, and for behaviors to cascade across relational contexts.

Although evidence favors an indirect association between child maltreatment and IPV through conduct problems in adolescence (Capaldi et al., 2012; Herrenkohl & Rousson,

2018), some research suggests that child maltreatment can have direct, unmediated effects on IPV risk for some adults (Gómez, 2011; Li et al., 2019; West, 2008; Widom & Maxfield, 2001). Studies also find that patterns differ by gender. For example, Fang and Corso (2007) found that, for males, child sexual abuse was a direct predictor of IPV perpetration in young adults, whereas for females, child physical abuse and neglect were direct predictors of IPV exposure. In that study, child neglect indirectly predicted IPV perpetration through youth violence perpetration for both males and females, indicating again that patterns of violence often surface early and become deeply embedded in patterns of social interaction that continue into adulthood.

Indeed, there is a considerable body of research that links child maltreatment, youth violence, and IPV, yet questions remain about how far into adulthood patterns of violence can extend. In the next section of this article, we turn to elder mistreatment (elder abuse) and review evidence of its connection to earlier forms of violence.

Elder Mistreatment

Elder mistreatment, also referred to as elder abuse, is characterized as an “intentional act or failure to act by a caregiver or another person in a relationship involving an expectation of trust that causes or creates a serious risk of harm to an older adult” (Hall, Karch, & Crosby, 2016) (p. 28). Estimates from The National Elder Mistreatment Study suggest that one in ten community-dwelling adults aged 60 and older experiences physical and psychological abuse annually (Acierno et al., 2010). Past-year prevalence rates among study participants were 4.6% for emotional abuse, 1.6% for physical abuse, 0.6% for sexual abuse, 5.9% for potential neglect, and 5.2% for financial abuse by a family member. Among respondents age 70 and older in the National Intimate Partner and Sexual Violence Survey, 23% reported experiencing abuse by an intimate partner (Rosay & Mulford, 2017). Researchers and practitioners generally believe that the actual prevalence of elder abuse is likely much higher due to under-reporting and misconceptions about this understudied form of violence.

Risk factors for elder abuse include personal and relationship characteristics, as well as health-related changes associated with aging. Although evidence for most risk factors is mixed across studies and types of abuse (Roberto, 2016), researchers frequently identify younger age, female gender, race/ethnic group membership, living alone, poor physical health, cognitive impairments, social isolation, or feelings of loneliness as being associated with greater risk for elder abuse. Dong and Simons (2014) reported that community-dwelling older adults with 3 or 4 risk factors had a 3.9-fold greater risk of confirmed abuse than a comparison group of older adults who had not experienced abuse and the risk increased to 26.7 times as great in older adults with 5 or more characteristics.

Another set of risk factors for elder mistreatment include perpetrator characteristics and family dynamics. The relationship between abusive family members and their older relatives is complex and often involve issues of control, dependence, and interdependence. For example, spouses or partners who perpetrate physical or sexual violence in the earlier years of their relationships tend to turn to coercive tactics, such as isolation, threats, intimidation, and manipulation to gain and maintain power over their victims in late life (e.g., Gerino, Caldarera, Curti, Brustia, & Rollè, 2018; Policastro & Finn, 2015; Teaster, Roberto, &

Dugar, 2006). Conversely, abusive adult children who are the primary caregivers for their older parents often depend on their parents for housing, financial assistance, and emotional support (Jackson & Hafemeister, 2012). Such reliance can be associated with the adult child's drug and alcohol addiction and chronic unemployment (Jackson & Hafemeister, 2014). Interdependencies between perpetrators and older adult victims, particularly when the older adults need care, also increase the risk of elder abuse (Amstadter et al., 2011). While most caregivers provide appropriate and compassionate care for their family members, escalating stress and burden can lead to potentially harmful or abusive behaviors (Beach et al., 2005; Cooper, Blanchard, Selwood, Walker, & Livingston, 2010; Yan & Kwok, 2011) by even the most well-intended caregivers.

