

SOCIAL VIOLENCE

Influences of Family and Community Physical Violence on Child Development: Prevalence, Risk Factors, and Research Gaps

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Introduction

Violence exposure in the lives of children includes both direct forms of victimization and indirect forms of witnessing across family and community context.³ Fifty-four percent of children (aged 2-17) are estimated to have experienced any violence (including physical, sexual, and emotional violence, bullying or witnessing violence) or any severe violence in the past year globally, or just over half of the world's children.^{1,2} This translates into about 1 billion children experiencing violence in 2014. In developing countries, the estimated past-year prevalence is higher at 59% of children exposed, and is lower in more developed countries at 44%.¹

Furthermore, international research estimates that between 133-275 million children globally witness violence in their homes annually.³ Estimates in developed countries range from 4.6-11.3 million, with higher estimates of 40.7-88 million in South Asia, 34.9-38.2 million in Sub-Saharan Africa, and 11.3-25.5 million in Latin America and the Caribbean.³ Therefore, although estimates vary somewhat between continents, they reveal violence against children is a global problem.

We focus here predominantly on physical violence exposure, including physical force toward a child intended to harm their health and development, as well as witnessing it toward others.⁴ The life-time median prevalence of self-reported child physical abuse in North America is 24.3% for boys and 21.7% for girls (21.7%), derived from a review of over 300 studies published between 2000-2017.^{2,4} These similarities by gender were also seen in Asia where the median prevalence rate for boys is 21.9% and 22.8% for girls. Yet, in contrast, in Europe rates for boys exceeded those of girls (27% vs. 12% respectively). Continental variability was also evident with rates of 60.2% for boys in Africa and 50.8% for girls. Notably, there are fewer studies available in Africa, Australia, Europe and South America (n=1 to 7 studies) than in North America (n=40 studies) and Asia (n=15 studies), and therefore heightened rates in Africa should be viewed in light of this limitation.⁴

Violence exposure varies across settings of children's daily lives, including communities and homes. Community violence includes acts intended to cause physical harm against a person in the community.⁵ The majority of research on community violence has been conducted in the U.S.,³ where about 25% of children age 2-17 have been exposed to it.⁶ Yet, in 2016, a lower estimate from a nationally representative sample indicated only 5% of older youth in the US (aged 10-17) had been victimized in community settings (encompassing multiple direct exposures and witnessing).⁷ While twenty-one percent (20.8%) were exposed at school, 8.4% were exposed at home only, and 21.3% were exposed across contexts of home and school. Poly-victims experienced violence in multiple settings, including the internet, and are estimated at 17.8% of youth.^{2,7} Therefore, in the U.S., just over a quarter, or 26.4%, of 10-17-year-olds have not been exposed to violence in any setting in the past year.

Given the global relevance of the COVID-19 pandemic to children's lives, and particularly the quarantine phase, it is useful to understand violence children sustained during this period. A Brazilian study of children assisted by pediatric emergency hospital services found 58.9% of them sustained child abuse (e.g., sexual, physical, or self-inflicted, all suspected/confirmed by a

physician) in their own homes.⁸ Patterns of quarterly relative percentages analyzed over time reveal that children assisted in the emergency room increased during the quarantine phase of the pandemic ($p < .01$) (i.e., after March 2020 to December 2020) relative to those months in the prior year.⁸ Corroborating patterns of increased violence toward children during the quarantine phase of the pandemic are from France where increased rates of hospitalization for the physical abuse of young children (aged 0-5) were observed from March to April 2020 with an estimate of .073%, relative to three years of prior data for those months in 2017-2019 (at .053%).⁹ These patterns translate into a heightened estimate 1.4 times higher of young children's physical abuse than would be expected from hospitalization data from the prior three years.⁹ Rates of violence against children likely increased during the quarantine phase since people became more isolated in their homes, away from school and daycare, where child injuries are observable by other adults. As well, families were constrained to their homes, away from workplaces, and for many, this occurred alongside economic stressors and overcrowding.² These factors increase the likelihood of conflict and violence occurring in the home, and young children are vulnerable in those conditions with few protective resources available to them.

Subject

Research has found pervasive detrimental effects of violence exposure on internalizing (e.g., depressive/anxiety symptoms), externalizing problems (e.g., aggressive behaviors), and social and educational outcomes across childhood and adolescence.^{10,11,12,13} Recent research also finds consistent links between community violence exposure and asthma in children^{14,15} including wheezing among preschoolers.¹⁶ Effects can be further summarized by type of violence exposure. First, across multiple studies, a recent meta-analysis found total exposure to community violence more strongly predicted externalizing than internalizing problems, with the strongest effects found for PTSD.¹⁷ Across sub-types of community violence exposure, the meta-analysis found direct victimization had stronger effects than witnessing violence on internalizing problems.

