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THE TRIPLE-C IMPACT: RESPONDING TO CHILDHOOD EXPOSURE TO CRIME AND VIOLENCE

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Content:

Falling Between the Cracks: Understanding Why States Fail in Protecting Our Children From Crime

2019 UNIVERSITY OF ILLINOIS LAW REVIEW 907 (2019)

The Snowball Effect of Crime & Violence: Measuring the Triple-C Impact

46 FORDHAM URBAN LAW JOURNAL 1 (2019)

The Tragedy of Wasted Funds and Wasted Lives: An Economic Analysis of Childhood Exposure to Crime and Violence

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FALLING BETWEEN THE CRACKS: UNDERSTANDING WHY STATES FAIL IN PROTECTING OUR CHILDREN FROM CRIME

*Michal Gilad**

This Article is the first to take an inclusive look at the monumental problem of crime exposure during childhood, which is estimated to be one of the most damaging and costly public health and public safety problems in our society today. We conducted a unique fifty-state survey, examining the state-level statutory responses to affected children. The survey uncovered staggering system failures, bureaucratic labyrinths, access to information challenges, and lack of coordination among governing agencies and organizations. Consequently, despite statutory eligibility for therapeutic services and compensation, the majority of children suffering the dire consequences of crime exposure are never identified. Even when identified, only a miniscule minority ever receive services or treatment to facilitate recovery.

Informed by scientific findings, the Article also takes on the challenging task of 'naming' this complex problem by coining the term "Comprehensive Childhood Crime Impact," or the "Triple-C Impact" in short. The term embodies the full effect of direct and indirect crime exposure on children due to their unique developmental characteristics, as well as the mammoth spillover effect on our society as a whole.

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TABLE OF CONTENTS

I.	INTRODUCTION.....	908
II.	THE PRINCIPLES UNDERLYING THE TRIPLE-C IMPACT	910
III.	THE SCOPE OF THE TRIPLE-C IMPACT—CATEGORIES OF EXPOSURE	914
	<i>A. Exposure to Family Violence</i>	918
	<i>B. Exposure to Community Crime</i>	921
	<i>C. Parental Victimization</i>	923
	<i>D. Parental Incarceration</i>	925
	<i>E. Child Witnesses</i>	927
IV.	GAUGING THE GAP—RESULTS OF THE FIFTY-STATE SURVEY	929
	<i>A. Survey Findings: Steps in the Right Direction</i>	933
	<i>B. Room for Improvement</i>	935
V.	POLICY IMPLICATIONS	942
VI.	WHY CRIME?.....	943
VII.	CONCLUSION	946
	APPENDIX: 50-STATE SURVEY RESULTS	948

I. INTRODUCTION

Since the early 1980s, every first-year law student in the U.S. has been inculcated with the conceptual process of naming, blaming, and claiming.¹ They have been taught that the first and most fundamental step in addressing a problem is identifying an experience as injurious and naming it as such.² With an entire generation of legal minds trained to “name,” is it still possible that one of the most injurious and costly problems in our society has yet to be properly named?

Over the past two decades, a large volume of empirical evidence has accumulated demonstrating the devastatingly harmful effect of direct and indirect childhood exposure to crime and violence.³ The documented harm ranges from physical and mental health problems,⁴ to increased risk for learning disabilities,

1. William L. F. Felstiner et al., *The Emergence and Transformation of Disputes: Naming, Blaming, Claiming* . . . , 15 LAW & SOC'Y REV. 631, 631 (1980).

2. See generally *id.*

3. See generally ROBERT L. LISTENBEE, JR. ET AL., REPORT OF THE ATTORNEY GENERAL'S NATIONAL TASK FORCE ON CHILDREN EXPOSED TO VIOLENCE 66 (2012), <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; Ruth Gilbert et al., *Burden and Consequences of Child Maltreatment in High-Income Countries*, 373 LANCET 68 (2009); Gayla Margolin & Elana B. Gordis, *The Effects of Family and Community Violence on Children*, 51 ANN. REV. PSYCHOL. 445 (2000); Maria Melchior et al., *Why Do Children from Socioeconomically Disadvantaged Families Suffer from Poor Health when They Reach Adulthood? A Life-Course Study*, 166 AM. J. EPIDEMIOLOGY 966 (2007); Frank W. Putnam, *The Impact of Trauma on Child Development*, 57 JUV. & FAM. CT. J. 1 (2006). For more on the outcomes of childhood crime exposure, see Michal Gilad et al., *The Snowball Effect of Crime & Violence: Measuring the Triple-C Impact*, 46 FORDHAM URB. L.J. (forthcoming 2019) [hereinafter Gilad, *Snowball Effect*].

4. PUB. HEALTH MGMT. CORP., FINDINGS FROM THE PHILADELPHIA URBAN ACE STUDY 1 (2013), <http://www.instituteforsafefamilies.org/sites/default/files/isfFiles/Philadelphia%20Urban%20ACE%20Report%202013.pdf>; Tracie O. Afifi et al., *Population Attributable Fractions of Psychiatric Disorders and Suicide Ideation and Attempts Associated with Adverse Childhood Experiences*, 98 AM. J. PUB. HEALTH 946, 946 (2008);

behavioral problems, repeat victimization,⁵ juvenile delinquency,⁶ adult criminality,⁷ and substance abuse.⁸ In 2012, the Attorney General Task Force on Children Exposed to Violence declared the problem as “a national crisis and a threat to the health and well-being of our nation’s children and of our country.”⁹ Others have described it as one of the most costly public health and public safety problems in the United States today.¹⁰

Despite the severity of childhood exposure to crime and violence, and the increased attention given to its various components, thus far there are almost no studies or policy analyses that take an inclusive look at the problem as a whole. Most available studies focus exclusively on one isolated form of exposure.¹¹ Indirect forms of childhood exposure to crime and their effects are often ignored or narrowly defined. This segmented and compartmentalized approach, which avoids properly defining and “naming” the problem, has prevented us from gaining a true understanding of its full scope, effect, and gravity. It has also hindered our ability to more accurately estimate the full cost of the problem to the state and to our society. Unsurprisingly, the

Vincent J. Felitti et al., *Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study*, 14 AM. J. PREVENTIVE MED. 245, 251 (1998); Leah K. Gilbert et al., *Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010*, 48 AM. J. PREVENTIVE MED. 345, 345–46 (2015); Eunju Lee et al., *Exposure to Community Violence as a New Adverse Childhood Experience Category: Promising Results and Future Considerations*, 98 FAM. SOC’Y 69, 69–70 (2017); Margolin & Gordis, *supra* note 3, at 459; Michael J. Salomon Weiss & Sheldon H. Wagner, *What Explains the Negative Consequences of Adverse Childhood Experiences on Adult Health? Insights from Cognitive and Neuroscience Research*, 14 AM. J. PREVENTIVE MED. 356, 356 (1998).

5. Jaelyn E. Barnes et al., *Sexual and Physical Revictimization Among Victims of Severe Childhood Sexual Abuse*, 33 CHILD ABUSE & NEGLECT 412, 417 (2009); Jamison D. Fargo, *Pathways to Adult Sexual Revictimization: Direct and Indirect Behavioral Risk Factors Across the Lifespan*, 24 J. INTERPERSONAL VIOLENCE 1771, 1784 (2009); Taryn Lindhorst et al., *Mediating Pathways Explaining Psychosocial Functioning and Revictimization as Sequelae of Parental Violence Among Adolescent Mothers*, 79 AM. J. ORTHOPSYCHIATRY 181, 181 (2009); Cathy Spatz Widom et al., *Childhood Victimization and Lifetime Revictimization*, 32 CHILD ABUSE & NEGLECT 785, 785 (2008).

6. Carlos A. Cuevas et al., *Juvenile Delinquency and Victimization: A Theoretical Typology*, 22 J. INTERPERSONAL VIOLENCE 1581, 1581 (2007); Carolyn Smith & Terence P. Thornberry, *The Relationship Between Childhood Maltreatment and Adolescent Involvement in Delinquency*, 33 CRIMINOLOGY 451, 468 (1995).

7. See, e.g., Cathy Spatz Widom, *Child Victims: Searching for Opportunities to Break the Cycle of Violence*, 7 APPLIED & PREVENTIVE PSYCHOL. 225, 225 (1998).

8. Robert F. Anda et al., *Adverse Childhood Experiences and Smoking During Adolescence and Adulthood*, 282 JAMA 1652, 1652 (1999); Shanta R. Dube et al., *Adverse Childhood Experiences and Personal Alcohol Abuse as an Adult*, 27 ADDICTIVE BEHAV. 713, 713 (2002); Shanta R. Dube et al., *Childhood Abuse, Neglect, and Household Dysfunction and the Risk of Illicit Drug Use: The Adverse Childhood Experiences Study*, 111 PEDIATRICS 564, 564 (2003); Dwain C. Fehon et al., *Correlates of Community Violence Exposure in Hospitalized Adolescents*, 42 COMPREHENSIVE PSYCHIATRY 283, 283 (2001); Dean G. Kilpatrick et al., *Risk Factors for Adolescent Substance Abuse and Dependence: Data from a National Sample*, 68 J. CONSULTING & CLINICAL PSYCHOL. 19, 19 (2000); Michael Lynch, *Consequences of Children’s Exposure to Community Violence*, 6 CLINICAL CHILD & FAM. PSYCHOL. REV. 265, 267–68 (2003); Mary E. Schwab-Stone et al., *No Safe Haven: A Study of Violence Exposure in an Urban Community*, 34 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 1343, 1344–45 (1995).

9. LISTENBEE JR. ET AL., *supra* note 3, at 31.

10. ERICA J. ADAMS, HEALING INVISIBLE WOUNDS: WHY INVESTING IN TRAUMA-INFORMED CARE FOR CHILDREN MAKES SENSE 1 (2010); Putnam, *supra* note 3, at 2.

11. DAVID FINKELHOR ET AL., CHILDREN’S EXPOSURE TO VIOLENCE: A COMPREHENSIVE NATIONAL SURVEY 3 (2009), <https://www.ncjrs.gov/pdffiles1/ojdp/227744.pdf>.

absence of a comprehensive understanding of the problem diminishes the ability to develop effective systematic solutions to improve the lives of millions of affected children and alleviate the harm inflicted upon our society.

Following the long-standing methodology of legal problem solving, for a truly inclusive examination of this devastating problem, it was necessary to first “name” it. This Article coins the term “Comprehensive Childhood Crime Impact,” or in short, the “Triple-C Impact.” The term embodies the full effect of all forms of direct and indirect crime exposure on children. Informed by scientific findings, it aims to clearly depict the complete interlocking matrix of ways in which crime harms children due to their unique developmental characteristics, and the spillover effect this harm has on society. The term allows for a common point of reference and a more precise use of terminology, as we examine this phenomenon, and attempt to develop effective responses to the challenges it poses.

The objective of this Article is to delineate the scientific and legal foundations at the base of the Triple-C Impact and to identify primary obstacles to its effective engagement. From a scientific perspective, this Article explores how the distinct developmental differences between children and adults shape the manner and severity in which crime exposure affects children. It also examines the marked short- and long-term injurious effect in store for this vulnerable group due to its discrete characteristics. From a legal perspective, this Article outlines and analyzes the intriguing results of our original fifty-state survey, which examines the statutory gaps in the existing response to the Triple-C Impact. The survey’s results paint an invaluable and unexpected picture of the root causes behind the ineptness of existing legal solutions to the problem.

Part II of this Article explains the fundamental principles of the Triple-C Impact. It also outlines the substantive differences between children and adults with regards to the impact of crime exposure on children. Part III delineates the scope of the Triple-C Impact. It carefully enumerates the categories of crime exposure that were selected to be included under the term and the empirical evidence that supports such inclusion. Part IV presents the results of the fifty-state survey, which examines the statutory responses presently available in the field and highlights statutory gaps. It also evaluates the strengths and weaknesses of the existing laws and policies and identifies the root causes of the marked deficiencies in the existing attempts to combat the Triple-C Impact problem. Part V elaborates on the policy implications of the survey’s findings, and the manners in which the findings can be utilized to improve our ability to address the problem. Part VI describes theoretical as well as practical reasons for addressing crime-related effects on children. Conclusions follow.

II. THE PRINCIPLES UNDERLYING THE TRIPLE-C IMPACT

It is undisputed that crime is a negative and harmful phenomenon for any community or individual that it touches. The conceptualization of the Triple-C Impact rests, however, on mounting empirical research demonstrating that there are significant developmental, social, and cultural differences between children

and adults. These differences lead children to be more vulnerable and susceptible to the negative forces of crime.¹² In fact, with relations to crime, children are considered to be the most vulnerable group in our society.¹³ The effect of crime infiltrates the lives of children from countless different directions. Despite common misperceptions, even when a criminal offence is not committed directly against the body of the child, evidence shows that it can leave marks that are acute, and often long lasting.¹⁴

The Triple-C Impact hinges on a set of factors that differentiate children from adults. These developmental variances have been shown to broaden, amplify, and influence the nature of the effect of crime on children when compared to adults. First, and most obvious, is that children are, on average, physically smaller and weaker than most adults, and they therefore are an easy target for predators. It is also vital to remember, however, that children are not merely miniature adults, and many more substantive differentiators are at play.

Second, from a physiological and anatomical perspective, a child's brain is extremely malleable during the early years of life.¹⁵ As a result, the "literature on central nervous system plasticity suggests that the human brain is dramatically affected by early experience."¹⁶ Exposure to crime and violence during childhood causes heightened levels of stress and overstimulation of certain brain structures, which can lead to chemical imbalance in the child's brain and abnormal neurological development.¹⁷ One recurring finding associated with crime exposure is a disruption in the development of the brain's major stress-regulating systems.¹⁸ The brain's executive functions, such as planning, memory, focusing attention, impulse control, and decision-making, were also found to be impaired due to exposure.¹⁹

12. David Finkelhor & Kathy Kendall-Tackett, *A Developmental Perspective on the Childhood Impact of Crime, Abuse, and Violent Victimization*, in 8 ROCHESTER SYMPOSIUM ON DEVELOPMENTAL PSYCHOPATHOLOGY: DEVELOPMENTAL PERSPECTIVES ON TRAUMA: THEORY, RESEARCH, AND INTERVENTION 1, 2 (Dante Cicchetti & Sheree L. Toth eds., 1997).

13. FINKELHOR ET AL., *supra* note 11, at 2; Patricia Y. Hashima & David Finkelhor, *Violent Victimization of Youth Versus Adults in the National Crime Victimization Survey*, 14 J. INTERPERSONAL VIOLENCE 799, 799 (1999).

14. FINKELHOR ET AL., *supra* note 11, at 2.

15. Margolin & Gordis, *supra* note 3, at 459–61; Bruce D. Perry, *Incubated in Terror: Neurodevelopmental Factors in the "Cycle of Violence"*, in CHILDREN IN A VIOLENT SOCIETY 124, 124 (Joy D. Osofsky ed., 1997).

16. Margolin & Gordis, *supra* note 3, at 459; *see also* Weiss & Wagner, *supra* note 4, at 356–57.

17. RICHARD J. LOEWENSTEIN ET AL., REPORT OF THE AMERICAN PSYCHIATRIC ASSOCIATION TASK FORCE ON THE BIOPSYCHOSOCIAL CONSEQUENCES OF CHILDHOOD VIOLENCE 23 (Richard J. Loewenstein & Frank W. Putnam eds., 2013), <http://www.researchgate.net/publication/239939460>; Margolin & Gordis, *supra* note 3, at 459–61.

18. Margolin & Gordis, *supra* note 3, at 460.

19. Dana Charles McCoy, *Early Violence Exposure and Self-Regulatory Development: A Bioecological Systems Perspective*, 56 HUM. DEV. 254, 255 (2013); *see also* Ayelet Lahat & Louis A. Schmidt, *Early Violence Exposure and Executive Function: Implications Psychopathology and Other Cautionary Points*, 56 HUM. DEV. 274, 275 (2013) (citing Dana Charles McCoy, *Early Violence Exposure and Self-Regulatory Development: A Bioecological Systems Perspective* (2013)).

Third, children are in critical stages of their emotional and cognitive development. Their identity is not yet formed, and their personality traits are in transitory stages.²⁰ As a result, they are considered to be significantly more vulnerable and susceptible to external influences and pressures.²¹ They are less mentally stable than adults, and they are extremely sensitive to psychological damage.²² Exposure to crime at this critical state can interrupt the delicate and complex process of maturation and alter its path.²³ It may affect the timing of typical developmental trajectories and disrupt children's progression through age-appropriate developmental tasks.²⁴

Furthermore, the underdeveloped cognitive capacity of most children and their emotional sensitivity limit their ability to "appraise and understand violence, to respond to and cope with danger, and to garner environmental resources that offer protection and support."²⁵ It also makes it difficult for them to process and cope with trauma and heal without external assistance.²⁶ The developmentally limited ability of young children to verbalize the powerful emotions they are experiencing may also aggravate the effect of exposure.²⁷ Victimology experts like Dr. Linda Mills recognize that there is a significant risk that any symptoms caused by crime exposure during these critical developmental stages will become embedded in the individual's core personality structure.²⁸

Fourth, as a factor of their social and psychological immaturity, children are dependent on adults for their survival and basic psychical and emotional needs.²⁹ Their dependency status enhances their vulnerability to the harmful effects of forms of indirect crime exposure. They "rely strongly on parent figures to protect them from danger, to make the world predictable and safe as they begin to venture forth, and to guide their responses in ambiguous or threatening situations."³⁰ Thus, when a caregiver is subjected to victimization, illicit substance abuse, or incarceration, the dependent children are often deprived of the care,

20. Marsha Levick et al., *The Eighth Amendment Evolves: Defining Cruel and Unusual Punishment Through the Lens of Childhood and Adolescence*, 15 U. PA. J. L. & SOC. CHANGE 285, 297–98 (2012).

21. *Id.* at 294–98.

22. *Roper v. Simmons*, 543 U.S. 551, 569–70 (2005).

23. Stephanie Holt et al., *The Impact of Exposure to Domestic Violence on Children and Young People: A Review of the Literature*, 32 CHILD ABUSE & NEGLECT 797, 802–03 (2008); Suzanne G. Martin, *Children Exposed to Domestic Violence: Psychological Considerations for Health Care Practitioners*, 16 HOLISTIC NURSING PRAC. 7, 9–10 (2002); Jennifer E. McIntosh, *Thought in the Face of Violence: A Child's Need*, 26 CHILD ABUSE & NEGLECT 229, 230 (2002).

24. Sue Boney-McCoy & David Finkelhor, *Special Populations: Psychosocial Sequelae of Violent Victimization in a National Youth Sample*, 63 J. CONSULTING & CLINICAL PSYCHOL. 726, 726 (1995); Margolin & Gordis, *supra* note 3, at 449–52.

25. Margolin & Gordis, *supra* note 3, at 450.

26. Levick et al., *supra* note 20, at 296.

27. Holt et al., *supra* note 23, at 802.

28. Linda G. Mills, *The Justice of Recovery: How the State Can Heal the Violence of Crime*, 57 HASTINGS L.J. 457, 486 (2005).

29. Elizabeth Scott, *The Legal Construction of Adolescence*, 29 HOFSTRA U. L. REV. 541, 546 (2000).

30. Margolin & Gordis, *supra* note 3, at 450.

support, guidance, and protection essential for their development into healthy, productive members of society.³¹

Moreover, due to their dependency status, children have comparatively little choice over their living environment and the people with whom they associate. Research presented in the American Psychological Association's amicus brief submitted to the U.S. Supreme Court in *Graham v. Florida*³² found that minors are "dependent on living circumstances of their parents and families and hence are vulnerable to the impact of conditions well beyond their control."³³ Justice Kagan, delivering the opinion of the court in *Miller v. Alabama*, reinforced the fact that minor children have limited control over their own environment, and are usually unable to extricate themselves from their surrounding environment, no matter how brutal or dysfunctional it is.³⁴ Hence, children do not have the capabilities or resources to remove themselves from harmful circumstances induced by crime and violence.³⁵ Furthermore, they depend on the assistance and initiative of adults to seek help for their rehabilitation and recovery from trauma.³⁶

Fifth, children have underdeveloped decision-making capacities.³⁷ This is due to children's level of cognitive development, immature judgment, and limited life experiences.³⁸ As a result, children tend to exhibit risk-taking behavior and low risk-aversion utility, particularly during teen years.³⁹ This could increase

31. *Id.* at 451–52.

32. 560 U.S. 48, 51 (2010).

33. Brief for the American Psychological Association et al., as Amici Curiae Supporting Petitioners at 15, *Graham v. Florida*, 560 U.S. 48 (2010) (Nos. 08-7412, 08-7621), <https://www.apa.org/about/offices/ogc/amicus/graham-v-florida-sullivan.pdf>; Alan E. Kazdin, *Adolescent Development, Mental Disorders, and Decision Making of Delinquent Youths*, in *YOUTH ON TRIAL: A DEVELOPMENTAL PERSPECTIVE ON JUVENILE JUSTICE* 33, 47 (Thomas Grisso & Robert G. Schwartz eds., 2000). Although this series of Supreme Court cases, including *Roper*, *Graham*, and *Miller*, dealt with juveniles offenders rather than victims, the court and amici's analysis of scientific developmental psychology is useful for an understanding of the special needs of juvenile and their unique characteristics and behavioral traits.

34. 567 U.S. 460, 477 (2012).

35. David Finkelhor & Patricia Y. Hashima, *The Victimization of Children & Youth: A Comprehensive Overview*, in *HANDBOOK OF YOUTH AND JUSTICE* 49, 59–61 (Susan O. White ed., 2001).

36. Terence P. Thornberry & Marvin D. Krohn, *The Development of Delinquency: An Interactional Perspective*, in *HANDBOOK OF YOUTH AND JUSTICE* 289, 299 (Susan O. White ed., 2001).

37. Elizabeth S. Scott & Thomas Grisso, *The Evolution of Adolescence: A Developmental Perspective on Juvenile Justice Reform*, 88 J. CRIM. L. & CRIMINOLOGY 137, 157 (1997).

38. *Id.* at 157; see also Elizabeth S. Scott, *The Legal Construction of Adolescence*, 29 HOFSTRA U. L. REV. 547, 550 (2000) [hereinafter Scott, *The Legal Construction*]; Kim Taylor-Thompson, *State of Mind/States of Development*, 14 STAN. L. & POL'Y REV. 143, 150 (2003).