Child Maltreatment and Elder Mistreatment

Whether child maltreatment increases the risk for abuse among older adults is unclear, in part, because there have been so few longitudinal studies that extend from childhood into old age. There are, however, a few relevant studies that hint at a connection similar to what is shown from studies of violence earlier in the lifecourse. In a cross-sectional study of 3,157 Chinese American older adults, Dong and Wang (2019) found that elder abuse was more prevalent among those who reported child maltreatment (25.2% vs. 13.8%) and IPV (48.8% vs. 12.9%). Child maltreatment was positively associated with psychological elder abuse, as well as financial exploitation. IPV was associated with a 5 to 8 times higher risk for psychological elder abuse, 6 to 9 times higher risk for physical and sexual elder abuse, and a 3 times higher risk for financial exploitation.

Kong and Easton (2019) investigated the association between adult recollections of sexual and psychological abuse (before age 18) and victimization in late adulthood using data from the Wisconsin Longitudinal Study (WLS), a cohort-based study that ended in 2011 when participants were in their early 70s. They found evidence of a relationship between reports of earlier sexual and emotional abuse and risk for abuse victimization in later adulthood. Kong and Moorman (2015) also used data from the WLS to examine whether adults with histories of child maltreatment were at higher risk for depression when caring for their formerly abusive and neglectful parents. In addition, they assessed whether various coping styles moderated the association between child maltreatment and depression in adult caregivers. Adult caregivers who recalled having been abused or neglected as children were at higher risk for depression when caring for their formerly abusive and neglectful parents than caregivers not abused or neglected. The use of emotion focused coping (i.e., tendency to criticize oneself, express negative feelings, and blaming oneself for difficulties encountered) increased the likelihood of depressive symptoms to a greater extent among caregiving adults who had been maltreated when they were young when compared to those who had not experienced maltreatment.

Using retrospective accounts of early family abuse and adversities of 1,266 middle aged adults and 1,219 older adults from a large population-based survey, the National Survey of Midlife Development in United States (MIDUS), Savla and colleagues (2013) found that having experienced emotional abuse and physical abuse during childhood predicted lower levels of emotional closeness to family in mid- and late life, more so for women than men.

The relationship of emotional abuse to family closeness was buffered by self-acceptance, wherein, higher frequency of emotional abuse was associated with diminished family closeness, particularly for individual with lower levels of self-acceptance. These findings suggest that the aftermath of childhood adversity does not dissipate with time, but continues to influence closeness to kin, which is often a risk factor for elder abuse.

Kong (2018) analyzed the WLS using mediation analyses to untangle the complexities of late life parent-child relationships in which there was a history of childhood abuse and neglect. Findings showed that early abuse resulted in less cohesive relationships (affectual solidarity) between mothers and their adult children, and this lack of cohesion was predictive of negative psychological well-being among adult children. Although early neglect and abuse by fathers was directly associated with adult children's lower psychological well-being, no mediating effects of intergenerational solidarity were found. Liu and colleagues (2018) explored the early abuse and late life caregiving relationships using data from the Midlife in the United States (MIDUS) study. They found that physical and emotional abuse from parents in early life moderated the association between daily assistance to parents with disabilities and daily mood. The moderating effect of parental abuse became nonsignificant when the assistance was provided to other family members or friends.

Further, in a qualitative study of 19 abusive and neglectful caregivers, the majority (12) of whom were elderly spouses of older adult victims, Campbell Reay and Browne (2001) examined risk factors associated with physical abuse (9 cases) and neglect (10 cases) independently. Six physical abusers compared to only one person in the neglect group reported past abuse by their fathers in childhood. The authors concluded that, compared to neglect, physical abuse as a child may produce internalized anger that becomes later manifest in "hostile, threatening and violent behavior" toward others (Campbell Reay & Browne, 2001) (p. 60). A study of emergency room visits confirmed these caregiver characteristics and found that caregivers who neglected their elders were themselves more likely to have a history of childhood trauma, including physical neglect (Kohn & Verhoek-Oftedahl, 2011). Collectively, these findings do indeed point to a connection between early life exposure to violence and risk of elder mistreatment among those previously exposed. The negative impact of child abuse (maltreatment) on the mental and physical health of adults who assume caregiving roles is documented in several studies, although replication of these findings in longitudinal and general population studies is required.