Victimization and witnessing had stronger effects on externalizing problems than hearing about community violence. Finally, effect sizes vary by age. Stronger community violence effects were found among adolescents than children. However, after taking study characteristics into account, further analyses suggested stronger influences of community violence on externalizing problems among adolescents (aged 12-25), while stronger influences were found among children (aged 11 and below) compared to adolescents on internalizing problems.¹⁷

Regarding parent-to-child physical aggression, detrimental effects have been found on children's internalizing, externalizing, and academic problems.^{18,19,12} Net of other victimizations, child maltreatment had the strongest relative effect on depressive symptoms among 2-9 year olds and 10-17 year olds.²⁰ Reviews demonstrate a pervasive detrimental link between domestic violence exposure and child behavior problems.²¹ As well, research points to the role of multiple violence exposures, or polyvictimization, on children's outcomes. Polyvictimization, defined as at least four different types of victimization in the previous year, is associated with increases traumatic symptoms (e.g., anger, depression, and anxiety).²² Another study found multiply victimized youth had lower grades than minimally victimized youth and those primarily victimized by their peers.²³

During the quarantine phase of the COVID-19 pandemic, a study of violence against young children (aged 0-5) showed heightened rates in that period. Yet, results on how young children exposed to violence during the pandemic are not yet available. Studies with adolescents monitored through surveys during the pandemic show mixed results. For example, a cross-sectional study of adolescents in high school in the US (Grades 9-12) conducted from January-June of 2021 (inclusive of questions on past-year prevalence encompassing March 2020), showed heightened risks of suicidality and poor mental health for those with more adverse child experiences including different types of violence exposure (e.g., physical abuse).²⁴

In contrast, a longitudinal Canadian study of adolescents (aged 14-18 at baseline in 2019 and aged 15-19 at Time 2 [Nov 2020 to June 2021]) conducted surveys conducted with them before and during the pandemic. They found that adolescents with two forms of child maltreatment experienced lower levels of internalizing and externalizing problems over time (by Time 2).²⁵ Disparate results between these studies may be due to research designs (e.g., cross-sectional or longitudinal, or the use of administrative records compared to surveys), as well as the period of focus (e.g., during the quarantine phase compared to years prior, or spanning years before and during pandemic).

Problems

More research is needed on the effects of violence exposure over time using longitudinal studies. These studies would best isolate the influences of violence exposure by also taking into account other adversities and prior behavior problems. As well, the research on young children exposed to violence, and not, following children at young ages during the pandemic continuing into adulthood would further understanding of its effects, and help to identify protective influences.

In research on violence exposure with young children, studies tend to use highly disadvantaged samples. More research is needed on the prevalence and consequences of violence exposure in young children's lives in comparative general community samples. Furthermore, since violence exposure sequelae are pervasive, studies need to continue to include a broad range of developmental outcomes. Although solid global estimates on exposure to violence now encompass witnessing violence and multiple forms of direct victimization in children's lives, these efforts need to move beyond prevalence toward testing theoretical models of influence. As well, more cross-national research is needed on community violence, and war violence. Finally, research is emerging on specific groups at risk for violence exposure during COVID-19 including the elevated risks faced by refugee youth (aged 12-17).²⁶ Again, information on how young child refugees fared in these circumstances would also be useful, raising the need for further attention to special groups at risk for violence before and during the pandemic.

Research Context

Research on community and family violence needs to be understood in relation to risk factors for exposure. Violence exposure varies by neighborhood, family, and individual factors. Higher levels of parent-to-child physical aggression is associated with living in economically disadvantaged neighborhood contexts as well as those with high violent crime levels.²⁷ Socio-economic status and family structure are also risk factors for violence exposure at the family level.^{10,13} Socio-economic status is predictive of exposure to violence co-occurrence.²⁸ Racial and ethnic minorities are more likely to be exposed to community violence.^{10,29} There is also some evidence of gender differences although the type of violence considered is important. Males are more likely to be exposed to community violence, and females are more often survivors of sexual abuse.^{10,2} However, some research finds no gender differences in maltreatment in the home,³⁰ while other studies find females are more likely than males to witness domestic violence.³¹

Key Research Questions

School and community contexts are promising sites for intervention and prevention of violence exposure influences, but more research is needed. What neighborhood and school factors reduce the impact of children's violence exposure? Furthermore, what family and individual factors buffer the influences of violence exposure in children's lives? Do buffering factors vary in influence by children's developmental stage? What neighborhood and school factors are associated with risks of poly-victimization, or the co-occurrence of violence exposure in children's lives? What forms of

violence co-occurrence are seen across different developmental stages of children’s lives? What resources mitigate heightened exposure of children to violence in the home during the quarantine phase of the pandemic? How can exposure to violence among children during public health emergencies be prevented?