39. A.L. Glenn et al., *The Neural Correlates of Moral Decision-Making in Psychopathy*, 14 MOLECULAR PSYCHIATRY 5 (2009); Adrian Raine & Yaling Yang, *Neural Foundations to Moral Reasoning and Antisocial Behavior*, 3 SOC. COGNITIVE & AFFECTIVE NEUROSCIENCE 203, 203 (2006); Elizabeth S. Scott et al., *Evaluating Adolescent Decision Making in Legal Contexts*, 19 L. & HUM. BEHAV. 221, 222 (1995); Scott, *Legal Construction*, *supra* note 38, at 591–92. See William Gardner, *A Life Span Theory of Risk Taking*, in *ADOLESCENT RISK TAKING* 66, 67–70 (Nancy J. Bell, Robert W. Bell eds., 1993); see also Lita Furby & Ruth Beyth-Marom, *Risk Taking in Adolescence: A Decision-Making Perspective*, 12 DEVELOPMENTAL REV. 1, 1 (1992); A.L. Greene, *Future-Time Perspective in Adolescence: The Present of Things Future Revisited*, 15 J. YOUTH & ADOLESCENCE 99, 105 (1986); Jari-Erik Nurmi, *How Do Adolescents See Their Future?: A Review of the Development of Future Orientation and Planning*, 11 DEV. REV. 1, 48 (1991); Laurence Steinberg & Elizabeth Cauffman, *Maturity of*

their exposure to crime and violence. Additionally, due to these immature decision-making capacities, the law normally charges adults with the task of making important decisions affecting children's lives. When parents or caregivers are incapacitated by violence, victimization, or incarceration, however, their ability to make coherent decisions on behalf of their children, and to fully consider their best interests, is inevitably diminished. This dynamic overexposes children to the harmful effect of crime.

Lastly, children are in the midst of their legal socialization.⁴⁰ Tom Tyler and Jeffrey Fagan define legal socialization as a process that unfolds during childhood and adolescence, through which children develop an inclination towards compliance with the law and cooperation with legal actors.⁴¹ The process is highly affected by children's exposure to crime and their childhood experiences with legal actors, law enforcement, and the justice system.⁴² Inferring from the research findings of Tyler and Fagan, it is likely that exposure to crime and violence, and the failure of the legal system to protect children from these harmful experiences, interfere with the legal socialization process of affected children. Disruption of this fundamental developmental process may explain a proclivity towards criminal behavior and illicit substance abuse in individuals affected by crime during childhood.⁴³

This set of fundamental developmental attributes commonly found in minor children overexposes children to the influence of crime and expands its effect far beyond conventional direct victimization. Insufficient accounting for these highly relevant differences between children and adults, and the unique developmental needs associated with these disparities, will inevitably impair the efficacy of any law or policy attempting to address the problem. The coining of the Triple-C Impact stems from an understanding that such marked distinctions necessitate focused attention on children as a unique group in order to develop a profound and accurate understanding of the problem and its possible solutions.

III. THE SCOPE OF THE TRIPLE-C IMPACT—CATEGORIES OF EXPOSURE

A significant element of the "naming" process is clearly marking the boundaries and content of the problem. The Triple-C Impact term is designed to encompass the full-range of direct and indirect forms of crime exposure that were found by empirical research to pose substantial short- and long-term harm to children due to the aforementioned unique developmental characteristics. The

Judgement in Adolescence: Psychosocial Factors in Adolescent Decision Making, 20 L. & HUM. BEHAV. 249, 254 (1996).

40. Jeffrey Fagan & Tom R. Tyler, *Legal Socialization of Children and Adolescents*, 18 SOC. JUST. RES. 217, 218 (2005).

41. *Id.* at 219–22. See also Jeffrey Fagan et al., *Developmental Trajectories of Legal Socialization Among Adolescent Offenders*, 96 J. CRIM. L. & CRIMINOLOGY 267, 270–73 (2005).

42. Fagan & Tyler, *supra* note 40, at 234.

43. Dean G. Kilpatrick et al., *Risk Factors for Adolescent Substance Abuse and Dependence: Data from a National Sample*, 68 J. CONSULTING & CLINICAL PSYCHOL. 19, 19 (2000); Cathy Spatz Widom, *Child Victims: Searching for Opportunities to Break the Cycle of Violence*, 7 APPLIED PREVENTIVE PSYCHOL. 225, 225 (1998).

primary criterion used in the selection of the exact categories of childhood exposure to crime is the presence of significant empirical evidence to support and demonstrate potential harm to the child, which rises to a level similar to that caused by direct victimization.⁴⁴

Direct victimization is the most conventional and commonly recognized form of crime exposure.⁴⁵ It occurs when an act defined by law as a criminal offense is committed against the person of the child.⁴⁶ Children who experience direct victimization, especially where violent crime is concerned, have been shown to exhibit an array of adverse short- and long-term symptoms.⁴⁷ The harm endured may vary depending on the type, severity, and frequency of the victimization as well as the child characteristics, such as age, gender, socio-economic status, level of familial support, and emotional capacity.⁴⁸

Documented symptoms include aggression, developmental and behavioral problems, attention disorders, attachment disorders, delays in educational development, and a deficit in social adaptation.⁴⁹ These children also suffer from in-

44. Due consideration should be given to the fact that children are not equally affected by crime victimization and trauma. Some children are deeply affected by victimization, whether direct or indirect, while others exhibit high levels of resilience. David Finkelhor, *Developmental Victimization: The Comprehensive Study of Childhood Victimization*, in VICTIMS OF CRIME 9, 12 (Robert C. Davis et al. eds., 3rd ed. 2007) [hereinafter Finkelhor, *Developmental Victimization*]. The exact combination of factors that allow some children to develop higher levels of resilience than others is not yet fully understood. Factors, however, such as age, gender, relationship with the caregiver, personal strengths and vulnerabilities, characteristics of the child's family and community, and the frequency and severity of the victimization, were shown by empirical research to have an effect on children's responses. BETSY MCALISTER GROVES ET AL., IDENTIFYING AND RESPONDING TO DOMESTIC VIOLENCE: CONSENSUS RECOMMENDATIONS FOR CHILD AND ADOLESCENT HEALTH 6 (2004), <http://www.futureswithoutviolence.org/userfiles/file/HealthCare/pediatric.pdf>; ANNE PETERSEN ET AL., NEW DIRECTIONS IN CHILD ABUSE AND NEGLECT RESEARCH 133 (2014).

45. Finkelhor, *Developmental Victimization*, *supra* note 44, at 11.

46. *Id.* at 10.

47. *Id.* at 12. For more on the outcome of the Triple-C Impact, see generally Gilad, *Snowball Effect*, *supra* note 3.

48. GROVES ET AL., *supra* note 44; PETERSEN ET AL., *supra* note 44; Stephanie Holt et al., *The Impact of Exposure to Domestic Violence on Children and Young People: A Review of the Literature*, 32 CHILD ABUSE & NEGLECT 797, 802–05 (2008); Sara R. Jaffee et al., *Individual, Family, and Neighborhood Factors Distinguish Resilient from Non-Resilient Maltreated Children: A Cumulative Stressors Model*, 31(3) CHILD ABUSE & NEGLECT 231, 246 (2007); Lois A. Weithorn et al., *Domestic Violence and Children: Analysis and Recommendations*, 9 FUTURE CHILD. 3, 9 (1999).

49. LISTENBEE JR. ET AL., *supra* note 3, at 31–32. Tracie O. Afifi et al., *Population Attributable Fractions of Psychiatric Disorders and Suicide Ideation and Attempts Associated with Adverse Childhood Experiences*, 98 AM. J. PUB. HEALTH 946, 951 (2008); Saaniya Bedi et al., *Risk for Suicidal Thoughts and Behavior After Childhood Sexual Abuse in Women and Men*, 41 SUICIDE & LIFE THREATENING BEHAV. 406, 411–12 (2011); Jacqueline C. Carter et al., *The Impact of Childhood Sexual Abuse in Anorexia Nervosa*, 30 CHILD ABUSE & NEGLECT 257, 264 (2006); Laura P. Chen et al., *Sexual Abuse and Lifetime Diagnosis of Psychiatric Disorders: Systematic Review and Meta-Analysis*, 85 MAYO CLINIC PROC. 618, 627 (2010); Scott E. Hadland et al., *Suicide and History of Childhood Trauma Among Street Youth*, 136 J. AFFECTIVE DISORDERS 377, 378 (2012); J. G. Hovens et al., *Impact of Childhood Life Events and Trauma on the Course of Depressive and Anxiety Disorders*, 126 ACTA PSYCHIATRICA SCANDINAVICA 198, 206 (2012); Annmarie C. Hulette et al., *Dissociation in Middle Childhood Among Foster Children with Early Maltreatment Experiences*, 35 CHILD ABUSE & NEGLECT 123, 127 (2011); Sarah Jonas et al., *Sexual Abuse and Psychiatric Disorder in England: Results from the 2007 Adult Psychiatric Morbidity Survey*, 41 PSYCHOL. MED. 709, 718 (2011); Sara Larsson et al., *High Prevalence of Childhood Trauma in Patients with Schizophrenia Spectrum and Affective Disorder*, 54 COMPREHENSIVE PSYCHIATRY 123,

creased risk for repeat victimization, mental health problems, and a greater likelihood to engage in criminal activity.⁵⁰ They are more inclined to practice risk behaviors, including alcoholism, drug abuse, smoking, suicide attempts, sexually promiscuous behavior, and unintended pregnancies.⁵¹ A strong link between

125 (2012); Gayla Margolin & Elana B. Gordis, *The Effects of Family and Community Violence on Children*, 51 ANN. REV. PSYCHOL. 445, 454 (2000); Terri L. Messman-Moore et al., *Emotion Dysregulation and Risky Sexual Behavior in Revictimization*, 34 CHILD ABUSE & NEGLECT 967, 968 (2010); Jennie G. Noll et al., *Sleep Disturbances and Childhood Sexual Abuse*, 31 J. PEDIATRIC PSYCHOL. 469, 470 (2006); Anna Plaza et al., *Childhood Physical Abuse as a Common Risk Factor for Depression and Thyroid Dysfunction in the Earlier Postpartum*, 200 PSYCHIATRY RES. 329, 334 (2012); Frank W. Putnam, *The Impact of Trauma on Child Development*, 57 JUV. & FAM. CT. J. 1, 1 (2006); Paul Rohde et al., *Associations of Child Sexual and Physical Abuse with Obesity and Depression in Middle-Aged Women*, 32 CHILD ABUSE & NEGLECT 878, 885 (2008); Lena Sanci et al., *Childhood Sexual Abuse and Eating Disorders in Females: Findings from the Victorian Adolescent Health Cohort Study*, 162 ARCHIVES PEDIATRIC & ADOLESCENT MED. 261, 265 (2008); Luisa Sugaya et al., *Child Physical Abuse and Adult Mental Health: A National Study*, 25 J. TRAUMATIC STRESS 384, 389 (2012); B. Wanner et al., *Childhood Trajectories of Anxiousness and Disruptiveness Explain the Association Between Early-Life Adversity and Attempted Suicide*, 42 PSYCHOL. MED. 2373, 2379 (2012); Mette Ystgaard et al., *Is There a Specific Relationship Between Childhood Sexual and Physical Abuse and Repeated Suicidal Behavior?*, 28 CHILD ABUSE & NEGLECT 863, 871 (2004).

50. Bryndis B. Asgeirsdottir et al., *Associations Between Sexual Abuse and Family Conflict/Violence, Self-Injurious Behavior, and Substance Use: The Mediating Role of Depressed Mood and Anger*, 35 CHILD ABUSE & NEGLECT 210, 216 (2011); Laura Bevilacqua et al., *Interaction Between FKBP5 and Childhood Trauma and Risk of Aggressive Behavior*, 69 ARCHIVES GEN. PSYCHIATRY 62, 70 (2012); Sophie Boivin et al., *Past Victimization and Dating Violence Perpetration in Adolescence: The Mediating Role of Emotional Distress and Hostility*, 27 J. INTERPERSONAL VIOLENCE 662, 673–74 (2012); Sjoukje B. B. de Boer et al., *Childhood Characteristics of Adolescent Inpatients with Early-Onset and Adolescent-Onset Disruptive Behavior*, 34 J. PSYCHOPATHOLOGY & BEHAV. ASSESSMENT 415, 421 (2012); Shi Huang et al., *The Long-Term Effects of Childhood Maltreatment Experiences on Subsequent Illicit Drug Use and Drug-Related Problems in Young Adulthood*, 36 ADDICTIVE BEHAV. 95, 98 (2011); Deborah J. Jones et al., *Linking Childhood Sexual Abuse and Early Adolescent Risk Behavior: The Intervening Role of Internalizing and Externalizing Problems*, 41 J. ABNORMAL CHILD PSYCHOL. 139, 146–47 (2013); Eleni K. Maneta et al., *Links Between Childhood Physical Abuse and Intimate Partner Aggression: The Mediating Role of Anger Expression*, 27 VIOLENCE & VICTIMS 315 (2012); Roberto Maniglio, *The Role of Child Sexual Abuse in the Etiology of Substance-Related Disorders*, 30 J. ADDICTIVE DISEASES 216, 222 (2011); Christina S. Meade et al., *Methamphetamine Use Is Associated with Childhood Sexual Abuse and HIV Sexual Risk Behaviors Among Patrons of Alcohol-Serving Venues in Cape Town, South Africa*, 126 DRUG & ALCOHOL DEPENDENCE 232, 238 (2012); Lynette M. Renner & Stephen D. Whitney, *Risk Factors for Unidirectional and Bidirectional Intimate Partner Violence Among Young Adults*, 36 CHILD ABUSE & NEGLECT 40, 49–50 (2012); Sunny H. Shin, Daniel P. Miller & Martin H. Teicher, *Exposure to Childhood Neglect and Physical Abuse and Developmental Trajectories of Heavy Episodic Drinking from Early Adolescence into Young Adulthood*, 127 DRUG & ALCOHOL DEPENDENCE 31, 36 (2013); Helen W. Wilson & Cathy S. Widom, *Pathways from Childhood Abuse and Neglect to HIV-Risk Sexual Behavior in Middle Adulthood*, 79 J. CONSULTING & CLINICAL PSYCHOL. 236, 244–45 (2011) [hereinafter Wilson & Widom, *Pathways from Childhood Abuse and Neglect*]; Helen W. Wilson & Cathy S. Widom, *The Role of Youth Problem Behaviors in the Path from Child Abuse and Neglect to Prostitution: A Prospective Examination*, 20 J. RES. ADOLESCENCE 210 (2010) [hereinafter Wilson & Widom, *The Role of Youth Problem Behaviors*].

51. Anda et al., *supra* note 8, at 1656–57; Asgeirsdottir et al., *supra* note 50, at 216; Dube et al., *Adverse Childhood Experiences*, *supra* note 8, at 722–23; Susan D. Hillis et al., *The Association Between Adverse Childhood Experiences and Adolescent Pregnancy, Long-Term Psychosocial Consequences, and Fetal Death*, 113 PEDIATRICS 320, 325–26 (2004); Huang et al., *supra* note 50, at 100; Jones et al., *supra* note 50, at 146–47; Maniglio, *supra* note 50, at 222; Meade et al., *supra* note 50, at 238; Shin, Miller & Teicher, *supra* note 50, at 36; Charles L. Whitfield et al., *Violent Childhood Experiences and The Risk of Intimate Partner Violence in Adults: Assessment in a Large Health Maintenance Organization*, 18 J. INTERPERSONAL VIOLENCE 166, 178–81 (2003); Wilson & Widom, *Pathways from Childhood Abuse and Neglect*, *supra* note 50, at 244–25. See generally Dube et al., *Childhood Abuse, Neglect and Household Dysfunction*, *supra* note 8; Wilson & Widom, *The Role of Youth Problem Behaviors*, *supra* note 50.

childhood victimization and life-threatening health conditions—such as cancer; lung, heart, liver, and skeletal diseases; sexually transmitted diseases; and obesity—has also been established.⁵²

On the other hand, indirect victimization occurs when a child experiences harm as a result of a criminal act committed against another.⁵³ Experts in the field assert that “[al]though indirect victimization affects adults as well as children, the latter are particularly vulnerable to its effects, due to their dependency on those being victimized.”⁵⁴ In fact, empirical studies demonstrate that unlike adults, direct and indirect victimization affect children in a very similar manner.⁵⁵ Research has shown that what may appear to the layperson’s eye to be “minor” forms of crime exposure, such as witnessing violence without being physically touched, can result in substantial harm.⁵⁶ The harm caused varies in a comparable manner to direct victimization and is influenced by a similar set of variables pertaining to the crime and the child.⁵⁷ Indirect victimization can result from many different forms of crime exposure during childhood.⁵⁸

52. Renée Boynton-Jarrett et al., *Child and Adolescent Abuse in Relation to Obesity in Adulthood: The Black Women’s Health Study*, 130 *PEDIATRICS* 245, 249 (2012); Alanna D. Hager & Marsha G. Runtz, *Physical and Psychological Maltreatment in Childhood and Later Health Problems in Women: An Exploratory Investigation of the Roles of Perceived Stress and Coping Strategies*, 36 *CHILD ABUSE & NEGLECT* 393, 400 (2012); Roberto Maniglio, *The Impact of Child Sexual Abuse on Health: A Systematic Review of Reviews*, 29 *CLINICAL PSYCHOL. REV.* 647, 654 (2009); Molly L. Paras et al., *Sexual Abuse and Lifetime Diagnosis of Somatic Disorders: A Systematic Review and Meta-Analysis*, 302 *J. AM. MED. ASS’N* 550, 555 (2009); Natalie Slopen et al., *Childhood Adversity and Cell-Mediated Immunity in Young Adulthood: Does Type and Timing Matter?*, 28 *BRAIN BEHAV. & IMMUNITY* 63, 68 (2013).

53. David Finkelhor, *Developmental Victimology: The Comprehensive Study of Childhood Victimization*, in *VICTIMS OF CRIME* 9, 12 (3d ed. 2007).

54. *Id.*

55. *See, e.g.*, Kilpatrick et al., *supra* note 8, at 26; Margolin & Gordis, *supra* note 3, at 469.

56. LISTENBEE JR. ET AL., *supra* note 3, at 66; Tyrone Bentley & Cathy S. Widom, *A 30-Year Follow-Up of the Effects of Child Abuse and Neglect on Obesity in Adulthood*, 17 *OBESITY* 1900, 1903 (2009); Preeti Chauhan & Cathy S. Widom, *Childhood Maltreatment and Illicit Drug Use in Middle Adulthood: The Role of Neighborhood Characteristics*, 24 *DEV. & PSYCHOPATHOLOGY* 723, 724–25 (2012); Janet Currie & Cathy S. Widom, *Long-Term Consequences of Child Abuse and Neglect on Adult Economic Well-Being*, 15 *CHILD MALTREATMENT* 111, 117 (2010); Gilbert et al., *supra* note 3, at 70; Ilan Harpaz-Rotem et al., *Clinical Epidemiology of Urban Violence: Responding to Children Exposed to Violence in Ten Communities*, 22 *J. INTERPERSONAL VIOLENCE* 1479, 1487 (2007); William W. Harris, Alicia F. Lieberman & Steven Marans, *In the Best Interests of Society*, 48 *J. CHILD PSYCHOL. & PSYCHIATRY & ALLIED DISCIPLINES* 392, 392 (2007); Valentina Nikulina, Cathy S. Widom & Sally Czaja, *The Role of Childhood Neglect and Childhood Poverty in Predicting Mental Health, Academic Achievement and Crime in Adulthood*, 48 *AM. J. COMMUNITY PSYCHOL.* 309, 316–18 (2011); Cathy S. Widom et al., *A Prospective Investigation of Physical Health Outcomes in Abused and Neglected Children: New Findings from a 30-Year Follow-Up*, 102 *AM. J. PUB. HEALTH* 1135, 1142 (2012); Widom, Czaja & Dutton, *supra* note 5, at 793–94; Helen W. Wilson & Cathy S. Widom, *Does Physical Abuse, Sexual Abuse, or Neglect in Childhood Increase the Likelihood of Same-Sex Sexual Relationships and Cohabitation? A Prospective 30-Year Follow-Up*, 39 *ARCHIVES SEXUAL BEHAV.* 63, 72 (2010); Wilson & Widom, *Pathways from Childhood Abuse and Neglect*, *supra* note 50, at 244.

57. Holt et al., *supra* note 23, at 804–06.

58. Julian D. Ford, *Complex Adult Sequelae of Early Life Exposure to Psychological Trauma*, in *THE IMPACT OF EARLY LIFE TRAUMA ON HEALTH AND DISEASE: THE HIDDEN EPIDEMIC* 69, 69 (Ruth A. Lanius et al. eds., 2010); LISTENBEE JR. ET AL., *supra* note 3, at 29–30; Harris, Lieberman & Marans, *supra* note 56, at 392.

A meticulous review of the medical and social science studies in the field has highlighted specific forms of indirect crime exposure that emulate the injurious effect of direct victimization.

A. *Exposure to Family Violence*

The most well-known manifestation of indirect crime exposure is witnessing family crime and violence. These are cases where the child witnesses⁵⁹ a crime committed in the home, among family members, but does not suffer direct physical harm as a result of the witnessed crime.

The presence of crime and violence in the home interrupts the sense of safety, security, and stability that such an environment is meant to foster in a child.⁶⁰ Such unsettling disruption can create a deep sense of uncertainty and preoccupation with fear,⁶¹ as well as grief, anger, and shame.⁶² These children often feel “a sense of terror that they will lose an essential caregiver, such as a battered parent who is severely injured and could be killed.”⁶³ “To complicate things even further, they also often fear losing their relationship with a battering parent who may be taken away and incarcerated or even executed.”⁶⁴ The developmentally egocentric thinking of children also frequently leads them to be burdened by “profound guilt⁶⁵ because they believe that they should have somehow intervened or prevented the violence—or, tragically, that they actually caused the violence.”⁶⁶ Affected children describe “ambivalent attitude[s] towards [both] their parents,” including “fear and empathy” towards the abusing parent,

59. For the purpose of this Article, a child is considered to be a witness to a crime when he or she perceives the criminal incident in one of their senses (sight, hearing, etc.) or observes the aftermath of the crime (injuries, damage to property, etc.).

60. McIntosh, *supra* note 23, at 231; *see also* Martin, *supra* note 23, at 14.

61. Holt et al., *supra* note 23, at 802–03.

62. LISTENBEE JR. ET AL., *supra* note 3, at 32; E. Mark Cummings et al., *Children and Violence: The Role of Children’s Regulation in the Marital Aggression-Child Adjustment Link*, 12 *CLINICAL CHILD & FAM. PSYCHOL. REV.* 3, 7 (2009); *see also* Suzanne C. Perkins et al., *The Mediating Role of Self-Regulation Between Intrafamilial Violence and Mental Health Adjustment in Incarcerated Male Adolescents*, 27 *J. INTERPERSONAL VIOLENCE* 1199 (2012).

63. Patrick T. Davies et al., *Child Emotional Security and Interparental Conflict*, 67 *MONOGRAPHS SOC’Y FOR RES. CHILD DEV.* i (2002); *see also* Alexander J. Botsis et al., *Parental Loss and Family Violence as Correlates of Suicide and Violence Risk*, 25 *SUICIDE & LIFE-THREATENING BEHAV.* 253, 257–58 (1995); E. Mark Cummings et al., *Interparental Discord and Child Adjustment: Prospective Investigations of Emotional Security as an Explanatory Mechanism*, 77 *CHILD DEV.* 132, 140, 147 (2006); Theodore Gaensbauer et al., *Traumatic Loss in a One-Year-Old Girl*, 34 *J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY* 520, 526–27 (1995); Daniel S. Schechter et al., *Distorted Maternal Mental Representations and Atypical Behavior in a Clinical Sample of Violence-Exposed Mothers and Their Toddlers*, 9 *J. TRAUMA & DISSOCIATION* 123 (2008); Alice C. Schermerhorn, E. Mark Cummings & Patrick T. Davies, *Children’s Representations of Multiple Family Relationships: Organizational Structure and Development in Early Childhood*, 22 *J. FAM. PSYCHOL.* 89, 98 (2008).