Child Maltreatment, IPV, and Elder Mistreatment

IPV can manifest as a continuation of longstanding abuse within a single relationship or as engagement in a series of violent intimate relationships over the lifecourse. A recently published narrative review on IPV among older women in multiple countries found that the lifetime prevalence of IPV ranged from 16.5% - 54.5%. Although physical abuse declined with age, emotional abuse remained stable over the lifecourse (Pathak, Dhairyawan, & Tariq, 2019). In contrast, Policastro and Finn (2017) reported that older adults who experienced emotional coercive control by intimate partners in their lifetime were 8.5 times more likely to experience physical abuse at age 60 or older than were older adults who had no such experience.

As often reflected in the transmission of violence literature, many older women or their partners live in families impacted by abuse, sometimes spanning generations (Miszkurka, Steensma, & Phillips, 2016). A connection among child maltreatment and IPV in late life has recently emerged from the findings of several qualitative studies (Finfgeld-Connett, 2014). For example, a case analysis of a 63- and 65-year-old women who presented for counseling related to IPV revealed that both women had experienced long-term abuse originating in childhood that carried into other family and intimate relationships (Tetterton & Farnsworth, 2011). The women of this study normalized their childhood experiences, viewing their victimization as a way of life over many years. Frequently, older women who grow up in abusive households report leaving their family home early to escape violence and abuse, only to have violence re-emerge in their newly created homes (Lazenbatt, Devaney, & Gildea, 2013; Teaster et al., 2006). A study by Roberto & McCann (in press) found that older women used their past experiences to account for partner violence and abuse in late life. Five of 10 women interviewed stated they had experienced physical or sexual abuse as children. As adults, eight of these women reported violence across multiple marriages or partnerships. Often, these women had experienced extreme physical violence as younger women, and only recognized emotional abuse in later life as IPV when it turned physical or adversely affected their health.

A recent quantitative analysis of the relationship between ACEs and physical IPV in late life found that several individual ACEs were significant predictors of late-life physical IPV, including physical, psychological, and sexual abuse, lack of feeling protected, and witnessing domestic violence in the household (Avent, Wilber, & Gassoumis, 2018). These findings lend further support to the idea that violence is a lifecourse process (Hamby & Grych, 2013).

Developmental and Lifecourse Theories

To the extent that a cycle of violence involving child maltreatment, youth violence, IPV and elder mistreatment does exist, as it appears, it is critical to understand when and under which conditions violence is likely to persist. As was discussed in an earlier publication of ours on these topics (Author, 2011), there are a number of theories that help to explain how abuse and neglect of children increases their risk for later forms of violence perpetration and victimization. In this section, we discuss several theories relevant to lifecourse patterns of violence. These include theories on psychobiological processes, attachment, social learning, and social cognition.

Theories of psychobiological processes help to explain how abuse and neglect elevate the risk of later problems in children by producing changes in patterns of arousal, stress response, and stress regulation (e.g., lower threshold for stress). As noted by scholars like Shonkoff (2009), an individual's prolonged exposure to high levels of "toxic" forms of adversity associated with adverse events (e.g., child maltreatment) places them at high risk for a range of cognitive, health, and social behavioral impairments. Alterations to patterns of stress arousal can lead some children (and adolescents) to engage in health compromising and impulsive behaviors, such as physical fighting, drug and alcohol abuse, and risky sexual practices (Connor, 2002). In adulthood, these same or similar unhealthy behaviors can

persist and possibly worsen, become more frequent, and consequential if additional stressors are encountered and not mitigated (Fortson et al., 2016). Ongoing exposure to violence, as when child is repeatedly abused and later bullied or assaulted as an adolescent, can further degrade an individual's ability to modulate stress and thereby lead to more vulnerability and worse health (Finkelhor, Turner, Hamby, & Ormrod, 2011; Finkelhor, Turner, Shattuck, & Hamby, 2013; Hamby & Grych, 2013).