Recent Research Results

Among preschoolers, community and family violence exposure are associated with more child problem outcomes. However, research shows the influence of community and family violence exposure works through a “meditational” model, or by a pathway of influence through caregivers. In this work, maternal distress is seen as central for preschool children as they are likely to experience community violence in their mother’s company. Children seek information from their mothers, and maternal distress in response to violent events is thought to affect child behavioral outcomes.³² For example, among young children (aged 3-5) in a Head Start program, community violence was found to increase maternal distress which in turn increased children’s hesitancy with peers, decreased cognitive functioning, and decreased positive peer interaction.³³ In another study, maternal depressive symptoms constituted part of the pathway through which community violence exposure affects child distress among preschool children.³⁴ Among a high risk sample of 3-5 year olds it was found that each of family aggression and community violence increased maternal distress which in turn increased child problem behaviors.³²

Research on older children points to factors that “moderate” or buffer the influences of community violence on children’s problem outcomes. Social support has consistently been found to buffer the effects of violence on children’s problem outcomes.^{35,13} Furthermore, family cohesion attenuates the effects of community violence exposure on male violence perpetration.³⁶ Research is also emerging on protective factors in school and community contexts. A Canadian study on child maltreatment effects on violent delinquency found an offsetting influence of a school intervention: the risk effect of maltreatment was lower in the group receiving a skills and relationship focused program.³⁷ The buffering effect of the school intervention program was observed again two years later.³⁸ Another study of youth in Gambia, Africa found positive school climate reduced the effect of witnessing community violence on post-traumatic stress symptoms.³⁹ Finally, a study of First Nations youth in Canada found individual, family and community resilience each buffered the effects of a broad measure of violence exposure on the re-experiencing post-traumatic distress disorder symptom cluster.⁴⁰

Recently, a study spanning 56 low to middle income countries around the world found a heightened risk of physical abuse of young children (aged 1-4) from parental spanking. In fact, spanking increased the risk of child physical abuse by over five times compared to children whose parents don't spank (Odds Ratio=5.74, $p<.001$), even after other relevant factors were taken into account.⁴¹ Positive attitudes toward physical punishment also increased the risk of physical abuse of children (OR=2.48, $p<.001$). In the US, studies have included measures of the macro-economic context (e.g., Great Recession with indicators of the Consumer Sentiment Index and the Unemployment Rate) in relation to high frequency maternal spanking, where macro-economic problems increases it when children are 9 years old;⁴² as well these macro-economic indices increase high frequency maternal physical and psychological aggression when children are nine years old, while neglect at this age is influenced by household income rather than the macro-economic context.⁴³

Results of this study imply that educating the public about the risky connection between spanking and physical abuse may be an effective intervention through public health information campaigns, for example.

Research Gaps

Preschooler's exposure to violence has received less attention than studies of older children, but it is an especially important developmental period when children are developing social and cognitive skills and preparing for transition to formal schooling.^{33,34} Given frameworks of cumulative risk, longitudinal research on the well-being of young children with and without child maltreatment exposure during the COVID19 pandemic is especially important as they go through school and over the life course. As well, studies of cumulative risk need to measure physical violence in different contexts given that community violence exposure and family violence in childhood (aged 5 and 9) are associated with different risky adolescent behaviors (age 15), where exposure to community violence increases their risky sexual behavior and family violence increases their risk of substance use, net of covariates. However, a bivariate association between community violence and subsequent adolescent obesity risks was explained by child, maternal and household covariates.⁴⁴ Further research is also needed across the three developmental periods of the early life course longitudinally, by addressing the types and amount of violence experienced or their effects at different ages.⁴⁵

Continued research into the influences of young children's violence exposure on brain development, the nervous, endocrine and immune systems is necessary, given emerging findings in this area.² For example, a composite measure of witnessing violence and personally experiencing violence in the community, in the home, and directly from care-givers in early through middle-childhood (ages 3, 5 and 9) was associated with region-specific brain activity at age 9 (i.e., decreased amygdala activation, indicating more sustained activation).⁴⁷ As well, high levels of early life violence exposure at ages 3, 5 and/or 9 (witnessing and/or victimization in home or community) interacted with high levels of social deprivation (i.e., lower social support, lower neighborhood cohesion) to decrease amygdala-orbitofrontal cortex white matter connectivity in the right hemisphere of the brain among children aged 15-17 years old, potentially decreasing regulation of their amygdalae to threat.⁴⁸ Researchers have proposed an interactive effect may result for youth experiencing both child maltreatment and types of COVID-19 pandemic stressors, a hypothesis in need of empirical testing.⁴² Furthermore, research shows early life violence exposure can lead to early menarche, which in turn may negatively influence health over the life course.⁴³ Therefore, identifying protective resources to decrease those connections engaging biosocial stress processes may have long-term health benefits.