64. LISTENBEE JR. ET AL., *supra* note 3, at 32.

65. Andrée Fortin et al., *Children’s Appraisals as Mediators of the Relationship Between Domestic Violence and Child Adjustment*, 26 *VIOLENCE & VICTIMS* 377, 386 (2011); Holt et al., *supra* note 23, at 803.

66. LISTENBEE JR. ET AL., *supra* note 3, at 32; *see also* Patrick T. Davies et al., *Pathways Between Profiles of Family Functioning, Child Security in the Interparental Subsystem, and Child Psychological Problems*, 16 *DEV. & PSYCHOPATHOLOGY* 525, 546 (2004).

and compassion “coupled with an obligation to protect” the abused.⁶⁷ Experiences of recurring sadness, confusion, and disappointment are also commonly described.⁶⁸

The presence of crime and violence in the home, particularly when intimate partner violence between mother and father is involved, “can make each caretaker less available to the child,” with the abuser perceived as “unpredictable and frightening” while the abused parent is “distracted by basic issues of safety and survival” for themselves and their children.⁶⁹

The Intergenerational Transmission of Violence theory posits that “witnessing and experiencing violence as a child leads to a greater use or tolerance of violence as an adult.”⁷⁰ The child’s ongoing exposure to aggression in the immediate environment can lead to a conceptualization of aggression as a functional and legitimate part of intimate relationships and family dynamics.⁷¹ Furthermore, children have a developmental need to attach rationale and justification to the batterer’s behavior in order to cope with the traumatic event.⁷² If inappropriate or inaccurate rationalization of abusive behavior is not addressed, “the child is potentially at risk of adopting anti-social rationales for their own abusive behavior” or abuse perpetrated against them.⁷³ The theory is thought to explain the heightened risk for either perpetrating or becoming a victim of domestic violence in adulthood observed among children exposed to family violence, thus leading to an intergenerational cycle of violence.⁷⁴ The theory also associates childhood exposure with greater likelihood of involvement in anti-social behavior, peer aggression, bullying, and violent crime.⁷⁵

67. Hadass Goldblatt, *Strategies of Coping Among Adolescents Experiencing Interparental Violence*, 18 J. INTERPERSONAL VIOLENCE 532, 542 (2003); see also Holt et al., *supra* note 23, at 802.

68. Holt et al., *supra* note 23, at 802.

69. Margolin & Gordis, *supra* note 3, at 451; see also Gayla Margolin, *Effects of Domestic Violence on Children*, in VIOLENCE AGAINST CHILDREN IN THE FAMILY AND THE COMMUNITY 57, 58 (Penelope K. Trickett & Cynthia J. Schellenbach eds., 1998).

70. Fred E. Markowitz, *Attitudes and Family Violence: Linking Intergenerational and Cultural Theories*, 16 J. FAM. VIOLENCE 205, 207 (2001); see also Holt et al., *supra* note 23, at 805; Sandra M. Smith et al., *The Intergenerational Transmission of Spouse Abuse: A Meta-Analysis*, 62 J. MARRIAGE & FAM. 640, 640 (2000).

71. Sandra A. Graham-Bermann & Victoria Brescoll, *Gender, Power and Violence: Assessing the Family Stereotypes of the Children of Batterers*, 14 J. FAM. PSYCHOL. 600, 601–02 (2000); George W. Holden, *Children Exposed to Domestic Violence and Child Abuse: Terminology and Taxonomy*, 6 CLINICAL CHILD & FAM. PSYCHOL. REV. 151, 157 (2003); Joy D. Osofsky, *Prevalence of Children’s Exposure to Domestic Violence and Child Maltreatment: Implications for Prevention and Intervention*, 6 CLINICAL CHILD & FAM. PSYCHOL. REV. 161, 165–66 (2003).

72. Holt et al., *supra* note 23, at 803.

73. *Id.*

74. Christine Wekerle & David A. Wolfe, *Dating Violence in Mid-Adolescence: Theory, Significance, and Emerging Prevention Initiatives*, 19 CLINICAL PSYCHOL. REV. 435, 441–42 (1999). For a discussion of the heightened risk for domestic violence perpetration and victimization among children exposed to family violence, see Alytia A. Levendosky et al., *Adolescent Peer Relationships and Mental Health Functioning in Families with Domestic Violence*, 31 J. CLINICAL CHILD PSYCHOL. 206, 206 (2002); K. Daniel O’Leary et al., *Multivariate Models of Men’s and Women’s Partner Aggression*, 75 J. CONSULTING & CLINICAL PSYCHOL. 752, 761 (2007).

75. Anna C. Baldry, *Bullying in Schools and Exposure to Domestic Violence*, 27 CHILD ABUSE & NEGLECT 713, 714–15 (2003); Holt et al., *supra* note 23, at 805–06; Laurence Steinberg, *Youth Violence: Do Parents and Families Make a Difference?*, 2 NAT’L INST. JUST. J. 30, 33 (2000).

The Intergenerational Transmission of Violence theory also finds support in empirical research. A study by Kaufman and Zigler estimated the intergenerational transmission rate to be 30% ($\pm 5\%$).⁷⁶ These findings were supported by a twelve-year longitudinal study, which “found that young adults who had been exposed to parental violence as children were 189% more likely than those not exposed, to experience violence in their own adult relationships.”⁷⁷ Research also found a direct relationship between the level of physical and emotional abuse of mothers and children’s belief systems regarding the intrinsic dominance and privilege of men along with the acceptable purpose of violence in family interactions.⁷⁸ Another study of individuals exposed to family violence during childhood has documented self-doubt of their “competency to become non-violent partners and ambivalence about their ability to control themselves.”⁷⁹

A recent study has examined the effect of childhood exposure to family violence on behavioral issues, including anxiety, depression, social interaction problems, attention problems, delinquency, aggression, and externalizing behaviors.⁸⁰ The study has found that children witnessing family violence alone had similar behavioral scores as children suffering from direct abuse.⁸¹ This effect is found to be most evident where boys are concerned.⁸² The only category in which differences were observed was the delinquency score,⁸³ where children who witnessed the violence scored lower than children affected by direct abuse, although their score was still significantly higher score than that of the control group.⁸⁴

The cumulative effect of these factors leads experts in the field to conclude that childhood exposure to family violence “has the potential to induce catastrophic and long-term trauma in the child witness.”⁸⁵ They further warn that the fact that a child does not exhibit distinct symptoms does not necessarily mean that she or he is unaffected by the violence, as the child may still develop physical or emotional symptoms later in life.⁸⁶

76. Richard J. Gelles & Mary M. Cavanaugh, *Violence, Abuse, and Neglect in Families and Intimate Relationships*, in *FAMILIES & CHANGE: COPING WITH STRESSFUL EVENTS AND TRANSITIONS* 129, 136 (Patrick C. McKenry & Sharon J. Price eds., 3d ed. 2005).

77. Holt et al., *supra* note 23, at 805.

78. Graham-Bermann & Brescoll, *supra* note 71, at 609.

79. Goldblatt, *supra* note 67, at 545.

80. Yuping Cao et al., *Effects of Exposure to Domestic Physical Violence on Children’s Behavior: A Chinese Community-Based Sample*, 9 *J. CHILD & ADOLESCENT TRAUMA* 127, 131 (2016).

81. *Id.* at 133.

82. *Id.* at 129.

83. The control group was composed of children who were not exposed to any form of family violence, either directly or indirectly.

84. Cao et al., *supra* note 80, at 130. The study was conducted in China, and thus the research sample is composed solely of children of Chinese ethnicity.

85. K.L. Kilpatrick & L.M. Williams, *Potential Mediators of Post-Traumatic Stress Disorder in Child Witnesses of Domestic Violence*, 22 *CHILD ABUSE & NEGLECT* 319, 328 (1998).

86. Katherine M. Kitzmann et al., *Child Witnesses to Domestic Violence: A Meta-Analytic Review*, 71 *J. CONSULTING & CLINICAL PSYCHOL.* 339, 347 (2003); Margolin & Gordis, *supra* note 3, at 446; see also Jennifer E. McIntosh, *Children Living with Domestic Violence: Research Foundations for Early Intervention*, 9 *J. FAM. STUD.* 219, 226–27 (2003).

B. Exposure to Community Crime

Even when the child's home environment is violence-free, the child is not immune to the effect of crime and violence exposure and may still experience indirect victimization as a result of exposure to community crime. The child may witness criminal activity outside the home among nonrelatives (for example, in the neighborhood or at school). Although the child is not directly physically injured, significant harm can result from the traumatic exposure.⁸⁷ Negative effect was documented for children who witnessed violence directly through sight or sound as well as those who only heard about the violence in retrospect.⁸⁸ This form of exposure to crime was found to most frequently affect school-age children and adolescents.⁸⁹ Children living in economically impoverished families and communities are also far more likely to be exposed.⁹⁰

Like the home, the neighborhood and school are considered to be part of the child's primary safe haven.⁹¹ Exposure to crime and violence in this environment can cause a loss of its protective and comforting qualities that are necessary for the development of the child's sense of security and trust.⁹² Once deprived of the ability to feel safe in their own schools and neighborhoods, adoption of an attitude of hypervigilance commonly occurs—never letting their guard down so they will be ready for the next outbreak of violence.⁹³ Such exposure to violence “can be interpreted by the child to mean not only that the world is unsafe but also

87. Margolin & Gordis, *supra* note 3, at 446.

88. Lynch, *supra* note 8, at 267; Patrick Sharkey, *The Acute Effect of Local Homicides on Children's Cognitive Performance*, 107 PNAS 11,733, 11,737 (2010) [hereinafter Sharkey, *Acute Effect*]; Patrick T. Sharkey et al., *The Effect of Local Violence on Children's Attention and Impulse Control*, 102 AM. J. PUB. HEALTH 2287, 2287 (2012); Dawn K. Wilson et al., *Violence Exposure, Catecholamine Excretion, and Blood Pressure Nondipping Status in African American Male Versus Female Adolescents*, 64 PSYCHOSOMATIC MED. 906, 907 (2002).

89. Lee et al., *supra* note 4, at 69; Bradley D. Stein et al., *Prevalence of Child and Adolescent Exposure to Community Violence*, 6 CLINICAL CHILD & FAM. PSYCHOL. REV. 247, 261 (2003); see also John E. Richters & Pedro Martinez, *The NIMH Community Violence Project: I. Children as Victims of and Witnesses to Violence*, 56 PSYCHIATRY 7, 8 (1993) (analyzing levels of witnessing violence among children in Washington, D.C.).

90. Carol B. Cunradi et al., *Neighborhood Poverty as a Predictor of Intimate Partner Violence Among White, Black, and Hispanic Couples in the United States: A Multilevel Analysis*, 10 ANNALS EPIDEMIOLOGY 297, 305 (2000); Lisa A. Goodman et al., *When Crises Collide: How Intimate Partner Violence and Poverty Intersect to Shape Women's Mental Health and Coping?*, 10 TRAUMA VIOLENCE & ABUSE 306, 308–09 (2009); see also Lin Huff-Corzine et al., *Deadly Connections: Culture, Poverty, and the Direction of Lethal Violence*, 69 SOC. FORCES 715, 719 (1991).

91. Margolin & Gordis, *supra* note 3, at 449.

92. *Id.* at 449–50.

93. Patrick J. Fowler et al., *Community Violence: A Meta-Analysis on the Effect of Exposure and Mental Health Outcomes of Children and Adolescents*, 21 DEV. & PSYCHOPATHOLOGY 227, 250 (2009); see also Michel Janosz et al., *Are There Detrimental Effects of Witnessing School Violence in Early Adolescence?*, 43 J. ADOLESCENT HEALTH 600, 601 (2008); Wendy Klierer & Terri N. Sullivan, *Community Violence Exposure, Threat Appraisal, and Adjustment in Adolescents*, 37 J. CLINICAL CHILD & ADOLESCENT PSYCHOL. 860, 860–61 (2008); Neena M. Malik, *Exposure to Domestic and Community Violence in a Nonrisk Sample: Associations with Child Functioning*, 23 J. INTERPERSONAL VIOLENCE 490, 501 (2008); Nancy Shields et al., *The Effects of Community Violence on Children in Cape Town, South Africa*, 32 CHILD ABUSE & NEGLECT 589, 599 (2008).

that the child is unworthy of being kept safe,” affecting self-esteem and the perception of self-worth.⁹⁴

Exposure to crime in the child’s natural environment may lead the child “to believe that violence is ‘normal’ . . . and that relationships are too fragile to trust because one never knows when violence will take the life of a friend or loved one.”⁹⁵ Children may feel compelled to resort to violence to avoid being viewed as weak and being targeted by bullies or other violent community members.⁹⁶ “They may turn to gangs or criminal activities due to despair and powerlessness, perpetuating a cycle of violence by inflicting violence on others and becoming targets for further violence or incarceration.”⁹⁷

Living in a community saturated with crime and violence may also negatively affect parents’ caretaking due to their own feelings of helplessness, fear, and grief. “Efforts to protect the child may be exhibited in authoritarian and restrictive parenting practices, as well as in certain precautions that may heighten the child’s anxiety.”⁹⁸ Other parents may yield to the sense of helplessness and cease any efforts to protect the child.⁹⁹

The Adverse Childhood Experiences (“ACE”) studies explored the link between a variety of negative events during childhood, including exposure to crime, and a host of health conditions in adulthood.¹⁰⁰ The studies found a strong link between negative childhood experiences and a broad range of physical and mental health problems and premature death.¹⁰¹ Exposure to community violence was not included in the original ACE Studies.¹⁰² More recent studies, however, have found strong and convincing evidence to suggest that exposure to community violence should be considered a new ACE category.¹⁰³ This conclusion is based on the substantial association between this type of exposure and the same set of life-threatening health conditions outlined in the ACE studies.¹⁰⁴ Similar studies have also established a link between exposure to community crime and post-traumatic stress symptoms (“PTSD”) as well as chemical imbalances in the brain that affect development and function.¹⁰⁵ Some studies go as far as showing

94. Margolin & Gordis, *supra* note 3, at 457; *see generally* Michael Lynch & Dante Cicchetti, *An Ecological Transactional Analysis of Children and Contexts: The Longitudinal Interplay Among Child Maltreatment, Community Violence, and Children’s Symptomatology*, 10 DEV. & PSYCHOPATHOLOGY 235 (1998).

95. LISTENBEE JR. ET AL., *supra* note 3, at 4.

96. Janosz et al., *supra* note 93, at 606–607; Shields et al., *supra* note 93, at 589.

97. LISTENBEE JR. ET AL., *supra* note 3, at 33; Catherine A. Taylor et al., *Cumulative Experiences of Violence Among High-Risk Urban Youth*, 23 J. INTERPERSONAL VIOLENCE 1618, 1618 (2008).

98. Margolin & Gordis, *supra* note 3, at 452.

99. *Id.*

100. David Finkelhor et al., *A Revised Inventory of Adverse Childhood Experiences*, 48 CHILD ABUSE & NEGLECT 13, 13 (2015).

101. *Id.*

102. *Id.*

103. *Id.* at 17.

104. *Id.* at 14; Lee et al., *supra* note 4, at 69.

105. Linda N. Freeman, Hartmut Mokros & Elva O. Poznanski, *Violent Events Reported by Normal Urban School-Aged Children: Characteristics and Depression Correlates*, 32 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 419, 419 (1993); Pedro Martinez & John E. Richters, *The NIMH Community Violence Project: II. Children’s Distress Symptoms Associated with Violence Exposure*, 56 PSYCHIATRY 22, 24 (1993); James J.

that even community violence that children do not witness in person can negatively affect their attentional abilities and cognitive performance.¹⁰⁶

C. Parental Victimization

When the child's parent is a victim of a violent crime, the child is often affected in some way by proxy. Unlike children exposed to family crime and violence, children under this category experience harm even though they do not perceive the commission of a crime through their own senses and are not considered witnesses to the crime against the parent.¹⁰⁷ "Simply put, the well-being of a child is inextricably linked to the well-being of the adults in his or her life"; and hence, if caregivers are victims of violence, this also impacts the children.¹⁰⁸ The most extreme scenario of parental victimization is homicide cases, where a child loses a parent or caregiver to crime.¹⁰⁹ The more common cases are of parents who have experienced violent victimization in childhood or adulthood, and suffer harmful implications as a result, with a spillover effect to their children.¹¹⁰ The effect of parental victimization is found to be most severe when the parent does not receive treatment and services to facilitate recovery.¹¹¹

Victimized parents have an increased probability of suffering from a range of mental health problems, including emotional deficiencies, depression, and low self-esteem.¹¹² A poorer state of physical health was also found in victimized, in comparison to nonvictimized, caregivers.¹¹³ Some evidence shows that victimization may also affect parenting skills and the interaction between parent and child.¹¹⁴ Survivors of victimization may have difficulties establishing clear generational boundaries with their children, may be over-

Mazza & William M. Reynolds, *Exposure to Violence in Young Inner-City Adolescents: Relationships with Suicidal Ideation, Depression, and PTSD Symptomatology*, 27 J. ABNORMAL CHILD PSYCHOL. 203, 204 (1999); Mary Schwab-Stone et al., *No Safe Haven II: The Effects of Violence Exposure on Urban Youth*, 38 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 359, 360 (1999); Shakira Franco Suglia et al., *Posttraumatic Stress Symptoms Related To Community Violence And Children's Diurnal Cortisol Response In An Urban Community-Dwelling Sample*, 17 INT. J. BEHAV. MED. 43, 44 (2010).

106. Sharkey, *Acute Effect*, *supra* note 88, at 11733; Sharkey et al., *supra* note 88, at 2292.

107. LISTENBEE JR. ET AL., *supra* note 3, at 109–10.

108. *Id.* at 110.

109. *Id.* at 109.

110. *Id.* at 116; Jennie G. Noll et al., *The Cumulative Burden Borne by Offspring Whose Mothers Were Sexually Abused as Children: Descriptive Results from a Multigenerational Study*, 24 J. INTERPERSONAL VIOLENCE 424, 427 (2009).

111. Howard Dubowitz et al., *Type and Timing of Mothers' Victimization: Effects on Mothers and Children*, 107 PEDIATRICS 728, 728 (2001); Cindy E. Weisbart et al., *Child and Adult Victimization: Sequelae for Female Caregivers of High-Risk Children*, 13 CHILD MALTREATMENT 235, 242 (2008).

112. Weisbart et al., *supra* note 111, at 240.

113. *Id.*

114. LISTENBEE JR. ET AL., *supra* note 3, at 32–33; Heidi N. Bailey et al., *The Impact of Childhood Maltreatment History on Parenting: A Comparison of Maltreatment Types and Assessment Methods*, 36 CHILD ABUSE & NEGLECT 236, 236 (2012); Patrick T. Davies et al., *A Process Analysis of the Transmission of Distress from Interparental Conflict to Parenting: Adult Relationship Security as an Explanatory Mechanism*, 45 DEV. PSYCHOL. 1761, 1761 (2009); Holt et al., *supra* note 23, at 800–801 (2008).

permissive as parents (or conversely, exhibit restrictive parenting practices), and may be more inclined to use harsh physical discipline.¹¹⁵

Studies show that when experiencing crime-induced trauma, a parent's ability to play a stable, consistent role in the child's life, and therefore to support the child, may be compromised.¹¹⁶ Furthermore, victimization causes parents themselves to be numbed, frightened, and depressed, unable to deal with their own trauma or grief, and thus they may encounter difficulties in being emotionally available, sensitive, and responsive to their children.¹¹⁷ A victimized parent who is depressed or overwhelmed may have difficulty meeting young children's need for structure or managing their developmental inability to understand and control their own emotions, thus impacting children's experience of emotional expression.¹¹⁸ The quality of attachment between parent and child has also been found to be affected.¹¹⁹ A victimized parent, particularly in cases of ongoing victimization, may be "living in constant fear, they may deny their children normal developmental transitions and the sense of basic trust and security that is the foundation of healthy emotional development."¹²⁰

Due to these factors, parental victimization has considerable detrimental consequences to child development, outcomes, and behavior as well as the child's relationship with the parent, even when the child is not aware of, or directly exposed to, the criminal act committed against the parent.

115. LISTENBEE JR. ET AL., *supra* note 3, at 31–32; George W. Holden et al., *Parenting Behaviors and Beliefs of Battered Women*, in CHILDREN EXPOSED TO MARITAL VIOLENCE: THEORY, RESEARCH, AND APPLIED ISSUES 291 (George W. Holden, Robert A. Geffner & Ernest N. Jouriles eds., 1998); Carol Coohy, *Battered Mothers Who Physically Abuse Their Children*, 9 J. INTERPERSONAL VIOLENCE 943, 951 (2004); David DiLillo & Amy Damashek, *Parenting Characteristics of Women Reporting a History of Childhood Sexual Abuse*, 8 CHILD MALTREATMENT 319, 319 (2003); Margolin & Gordis, *supra* note 3, at 452; Richard Thompson, *Mothers' Violence Victimization and Child Behavior Problems: Examining the Link*, 77 AM. J. ORTHOPSYCHIATRY 306, 307 (2007).

116. Eli Buchbinder, *Motherhood of Battered Women: The Struggle For Repairing The Past*, 23 CLINICAL SOC. WORK J. 307, 322 (2004); Kihyun Kim, Penelope K. Trickett & Frank W. Putnam, *Childhood Experiences of Sexual Abuse and Later Parenting Practices Among Non-Offending Mothers of Sexually Abused and Comparison Girls*, 34 CHILD ABUSE & NEGLECT 610, 613 (2010); Alytia A. Levendosky & Sandra A. Graham-Bermann, *Parenting in Battered Women: The Effects of Domestic Violence on Women and Their Children*, 16 J. FAM. VIOLENCE 171, 171 (2001); McIntosh, *supra* note 23, at 231; Joy D. Osofsky, *The Impact of Violence on Children*, 9 DOMESTIC VIOLENCE & CHILDREN 33, 40 (1999).

117. Holden, *supra* note 71, at 158; Alytia A. Levendosky & Sandra A. Graham-Bermann, *The Moderating Effects of Parenting Stress on Children's Adjustment in Woman-Abusing Families*, 13 J. INTERPERSONAL VIOLENCE 383, 386 (1998); Melanie Marysko et al., *History of Childhood Abuse is Accompanied by Increased Dissociation in Young Mothers Five Months Postnatally*, 43 PSYCHOPATHOLOGY 104, 105 (2010); Osofsky, *supra* note 116, at 40–41.

118. Jeffrey L. Edleson, *Children's Witnessing of Adult Domestic Violence*, 14 J. INTERPERSONAL VIOLENCE 839, 841 (1999).