Attachment theory places a strong emphasis on early bonding between children and their caregivers-- and the developmental impacts of weak parental attachments and lack of warmth and nurturance that can characterize violent households (Herrenkohl, 2011b). Children in abusive and neglectful home environments are more apt to develop attachment strategies that are adaptive in those settings (e.g., disorganized, avoidant) (Crittenden, 2006) but maladaptive in other settings where the threat of violence is low (Crittenden, 2006; Dumas, Pearson, Elgin, & McKinley, 2008). Ongoing concerns about safety and one's ability to rely on others (peers and adults) for protection add to the damage inflicted on children who begin life with insecure attachments.

Research testing assumptions about attachment styles and their role in the intergenerational transmission of violence is limited. According to Dumas and colleagues (2008), like children, adults rely on internal working models of self and others that shape how they respond in a given situation or encounter. When attachment needs are strained (as when an adult fears abandonment or betrayal by an adult partner), individuals with insecure attachments respond in ways that are intended to re-establish a connection with an attachment figure. Violence may, in this context, represent a desperate, often futile, attempt to maintain a connection to another person on whom a perpetrator is emotionally, socially, or financially dependent. In their study of 70 heterosexual couples, Dumas et al. (2008) found that attachment anxiety (fear of rejection and abandonment) elevated the risk of male and female violence. Violence was also more likely in relationships where men had avoidant attachment styles and women had anxious attachment styles; a dynamic they called "mispairing." The authors concluded that this mispairing of attachment styles is perhaps the most conducive to IPV because of the "different needs for closeness and distance" experienced by each partner. While findings like these on attachment styles are compelling, Capaldi and colleagues (2012) caution that research on attachment and IPV is insufficient to draw causal connections.

Social learning theories offer another perspective on the transmission of violence over the lifecourse. These theories pertain to the ways that violence exposure influences patterns of cognition and learned behavior that elevate the risk for violence from one point in time to the next (Ehrensaft et al., 2003). According to Ehrensaft and colleagues (2003), maltreated children learn and generalize coercive interaction styles from the home environment to other contexts. This, coupled with a growing acceptance and normalization of violence that comes with repeated encounters, leads to a higher likelihood of violence within and across adult relationships. When two adult partners share a learned acceptance of violence, the risk for IPV becomes exponentially higher. Ehrensaft's study of 543 children followed longitudinally showed that one of the strongest predictors of violent injury in adult relationships was a partner's history of physical abuse as a child. Interestingly, exposure to

violence between parents as a child was more strongly related to IPV victimization than was being abused as a child, suggesting that patterns of social learning may not necessarily require direct contact with an abuser (Capaldi et al., 2012; Ehrensaft et al., 2003; Herrenkohl et al., 2008)

A more specific theory of social information processing centers on cognitions and the ways that violence exposure leads to ways of thinking that promote aggression. In a seminal article by Dodge and colleagues (Dodge, Bates, & Pettit, 1990), the concept of social information processing was first discussed as a way to explain the high rate of aggression among physically abused children. The authors recounted how abused children misinterpret and respond to social cues, referring specifically to their tendency to overattribute hostile intentions to others, even when the threat of violence is low.

Relatedly, Wolfe et al. (2010) hypothesized that abuse (and neglect) interfere with a child's ability to interpret and respond appropriately to social cues, and that this deficit is additionally accompanied by poor problem-solving and emotion regulation skills. Collectively, these challenges lead to a higher risk for violence, particularly when relational environments are experienced as unsafe or threatening, such as when a child or adolescent is bullied or harassed by peers at school (Herrenkohl, 2011a).

Of note, Capaldi and colleagues (2012) determined that hostile thinking and aggressive attitudes (attitudes justifying the use of violence in relationships) were only moderately related to IPV risk. However, Saint-Eloy Cadely et al. (2018) concluded that variables associated with social learning and social information processing are, in fact, useful for explaining the continuity and escalation of psychological and physical IPV perpetration in a sample of men and women ages 18 to 25. Indeed, findings such as these on the persistence of violence and its association with social and attitudinal measures of learned acceptance undergirds a number of even broader sociological theories on gender norms and disproportionality in rates of victimization and violence perpetration experienced at a population level (Devries et al., 2013).