More research is needed on pathways that lead from violence exposure to problem outcomes at different developmental stages. Further work is also needed on the potential buffering influences of school and community resources in addition to family and individual resources across developmental stages. Research has begun to identify community and school resources in the lives of older children but these influences in younger children's lives should also be examined. Also, the buffering effects of social and personal resources should be tested across multiple types of violence exposures. Studies need to measure multiple types of violence exposure in their research design. More studies that examine buffering resources of violence exposure in longitudinal research designs and on multiple outcomes are needed. Continued internationally comparative research is further needed, and there are some promising developments in this area.²

Conclusions

Violence exposure occurs in different social contexts of children's lives including families and communities and often co-occurs in the form of multiple violence exposures. Children are exposed to violence at both young and older ages. Children in disadvantaged neighborhood and family contexts are particularly at risk for violence exposure. For young children, pathways have

been identified where violence exposure affects caregiver mental health which in turn affects child outcomes. Therefore, a model of intergenerational risks in the lives of young children warrants theoretical and empirical development. Among older children, violence exposure has direct detrimental influences on a broad range of social, emotional and academic outcomes. Some promising research has emerged on features of families, schools and communities that further buffer the effects of violence exposure in children's lives. Social support is protective resource in reducing the impact of community violence exposure in children's lives. Additionally, features of communities and schools (e.g., school climate and community resilience) are emerging as protective in reducing community violence exposure and child maltreatment influences in older children's lives. Further research on prevention and intervention efforts are needed on a broad range of outcomes, age groups of children, and with sensitivity toward including children exposed to heightened family violence during the COVID-19 pandemic.

Implications for Parents, Services and Policy

Ideally, more resources would be targeted at initiatives to reduce overall levels of violence exposure in communities and families. However, more immediate policy and prevention opportunities that build on research findings are also available. For example, public health campaigns launched globally may help reduce the strong risk connections found between spanking and physical abuse of young children.⁴¹ Furthermore, continued support for open-access online parenting resources available during public health crises like the pandemic is vital, as is support for its translation into multiple languages.⁴⁴ In the US, a study drawing on youth experiences (ages 10-18) during the May-June 2020 phase of the pandemic found they reported concerns around mental health, violence in the home, and conflict over school concerns to the National Child Abuse helpline through text and online live chat options.²⁴ Counselors provided online assistance with coping skills in response. Ensuring youth access to text and online reporting options is therefore a promising and often privately accessed coping resource, however, about 20% of youth in this study did not have online or text options.⁴⁵ Finally, in England, through the Healthy Child Program, all families with young children (aged 0-5) and pregnant women have access to Health Visitors (HV) that administer this preventive resource. During the pandemic these services were scaled back yielding HV that varied in quality. This program has great promise to help families that fall through the cracks of other service deliveries. Sometimes digital resources were used instead of home visits, but research is still needed on their efficacy, and how families without appropriate technology can best be supported.⁴³ These studies point to a need to

examine the efficacy of providing outreach services to prevent and intervene in the lives of children exposed to violence through text and internet resources, as they have promise in lock-down conditions, but potentially even beyond.

Among preschoolers, it may be especially useful to offer support to caregivers exposed to violence.³² Supportive resources may decrease caregiver distress which may in turn reduce child behavior problems. Second, among older youth, efforts to support family functioning may reduce violence perpetration.³⁶ The role of buffering resources across contexts that decrease the effect of violence exposures on children's outcomes should include a broad range of outcomes including educational attainments. School factors are emerging as protective resources among older youth with findings emerging from Canada and Gambia, Africa.^{38,40} School factors should be further investigated among younger children. Efforts to foster community and school buffering resources are promising as they may reach a broad range of students. Research findings suggest that resources in multiple social contexts may best be garnered to reduce the impact of violence exposure on children.²⁸

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Note:

^a Research to date tends to focus on one of three age groups, young children/preschoolers, children, and adolescents, with few studies investigating violence exposure in the three periods developmentally. In this entry, we try to make clear which age group the cited research refers to.