119. Holt et al., *supra* note 23, at 801; Alytia A. Levendosky et al., *The Impact of Domestic Violence on the Maternal-Child Relationship and Preschool-Age Children's Functioning*, 17 J. FAM. PSYCHOL. 275, 276 (2003); see also HEDY CLEAVER, IRA UNELL, & JANE ALDGATE, CHILDREN'S NEEDS—PARENTING CAPACITY: CHILD ABUSE: PARENTAL MENTAL ILLNESS, LEARNING DISABILITY, SUBSTANCE MISUSE AND DOMESTIC VIOLENCE 72 (2d ed. 1999).

120. Alytia A. Levendosky, Shannon M. Lynch, & Sandra A. Graham-Bermann, *Mothers' Perceptions of the Impact of Woman Abuse on Their Parenting*, 6 VIOLENCE AGAINST WOMEN 247, 255 (2000); Levendosky & Graham-Bermann, *supra* note 116, at 173.

D. Parental Incarceration

Another form of indirect exposure to crime occurs when a child is separated from a primary caregiver as a result of incarceration. Children are affected by the incarceration of either parent, but they typically experience greater harm when their mother is imprisoned due to the central role a mother often plays in the life of a young child.¹²¹ Incarceration of a parent normally causes major negative economic, social, and psychological consequences to the child and may have life-long repercussions.¹²²

When the incarcerated parent is the primary caregiver, the family's life is fundamentally disrupted. The child is usually uprooted and may be separated, not only from the incarcerated parent but also from his or her siblings, other relatives, and friends.¹²³ The child is at risk of being moved frequently among caregivers and even becoming a ward of the state.¹²⁴ Maintaining a close relationship and regular contact with the incarcerated parent over time is a significant challenge.¹²⁵ Even in cases where a child is present at the time of arrest:

only 42% of officers inquire about that child's care; nearly one third will request that Child Protective Services (CPS) take custody of the child. For law enforcement agencies who do assume responsibility for a minor child upon the arrest of a sole caretaker, about half determine where the child is placed without involving CPS.¹²⁶

Unfortunately, even when officials request a recommendation for potential caregivers from the arrested parent, many are not willing or able to offer a sound placement recommendation.¹²⁷

When the child is too young to fully understand the reasons for the parent's "disappearance," destructive feelings of self-blame and anger can emerge.¹²⁸ The remaining caregiver is often unable to render necessary support and to find a suitable way to convey the information to the child in an age-appropriate manner.¹²⁹ Economic hardship is another likely possibility, due to the added legal

121. Tiffany Conway & Rutledge Q. Hutson, *Parental Incarceration: How to Avoid a "Death Sentence" for Families*, 41 CLEARINGHOUSE REV. J. POVERTY L. & POL'Y 212, 212 (2007).

122. *Id.*

123. *Id.*

124. Steve Christian, *Children of Incarcerated Parents*, NAT'L CONF. ST. LEGISLATURES, Mar. 2009, at 3.

125. For a detailed discussion, see Michal Gilad & Tal Gat, *U.S. v. My Mommy: Evaluation of Prison Nurseries as a Solution for Children of Incarcerated Women*, 37 N.Y.U. REV. L. & SOC. CHANGE 371, 387 (2013).

126. NANCY G. LA VIGNE, ELIZABETH DAVIES & DIANA BRAZZELL, URB. INST. JUST. POL'Y CTR., *BROKEN BONDS: UNDERSTANDING AND ADDRESSING THE NEEDS OF CHILDREN WITH INCARCERATED PARENTS* 3 (2008).

127. *Id.*

128. *Id.*

129. *Id.* at 7.

expenses involved and the loss of income or social benefits.¹³⁰ The child left behind is also subjected to negative stigma and shame associated with parental incarceration.¹³¹

Parental incarceration is one of the adverse childhood experiences empirically found to have a strong impact on adult health status and significant association with multiple risk behaviors and leading causes of premature death.¹³² Additional studies indicate that the separation of a young child from a primary caregiver due to incarceration is linked with a host of adverse symptoms, including impaired ability to sympathize or show concern for others; aggression and anger;¹³³ developmental and behavioral problems; sleeping, eating, or attention disorders; problems with social adaptation; and manifestation of sexually promiscuous behavior.¹³⁴

130. NELL BERNSTEIN, *ALL ALONE IN THE WORLD: CHILDREN OF THE INCARCERATED* 109–42 (2005); DONALD BRAMAN, *DOING TIME ON THE OUTSIDE: INCARCERATION AND FAMILY LIFE IN URBAN AMERICA* 151 (2004).

131. See Sarah Abramowicz, *Rethinking Parental Incarceration*, 82 U. COLO. L. REV. 793, 815 (2011); Denise Johnston, *Services for Children of Incarcerated Parents*, 50 FAM. CT. REV. 91, 97 (2012); Julie Poehlmann, *Children of Incarcerated Mothers and Fathers*, 24 WIS. J.L. GENDER & SOC'Y 331, 332–33 (2009).

132. Vincent J. Felitti et al., *Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study*, 14 AM. J. PREVENTIVE MED. 245, 251 (1998); Gilbert et al., *supra* note 4, at 346.

133. Christopher Wildeman, *Paternal Incarceration and Children's Physically Aggressive Behaviors: Evidence from the Fragile Families and Child Wellbeing Study*, 89 SOC. FORCES 285, 288 (2010).

134. REBECCA PROJECT FOR HUMAN RIGHTS & NATIONAL WOMEN'S LAW CENTER, *MOTHERS BEHIND BARS: A STATE-BY-STATE REPORT CARD AND ANALYSIS OF FEDERAL POLICIES ON CONDITIONS OF CONFINEMENT FOR PREGNANT AND PARENTING WOMEN AND THE EFFECT ON THEIR CHILDREN* 13 (2010); Jessica Y. Kim, *In-Prison Day Care: A Correctional Alternative for Women Offenders*, 7 CARDOZO WOMEN'S L.J. 221, 228–29 (2001); Joseph Murray et al., *Children's Antisocial Behavior, Mental Health, Drug Use, and Educational Performance After Parental Incarceration: A Systematic Review and Meta-Analysis*, 138 PSYCHOL. BULL. 175, 175 (2012); Leda M. Pojman, *Cuffed Love: Do Prison Babies Ever Smile?*, 10 BUFF. WOMEN'S L.J. 46, 62 (2002); Sara Wakefield & Christopher Wildeman, *Mass Imprisonment and Racial Disparities in Childhood Behavioral Problems*, 10 CRIMINOLOGY & PUB. POL'Y 793, 794–95 (2011); John J. Sheridan, *Inmates May be Parents, Too*, CORRECTIONS TODAY, Aug. 1996, at 100.

Life outcomes were also found to be affected by parental incarceration, including delays in educational development and achievement,¹³⁵ risk for homelessness,¹³⁶ a greater likelihood to develop addiction to drugs or alcohol,¹³⁷ and a greater likelihood to engage in criminal activity.¹³⁸ A recent longitudinal study also found a link between parental incarceration during childhood and social exclusion in adulthood.¹³⁹ The variable of social exclusion was composed of personal income, household income, perceived socioeconomic status, and feelings of powerlessness.¹⁴⁰ The study found that “both maternal and paternal incarceration significantly contribute to young adult social exclusion among offspring in their late twenties to early thirties.”¹⁴¹

Children suffering from parental incarceration are often referred to as the “invisible victims” of crime since they are forced to bear the consequences of their parents’ criminal behavior and the system’s inability, or possibly unwillingness, to address their needs and mitigate the displayed harms.¹⁴²

E. Child Witnesses

An additional category of exposure that was examined for inclusion under the Triple-C Impact sphere was child witnesses, who provide testimony before the criminal justice system either in court or to other law enforcement agencies. Some evidence exists of possible harm experienced by this category of children,

135. BARBARA BLOOM & DAVID STEINHART, WHY PUNISH THE CHILDREN?: A REAPPRAISAL OF THE CHILDREN OF INCARCERATED MOTHERS IN AMERICA 23–27 (1993); Rucker C. Johnson, *Ever-Increasing Levels of Parental Incarceration and the Consequences for Children*, in DO PRISONS MAKE US SAFER?: THE BENEFITS AND COSTS OF THE PRISON BOOM 177, 195–96 (Steven Raphael & Michael A. Stoll eds., 2009); ANN M. STANTON, WHEN MOTHERS GO TO JAIL 91–93 (1980); Holly Foster & John Hagan, *Incarceration and Intergenerational Social Exclusion*, 54 SOC. PROBS. 399, 416–17 (2007) [hereinafter Foster & Hagan, *Incarceration*]; Holly Foster & John Hagan, *Maternal and Paternal Imprisonment and Children’s Social Exclusion in Young Adulthood*, 105 J. CRIM. L. & CRIMINOLOGY 387, 405–21 (2015) [hereinafter Foster & Hagan, *Maternal and Paternal Imprisonment*]; Murray et al., *supra* note 134, at 186; Joseph Murray & David P. Farrington, *The Effects of Parental Imprisonment on Children*, 37 CRIME & JUST. 133, 162 (2008); Ashton D. Trice & JoAnne Brewster, *The Effects of Maternal Incarceration on Adolescent Children*, 19 J. POLICE & CRIM. PSYCHOL. 27, 31 (2004).

136. Foster & Hagan, *Incarceration*, *supra* note 135, at 410–13; Christopher Wildeman, *Parental Incarceration, Child Homelessness, and the Invisible Consequences of Mass Imprisonment*, 651 ANNALS AM. ACAD. POL. & SOC. SCI. 74, 84–86 (2014).

137. Murray et al., *supra* note 134, at 199; Michael E. Roettger et al., *Paternal Incarceration and Trajectories of Marijuana and Other Illegal Drug Use from Adolescence into Young Adulthood: Evidence from Longitudinal Panels of Males and Females in the United States*, 106 ADDICTION 121, 126 (2010).

138. Michael E. Roettger & Raymond R. Swisher, *Associations of Fathers’ History of Incarceration with Sons’ Delinquency and Arrest Among Black, White, and Hispanic Males in the United States*, 49 CRIMINOLOGY 1109, 1135 (2011).

139. Foster & Hagan, *Maternal and Paternal Imprisonment*, *supra* note 135, at 405–21.

140. *Id.* at 388.

141. *Id.* at 388. The study also found that educational interventions that increase successful completion of college to be a mediator of the exclusionary effects of maternal and paternal incarceration. *Id.* at 424.

142. Alexandra Hayes, *Children are the Invisible Victims of America’s Incarceration Problem*, THRIVE GLOBAL (July 25, 2018), <https://thriveglobal.com/stories/children-with-incarcerated-parents>.

especially when adequate services and support that target the unique developmental needs of this age group are not available.¹⁴³

Court testimony is an extremely stressful, frightening, and formidable event, especially for a vulnerable young child. The child is placed in the unfamiliar and intimidating environment of a courtroom and asked to participate in a process that is foreign and perplexing. She or he must face the defendant, who the child often perceives as a threatening and dangerous figure. The child is required to answer difficult questions in public and to go through harsh questioning by unsympathetic strangers. The child's truthfulness is repeatedly doubted and questioned throughout the process, and this is often perceived as a humiliating experience.¹⁴⁴ Moreover, the child must repeatedly re-live the traumatic event she or he witnessed through recurring interrogations by law enforcement and in court. When the defendant is known or related to the child witness, further difficulties, including intense guilt and loyalty conflicts, may arise.¹⁴⁵ The multitude of stressors involved in this experience can trigger extreme levels of anxiety and psychological strain, often referred to as "secondary traumatization."¹⁴⁶

Nevertheless, the documented level of harm caused as a result of court testimony does not appear to meet the threshold set by the previously discussed categories in this Part. Moreover, there is contrary evidence regarding the possible benefits that providing testimony can generate for the child as well as its function in facilitating recovery from crime-induced trauma.¹⁴⁷ Lastly, court witnessing is a form of crime exposure that very rarely stands alone. Children who provide testimony will normally also fall under one of the other Triple-C categories and thus will still be covered.

Under these circumstances, it was decided that this category of crime exposure should *not* be included under the Triple-C Impact at this point in time. This decision may change in the future if new empirical evidence emerges to support a weightier severity of harm that ought to be addressed independently from the other Triple-C Impact categories.

Relying on this comprehensive review of literature, it was determined that the Triple-C Impact concept should focus on five categories of childhood crime

143. Jodi A. Quas & Mariya Sumaroka, *Consequences of Legal Involvement on Child Victims of Maltreatment*, in CHILDREN'S TESTIMONY: A HANDBOOK OF PSYCHOLOGICAL RESEARCH AND FORENSIC PRACTICE 323, 329-34 (Michael E. Lamb et al. eds., 2d ed. 2012); U.S. DEP'T OF JUSTICE, OFFICE OF JUSTICE PROGRAMS, ATTORNEY GENERAL GUIDELINES FOR VICTIM AND WITNESS ASSISTANCE 1 (2005); Tanya Asim Cooper, *Sacrificing the Child to Convict the Defendant: Secondary Traumatization of Child Witnesses by Prosecutors, Their Inherent Conflict of Interest, and the Need for Child Witness Counsel*, 9 CARDOZO PUB. L. POL'Y & ETHICS J. 239, 244-49 (2011); Gail S. Goodman et al., *Testifying in Criminal Court: Emotional Effects on Child Sexual Assault Victims*, MONOGRAPHS SOC'Y FOR RES. CHILD DEV., 1992, at 44-62; Robert H. Pantell, *The Child Witness in the Courtroom*, PEDIATRICS, Mar. 2017, at 1-2; Jodi A. Quas et al., *Childhood Sexual Assault Victims: Long-Term Outcomes After Testifying in Criminal Court*, MONOGRAPHS SOC'Y FOR RES. CHILD DEV., 2005, at 9; Janet Leach Richards, *Protecting the Child Witness in Abuse Cases*, 34 FAM. L. Q. 393, 393 (2000).

144. Goodman et al., *supra* note 143, at 7-8.

145. *Id.*

146. Cooper, *supra* note 143, at 249-50.

147. Pantell, *supra* note 143, at 4; Jodi A. Quas & Gail S. Goodman, *Consequences of Criminal Court Involvement for Child Victims*, 18 PSYCHOL., PUB. POL'Y & L. 392, 394 (2011).

exposure supported by scientific findings: direct victimization, witnessing family crime, witnessing community crime, parental victimization, and parental incarceration. We must also remember that the aforementioned categories are not mutually exclusive. It is often the case that children experience poly-victimization and suffer from multiple forms of direct or indirect crime exposure.¹⁴⁸ Such cumulative exposure was found to further aggravate the harmful impact on the child.¹⁴⁹ As science evolves and advances, this list may change to adapt to new findings, relying on similar harm-based criteria.

It is vital to keep in mind, however, that like any social science, and even medical research, all the cited studies are affected by a range of limitations and methodical complexities.¹⁵⁰ These may be particularly pronounced in this area of study due to the frequent co-occurrence of childhood exposure to crime with other serious life adversities and the commonality of experiencing more than one of the Triple-C categories.¹⁵¹ Yet, while we must always remain conscious and mindful of these constraints and the improbability of absolute accuracy in results, the pronounced risk to children affected by the Triple-C Impact established in the existing empirical studies outlined above must not be ignored or discounted.

Once the problem is named and its scope and boundaries are better defined, we can proceed to examine the available statutory responses and policy-based solutions, and to assess their sufficiency in addressing the problem.

IV. GAUGING THE GAP—RESULTS OF THE FIFTY-STATE SURVEY

A primary factor influencing the level of harm caused by the Triple-C Impact is the manner in which affected children are addressed, identified, managed, and treated.¹⁵² The Attorney General Task Force on Children Exposed to Violence, which covered a few of the Triple-C Impact categories in its final report, has repeatedly emphasized that “[c]hildren exposed to violence can heal if we

148. David Finkelhor et al., *Poly-Victimization: A Neglected Component in Child Victimization*, 31 *CHILD ABUSE & NEGLECT* 7, 13 (2007).

149. David Finkelhor et al., *Pathways to Poly-Victimization*, 14 *CHILD MALTREATMENT* 316, 316–17 (2009); Finkelhor et al., *supra* note 148, at 9; Heather A. Turner et al., *Poly-Victimization in a National Sample of Children and Youth*, 38 *AM. J. PREVENTIVE MED.* 323, 327–28 (2010).

150. For examples of the common limitations and methodological difficulties described here, see Holt et al., *supra* note 23, at 798–99.

151. *Id.* at 798.

152. LISTENBEE JR. ET AL., *supra* note 3, at 5; Barnes et al., *supra* note 5, at 418; Judith A. Cohen et al., *Community Treatment of Posttraumatic Stress Disorder for Children Exposed to Intimate Partner Violence: A Randomized Controlled Trial*, 165 *ARCHIVES PEDIATRIC & ADOLESCENT MED.* 16, 20 (2011); Fargo, *supra* note 5, at 1771; Susan J. Ko et al., *Creating Trauma-Informed Systems: Child Welfare, Education, First Responders, Health Care, Juvenile Justice*, 39 *PROF. PSYCHOL.* 396, 398–99 (2008); Lindhorst et al., *supra* note 5, at 10; Tamra B. Loeb et al., *Associations Between Child Sexual Abuse and Negative Sexual Experiences and Revictimization Among Women: Does Measuring Severity Matter?*, 35 *CHILD ABUSE & NEGLECT* 946, 946–47 (2011); Sarah E. Ullman et al., *Child Sexual Abuse, Post-Traumatic Stress Disorder, and Substance Use: Predictors of Revictimization in Adult Sexual Assault Survivors*, 18 *J. CHILD SEXUAL ABUSE* 367, 368 (2009); Widom et al., *supra* note 5, at 785.

identify them early and give them specialized services, evidence-based treatment, and proper care and support.”¹⁵³ “Without services or treatment, even children who appear resilient and seem to recover from exposure to violence still bear emotional scars that may lead them to experience these same health and psychological problems years or decades later.”¹⁵⁴ Furthermore, the mere lack of response can further compound the caused harm by fostering a sense of isolation and betrayal as the child acknowledges that “no one takes notice or offers protection, justice, support, or help.”¹⁵⁵

Yet it is well documented that despite the strong association between exposure to violence and harm to the child, Triple-C affected children are habitually ignored.¹⁵⁶ The Task Force has recognized that few of the children affected by crime exposure are effectively identified.¹⁵⁷ Furthermore, “[t]he majority of children in our country who are identified as having been exposed to violence never receive services or treatment that effectively help them to stabilize themselves, regain their normal developmental trajectory, restore their safety, and heal their social and emotional wounds.”¹⁵⁸

Exposed children are considered “the ‘silent’ or ‘hidden’ victims of violence because their presence is often overlooked by the parents/caregivers or goes unknown by observers and professionals.”¹⁵⁹ Even in criminal cases that are reviewed by a multitude of professionals and service providers, including judges, law enforcement agents, prosecutors, and case workers, the situation of the children affected by the Triple-C Impact is often overlooked, and few of the professionals involved inquire about the affected children in their caseload.¹⁶⁰

153. LISTENBEE JR. ET AL., *supra* note 3, at 5.

154. *Id.* at 12.

155. *Id.* at 30.

156. *Id.* at 77; U.S. DEP’T OF HEALTH AND HUMAN SERVICES, CHILD MALTREATMENT 10 (2010); U.S. HEALTH RES. AND SERV. ADMIN., CHILD HEALTH USA 6 (2011); Judith A. Cohen, Anthony P. Mannarino & Satish Iyengar, *Community Treatment of Posttraumatic Stress Disorder For Children Exposed to Intimate Partner Violence: A Randomized Controlled Trial*, 165 ARCHIVES PEDIATRIC ADOLESCENT MED. 16, 16 (2011); John A. Fairbank & Doreen W. Fairbank, *Epidemiology of Child Traumatic Stress*, 11 CURRENT PSYCHIATRY REPS. 289, 289 (2009); Chandra Ghosh Ippen et al., *Traumatic and Stressful Events in Early Childhood: Can Treatment Help Those at Highest Risk?*, 35 CHILD ABUSE NEGLECT 504, 504 (2011); David J. Kolko et al., *Community Treatment of Child Sexual Abuse: A Survey of Practitioners in the National Child Traumatic Stress Network*, 36 ADMIN. POL’Y MENTAL HEALTH 37, 37 (2009); R. Wells et al., *Health Service Access Across Racial/Ethnic Groups of Children in the Child Welfare System*, 33 CHILD ABUSE NEGLECT 282, 283 (2009); Philip T. Yanos, Sally J. Czaja & Cathy Spatz Widom, *A Prospective Examination of Service Use by Abused and Neglected Children Followed Up into Adulthood*, 61 PSYCHIATRIC SERVS. 796, 796 (2010).

157. LISTENBEE JR. ET AL., *supra* note 3, at 83, 172; see also David Finkelhor et al., *Children’s Exposure to Violence: A Comprehensive National Survey*, JUV. JUST. BULL. 9 (Oct. 2009), <https://www.ncjrs.gov/pdffiles1/ojdp/227744.pdf>.

158. LISTENBEE JR. ET AL., *supra* note 3, at 12.

159. *Identifying Children Affected by Domestic Violence*, NAT’L CHILD TRAUMATIC STRESS NETWORK, [http://www.kscourts.org/court-administration/Legal_Institute_on_Adverse_Childhood_Exp/Domestic%20Violence%20and%20Child%20Traumatic%20Stress%20\(NCTSN\).pdf](http://www.kscourts.org/court-administration/Legal_Institute_on_Adverse_Childhood_Exp/Domestic%20Violence%20and%20Child%20Traumatic%20Stress%20(NCTSN).pdf) (last visited Mar. 24, 2019) [hereinafter *Identifying Children*].

160. LISTENBEE JR. ET AL., *supra* note 3, at 70; SUSAN SCHECHTER & JEFFREY L. ELDELSON, OPEN SOCIETY INSTITUTE’S CENTER ON CRIME, COMMUNITIES & CULTURE, DOMESTIC VIOLENCE & CHILDREN: CREATING A PUBLIC RESPONSE 3 (2000); *Identifying Children*, *supra* note 159.

Studies show that professionals and service providers frequently fail to recognize the connection between exposure to crime and harm to children, and responding agencies and institutions do not have proper protocols and procedures in place to address these children.¹⁶¹ These findings are also supported by our survey results, in which less than a handful reported having specific policies or protocols aimed to facilitate identification of affected children.¹⁶² Even when such protocols were available, they focus exclusively on children exposed to family violence and do not cover any of the remaining Triple-C Impact categories.¹⁶³

Accordingly, in order to truly comprehend the problem before us, it is vital to understand what is missing from our existing response to the problem. Thus far, no study has attempted to empirically map the standing statutory availability in this field, and there is no systematic knowledge on the manner in which state laws and policies address children affected by the Triple-C Impact.

To fill the gap and gain an understanding of the root causes of the problem, we designed a comprehensive fifty-state survey. At the onset, we hypothesized that the existing deficient response to affected children stems from statutory lacunas, narrow statutory definitions, and restrictive eligibility criteria that exclude access to services and resources from many categories of exposed children. This hypothesis was based on theories in the literature and policy reports.¹⁶⁴ But our results, to a large extent, indicated differently.