Studies of violence in children, youth, and adults have given rise to several "synthetic" lifecourse theories that blend ideas from these other theories on psychobiology, attachment, and social learning. For example, Cicchetti (2013) proposed that child maltreatment serves as an initial stimulus for a variety of experiences, or cascading effects, that ultimately result in negative adult outcomes. Chronic adversity in childhood produces neurobiological and epigenetic changes, as well as social behavioral and environmental changes, that interfere in children's prosocial development. Variation in the expression of chronic stress stemming from early forms of adversity is, in this regard, not a consequence of any single event or set of experiences, but rather a confluence of events, compounding risks, and transactional relationships that shape an individual's lifecourse trajectory of violence. As important as actual exposure are the ways individuals learn (or fail to learn) to cope and respond to hardship, and the degree to which forces in the social environment serve to protect or exacerbate risks that are already present or biologically embedded.

Finally, an aptly termed “lifecourse perspective” applied to the cycle of violence incorporates the principle of “linked lives,” which describes a pattern of relational connection and dependencies that can result in violence of one form or another (Elder, 1977; Teaster & Brossoie, 2016). From this perspective, individual lives are embedded within, and influenced by, relationships with others (i.e., family), and shifts in dependence, independence, and interdependence transform these relationships over time. For example, in early-stage families, young children are reliant on their parents to meet most of their daily needs. As families mature, there is an increase in the bidirectional flow of instrumental, financial, and emotional support between adult children and their parents. In late-life families, parents can begin to experience declines in their physical and mental functioning and turn to their adult children for help and assistance. Assuming greater support and responsibility for parents can perpetuate ambivalent and sometimes hostile emotional responses to the parent-child relationship (Armsden & Greenberg, 1987), particularly if the foundation of that relationship is compromised by past abuse by the parent or violence toward other members of the household. As Gordon and Brill (2001) explain, elder abuse can take the form of “reverse violence,” in which adult children who are in a position to help their parents in late life become abusive to “exact revenge” for the poor treatment they received many years earlier. Kong and Moorman (2015) suggest that unresolved trauma and weak bonds of attachment and emotional closeness between adult children and their parents add to the likelihood of elder mistreatment.

Similarly, in response to major life stressors, adults who experience childhood abuse may re-enact with their spouses/partners and aging parents the same or similar behaviors they encountered when they were young (Korbin, Anetzberger, & Austin, 1995). A very plausible scenario is one in which an adult child who has never become fully independent from a parent because of personal (e.g., mental illness, drug dependence), relational (e.g., unable to sustain intimate relations), or financial challenges (e.g., unable to keep a job) uses violence as a means to maintain control and dominance over that person. A relationship of child to parent can become abusive when a parent refuses to provide shelter, money, or other types of instrumental support the child demands (Lachs & Pillemer, 2004; Teaster & Brossoie, 2016).

Protective Factors and Resilience

Ideas pertaining to resilience and protection from a cycle of violence are captured in some of the above theories, as well as empirical studies. In this section we review findings on resilience and discontinuity in developmental pathways characterized by ongoing encounters with violence. The concept of resilience has been a topic of investigation for many years (Wright, Masten, & Narayan, 2013) and results from this line of research are critical to advancing programs and policies related to prevention and early intervention (Herrenkohl, Higgins, Merrick, & Leeb, 2015; Herrenkohl & Rousson, 2018).

While early abuse of children is associated with a host of lifelong consequences, a majority of these children achieve levels of functioning above what some might consider possible because of the extreme stress and hardship they have endured (Cicchetti, 2013; Hunter, Gray, & McEwen, 2018). Increasingly, findings on resilience indicate that variables associated with an individual’s genetics, biology, temperament, personality, and emotional

mistreatment (physical, verbal, and/or financial) and resilience, such that victims of elder mistreatment had higher levels of resilience when they had higher levels of social support.