The survey gathered data on statutory eligibility criteria for therapeutic services and resources for children directly and indirectly exposed to crime in each of the fifty states and the District of Columbia. It addressed all five categories of the Triple-C Impact: direct child victims,¹⁶⁵ children exposed to family violence,¹⁶⁶ children exposed to community violence,¹⁶⁷ children with a victimized

161. For example, a study of pediatric response to child exposure to domestic violence revealed that only 4.2% of the surveyed pediatric emergency departments have a protocol in place for responding to such cases. See, e.g., Rosalind J. Wright, et al., *Response of Battered Mothers in the Pediatric Emergency Department: A Call for Interdisciplinary Approach to Family Violence*, 99 PEDIATRICS 186, 188 (1997). Another study conducted by the American Prosecutors Research Institute has found that less than half of the prosecution offices responding to the study survey were aware of protocols directing law enforcement officers to ask about child victims or witnesses when investigating domestic violence reports. SCHECHTER & ELDELSON, *supra* note 160, at 7. See generally DEBRA WHITCOMB, CHILDREN AND DOMESTIC VIOLENCE: THE PROSECUTOR'S RESPONSE, NAT'L. CRIM. JUST. REFERENCE SERV. (2004), <https://www.ncjrs.gov/pdffiles1/nij/199721.pdf>; Wright, *supra*, at 186.

162. Complete survey data is archived with the author.

163. Complete survey data is archived with the author.

164. LISTENBEE JR. ET AL., *supra* note 3, at 5; SCHECHTER & ELDELSON, *supra* note 160, at 3; *Identifying Children*, *supra* note 159.

165. Children who had a crime committed against their own person.

166. Witnessing crime in the home or among family members, when the child is not physically harmed (most common are cases of domestic violence or inter-familial sexual abuse).

167. Witnessing crime outside the home (e.g., neighborhood or school) committed among nonrelatives, when the child is not physically harmed.

parent,¹⁶⁸ and children affected by parental incarceration.¹⁶⁹ The survey aimed to answer fundamental questions including the following: What resources are statutorily available on the state level? Which state agencies are charged with responding to affected children? Are there mechanisms to identify affected children? Which categories of children are statutorily eligible for services and resources?

The survey was conducted through email questionnaires¹⁷⁰ that were sent to a broad range of state agencies (*e.g.*, victim compensation agency, victim assistance office, state police, state and district attorney office, department of children & family services, department of human services, department of corrections, etc.)¹⁷¹ as well as nongovernmental organizations that serve children affected by crime. Responses were obtained from fifty out of the fifty-one jurisdictions, amounting to a 98% response rate. Only the State of Maryland refused to provide information per our survey questionnaire.¹⁷² All state responses were cross-referenced and verified against the governing statutes, administrative rules, case law, agency guidelines, and internal policies. The results were logged in descriptive form and then translated into numerical data and analyzed.¹⁷³

We created the Triple-C Impact Index (“TCII”), which measures the degree of state response to the problem. The Index assigns each state a score between zero and six,¹⁷⁴ depending on the number of Triple-C Impact categories that were reported to be officially recognized by state law and statutorily eligible for therapeutic services or compensation. It should be clarified that only services and resources that are clearly mandated by law and target the specific population of children affected by each of the Triple-C Impact categories were included in the survey. Some additional services may be available by grassroots and civil-society organizations or privately under medical insurance of Medicaid, Medicare,

168. Children with a parent or a primary caregiver who was a victim of a violent crime, where the child was not a witness to the crime but was affected in some way by proxy.

169. Children with a parent or primary caregiver who is incarcerated in a county, state, or federal correctional facility.

170. Phone interviews and follow-ups were also conducted as needed to supplement electronic correspondence.

171. Although some references were made, the survey did not directly cover services provided by the general public school and public health system or through medical insurance. It also did not cover services by Child Protective Services, which are exclusive for children facing risk from a caregiver, rather than the general population of children.

172. Interview with D. Scott Beard, Exec. Dir., Criminal Injuries Comp. Bd., Dep’t of Pub. Safety & Corr. Serv. (Mar. 8, 2017) (on file with the author).

173. Under each category a state could be scored either “1” or “0.” “0” was logged when no eligibility for therapeutic was available in any form. “1” was logged when some degree of eligibility to therapeutic services or resources was available. The states were given the “benefit of the doubt” and received a “1” score even when available services were minimal and eligibility criteria was limited and restricting. Each state received a total score between zero and six accordingly.

174. The Index covers the five Triple-C Impact Categories (Direct victimization, existence of a specific Child Victims act or provision, exposure to family crime, exposure to community crime, parental victimization, and parental incarceration). A sixth point is awarded if the state collects statistical data on the parental status of inmates under the custody of the state’s department of corrections.

or CHIP coverage. Child Protective Services also provide some services to eligible children, but those are restricted only to children who face danger from their caregivers, rather than the entire group of affected children, and thus are excluded from the survey. In several states, some counseling services are available through the public school system, but these do not specifically target Triple-C Impact Children and are often sporadically available, depending on the budget and discretion of each school district in the state.¹⁷⁵

The survey's outcomes were insightful and surprising. They largely refuted the original hypothesis and directed attention to flaws in interagency coordination, extensive access barriers, ineffective utilization of resources, and insufficient account for the distinct needs of minor children. These crucial findings, outlined below, shine a bright light on potential solutions to the problems and inform us on effective paths toward improving the way we address children suffering from the Triple-C Impact.

A. Survey Findings: Steps in the Right Direction

Despite the original hypothesis that children under most of the Triple-C Impact categories are not formally recognized by law, and thus are ineligible to receive services to facilitate their recovery, the survey painted a very different image. Encouragingly, it revealed a sizable prevalence of statutory recognition of many of the Triple-C Impact categories among states, with the marked exception of children affected by parental incarceration. It also found that many state laws, as well as agency guidelines, mandate eligibility for services and resources for exposed children.

Based on the states' responses, the average state TCII score was 2.5, indicating that most states recognized two to three of the Triple-C Impact Categories. Encouragingly, only one state, the state of Indiana, was awarded a TCII score of zero, for failing to provide any statutory recognition of the surveyed categories. No state reported recognition of all the Triple-C Impact categories. The highest TCII score in the dataset was awarded to the state of New York for recognizing five of the six surveyed categories, excluding eligibility for services only for children affected by parental incarceration.¹⁷⁶

Among responding states, forty-five (88.2%) reported that children exposed to family crime were formally recognized and statutorily eligible for counseling services, compensation, or reimbursement.¹⁷⁷ Only five states (9.8%) explicitly excluded eligibility for this group of children.¹⁷⁸ Thirty-one of the responding states (60.8%) recognized eligibility of children with a victimized parent, even when the child was not a witness to the criminal act.¹⁷⁹ Twenty-two

175. In one case, school-based services were statutorily mandated to all school districts in the state, and eligibility criteria relied on the status of the child as affected by different categories of crime exposure. In this case, the services and resources provided were included in the survey.

176. A full summary table of state scores is available in the Appendix.

177. Complete survey data is archived with the author.

178. The states are Hawaii, Indiana, North Carolina, Rhode Island, and Wisconsin.

179. Complete survey data is archived with the author.

states (43.1%) had laws authorizing services and resources to children exposed to community crime.¹⁸⁰

Consistently excluded were children affected by parental incarceration, with only one state, the state of Vermont, reporting the availability of any statutory recourse to this group of vulnerable children.¹⁸¹ Furthermore, it was discovered that the majority of states (58.8%) do not collect any systematic data on the parental status of inmates in correctional facilities and therefore have no ability to identify or track children affected by parental incarceration.¹⁸²

State responses also reflected high levels of awareness of the issue of children indirectly exposed to crime and the short- and long-term harm they endure. This was especially evident in responses provided by State Victim Compensation agents. The survey results indicate that these agents make ongoing efforts to stretch the resources available to them and provide broad and inclusive interpretations to the governing laws in order to grant assistance to as many affected children as possible.

Survey responses repeatedly included statements such as the one provided by the Alaska Violent Crime Compensation Board, maintaining that “[t]he Board takes the view that if there is domestic violence in the home, the child will be affected whether or not they are eye witnesses to an actual physical altercation. So counseling would almost always be considered.”¹⁸³ In one case, a statutory provision was broadly interpreted in a manner that could even be presumed to exceed the legislature’s reasonable intent.¹⁸⁴ In this case, a provision that explicitly provided compensation to relatives of “sexual assault victims” who require “counseling in order to better assist the victim in his recovery,”¹⁸⁵ was expanded through broad interpretation of the State Crime Victim Compensation Program to apply to relatives of victims of any crime.¹⁸⁶

These unexpected outcomes shed a positive light on the approach of key players in the system to the needs of children affected by the Triple-C Impact. The results clearly show that for most Triple-C categories, the primary cause for the existing ineffective state response to affected children is not the lack of statutory eligibility or narrow legal definitions. Consequently, the results significantly alter our perception of the problem’s framework and mandate us to proceed with the quest for the actual causes elsewhere.

180. Complete survey data is archived with the author.

181. It should be noted that in the state of Vermont, therapeutic services to children with incarcerated parents are provided through the general behavioral health parity system, rather than a dedicated policy that specifically targets this group of children. Having an incarcerated parent, however, is a factor that is explicitly considered as part of the eligibility assessment. Thus, we considered Vermont as having statutory eligibility for services for children affected by parental incarceration. Interview with Kim Bushey, Program Servs. Dir., Vt. Dep’t of Corr. (Mar. 25, 2016) (on file with the author).

182. Complete survey data is archived with the author.

183. Interview with Katherine Hudson, Exec. Dir., Alaska Violent Crimes Comp. Bd. (Jan. 20, 2016) (on file with the author).

184. Complete survey data is archived with the author.

185. MO. REV. STAT. § 595.020.1(2)(a) (2018).

186. Interview with Susan Sudduth, Mo. Crime Victims’ Comp. Program (Apr. 12, 2016) (on file with the author).

B. *Room for Improvement*

Despite the positive highlights, the survey also uncovered a multitude of deficiencies and limitations. These findings provide indispensable directives in our search for the core of the problem.

Most evidently, the survey results reveal an unwarranted degree of disparity and inconsistency among, and even within, states when addressing the Triple-C Impact. Extreme differences were detected in the terminology used, the scope of the definitions provided, the agencies assigned to address each category of affected children, the level of accessibility to existing services, and the amount of information publicly available. On the national level, no methodical attempts for standardization, model policies, or guidelines for “best practices” in order to assure a minimum level of care were identified.

This lack of consistency and uniformity presents several fundamental challenges. From a research perspective, the use of inconsistent terminology and definitions makes it extremely difficult to investigate the Triple-C Impact problem in its entirety, evaluate existing findings, gain a coherent understanding of the full scope of the problem, and gauge its social cost and effect.¹⁸⁷ These constraints and limitations in the ability to conduct high-quality and reliable empirical studies are not confined to the academic arena, but they directly affect our ability to devise effectual evidence-based solutions to the problem. Moreover, alongside the more academic-oriented challenges, substantial practical difficulties also emerge.

From the state’s viewpoint, any effort to devise a coordinated interagency response to the problem requires fluent communication amongst all the governmental and nongovernmental stakeholders involved. When these bodies do not “speak the same language” in terms of the terminology used, division of labor, scope of responsibility, and the expected standard of service and care, such efforts are doomed to failure. It also makes it nearly impossible to share information, develop interstate collaborations, and benefit from experiences and lessons learned in other states. The survey presents strong evidence of this absence of coordination between the various agencies, organizations, and service providers in the field. In fact, it depicts a picture of a system in which each player on the field rarely knows what the other is doing, let alone works in tandem with other players towards the common goal of assisting impacted children.

One critical component of the uncoordinated efforts and deficiencies in communication among relevant stakeholders is the gap in knowledge among such key players. The survey uncovered numerous examples across the nation where resources were statutorily available to affected children but were not known to service providers and advocates who served these children, or even to government agencies entrusted with serving the relevant populations.

187. On the issue of inconsistency in terminology, see also David Finkelhor, *Prevalence of Child Victimization, Abuse, Crime, And Violence Exposure*, in *VIOLENCE AGAINST WOMEN AND CHILDREN: MAPPING THE TERRAINS* (J.W White, et al. eds.) 9, 9–13 (2011).

In the state of Kentucky for example, a representative of the Victim Compensation Board reported that, pending documentation of a medical practitioner indicating a child was emotionally injured in relation to a crime, the child would be considered for compensation and therapeutic services in cases of exposure to family crime, exposure to community crime, and parental victimization.¹⁸⁸ On the contrary, a representative of a nongovernmental youth advocacy organization in the state, serving children affected by the Triple-C Impact, responded that children under all three of the above-mentioned categories “are not considered ‘victims of crime’ and are not eligible for services/compensation.”¹⁸⁹

Similar trends were also detected among governmental agencies. In Nebraska, while a representative of the Victim Reparation Program confirmed that “children who witness family crime are eligible for compensation,”¹⁹⁰ a Victim Specialist with the office of the State Attorney General responded that she is “not familiar with any specific statutes or policies that provide for specific programming or services to children exposed to violence in their home.”¹⁹¹ Similarly, in the state of Virginia, the director of the state Criminal Injuries Compensation Fund reported that “for counseling purposes, minor child witnesses of violence involving a caretaker are considered to be a primary victim” and therefore eligible for services.¹⁹² Conversely, the Crime Victim Programs Manager at the Virginia Department of Justice asserted that “[a]s far as statutes or guidelines around eligibility for services to child witnesses to domestic violence, there are none.”¹⁹³

This state of affairs is particularly alarming in light of the fact that beyond the reasonable expectation that government agencies will work together in a cooperative and coordinated manner towards their common goals, nongovernmental organizations and service providers who receive funds under the Victims of Crime Act (“VOCA”) are mandated to assist and inform their clients of eligibilities for victim compensation benefits.¹⁹⁴ These statutory obligations are unlikely to be fulfilled if relevant governmental agencies as well as funded service providers are not trained, educated and periodically informed on the rights and eligibilities of each and every category of impacted children.

188. Interview with Lindsay Crawford, Policy Advisor / Interim SAEP Coordinator, Ky. Crime Victims Comp. Board (Feb. 3–4, 2016) (on file with author).

189. Interview with Shannon Moody, Policy Dir., Ky. Youth Advocates (Feb. 1–2, 2016) (on file with author).

190. Interview with Sher Schrader, Crime Victims’ Reparations Program, Neb. Comm’n on Law Enf’t & Criminal Justice (Feb. 5, 2016) (on file with author).

191. Interview with Doug Peterson, Neb. Attorney Gen., (Feb. 10, 2016) (on file with author); Interview with Patricia L. Sattler, MSW, Victim/Witness Specialist, Neb. Dep’t of Justice, (Feb. 10, 2016) (on file with author).

192. Interview with Jack Ritchie, Dir., Va. Criminal Injuries Comp. Fund (Mar. 9–10, 2016) (on file with author).

193. Interview with Cassandra Bullock, Victims Servs. Manager, Va. Dep’t of Criminal Justice Servs. (Mar. 8, 2016) (on file with author).

194. 42 U.S.C. 10603(b)(1)(E) (2018); Interview with Dan Eddy, Exec. Dir., Nat’l Ass’n of Crime Victim Comp. Bds. (Feb. 25, 2016) (on file with author).

The urgent need for interagency coordinated efforts to combat the problem is also highlighted in the Attorney General Task Force report.¹⁹⁵ Although the Task Force did not empirically test the issue, it clearly stated that “[c]hild-serving professionals from all disciplines and law enforcement professionals should partner to provide protection and help in recovery and healing for children exposed to violence.”¹⁹⁶ When addressing the appointed members of the Task Force, Attorney General Eric Holder further added that “[i]f we work together, across professional disciplines . . . we will be able to prevent this violence when possible, identify it when it does occur, and provide support that helps children heal so that they can grow into healthy adults.”¹⁹⁷ Throughout the report, an emphasis is put on the vital importance of developing a coordinated response across all phases of the process, from identification to recovery.¹⁹⁸

Lastly, and most concerning of all, are the challenges that emerge on the side of children affected by the Triple-C Impact and their families. For parents or guardians seeking resources and assistance for their children, the lack of systemic coordination, uniformity, and commonly used terminology poses a colossal hurdle in the ability to identify and access available services and potential resources. Such challenges are severely exacerbated by several related issues illuminated by the survey’s results.

Although the survey has detected a relatively high prevalence of statutory provisions that include children under most categories of the Triple-C Impact across the nation, very few of these provisions are specifically targeted towards children and their unique developmental needs. Most address the general adult population, with children included as an afterthought and without any account for the relevant differences between adults and minor children outlined in Part II. Only thirteen states (25.4%) reported having a dedicated child victims act or provision. Six additional states (11.7%) reported the availability of a statutory provision with child-specific elements for at least one of the Triple-C categories.¹⁹⁹ Absent such developmentally oriented accommodations, available policies are inevitably expected to have diminished efficacy.

Additionally, the vast majority (if not all) of the identified services and resources leave the initiative to the child’s parent or guardian, who must actively seek and apply for the service. None of the responding states reported the existence of an effective referral system designed to identify children affected by the Triple-C Impact and to refer them to therapeutic services for any of the categories of children included in the survey.²⁰⁰ Only one state (Rhode Island) reported a systematic mechanism for identification and tracking of children exposed to family crime.²⁰¹ This identification method, however, does not appear to be linked

195. LISTENBEE JR. ET AL., *supra* note 3, at 13.

196. *Id.* at 19.

197. Eric H. Holder, Jr., U.S. Attorney Gen., Letter of the Attorney General to Members of the National Task Force on Children Exposed to Violence (Dec. 20, 2012).

198. *See generally* LISTENBEE JR. ET AL., *supra* note 3.

199. Complete survey data is archived with the author.

200. Complete survey data is archived with the author.

201. Complete survey data is archived with the author.

to a referral mechanism. It was also not extended to children under any of the other Triple-C Impact categories.²⁰²

This appears to be a complicated system-design issue. While many of the statutorily mandated opportunities for counseling services for the relevant categories of children are provided through reimbursement by the states' Victim Compensation programs, such programs are not adequately equipped to provide effective recourse to the problem. Compensation programs are severely underfunded and allocated with only a negligent slice of the federal VOCA funds (only 7% of the total VOCA budget, amounting to \$133 million in 2017 for all states and territories combined).²⁰³ The application process is long and tedious, and programs in most states do not have the capacity to process large volumes of applications. Most importantly, by design, compensation agents do not have direct access to affected children and thus do not have the capabilities or resources to pursue effective outreach, identification, or referral efforts.²⁰⁴

At the same time, 93%, or \$1.8 billion of the federal VOCA budget, is allocated as grants to Victim Assistance Programs.²⁰⁵ The act prioritizes funds to services dedicated to child victims.²⁰⁶ In theory, the act permits the use of the grants to support a variety of local services and programs, including services to "secondary victims" such as children affected by crime exposure.²⁰⁷ Yet eligibility criteria for the funded programs do not seem to be regulated by any overarching policies (either by law or internal protocols). No state has reported protocols that assure that funds are distributed to all affected categories of children. All states that provided information on this issue in our survey stated that eligibility criteria depend on each individual program and case-by-case examination.²⁰⁸ No state could provide information about specific programs or services that accommodate the different categories of children affected by the Triple-C Impact. Publicly available lists of VOCA funded programs in each state include only very general information and do not specify whether eligibility criteria cover "secondary victims."²⁰⁹ Under these circumstances, although relevant services may be

202. Interview with Deborah DeBare, Exec. Dir., R.I. Coal. Against Domestic Violence (Mar. 22, 2016) (on file with author).

203. See OFFICE OF VICTIMS OF CRIME, OVC FORMULA CHART, 2017 CRIME VICTIMS FUND ALLOCATION: COMPENSATION (2017), <https://ojp.gov/ovc/grants/Crime-Victims-Fund-Compensation-Allocations-2017.pdf>; see also Interview with Dan Eddy, Exec. Dir., Nat'l Ass'n of Crime Victim Comp. Bds. (June 27, 2017) (on file with author).

204. Interview with Dan Eddy, *supra* note 203.

205. See OFFICE OF VICTIMS OF CRIME, *supra* note 203; Interview with Dan Eddy, *supra* note 203.

206. The specific words of the Act prioritize funds for child abuse prevention and treatment, but some broader interpretations for the term "child abuse" are available. See 34 U.S.C. § 20103(a)(2)(A) (2018).

207. *Id.*

208. Complete survey data is archived with the author.

209. See, e.g., Illinois, OFFICE FOR VICTIMS OF CRIME, <https://ovc.ncjrs.gov/ResourceByState.aspx?state=il> (last visited Mar. 24, 2019); VOCA, IND. CRIMINAL JUSTICE INST., <https://www.in.gov/cji/2393.htm> (last visited Mar. 24, 2019); Texas, OFFICE FOR VICTIMS OF CRIME, <https://ovc.ncjrs.gov/ResourceByState.aspx?state=tx> (last visited Mar. 24, 2019).

available, accessibility is hindered by the deficiencies in regulation and the distribution of information to the public. Thus, an increased burden falls on the underfunded and unequipped Victim Compensation programs.

To add insult to injury, the process of conducting the survey has unearthed an abundance of technical difficulties that obscure the access to the information required in order to obtain available services and resources. We repeatedly encountered difficulties in identifying the agency responsible for providing services in each of the surveyed categories as well as difficulties in locating the specific officials within the agencies who held the relevant information. Lack of transparency of contact information for relevant public servants (phone numbers and email addresses) was a reoccurrence in many states. The lack of transparency in contact information of government agents was justified by some as a security measure, to protect agents from threats.²¹⁰ While the physical safety of government agents is of vital importance, the safety measures enforced should not be ones that compromise the level of service and accessibility provided to vulnerable populations, especially when the means of contact are not face-to-face (*i.e.*, phone or email). Furthermore, even once the required contact information was obtained, we often experienced lack of responsiveness from the side of relevant state officials.²¹¹ Phone contact frequently proved to be futile as the caller seeking information was transferred from one person to another until reaching a dead end (usually a voicemail, full to capacity). Once again, the most notable difficulties were experienced in the collection of data on children affected by parental incarceration, where in some states, up to five different agencies had to be contacted in order to obtain and confirm the needed information. Due to such access-to-information barriers, the compilation of the survey data included over a full year of persistent and repeated attempts.

Imagine a child in desperate need for assistance to overcome trauma in this environment. The child must depend almost solely on a lay parent with no professional skills, and often with only minimal education and resources,²¹² to go through the daunting journey through the thorny terrains of the system. The parent will first have to gain awareness and understanding that the child is in need of external assistance in relation to his or her exposure to crime. Then, the parent

210. Interview with Dan Eddy, Exec. Dir., Nat'l Ass'n of Crime Victim Comp. Bds. (June 28, 2017) (on file with author).

211. It should be duly noted that there were also many states in which state officials were extremely responsive and cooperative, provided a wealth of helpful information, and assisted in locating additional sources of information.

212. See LISTENBEE JR. ET AL., *supra* note 3, at 34 ("Although no community is untouched, the epidemic of children's exposure to violence does not play out evenly across the country. Children living in poverty are far more likely to be exposed to violence and psychological trauma, both at home and in the surrounding community. Compounding the problem, economically impoverished families and communities typically lack the resources needed to protect children."); Carol B. Cunradi et al., *Neighborhood Poverty as a Predictor of Intimate Partner Violence Among White, Black, and Hispanic Couples in The United States: A Multilevel Analysis*, 10 ANNALS OF EPIDEMIOLOGY 297 (2000); Lisa A. Goodman et al., *When Crises Collide: How Intimate Partner Violence and Poverty Intersect to Shape Women's Mental Health and Coping?*, 10 TRAUMA VIOLENCE ABUSE 306 (2009); Lin Huff-Corzine et al., *Deadly Connections: Culture, Poverty, and The Direction of Lethal Violence*, 69 SOCIAL FORCES 715 (1991).

will require some level of cognizance that some form of assistance that suits the child's needs might be available out there. The parent will have to verify whether their child meets the varying and unpredictable eligibility criteria for available services. To do that, the parent must uncover which agency in their state or municipality is charged with providing the needed service. Undeterred by many shutting doors, the parent will have to spot the specific position within the agency that processes the coveted information. They then must proceed on a quest to find out how to contact the individual holding this position—who, despite being entrusted to serve the public, their contact information is likely to be buried under layers of bureaucracy and pretty websites that contain very little substance. What are the odds that the vulnerable child, despite the parent's best intentions, will obtain this vital assistance that will help him or her find the path towards recovery?

The suspicions that the aforementioned cumulative systemic flaws impact utilization of the available services and resources were substantiated by the astonishingly low claim rates, the survey revealed.²¹³ It should be disclaimed that the reporting systems of most states do not allow for a breakdown of data according to the categories of our survey.²¹⁴ As a result, the numbers obtained are either from states with more sophisticated data systems or those who agreed to hand count the cases for the benefit of the survey. Only ten states provided claim rate data and provided it only for part of the surveyed categories. Thus, the available figures should be considered anecdotal, and although telling and indicative, cannot be construed as conclusive evidence.

213. Complete survey data is archived with the author.

214. Interview with Dan Eddy, Exec. Dir., Nat'l Ass'n of Crime Victim Comp. Bds. (Feb. 25, 2016) (on file with author).

TABLE 1

State	Category	Claims in 2015
Arizona	Exposure to Family Crime	35
California	Exposure to Community Crime	35
Iowa	Exposure to Family Crime	21
Kentucky	Exposure to Family Crime	0
	Exposure to Community Crime	0
	Parental Victimization	0
Maine	Exposure to Family Crime	0
Montana	Exposure to Family Crime	15
	Exposure to Community Crime	0
Nebraska	Exposure to Family Crime	1
	Exposure to Community Crime	0
Nevada	Exposure to Family Crime	0
Virginia	Exposure to Family Crime	0
West Virginia ²¹⁵	Exposure to Community Crime	0

These numbers are particularly astounding considering the fact that more than half of the minor children living in the United States today are estimated by empirical studies to be affected by the Triple-C Impact in one form or another each year.²¹⁶ There could be many, more benign, reasons for low claim rates. The affected child or parent may not fully comprehend the severity of the harm endured and the long-term implications of avoiding treatment. Some are able to obtain services elsewhere through medical insurance, urgent care, or child protective services. Others are disinterested in obtaining assistance from government agencies due to negative past experiences or general distrust common to marginalized communities.²¹⁷ Yet one can only wonder whether these persistent and recurring system design flaws and administrative roadblocks are not entirely coincidental, and they may be the manifestation of political forces aiming to disincentivize the utilization of resources in order to generate some level of short-

215. See LISTENBEE JR. ET AL., *supra* note 3, at 3.

216. *Id.* For more on the prevalence of the Triple-C Impact in society, see Gilad, *Snowball Effect*, *supra* note 3.

217. These are some factors that explain general low claim rate for victim compensation assistance, which are estimated to steadily stand at approximately 10% in most states. Interview with Dan Eddy, *supra* note 210.

term fiscal savings. Unfortunately, an evidence-based examination of the problem indicates that such short-term savings are likely to result in epic long-term costs borne by taxpayers and society. This is explained in Part VI.

V. POLICY IMPLICATIONS

The presented survey offers the first-ever attempt for accurate national-scale mapping of the policies and resources at the disposal of Triple-C-Impacted children. As such, it provides a unique perspective on the macro- and micro-level, which can serve as an invaluable tool for any attempt to enhance our response to the Triple-C Impact national crisis for the benefit of both the affected children and society as a whole.

First, the survey results can serve as a resource in the hands of service providers and policy makers in the field, at the state and national levels. The survey allows access to methodically compiled knowledge as to the existence of services for each category of affected children under each jurisdiction, the exact scope of eligibility, the government agency charged with distribution of resources and eligibility assessment, and accurate references to the governing laws and policies. This information can be used to improve and maximize the ability of service providers and advocates to assist affected children and enhance their referral capabilities. It may also assist in interagency collaboration and coordination as each agency can gain a better understanding of what the others are doing. On the policy level, the information the survey provides illuminates existing gaps that require attention when devising policy amendments and legislative proposals. It can also facilitate interstate collaborations and provide opportunities to learn from experiences already gained in states where more elaborate child-specific policies and more inclusive eligibility criteria are practiced.

Second, the findings can direct our efforts towards devising responses to the problem in a more effective and targeted manner. The original hypothesis assumed that the core of problem lay in statutory lacunas that prevented formal recognition for many categories of affected children and restricted eligibility criteria.²¹⁸ This underlying assumption would have directed efforts towards legislative initiatives to assure recognition to all Triple-C Impact categories, expansion of statutory definitions, and channeling fiscal resources and grants to fill the identified gaps. An analysis of the survey results demonstrates that such solutions may not target the essence of the problem and hence are unlikely to breed effective results.

A careful analysis of the survey data leads to the conclusion that the heart of the problem lies in lack of cooperation and coordination between stakeholders in the field, significant gaps in knowledge among key players, and technical difficulties and flaws in system design that impede access to information and resources. Following these critical leads, a more effective strategy may be to focus on developing mechanisms for fluent communication among the key players in

218. See *supra* note 164 and accompanying text.

the field, encouraging and fostering interagency collaborations, devising best practices promoting standardization and coherent use of terminology across the board, establishing identification systems to alleviate the dependence on parental initiative, correcting the technical difficulties obscuring access to services, and designing new methods to improve the accessibility of the available policies and services. Such actions must also be accompanied by efforts to assure that the capacity of the existing system can accommodate the expected increase in claim rates and rise in service utilization.

One category of affected children stands apart in the survey results: children affected by parental incarceration. For this particular category, the original hypothesis of impeding statutory gaps was found to bear truth.²¹⁹ Consequently, for this category, addressing the statutory lacuna and filling the identified gaps in state laws and statutory distribution of funds through legislative actions may be the most applicable course of action towards the desirable outcome.

Taking such an evidence-based route, relying on survey findings allows us to custom fit the solution to the specific nature and characteristics of the problem at hand in a manner that is expected to produce more constructive and efficient outcomes.

VI. WHY CRIME?

Reading through this Article must beg the question: what is so special about crime? It is intuitive to assert that childhood is a vulnerable period in the life of an individual. This vulnerability overexposes children not only to harm induced by crime but also to harm resulting from many other life adversities, such as poverty, familial instability, natural disasters, illnesses, and many others.²²⁰ Why should we isolate and focus on the negative effect of crime on the child?

Although all the above-listed weighty social problems have the potential to be highly damaging to children, and justify prioritized attention and action, there are several factors that differentiate crime from the others.

While the aforementioned compartmentalized examination of the problem thus far prevented us from gaining accurate measures of the problem, existing indicators provide a strong sense of its mammoth magnitude. As determined by the Attorney General Task Force, the problem is “not limited to one community or one group of children. It occurs among all ethnic and racial groups; in urban, suburban, and rural areas; in gated communities and on tribal lands.”²²¹ Existing data show that approximately two out of every three children are affected.²²² “Of the 76 million children currently residing in the United States, an estimated 46 million” can expect to have their lives touched by violence and crime this year.²²³

219. See *supra* Section III.D.

220. See *supra* Part II.

221. LISTENBEE JR. ET AL., *supra* note 3, at viii.

222. *Id.* at 3.

223. *Id.*; see also Finkelhor, *supra* note 187, at 9–13; FINKELHOR, *supra* note 11, at 1; David Finkelhor et al., *Prevalence of Childhood Exposure to Violence, Crime and Abuse: Results from the National Survey of Children's Exposure to Violence*, 169 JAMA PEDIATRICS 746 (2015); David Finkelhor et al., *Trends in Childhood*

One in every ten children in the U.S. experiences more than one type of crime exposure and thus is considered a poly-victim.²²⁴ These astonishing numbers include only children affected by direct victimization, exposure to family crime, and exposure to community crime. They do not include children with victimized caregivers and those affected by parental incarceration, who are also included in this study under the Triple-C Impact.

Studies in the field of medicine and social science provide strong and convincing evidence of the harm inflicted on children affected by crime exposure.²²⁵ Although almost no studies encompass all the Triple-C categories, existing research provides ample evidence, outlined in this Article, as to the strong correlation between crime exposure and a broad range of injurious symptoms.²²⁶ It also provides insightful explanations about the physical and psychological mechanisms and processes underlying the caused harm.²²⁷ This invaluable information and data are largely ignored by policy makers in the criminal justice arena and are not sufficiently accounted for in order to improve the efficacy of devised solutions.²²⁸ In fact, in this specific field, there is strong evidence to show that there are very effective tools which, if applied correctly, can significantly alleviate the damaging effect of childhood crime exposure.²²⁹ The wealth of informative evidence, coupled with the availability of effective resources in this field, provides a unique opportunity to make a significant difference with positive outcomes.

Another strong data point in this field is the massive cost of the problem to the state and our society in general. Again, the lack of inclusive examinations of the Triple-C Impact problem in its entirety thus far prevents us from gauging the full cost of the problem. Nevertheless, the existing partial estimates are already

Violence and Abuse Exposure: Evidence from Two National Surveys, 164 ARCH. PEDIATRIC ADOLESCENT MED. 238 (2010); David Finkelhor et al., *Violence, Crime, and Abuse Exposure in a National Sample of Children and Youth: an Update*, 167 JAMA PEDIATRICS 614 (2013).

224. LISTENBEE JR. ET AL., *supra* note 3, at 5; Turner et al., *supra* note 149, at 323.

225. See, e.g., *infra* note 230 and accompanying text.

226. See *supra* Part III.

227. See *supra* Part IV.

228. See *supra* Part V.

229. PATRICIA V. HORN & ALICIA LIEBERMAN, *Using Dyadic Therapies to Treat Traumatized Children*, in TREATING TRAUMATIZED CHILDREN 210–224 (Danny Brom, Ruth Pat-Horenczyk & Julian D. Ford eds., 2008); Alicia L. Lieberman, Chadra. G. Ippen & Steven Marans, *Psychodynamic Therapy for Child Trauma*, in EFFECTIVE TREATMENTS FOR PTSD 370, 370–387 (Edna B. Foa et al. eds., 2009); LISTENBEE JR. ET AL., *supra* note 3; Cohen et al., *supra* note 152; Ippen et al., *supra* note 156; Ko et al., *supra* note 152; ADAMS, *supra* note 10, at 8–11; Lisa Pilnik et al., *Victimization and Trauma Experienced by Children and Youth: Implications for Legal Advocates*, OFFICE OF JUVENILE JUSTICE DELINQUENCY PREVENTION: MOVING FROM EVIDENCE TO ACTION (Sep. 2012), http://www.ojjdp.gov/programs/safestart/IB7_VictimizationTrauma_LegalAdvocates.pdf.

overwhelming.²³⁰ The Attorney General Task Force report has described the financial costs of the problem as “astronomical.”²³¹ It acknowledged the financial burden it placed on public systems, including child welfare, social services, law enforcement, juvenile justice, and, in particular, education.²³² This is combined with the staggering loss of productivity over children’s lifetimes.²³³ To provide a sense of the magnitude of the sums involved, the annual costs of the public health system alone are estimated to range from \$333 billion to \$750 billion.²³⁴ One study calculates the annual national costs of only direct victimization, without consideration of the remaining four Triple-C Impact categories, at \$94,076,882,529.²³⁵ Another study evaluated the lifetime costs per child to be \$210,012 to \$1,258,800 (in 2010 dollars).²³⁶ Thus, effective resolution of the problem provides an almost unparalleled opportunity for savings in fiscal and social costs.

Lastly, governments are considered to have unique obligations towards their citizens where crime is concerned, in comparison to other social issues. This is particularly significant in the case of the U.S. libertarian and capitalist-oriented political system, where the state has very limited responsibilities towards the individual,²³⁷ in comparison to more socialist and welfare-based political systems.²³⁸ The emphasis on government responsibilities in the criminal justice arena can be traced to the philosophical conceptualization of the state and its sovereignty, which was fundamentally based on the state’s obligation to physically protect its constituents. Since the time of Thomas Hobbes and Jean-Jacques Rousseau, this obligation to protect was associated with the government’s responsibility to operate the criminal justice system and protect constituents from harmful criminal activity.²³⁹ From this responsibility to protect also stems the role of the state as the prosecutor, representing “the people” in most criminal proceedings. Although the issue of government responsibility towards citizens is

230. THERESA DOLEZAL ET AL., HIDDEN COSTS IN HEALTH CARE: THE ECONOMIC IMPACT OF VIOLENCE AND ABUSE (2009); Xiangming Fang et al., *The Economic Burden of Child Maltreatment in the United States and Implications for Prevention*, 36 CHILD ABUSE & NEGLECT 156 (2012); Kathryn E. McCollistera, Michael T. French & Hai Fang, *The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation*, 108 DRUG ALCOHOL DEPENDENCY 98 (2010); ADAMS, *supra* note 10, at 1; Suzette Fromm, *Total Estimated Cost of Child Abuse & Neglect in the United States: Statistical Evidence*, ISSUELAB (Jan. 1, 2001), http://www.issuelab.org/resource/total_estimated_cost_of_child_abuse_neglect_in_the_united_states_statistical_evidence; Patrick Sidmore, *Economic Costs of Adverse Childhood Experiences in Alaska: The Price of Not Intervening Before Trauma Occurs*, ALA. DEP’T OF HEALTH & SOC. SERV., <http://dhss.alaska.gov/abada/aceak/Documents/ACEsEconomicCosts-AK.pdf> (last visited Mar. 24, 2019).

231. LISTENBEE JR. ET AL., *supra* note 3, at 5.

232. *Id.*

233. *Id.*

234. *Id.* at 28.

235. Fromm, *supra* note 230, at 3.

236. Fang et al., *supra* note 230, at 156, 160–61.

237. See, e.g., Sarwat Jahan & Ahmed Saber Mahmud, *What Is Capitalism?*, 52 FIN. & DEV. 44, 44 (2015); 2018 Platform, LIBERTARIAN PARTY, <https://www.lp.org/platform> (last visited Mar. 24, 2019).

238. David Gilmour, *What Is Socialism?: Everything You Need to Know*, DAILY DOT (Oct. 18, 2018, 2:30 PM), <https://www.dailydot.com/layer8/what-is-socialism-definition>.

239. THOMAS HOBBS, LEVIATHAN 144 (Edwin Curley ed., 1994); JEAN-JACQUES ROUSSEAU, ON THE SOCIAL CONTRACT 166 (Donald A. Cress ed., Donald A. Cress trans., Hackett Publishing Co., 2011).

a highly complex and controversial one, we can identify fundamental principles that establish heightened state responsibilities in the area of protection of the citizens from crime-induced harms.

The critical combination of level of harm, extensive prevalence and scale, massive financial burden, availability of evidence-based effective remedies, and the heightened state obligations in this field calls for urgent attention to this issue and provides an unparalleled opportunity for effective, positive change.

VII. CONCLUSION

Following the fundamental principles of the evolution of legal problems, this Article takes the first step in naming a “new” problem. Such a seemingly simple and technical task of assigning a title to a problem may at first glance appear mundane. The effect, however, goes much deeper than the title. Naming a problem helps conceptualize a recurring phenomenon as problematic and injurious and shines a spotlight on its existence and the harm it inflicts, so it can no longer be ignored.²⁴⁰ It provides a point of reference that enables us to raise awareness, initiate public discussion, and make coordinated and cohesive efforts to address the problem—the same type of efforts that are so direly missing where the Triple-C Impact is concerned.

The naming process also facilitates the defining of the scope and boundaries of the problem. In the case of the Triple-C Impact, it allows us to cluster together a group of adverse elements that were previously looked at in isolation, so we can see the inseparable common grounds and interconnections that tie them together cohesively into one integral problem. Only once this inclusive perspective is developed through the naming process, the true extent of the problem can be understood, its root causes identified, and its full effect realized.

Coining the Triple-C Impact terminology highlights a paramount problem that affects millions of children all around us. It maims the bodies, souls, and spirits of those whom we ought to protect most. But its effect goes far beyond the individual children it touches. With millions of children across the nation untreated and prevented from conducting a healthy and productive lifestyle—with heightened risks for substance abuse, criminal behavior, and repeat victimization—community safety is inevitably compromised, and public funds are unnecessarily burdened.²⁴¹ Thus, none of us are spared from its violent claws.

This Article takes the first step in providing a realistic conceptualization of the problem, integrating legal tools with scientific findings. By mapping the existing gaps in the system, and pinpointing the underlying causes of the prevailing deficiencies, the study provides initial directions to possible solutions to the problem and gives us a valuable opportunity to take action that will improve outcomes for millions of children across the nation and our society as a whole. The next step to be undertaken in the path towards an effective response is an

240. See Felstiner et al., *supra* note 1, at 635.

241. See, e.g., Mills, *supra* note 28, at 481–86; Putnam, *supra* note 3, at 2; see also ADAMS, *supra* note 10, at 1, 5.

economic analysis that will evaluate the aggregate costs of the Triple-C Impact problem to the state and to our society. Relying on these two pillars, an operative and financially sound action plan can be developed to alleviate the devastating harms caused by this sweeping problem.²⁴²

242. For continuing research of the prevalence and outcomes of the Triple-C Impact, see Gilad, *Snowball Effect*, *supra* note 3.

APPENDIX: 50-STATE SURVEY RESULTS

TABLE 1: STATE-BY-STATE TRIPLE-C IMPACT STATUTORY RECOGNITION BY CATEGORY (AS OF 2016)

The table exemplifies which of the Triple-C Impact categories are statutorily recognized in each of the fifty states and the District of Columbia. The table presents the results in a 0/1 form. “1” is logged where the state’s law recognizes the category and provides eligibility for therapeutic services or compensation for children under the category. “0” is logged when no statutory recognition is available for the category in the state. Blank logs were placed when information was unavailable.

STATE	Direct Victims: Child Specific Victim Rights Act/Provision	Family Violence	Community Violence	Parental Victimization	Parental Incarceration	Data on Parental status of Inmates	Total
Alabama	0	1	0	1	0	1	3
Alaska	0	1	1	1	0	0	3
Arizona	0	1	0	0	1		2
Arkansas	0	1	0	1	0	0	2
California	0	1	1	1	0	0	3
Colorado	1	1	0	1	0	0	3
Connecticut	0	1	0	1	0	1	3
Delaware	1	1	0	1	1	0	4
Florida	0	1	1	0	0	1	3
Georgia	0	1	1	1	0	1	4
Hawaii	0	0	0	0	0	1	1
Idaho	0	1	0	1	0	0	2
Illinois	0	1	1	1	0	1	4
Indiana	0	0	0	0	0	0	0
Iowa	0	1	0	1	0	1	3
Kansas	0	1	0	1	0	0	2
Kentucky	0	1	1	1	0		3
Louisiana	0	1	0	1	0	0	2
Maine	0	1	0	0	0		1
Maryland					0	0	0
Massachusetts	0	1	0	0	0		1
Michigan	0	1	0	1	0	0	2
Minnesota	1	1	1	1	0		4
Mississippi	1	1	1	1	0		4
Missouri	0	1	0	1	0	1	3
Montana	0	1	1	0	0	0	2
Nebbraska	0	1	1	0	0		2
Nevada	0	1	1	0	0	1	3
New Hampshire	0	1	0	1	0	1	3
New Jersey	0	1	0	1	0	1	3
New Mexico	0	1	1	1	0	1	4
New York	1	1	1	1	0	1	5
North Carolina	0	0	0	0	0	1	1
North Dakota	1	1	1	0	0		3
Ohio	0	1	0	0	0	1	2
Oklahoma	0	1	0	0	0	0	1

Oregon	0	1	1	0	0	1	3
Pennsylvania	1	1	1	1	0		4
Rhode Island	1	0	0	0	0	0	1
South Carolina	0	1	1	1	0	1	4
South Dakota	0	1	1	1	0		3
Tennessee	0	1	0	0	0	0	1
Texas	0	1	0	1	0	0	2
Utah	1	1	0	1	0	1	4
Vermont	0	1	1	1	1	0	4
Virginia	0	1	0	0	0	0	1
Washington	1	1	1	0	0	1	4
West Virginia	0	1	1	1	0	0	3
Wisconsin	1	0	0	0	0	1	2
Wyoming	0	1	1	1	0	1	4
Washington DC	0	1	0	1	0		2
Total	11	45	22	31	3	21	Average 2.61

THE SNOWBALL EFFECT OF CRIME AND VIOLENCE: MEASURING THE TRIPLE-C IMPACT

Michal Gilad, Abraham Gutman,** & Stephen P. Chawaga****

ABSTRACT

This Article is one of the first to take an inclusive look at Comprehensive Childhood Crime Impact (Triple-C Impact) – the monumental problem of exposure to crime during childhood. This problem is estimated to be one of the most damaging and costly public health and public safety problems in our society today. This Article presents an original empirical analysis revealing the states’ failure to provide effective recourse to the millions of children nationwide who suffer from exposure to crime and violence. Additionally, it provides an in-depth, evidence-based investigation into the magnitude of the Triple-C Impact problem, and the full range of adverse outcomes suffered by affected children, as well as our society as a whole, that result from the states’ deficient practices. This Article establishes the importance of developing effective policies that will enable early identification of, and intervention for, children harmed by crime exposure, in order to facilitate recovery from trauma. It demonstrates how improving state practices will prevent cascading injurious consequences, improving the lives and

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well-being of millions of children into adulthood, while also providing an almost unparalleled opportunity for savings on fiscal and social costs.