In another study of resilience among women exposed to IPV, Howell and colleagues (2018) examined proximal predictors of resilience (e.g., personal competence, trust in one's instincts, positive acceptance of change) in a sample of 112 women exposed to physical, psychological, and sexual forms of violence. Hypothesized protective factors included spirituality, social support, community cohesion, and ethnic identity. Findings of several regression models showed that social support and spirituality were significant, direct predictors of higher resilience scores. In this case, no moderation tests were conducted because all participants were exposed to a common risk event (exposure to IPV).

Conclusions and Implications

Research discussed in this review underscores the interconnections among different forms of violence that span the developmental lifecourse from childhood to middle adulthood, and possibly to late life. Child maltreatment in its various manifestations is consistently predictive of aggression and more serious forms of violence in children and adolescents. Violence in youth is, in turn, highly predictive of IPV in young- and middle-aged adults. Connections also exist between earlier forms of violence and elder mistreatment, although findings in this area are more tentative because of the small number of studies that extend beyond midlife. As work related to abuse in older adults continues, odds are that empirical evidence of similar patterns of violence victimization and perpetration will be revealed. An important question in this line of research is whether formerly abused children become abusive toward their parents as they age (Jooyoung Kong & Moorman, 2015). This is a topic of several recent studies, including one by Kong and Moorman (2015), which points to depression among adult survivors of child maltreatment as a one, of potentially many, proximal and exacerbating risk factor for elder abuse among informal caregivers from the same family.

Developmental theories and frameworks used to explain the cycle of violence and intergenerational transmission of abuse from childhood to adulthood offer a number of plausible explanations about the mechanisms that allow violence to persist across relational contexts. Learned behaviors and patterns of social interaction; social information processing; and attachment strategies are all implicated in ongoing encounters with violence in partnered and familial relationships. Biological and genetic vulnerabilities are also relevant and increasingly well-documented in etiological studies (Cicchetti, 2013; Hunter et al., 2018; Shonkoff et al., 2009). Particularly in light of emerging evidence from research on risk and protection combining biological and social influences on aggression, comprehensive, developmental theories of a more synthetic variety are in some ways the most helpful. Still, findings from more traditional theories are instructive and remain relevant to the development of programs and policies related to violence prevention (Herrenkohl et al., 2015; Herrenkohl et al., 2019; Higgins, Lonne, Scott, & Herrenkohl, 2019; Sanders, Higgins, & Prinz, 2017).

While research on the cycle of violence in children, youth, and adults is in many ways compelling, the literature also contains gaps and several notable limitations. A primary limitation of the literature writ large is the heavy reliance on cross-sectional studies. Studies captured in this and other reviews are mostly cross-sectional and descriptive, and, therefore, limited from the standpoint of establishing a causal ordering among variables. The use of retrospective, self-report measures of violence is a related and equally concerning limitation, given the inaccuracies in measurement from poor recall (Hardt & Rutter, 2004). Particularly if the goal is to uncover how and under which conditions violence persists, prospective longitudinal studies are very clearly needed. The need is particularly evident in areas like elder mistreatment where much is still unknown about the proximal and distal influences on violent and abusive behavior. Studies of family violence have focused mainly on children and adolescents, and some on young and middle-aged adults, but relatively little on older adults over the age of 65 (Teaster & Brossoie, 2016). As noted by scholars who study aging in adults, the field requires original, theory-informed research that helps to advance knowledge of the causes, correlates, and pathways linking earlier developmental periods and experiences to those impacting individuals as they become increasingly dependent on others for their care (Pillemer, Burnes, Riffin, & Lachs, 2016). Further, relatively little is known about whether violence experienced by dependent adults is as strongly tied to proximal risk factors, such as drug and alcohol use, as other forms of violence, and whether patterns of violence and underlying risk influences differ by demographics, such as gender, race, and ethnicity (Capaldi et al., 2012). What *is* known about risk and protective factors for violence in aging adults comes mainly from studies based on small samples and cross-sectional data.