Introduction	2
I. The Scope and Prevalence of the Triple-C Impact	3
II. Identifying Gaps in Law and Policy	19
A. Statutory Mapping	21
B. Statutory Application	24
C. Root Causes	27
III. Understanding the Consequences	34
A. Criminal Justice	35
B. Substance Abuse	42
C. Mental Health	45
D. Physical Health	50
E. Education	55
F. Economic Well-Being	60
G. Methodological Limitations	64
IV. The Spill-Over Effect	65
Conclusions	67
Appendix: 50-State Survey Results	70

INTRODUCTION

When a snowball starts rolling down a snowy hill, it continues to exponentially grow and gain momentum, unless stopped by an external force. The effects of crime on children assume a similar pattern. If not brought to a halt by intervention or treatment, the effects can linger and escalate throughout the child's life into adulthood. Crime impacts all aspects of the individual's life, ranging from physical and mental health to fundamental life outcomes, including employment, education, and economic well-being. As is true in many different contexts, timing is everything:

[V]iolence experienced during childhood and adolescence may be particularly damaging to health over time. This is because childhood and adolescence are the periods in which important personal and psychological resources that guide cognition and decision-making, and ultimately influence health, are typically

developed . . . [W]hereas violence experienced at other stages of life might ultimately have relatively fewer life course consequences.¹

Comprehensive Childhood Crime Impact, or “Triple-C Impact,” is a term we coined to embody the distinct effects that direct and indirect exposures to crime have on children.² This Article aims to gauge and measure the devastating harm that results from the states’ failure to provide effective intervention to millions of affected children nationwide, thus enabling the Triple-C Impact snowball to continue careening down the steep slope.

Part I of the Article introduces the foundation and pillars of the Triple-C Impact. It also elaborates on the scope and prevalence of the Triple-C Impact problem in our society today. Part II illuminates the existing failures and gaps in states’ response to this problem by examining the results of a comprehensive fifty-state survey. This Part also identifies and analyzes the root causes of these deficiencies in states’ responses. Relying on empirical evidence and data, Part III provides a detailed explanation of the consequences and risks of the abovementioned gaps in state response, and outlines the pathways leading to these adverse outcomes. Part IV discusses the “spillover effect” — how these issues reach beyond individual children to our society as a whole. Conclusions will follow.

I. THE SCOPE AND PREVALENCE OF THE TRIPLE-C IMPACT

Informed by scientific findings, the Triple-C Impact hinges on a set of factors that differentiate children from adults.³ Evidence shows that the timing of exposure to crime is a critical factor in determining the level of risk for long-term harm.⁴ Despite common misperceptions, children are not merely miniature adults — many more substantive differentiators are at play besides physical size. From a physiological and anatomical perspective, a child’s brain is

1. Niclas Olofsson et al., *Long-Term Health Consequences of Violence Exposure in Adolescence: A 26-Year Prospective Study*, 12 BMC PUB. HEALTH, 2012, at 1–2.

2. See generally Michal Gilad, *Falling Between the Cracks: Understanding Why States Fail in Protecting Our Children from Crime* (Univ. of Pa. Law Sch. Pub. Law & Legal Theory Research Paper Series, Paper No. 17-32, 2018), https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=2859&context=faculty_scholarship [<https://perma.cc/N8JS-N85B>].

3. *Id.* at 7.

4. Olofsson et al., *supra* note 1.

extremely malleable during the early years of life.⁵ The plasticity of a child's central nervous system leads the human brain to be dramatically affected by early experiences.⁶ Exposure to crime and violence during childhood causes heightened levels of stress and overstimulation of certain brain structures, which can lead to chemical imbalances in the child's brain and to abnormal development of neurological and cerebral systems.⁷

Children are also in the critical stages of their emotional and cognitive development.⁸ Their identity is not yet formed, their personality traits are in transitory stages,⁹ and they are less mentally stable than adults.¹⁰ Exposure to crime at this critical stage interrupts the delicate and complex process of maturation,¹¹ affects the timing of developmental trajectories, and disrupts children's progression through age-appropriate milestones.¹² This state of psychological

5. Gilad, *supra* note 2, at 7. Gayla Margolin & Elana B. Gordis, *The Effects of Family and Community Violence on Children*, 51 ANN. REV. PSYCHOL. 445, 459 (2000). See generally Bruce Perry, *Incubated in Terror: Neurodevelopmental Factors in the "Cycle of Violence,"* in CHILDREN IN A VIOLENT SOCIETY 124 (Joy D. Osofsky ed., 1997).

6. Margolin & Gordis, *supra* note 5, at 459; Michael J. S. Weiss & Sheldon H. Wagner, *What Explains the Negative Consequences of Adverse Childhood Experiences on Adult Health? Insights from Cognitive and Neuroscience Research*, 14 AM. J. PREVENTATIVE MED. 356, 357 (1998); Bruce D. Perry & Ronnie Pollard, *Homeostasis, Stress, Trauma, and Adaptation: Neurodevelopmental View of Childhood Trauma*, 7 CHILD & ADOLESCENT PSYCHIATRY CLINICS N. AM. 33, 33-34 (1998).

7. REPORT OF THE AMERICAN PSYCHIATRIC ASSOCIATION TASK FORCE ON THE BIOPSYCHOSOCIAL CONSEQUENCES OF CHILDHOOD VIOLENCE 23 (Richard J. Loewenstein & Frank W. Putnam eds., 2013), <http://www.researchgate.net/publication/239939460> [<https://perma.cc/P6JA-NBYG>] [hereinafter REPORT ON THE BIOPSYCHOSOCIAL CONSEQUENCES OF CHILDHOOD VIOLENCE]. See Margolin & Gordis, *supra* note 5, at 459. See generally Ayelet Lahat & Louis A. Schmidt, *Early Violence Exposure and Executive Function: Implications for Psychopathology and Other Cautionary Points*, 56 HUM. DEV. 274 (2013); Dana Charles McCoy, *Early Violence Exposure and Self-Regulatory Development: A Bioecological Systems Perspective*, 56 HUM. DEV. 254 (2013).

8. Gilad, *supra* note 2, at 8.

9. *Id.*

10. Roper v. Simmons, 543 U.S. 551, 569-70 (2005). See also Jessica Feerman et al., *The Eighth Amendment Evolves: Defining Cruel and Unusual Punishment Through the Lens of Childhood and Adolescence*, 15 U. PA. J.L. & SOC. POL'Y 285, 294-97 (2012).

11. Gilad, *supra* note 2, at 8.

12. Stephanie Holt et al., *The Impact of Exposure to Domestic Violence on Children and Young People: A Review of the Literature*, 32 CHILD ABUSE & NEGLECT 797, 802 (2008); Margolin & Gordis, *supra* note 5, at 449. See generally Sue Boney-McCoy & David Finkelhor, *Psychosocial Sequelae of Violent Victimization in a National Youth Sample*, 63 J. CONSULTING & CLINICAL PSYCHOL. 726 (1995);

immaturity also makes it difficult for children to process and cope with trauma without assistance.¹³ Children are at increased risk that damage caused by exposure at this delicate developmental stage will become permanently embedded in their core personality structure.¹⁴

Because of their social and psychological immaturity, children are dependent on adults for their survival and basic psychological and emotional needs.¹⁵ As a consequence, they have little choice over their living environment¹⁶ and the people they associate with. Additionally, they do not have the capabilities or resources to remove themselves from harmful circumstances created by crime and violence.¹⁷ When caregivers are incapacitated by victimization, illicit substance abuse, or incarceration, their ability to make coherent fundamental decisions on behalf of their children, and to fully consider the child's best interests, is inevitably diminished.¹⁸ The dependent children, therefore, are often deprived of the care, guidance, and protection essential for their development.

Lastly, children are in the midst of legal socialization¹⁹ — the process through which they develop an inclination towards compliance with the law and cooperation with legal actors.²⁰ The

Suzanne G. Martin, *Children Exposed to Domestic Violence: Psychological Considerations for Health Care Practitioners*, 16 *HOLISTIC NURSING PRAC.* 7 (2002); Jennifer E. McIntosh, *Thought in the Face of Violence: A Child's Need*, 26 *CHILD ABUSE & NEGLECT* 229 (2002).

13. Jessica Feierman et al., *supra* note 10, at 296–97; Margolin & Gordis, *supra* note 5, at 450.

14. Linda G. Mills, *The Justice of Recovery: How the State Can Heal the Violence of Crime*, 57 *HASTINGS L.J.* 457, 486 (2005).

15. Gilad, *supra* note 2, at 9; Elizabeth Scott, *The Legal Construction of Childhood*, 29 *HOFSTRA U. L. REV.* 547, 550 (2000).

16. Gilad, *supra* note 2, at 9.

17. Brief for Am. Psychol. Ass'n et al. as Amici Curiae Supporting Petitioners at 14–15, *Graham v. Florida*, 560 U.S. 48, 52 (2010) (Nos. 08-7412, 08-7621), <http://www.apa.org/about/offices/ogc/amicus/graham-v-florida-sullivan.pdf> [<https://perma.cc/FGV4-5MXB>]; Alan E. Kazdin, *Adolescent Development, Mental Disorders, and Decision Making of Delinquent Youths*, in *YOUTH ON TRIAL* 47 (Thomas Grisso & Robert G. Schwartz eds., 2000); *Miller v. Alabama*, 567 U.S. 460 (2012). Although this series of Supreme Court cases, including *Roper*, *Graham*, and *Miller*, dealt with juvenile offenders rather than victims, the court and amici's analysis of scientific developmental psychology is useful for an understanding of the special needs of juvenile and their unique characteristics and behavioral traits. David Finkelhor & Patricia Y. Hashima, *The Victimization of Children & Youth: A Comprehensive Overview*, in *LAW AND SOCIAL SCIENCE PERSPECTIVES ON YOUTH AND JUSTICE* 49, 59–61 (S.O. White ed., 2001).

18. See Margolin & Gordis, *supra* note 5, at 451.

19. Gilad, *supra* note 2, at 10.

20. Jeffrey Fagan & Tom R. Tyler, *Legal Socialization of Children and Adolescent*, 18 *SOC. JUST. RES.* 217, 219–22 (2005). See generally Jeffrey Fagan et al.,

process is highly influenced by childhood experiences with crime, law enforcement, legal actors, and the justice system.²¹ Disruption of this fundamental developmental process,²² particularly as a result of childhood exposure to crime, could increase proclivity towards criminal behavior and illicit substance abuse later in life.²³

These fundamental differences between children and adults necessitate specialized legal solutions tailored specifically to the unique needs of minor children, rather than superimposing improper, adult-oriented policies on them. Accounting for these differences will set solid foundations for effectively protecting this especially vulnerable group.

Empirical studies also show that due to the aforementioned differences between adults and minor children, the understanding of crime-induced harm to children must be expanded beyond the conventional perspective of direct victimization.²⁴ That is to say, even when a criminal offense is not committed directly against the body of the child, and the child is “only” indirectly exposed to a crime, this indirect exposure can leave marks that are acute and long-lasting.²⁵

Developmental Trajectories of Legal Socialization Among Adolescent Offenders, 96 J. CRIM. L. & CRIMINOLOGY 267 (2005).

21. Gilad, *supra* note 2, at 11; Fagan & Tyler, *supra* note 20, at 217.

22. Gilad, *supra* note 2, at 11.

23. *Id.*; Cathy Spatz Widom, *Child Victims: Searching for Opportunities to Break the Cycle of Violence*, 7 APPLIED & PREVENTIVE PSYCHOL. 225, 226 (1998). See generally Dean G. Kilpatrick et al., *Risk Factors for Adolescent Substance Abuse and Dependence: Data from a National Sample*, 68 J. CONSULTING & CLINICAL PSYCHOL. 19 (2000).

24. See David Finkelhor, *Developmental Victimology: The Comprehensive Study of Childhood Victimization*, in VICTIMS OF CRIME 9, 12 (R.C. David et al. eds., 3d ed. 2007); Margolin & Gordis, *supra* note 5, at 450; Olofsson et al., *supra* note 1, at 2.

25. See ROBERT L. LISTENBEE ET AL., REPORT OF THE ATTORNEY GENERAL'S NATIONAL TASK FORCE ON CHILDREN EXPOSED TO VIOLENCE 66 (Dec. 20, 2012), <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf> [<https://perma.cc/PF7V-YHL7>]; Ilan Harpaz-Rotem et al., *Clinical Epidemiology of Urban Violence: Responding to Children Exposed to Violence in Ten Communities*, 22 J. INTERPERSONAL VIOLENCE 1479, 1480 (2007); William W. Harris et al., *In the Best Interests of Society*, 48 J. CHILD PSYCHOL. & PSYCHIATRY & ALLIED DISCIPLINES 392, 392 (2007); Ruth Gilbert et al., *Burden and Consequences of Child Maltreatment in High-Income Countries*, 373 LANCET 68, 68 (2009); Helen W. Wilson & Cathy Spatz Widom, *Pathways from Childhood Abuse and Neglect to HIV-Risk Sexual Behavior in Middle Adulthood*, 79 J. CONSULTING & CLINICAL PSYCHOL. 236, 236 (2011). See generally Tyrone Bentley & Cathy Spatz Widom, *A 30-Year Follow-Up of the Effects of Child Abuse and Neglect on Obesity in Adulthood*, 17 OBESITY 1900 (2009); Preeti Chauhan & Cathy Spatz Widom, *Childhood Maltreatment and Illicit Drug Use in Middle Adulthood: The Role of Neighborhood Characteristics*, 24 DEV. & PSYCHOPATHOLOGY 723 (2012); Janet Currie & Cathy Spatz Widom, *Long-Term Consequences of Child Abuse and*

In response to these findings, we designed the Triple-C Impact concept to incorporate the full range of direct and indirect forms of exposure to crime that commonly affect children. When evaluating which forms of childhood crime exposure should be included under the Triple-C Impact umbrella, the primary criterion we used was whether there is significant empirical evidence that supports and demonstrates potential harm to the child that rises to, or nearly meets, the harm caused by the “gold standard” of direct victimization.²⁶ Meticulous review of over 150 studies examined the many aspects of the effects that exposure to crime has on all facets of children’s lives and identified five categories of exposure that meet this rigorous standard. These are direct victimization, exposure to family crime, exposure to community crime, parental victimization, and parental incarceration.²⁷ As science evolves and advances, this list could change to adapt to new findings, relying on similar harm-based criteria.²⁸

As noted, the first and most obvious and commonly recognized form of exposure to crime is direct victimization. It occurs when an act defined by law as a criminal offense is committed against the person of the child. As a result, the child can be physically injured during the act, suffer emotional and mental impairments, or both.²⁹

Neglect on Adult Economic Well-Being, 15 CHILD MALTREATMENT 111 (2010); Valentina Nikulina et al., *The Role of Childhood Neglect and Childhood Poverty in Predicting Mental Health, Academic Achievement and Crime in Adulthood*, 48 AM. J. COMMUNITY PSYCHOL. 309 (2011); Cathy Spatz Widom et al., *A Prospective Investigation of Physical Health Outcomes in Abused and Neglected Children: New Findings from a 30-Year Follow-Up*, 102 AM. J. PUB. HEALTH 1135 (2012); Cathy Spatz Widom et al., *Childhood Victimization and Lifetime Revictimization*, 32 CHILD ABUSE & NEGLECT 785 (2008).

26. Due consideration should be given to the fact that children are not all equally affected by crime victimization and trauma. Some children are deeply traumatized by victimization, whether direct or indirect, while others exhibit high levels of resilience. See generally Finkelhor & Hashima, *supra* note 17, at 12. The exact combination of factors that allow some children to develop higher levels of resilience than others is not yet fully understood. However, factors such as age, gender, relationship with the caregiver, personal strengths and vulnerabilities, characteristics of the child’s family and community, and the frequency and severity of the victimization, were shown by empirical research to have an effect on children’s responses. BETSY MCALISTER GROVES ET AL., FAM. VIOLENCE PREVENTION FUND, IDENTIFYING AND RESPONDING TO DOMESTIC VIOLENCE: CONSENSUS RECOMMENDATIONS FOR CHILD AND ADOLESCENTS HEALTH 6 (2004), <http://www.futureswithoutviolence.org/userfiles/file/HealthCare/pediatric.pdf> [<https://perma.cc/H3VB-NS8S>]; see ANNE PETERSEN ET AL., NEW DIRECTIONS IN CHILD ABUSE AND NEGLECT 17 (2013).

27. Gilad, *supra* note 2, at 11–29.

28. *Id.* at 28.

29. McCoy, *supra* note 7, at 259.

Few data sources exist that measure the number of children affected by crime across the nation. To provide the most accurate prevalence indicators for the Triple-C Impact categories outlined below, we utilized the raw data of the National Survey of Children's Exposure to Violence (NatSCEV III).³⁰ We designed a customized analysis model of this nationally representative dataset that tallies the categories and definitions of the Triple-C Impact.³¹ Our analysis found that 52.31% of minor children nationwide were direct victims of a violent crime during their childhood years.³² This includes physical assault with or without a weapon, sexual assault and kidnapping, or attempts to commit any of these acts against the child. When the prevalence percentages are synthesized with population estimates, the result indicates that 38.8 million minor children were direct victims of a violent crime nationwide.³³ Boys are affected at a higher rate than girls, 56.14% compared to 48.3%.³⁴ This is the category in which the difference between boys and girls is the most significant.

The second and most well-known manifestation of indirect exposure to crime is witnessing family crime and violence. These are

30. Collected by Dr. David Finkelhor et al., the National Survey of Children's Exposure to Violence (NatSCEV) includes a representative sample of U.S. telephone numbers from August 28, 2013 to April 30, 2014. Via telephone interviews, self-reported information was obtained from 4,000 children zero to seventeen years old, with information about exposure to violence, crime, and abuse provided by youth ten to seventeen years old and by caregivers for children zero to nine years old. It is important to note that only the raw survey data was used in our analysis. The definitions and categories of our analysis differ from those used by Dr. Finkelhor's team, and therefore our results also vary from those presented in their published study. For comparison, see David Finkelhor et al., *Prevalence of Childhood Exposure to Violence, Crime, and Abuse: Results from the National Survey of Children's Exposure to Violence*, 169 JAMA PEDIATRICS 746, 752 (2015).

31. All the statistical figures included in Part I of this Article are derived from the authors original analysis of the NatSCEV data.

32. Full analysis results are archived with the authors.

33. The calculation is based on a population estimate of 74,182,000 children under the age of eighteen living in the U.S., based on the official 2010 Census data. See generally William O'Hare, *The Changing Child Population of the United States: Analysis of Data from the 2010 Census* (Nov. 2011), <http://www.aecf.org/m/resourcedoc/AECF-ChangingChildPopulation-2011-Full.pdf> [<https://perma.cc/9WSW-V8XQ>]. Although more current population estimates exist, no significant change in the number children under the age of eighteen was noted since 2010. See, e.g., *POP1 Child Population: Number of Children (in Millions) Ages 0-17 in the United States by Age, 1950-2017 and Projected 2018-2050*, FED. INTERAGENCY F. ON CHILD AND FAM. STAT., <https://www.childstats.gov/americaschildren/tables/pop1.asp> [<https://perma.cc/V2RU-APH6>] [hereinafter *POP1 Child Population*].

34. Full analysis results are archived with the authors.

cases where the child witnesses³⁵ a crime committed in the home, among immediate family members, but does not suffer direct physical harm as a result of the witnessed crime. The presence of crime and violence in the home disrupts the sense of safety, security, and stability that this environment is meant to foster in a child, which is vital for healthy development.³⁶ Affected children are often preoccupied with fear of losing a parent, whether it is the battered parent who is in imminent danger of being severely injured or killed,³⁷ or the batterer who may be incarcerated or even executed.³⁸ The developmentally ego-centric thinking of children frequently leads them to be burdened by profound guilt, as they are inclined to believe that they are at fault for causing the violence, or that they could or should have done something to prevent it.³⁹ Affected children also describe deep confusion and ambivalence towards both parents, including “fear and empathy” towards the abuser, and “compassion

35. For the purpose of this Article, a child is considered to be a witness to a crime when he or she perceives the criminal incident through any one of his or her senses (sight, hearing, etc.) or observes the aftermath of the crime (injuries, damage to property, etc.).

36. Gilad, *supra* note 2, at 16. See LISTENBEE ET AL., *supra* note 25, at 32; Holt et al., *supra* note 12, at 802–03. See generally E. Mark Cummings et al., *Children and Violence: The Role of Children’s Regulation in the Marital Aggression-Child Adjustment Link*, 12 CLINICAL CHILD & FAM. PSYCHOL. REV. 3 (2009); Martin, *supra* note 12; McIntosh, *supra* note 12; Suzanne C. Perkins et al., *The Mediating Role of Self-Regulation Between Intrafamilial Violence and Mental Health Adjustment in Incarcerated Male Adolescents*, 27 J. INTERPERSONAL VIOLENCE 1199 (2012).

37. See Patrick T. Davies et al., *Child Emotional Security and Interparental Conflict*, 67 MONOGRAPHS SOC’Y RES. CHILD DEV. 10 (2002); E. Mark Cummings et al., *Interparental Discord and Child Adjustment: Prospective Investigations of Emotional Security as an Explanatory Mechanism*, 77 CHILD DEV. 132, 134 (2006); Daniel S. Schechter et al., *Distorted Maternal Mental Representations and Atypical Behavior in a Clinical Sample of Violence-Exposed Mothers and Their Toddlers*, 9 J. TRAUMA & DISSOCIATION 123, 129 (2008). See generally Alexander J. Botsis et al., *Parental Loss and Family Violence as Correlates of Suicide and Violence Risk*, 25 SUICIDE & LIFE-THREATENING BEHAV. 253 (1995); Theodore Gaensbauer et al., *Traumatic Loss in a One-Year-Old Girl*, 34 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 520 (1995).

38. See Elizabeth Beck & Sandra J. Jones, *Children of the Condemned: Grieving the Loss of a Father to Death Row*, 56 OMEGA 191, 194 (2007).

39. Gilad, *supra* note 2, at 16; Holt et al., *supra* note 12, at 803; LISTENBEE ET AL., *supra* note 25, at 32. See Andrée Fortin et al., *Children’s Appraisals as Mediators of the Relationship Between Domestic Violence and Child Adjustment*, 26 VIOLENCE & VICTIMOLOGY 377, 381 (2011); Patrick T. Davies et al., *Pathways Between Profiles of Family Functioning, Child Security in the Interparental Subsystem, and Child Psychological Problems*, 16 DEV. & PSYCHOPATHOLOGY 525, 547 (2004).

[for,] coupled with a sense of obligation to protect[,]” the abused.⁴⁰ The rattling presence of violence in the home can also lead to erroneous beliefs: the conceptualization that aggression is a functional and legitimate part of intimate relationships and family dynamics,⁴¹ and the belief that men are intrinsically dominant and privileged.⁴²

Ongoing exposure to aggression in the immediate home environment is also shown to put the child at potential risk of adopting anti-social rationalization for their own abusive behavior or for abuse perpetrated against them,⁴³ thus contributing to the creation of an inter-generational cycle of violence.⁴⁴ Additionally, preoccupation with dysfunctional home dynamics saturated with violence is likely to make parents less available as effective caregivers — the abuser is perceived as “unpredictable and frightening,” while the abused parent is distracted by basic concerns for their own, as well as the child’s, safety and survival.⁴⁵ The cumulative effect of these factors leads experts in the field to conclude that childhood exposure to family violence “has the potential to induce catastrophic and long-term trauma in the child-witness.”⁴⁶ Further, the fact that a child has not exhibited distinct symptoms of trauma during childhood does not

40. Gilad, *supra* note 2, at 16–17; Hadass Goldblatt, *Strategies of Coping Among Adolescents Experiencing Interparental Violence*, 18 J. INTERPERSONAL VIOLENCE 532, 542 (2003); Holt et al., *supra* note 12, at 802.