Considerably more research is needed at all stages and phases of development on protective factors and resilience. As is true of other areas of research, much more is known about risk factors for violence and risk transmission than about protective factors, resilience, and risk mitigation (Herrenkohl, 2011b). Whether protective factors are the same or similar in childhood, adolescence, and adulthood is not well established, yet this information is critical to refining and advancing theories that can inform policies and practice in prevention and intervention (Cicchetti, 2013).

Insecure attachments and lack of trust in formative relationships between children and adult caregivers can lead to future encounters with violence as well as health and mental disorders, but strong and nurturing relationships can have the opposite effect (Centers for Disease Control and Prevention, 2014). Strong and positive relationships can be healing and protective from ongoing exposure to violence in vulnerable populations (Centers for Disease Control and Prevention, 2014). Programs focused on strengthening relationships and building networks of support appear critical to lessening youth violence and adolescent and young adult IPV, and to improving health and mental health among older adults (Jooyoung Kong & Moorman, 2015). Additional studies are needed to assess the qualities of relationships and social support networks that are most conducive to non-violence. Research is also needed to determine how social networks can be mobilized to lessen violence in communities where it occurs more often (Melton, 2014) and to reduce the emotional strain of caregiving for children, as well as dependent older adults (Jooyoung Kong & Moorman, 2015).

Studies on child maltreatment and IPV have linked family violence to poverty and socioeconomic insecurity. Studies have also connected a child's exposure to violence to later measures of employment and income (Stevens et al., 2018), and to disparities based on race and ethnicity (Klevens & Metzler, 2019). Is the cycle of violence that exists within families also then evidence of enduring social class differences and inequities? A recent article by Klevens and Metzler (2019) makes this very point. As stated by the authors, evidence of the connection between violence and socioeconomic indicators of education, occupation, and income make clear the role of structural determinants in the proliferation and persistence of violence within particular segments of the population. While most families experiencing poverty or financial hardship do not engage in violence, limited resources and access to opportunities that allow for upward mobility are increasingly implicated in the elevated rates of violence among certain racial and ethnic groups within disinvested and disenfranchised communities (Klevens & Metzler, 2019). Further research on these and related issues is required. For example, studies might explore how socioeconomic indicators differentially relate to violence at different stages of development and whether mechanisms of risk transmission differ across demographic groups in urban and rural settings.

In conclusion, Hamby and Grych (2013) explain that the interconnections of different form of violence are underexplored and they call on the field to attend more intentionally to developmental and intergenerational patterns of violence. They cite the need and benefits of this crosscutting research, noting that the field of violence research has operated as if violence of one form (e.g., child maltreatment) is unrelated to another (e.g., IPV). This has had the effect of diverting attention away from common causes and possible solutions. The compartmentalization of violence research has slowed our collective engagement around practice and policy solutions that can produce and sustain changes necessary to improve the life chances of those at-risk and impacted by violence. We share the belief with Hamby and Grych that much more work should be done to draw connections among types of violence that appear at different life stages and that violence is best understood as a developmental phenomenon that is based in relationships in which power is not equally shared. We also share the belief that violence is driven by social determinants and that large structural changes are needed to have population-level effects on violence directed to children and adults (Klevens & Metzler, 2019). To eradicate violence in its various forms, efforts must begin to "connect the dots" by conducting research that builds on current findings and overcomes existing limitations, and by coordinating and integrating responses to violence that realize these connections (Wilkins et al., 2014).

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Diversity Statement

Research reviewed in this report is limited by samples that are typically not representative of groups representing diversity in race, ethnicity, gender identity, or sexual orientation. Findings should be viewed with this limitation in mind. Research based on diverse and heterogeneous samples from differing regions of the United States is necessary to improve understanding and advance programs and policies relevant to lifecourse patterns of violence. Research done in countries other than the United States will further efforts to understand and act on violence globally. Comparative studies of violence will also increase understanding of shared social, cultural, and economic risk and protective factors.