41. See Joy D. Osofsky, *Prevalence of Children’s Exposure to Domestic Violence and Child Maltreatment: Implications for Prevention and Intervention*, 6 CLINICAL CHILD & FAM. PSYCHOL. REV. 161, 165 (2003). See generally Sandra A. Graham-Bermann & Victoria Brescoll, *Gender, Power and Violence: Assessing the Family Stereotypes of the Children of Batterers*, 14 J. FAM. PSYCHOL. 600 (2000); George W. Holden, *Children Exposed to Domestic Violence and Child Abuse: Terminology and Taxonomy*, 6 CLINICAL CHILD & FAM. PSYCHOL. REV. 151 (2003).

42. Graham-Bermann & Brescoll, *supra* note 41, at 605.

43. Holt et al., *supra* note 12, at 803.

44. See K. Daniel O’Leary et al., *Multivariate Models of Men’s and Women’s Partner Aggression*, 75 J. CONSULTING & CLINICAL PSYCHOL. 752, 761 (2007); Christine Wekerle & David A. Wolfe, *Dating Violence in Mid-Adolescence: Theory, Significance, and Emerging Prevention Initiatives*, 19 CLINICAL PSYCHOL. REV. 435, 442 (1999); Alytia A. Levendosky et al., *Adolescent Peer Relationships and Mental Health Functioning in Families with Domestic Violence*, 31 J. CLINICAL CHILD PSYCHOL. 206, 207 (2002).

45. Gilad, *supra* note 2, at 17; Margolin & Gordis, *supra* note 5, at 451; Gayla Margolin, *Effects of Domestic Violence on Children*, in VIOLENCE AGAINST CHILDREN IN THE FAMILY AND THE COMMUNITY 90 (Penelope K. Trickett & Cynthia J. Schellenbach eds., 1998).

46. Gilad, *supra* note 2, at 19; Kym L. Kilpatrick & L. M. Williams, *Potential Mediators of Post-Traumatic Stress Disorder in Child Witnesses of Domestic Violence*, 22 CHILD ABUSE & NEGLECT 328 (1998).

necessarily mean that the child is unaffected by the violence, as the child may still develop physical or emotional symptoms later in life.⁴⁷

Our analysis found that more than one in every five children is exposed to family violence, a total of 22.94%.⁴⁸ This includes violent physical assault of a parent by a spouse, violent assault of a sibling by a parent (beyond spanking), other violent altercation between immediate family members at the home, and violent destruction of property. When translated to numerical figures, over seventeen million children living in the U.S. today witnessed a crime in their own home before turning eighteen.⁴⁹ This is the only category in which girls experience a slightly higher risk of exposure, at 24%, compared with 21.93% of boys.

Third, even when the child's home environment is violence-free, the child could be exposed to community crime.⁵⁰ The child may witness criminal activity outside the home, among non-relatives, around the neighborhood or at school.⁵¹ Although the child is not directly physically injured, significant harm can result from this kind of traumatic exposure.⁵² Negative effects have been documented for children who witnessed community violence directly through sight or sound, as well as for those who only heard about the violence after the fact.⁵³ Children living in economically impoverished families and communities are particularly prone to this form of exposure to community crime.⁵⁴

47. See Margolin & Gordis, *supra* note 5, at 446; Jennifer E. McIntosh, *Children Living with Domestic Violence: Research Foundations for Early Intervention*, 9 J. FAM. STUD. 219, 224–26 (2003); Holt et al., *supra* note 12, at 806.

48. Full analysis results are archived with the authors.

49. The calculation is based on a population estimate of 74,182,000 children under the age of eighteen living in the U.S. For this calculation, we used the official 2010 Census data. See generally O'Hare, *supra* note 33. Although more current population estimates exist, no significant change in the number children under the age of eighteen was noted since 2010. See, e.g., *POP1 Child Population*, *supra* note 33.

50. Gilad, *supra* note 2, at 19.

51. *Id.*

52. *Id.*

53. *Id.*; Michael Lynch, *Consequences of Children's Exposure to Community Violence*, 6 CLINICAL CHILD & FAM. PSYCHOL. REV. 265, 267 (2003); see Patrick T. Sharkey et al., *The Effect of Local Violence on Children's Attention and Impulse Control*, 102 AM. J. PUB. HEALTH 2287, 2287 (2012); Patrick T. Sharkey, *The Acute Effect of Local Homicides on Children's Cognitive Performance*, 107 PNAS 11733, 11733 (2010). See generally Dawn K. Wilson, *Violence Exposure, Catecholamine Excretion, and Blood Pressure Non-Dipping Status in African-American Male Versus Female Adolescents*, 64 PSYCHOSOMATIC MED. 906 (2002).

54. Gilad, *supra* note 2, at 19–20. See generally Lin Huff-Corzine & Jay Corzine, *Deadly Connections: Culture, Poverty, and the Direction of Lethal Violence*, 69 SOC.

Like the home, the neighborhood and school are considered to be part of a child's primary safe haven.⁵⁵ Exposure to crime and violence in these environments can eviscerate the protective and comforting qualities necessary for proper development of the child's sense of security and trust.⁵⁶ Children might interpret their inability to feel safe in their own schools and neighborhoods to mean that the world itself is unsafe, and that "relationships are too fragile to trust because one never knows when violence will take the life of a friend or loved one."⁵⁷ This can often lead to a state of hypervigilance, where the child is constantly wired and anticipates an outbreak of violence.⁵⁸ Some children may resort to believing that they are unworthy of safety and protection, affecting their self-esteem and perception of self-worth.⁵⁹ Exposure to community crime may also lead the child to believe that violence is "normal"⁶⁰ and to feel compelled to resort to aggression, gangs, or criminal activity to avoid being targeted and viewed as weak.⁶¹

Living in a community saturated with crime and violence may also negatively affect parents' caretaking abilities due to their own feelings of helplessness, fear, and grief.⁶² Indeed, "[e]fforts to protect the

FORCES 55 (1991); Carol B. Cunradi et al., *Neighborhood Poverty as a Predictor of Intimate Partner Violence Among White, Black, and Hispanic Couples in the United States: A Multilevel Analysis*, 10 ANNALS EPIDEMIOLOGY 297 (2000); Lisa A. Goodman et al., *When Crises Collide: How Intimate Partner Violence and Poverty Intersect to Shape Women's Mental Health and Coping*, 10 TRAUMA VIOLENCE ABUSE 306 (2009).

55. Gilad, *supra* note 2, at 20; Margolin & Gordis, *supra* note 5, at 449.

56. Gilad, *supra* note 2, at 20; Margolin & Gordis, *supra* note 5, at 449.

57. Gilad, *supra* note 2, at 20–21; LISTENBEE ET AL., *supra* note 25, at 4.

58. Gilad, *supra* note 2, at 20. See P.J. Fowler et al., *Community Violence: A Meta-Analysis on the Effect of Exposure and Mental Health Outcomes of Children and Adolescents*, 21 DEV. & PSYCHOPATHOLOGY 227, 228 (2009); Michel Janosz et al., *Are There Detrimental Effects of Witnessing School Violence in Early Adolescence?*, 43 J. ADOLESCENT HEALTH 600, 601 (2008); Nancy Shields et al., *The Effects of Community Violence on Children in Cape Town, South Africa*, 32 CHILD ABUSE & NEGLECT 589 (2008). See generally Wendy Kliwer & Terri N. Sullivan, *Community Violence Exposure, Threat Appraisal, and Adjustment in Adolescents*, 37 J. CLINICAL CHILD & ADOLESCENT PSYCHOL. 860 (2008).

59. Gilad, *supra* note 2, at 20. Michael Lynch & Dante Cicchetti, *An Ecological Transactional Analysis of Children and Contexts: The Longitudinal Interplay Among Child Maltreatment, Community Violence, and Children's Symptomatology*, 10 DEV. PSYCHOPATHOLOGY 235, 252 (1998); Margolin & Gordis, *supra* note 5, at 458.

60. LISTENBEE ET AL., *supra* note 25, at 33.

61. *Id.*; Gilad, *supra* note 2, at 21. See Shields et al., *supra* note 58, at 591; Catherine A. Taylor et al., *Cumulative Experiences of Violence Among High-Risk Urban Youth*, 23 J. INTERPERSONAL VIOLENCE 1618, 1629 (2008).

62. Gilad, *supra* note 2, at 21.

child may be exhibited in authoritarian and restrictive parenting practices, as well as in certain precautions that may heighten the child's anxiety."⁶³ Other parents may yield to the sense of helplessness and cease any efforts to protect the child at all.⁶⁴ Nationally, community violence was found to affect 34.87% of children, or 25.8 million children nationwide⁶⁵ — 36.83% of boys and 32.81% of girls.⁶⁶ This measure includes witnessing assault with or without a weapon, witnessing shooting, bombing or violent street riots, and witnessing illegal drug trade.

Fourth, when the child's parent is a victim of a violent crime, the child is often affected by proxy.⁶⁷ When a parent is victimized, the child can be harmed even when the child is not a witness to the crime against the parent,⁶⁸ “[s]imply put, the well-being of a child is inextricably linked to the well-being of the adults in his or her life”⁶⁹ The most extreme scenario of victimized parents is homicide cases, when a child loses a parent to crime.⁷⁰ More common cases are parents who have experienced violent victimization in childhood or adulthood and suffer harmful consequences that spill over to their children.⁷¹

The effect of parental victimization is found to be most severe when the parent does not receive treatment and services to facilitate recovery.⁷² Victimized parents are more likely than non-victimized caregivers to suffer from a range of mental health problems and to be in poorer physical health.⁷³ Some evidence shows that victimization

63. *Id.*; Margolin & Gordis, *supra* note 5, at 452.

64. Gilad, *supra* note 2, at 21.

65. The calculation is based on a population estimate of 74,182,000 children under the age of eighteen living in the U.S. For this calculation we used the official 2010 Census data. *See generally* O'Hare, *supra* note 33. Although more current population estimates exist, no significant change in the number children under the age of eighteen was noted since 2010. *See, e.g., POPI Child Population, supra* note 33.

66. Full analysis results are archived with the authors.

67. Gilad, *supra* note 2, at 22.

68. *Id.* This differs from the category of exposure to family crime and violence, when the child perceives the crime in one of their senses and is considered a direct witness.

69. *Id.*; LISTENBEE ET AL., *supra* note 25, at 110.

70. Gilad, *supra* note 2, at 22.

71. *Id.* *See generally* Jennie G. Noll et al., *The Cumulative Burden Borne by Offspring Whose Mothers Were Sexually Abused as Children: Descriptive Results from a Multigenerational Study*, 24 J. INTERPERSONAL VIOLENCE 424 (2009).

72. Cindy E. Weisbart et al., *Child and Adult Victimization: Sequelae for Female Caregivers of High-Risk Children*, 13 CHILD MALTREATMENT 235, 242 (2008).

73. *Id.*

against the parents may affect parenting skills and, thus, influence the interactions between parent and child.⁷⁴ Survivors of victimization may have difficulties establishing clear generational boundaries with their children and be over-permissive as parents, or, conversely, they might exhibit overly restrictive parenting practices and be more inclined to use harsh physical discipline.⁷⁵ Crime-induced trauma can compromise “a parent’s ability to play a stable, consistent role in the child’s life,” and to remain “emotionally available, sensitive, and responsive to their children.”⁷⁶ A victimized parent who is depressed or overwhelmed because of past victimization may have difficulty maintaining structure or managing children’s inability to understand and control their own emotions, coloring their children’s experience of emotional expression.⁷⁷ Parental victimization has also been found to affect the quality of attachment between parent and child.⁷⁸

74. Gilad, *supra* note 2, at 23; Holt et al., *supra* note 12, at 800–01; LISTENBEE ET AL., *supra* note 25, at 32–33. See generally Heidi N. Bailey et al., *The Impact of Childhood Maltreatment History on Parenting: A Comparison of Maltreatment Types and Assessment Methods*, 36 CHILD ABUSE & NEGLECT 236 (2012); Patrick T. Davies et al., *A Process Analysis of the Transmission of Distress from Interparental Conflict to Parenting: Adult Relationship Security as an Explanatory Mechanism*, 45 DEV. PSYCHOL. 176 (2009).

75. Gilad, *supra* note 2, at 23; David DiLillo, *Parenting Characteristics of Women Reporting a History of Childhood Sexual Abuse*, 8 CHILD MALTREATMENT 319, 323–24 (2003); Margolin & Gordis, *supra* note 5, at 452. See Richard Thompson, *Mothers’ Violence Victimization and Child Behavior Problems: Examining the Link*, 77 AM. J. ORTHOPSYCHIATRY 306, 307 (2007). See generally George W. Holden, *Parenting Behaviour and Beliefs of Battered Women*, in CHILDREN EXPOSED TO MARITAL VIOLENCE: THEORY, RESEARCH, AND APPLIED ISSUES (George W. Holden et al. eds., 1998); Carol Coohy, *Battered Mothers Who Physically Abuse Their Children*, 9 J. INTERPERSONAL VIOLENCE 943 (2004).

76. Joy D. Osofsky, *The Impact of Violence on Children*, 9 DOMESTIC VIOLENCE & CHILD. 33, 40–41 (1999). See generally Kihyun Kim et al., *Childhood Experiences of Sexually Abused and Comparison Girl*, 34 CHILD ABUSE & NEGLECT 610 (2010); Eli Buchbinder, *Motherhood of Battered Women: The Struggle for Repairing the Past*, 23 CLINICAL SOC. WORK J. 307 (2004); Alytia A. Levendosky & Sandra A. Graham-Bermann, *Parenting in Battered Women: The Effects of Domestic Violence on Women and Their Children*, 16 J. FAM. VIOLENCE 171, 184–86 (2001); McIntosh, *supra* note 12; Melanie Marysko et al., *History of Childhood Abuse Is Accompanied by Increased Dissociation in Young Mothers Five Months Postnatally*, 43 PSYCHOPATHOLOGY 104 (2010); Holden, *supra* note 41.

77. See Buchbinder, *supra* note 76, at 321; McIntosh, *supra* note 12, at 234; see also Holden, *supra* note 41, at 66. See generally Levendosky & Graham-Bermann, *supra* note 76; Osofsky, *supra* note 76.

78. See Holt et al., *supra* note 12, at 800–02; Levendosky & Graham-Bermann, *supra* note 76, at 184; Osofsky, *supra* note 76, at 41. See generally Alytia A. Levendosky et al., *The Impact of Domestic Violence on the Maternal–Child Relationship and Preschool-Age Children’s Functioning*, 17 J. FAM. PSYCHOL. 275 (2003); see also HEDY CLEAVER ET AL., CHILDREN’S NEEDS—PARENTING CAPACITY,

Victimized parents, particularly in cases of ongoing victimization, may be “living in constant fear” and so “may deny their children normal developmental transitions and the sense of basic trust and security that is the foundation of healthy emotional development.”⁷⁹

Parental victimization has considerable detrimental impacts on child development, behavior, and the child’s relationship with the parent. This is true even when the child has no awareness or direct exposure to the criminal act committed against the parent. As of August 2018, there is no known data on the state or national level that measures the number of children affected by parental victimization in the United States. This is the only category for which estimations of the extent of exposure are completely unknown. Hopefully, by raising awareness of the cumulative impact that parental victimization has on children, more attempts will be made by state agencies and empirical scientists to assess the prevalence of this form of childhood crime exposure.

The fifth and last form of exposure to crime identified under the Triple-C Impact umbrella is parental incarceration — when a child is separated from a primary caregiver as a result of the caregiver’s confinement in a correction facility. Incarceration of a parent normally results in severe economic, social, and psychological consequences to the child and may have life-long repercussions.⁸⁰

THE IMPACT OF PARENTAL MENTAL ILLNESS, PROBLEM ALCOHOL AND DRUG USE, AND DOMESTIC VIOLENCE ON CHILDREN’S DEVELOPMENT 63 (1999).

79. Osofsky, *supra* note 76, at 40; see Holt et al., *supra* note 12, at 801. See generally Alytia A. Levendosky et al., *Mothers’ Perceptions of the Impact of Woman Abuse on Their Parenting*, 6 VIOLENCE AGAINST WOMEN 248 (2000); Levendosky & Graham-Bermann, *supra* note 76.

80. See generally Sarah Abramowicz, *Rethinking Parental Incarceration*, 82 U. COLO. L. REV. 793 (2011); Joseph Murray et al., *Children’s Antisocial Behavior, Mental Health, Drug Use, and Educational Performance After Parental Incarceration: A Systematic Review and Meta-Analysis*, 138 PSYCHOL. BULL. 175 (2012); Danielle H. Dallaire, *Children with Incarcerated Mothers: Developmental Outcomes, Special Challenges and Recommendations*, 28 J. APPLIED DEV. PSYCHOL. 15 (2007); Amanda Burgess-Proctor et al., *Comparing the Effects of Maternal and Paternal Incarceration on Adult Daughters’ and Sons’ Criminal Justice System Involvement*, 43 CRIM. JUST. & BEHAV. 1034 (2016); Rucker C. Johnson, *Ever-Increasing Levels of Parental Incarceration the Consequences and for Children*, in DO PRISONS MAKE US SAFER? THE BENEFITS AND COSTS OF THE PRISON BOOM 177 (Steven Raphael & Michael A. Stoll eds., 2009); Melinda Tasca et al., *Family and Residential Instability in the Context of Paternal and Maternal Incarceration*, 38 CRIM. JUST. & BEHAV. 231 (2011); Rosa Minhyo Cho, *Maternal Incarceration and Children’s Adolescent Outcomes: Timing and Dosage*, 84 SOC. SERV. REV. 257 (2010); Amanda Geller et al., *Parental Incarceration and Child Wellbeing: Implications for Urban Families*, 90 SOC. SCI. Q. 1186, 1191–92 (2009). See generally Raymond R. Swisher & Unique R. Shaw-Smith, *Parental Incarceration and*

When the incarcerated parent is the primary caregiver, the family's life is profoundly disrupted. The child is usually uprooted and may be separated not only from the incarcerated parent but also from siblings, other relatives, and friends. The child is at risk of being moved frequently between different caregivers and even becoming a ward of the state.⁸¹ Maintaining a close relationship and regular contact with the incarcerated parent is a significant challenge.⁸² If the child is too young to fully understand the reasons for the parent's "disappearance," destructive feelings of self-blame and anger can emerge.⁸³ The caregiver who remains with the child might struggle to provide support and to find a suitable way to convey the information to the child in an age-appropriate manner. Economic hardship is another likely result of parental incarceration, due to added legal expenses and loss of income or social benefits.⁸⁴ Lastly, the child is likely to be subjected to negative stigma and shame associated with parental incarceration.⁸⁵

This is the most controversial and seldom recognized group of Triple-C Impacted children, due to the strong association between a child's status and the perceived moral wrongdoing or blameworthiness of the parent. Children suffering from parental

Adolescent Well-Being: Life Course Contingencies and Other Moderators, 104 J. CRIM. L. & CRIMINOLOGY 929 (2015); ROSS PARKE & K. ALISON CLARKE-STEWART, EFFECTS OF PARENTAL INCARCERATION ON YOUNG CHILDREN, FROM PRISON TO HOME (Jan. 2002), <https://www.urban.org/sites/default/files/publication/60691/410627-Effects-of-Parental-Incarceration-on-Young-Children.PDF> [<https://perma.cc/N5YQ-36DR>].

81. See Donna K. Metzler, *Neglected by the System: Children of Incarcerated Mothers*, 82 ILL. BAR J. 428, 430 (1994); Murray et al., *supra* note 80, at 177; Abramowicz, *supra* note 80, at 814.

82. See generally Michal Gilad & Tal Gat, *U.S. v. My Mommy: Evaluation of Prison Nurseries as a Solution for Children of Incarcerated Women*, 37 N.Y.U. REV. L. & SOC. CHANGE 371 (2013).

83. NELL BERNSTEIN, ALL ALONE IN THE WORLD: CHILDREN OF THE INCARCERATED 143–48 (2005); see ALISON CUNNINGHAM & LINDA BAKER, INVISIBLE VICTIMS: THE CHILDREN OF WOMEN IN PRISON 5–6, VOICES OF CHILDREN (Dec. 2004), <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.555.9642&rep=rep1&type=pdf> [<https://perma.cc/W2CU-7ZT9>].

84. See DONALD BRAMAN, DOING TIME ON THE OUTSIDE: INCARCERATION AND FAMILY LIFE IN URBAN AMERICA 155–56 (2004); BERNSTEIN, *supra* note 83, at 115–16; Christopher Wildeman, *Parental Incarceration, Child Homelessness, and the Invisible Consequences of Mass Imprisonment*, 651 ANNALS AM. ACAD. 77 (2014).

85. See Abramowicz, *supra* note 80, at 815; Murray et al., *supra* note 80, at 178. See generally Denise Johnston, *Services for Children of Incarcerated Parents*, 50 FAM. CT. REV. 91 (2012); Julie Poehlmann, *Children of Incarcerated Mothers and Fathers*, 24 WIS. J.L. GENDER & SOC'Y 331 (2009).

incarceration are often referred to as the “invisible victims” of crime, as they are forced to bear the consequences of their parents’ criminal behavior and the system’s inability, or possibly unwillingness, to address their needs and mitigate the displayed harms.⁸⁶ At present, federal or state Departments of Corrections do not systematically collect data on the parental status of inmates. Only 40% of states collect such data in one form or another.⁸⁷ Our analysis reveals that 4.77% of children are estimated to be affected by either paternal or maternal incarceration at some point during childhood, amounting to over 3.5 million children.⁸⁸ Parental incarceration affects boys (5.16%) slightly more than girls (4.36%).⁸⁹

Overall, an astonishing 64.12%, or 47.56 million,⁹⁰ children living in the United States today are affected by at least one form of exposure to crime during their childhood.⁹¹ If we go one step further and apply these percentages to the total U.S. population, rather than only the population of minor children, we can conclude that there are approximately 210.5 million individuals walking among us, children and adults alike, who have been exposed to at least one category of the Triple-C Impact during their childhood.⁹² Boys are at a higher risk of exposure, at 66.49%, as compared to girls at 61.64%.⁹³

86. See generally CUNNINGHAM & BAKER, *supra* note 83; Wildeman, *supra* note 84; Rebecca Covington, *Incarcerated Mother, Invisible Child*, 31 EMORY INT’L L. REV. 99 (2016).

87. See *infra* Part II (explaining Triple-C Impact 50-States Survey results).

88. Full analysis results are archived with the authors.

89. Full analysis results are archived with the authors.

90. The calculation is based on a population estimate of 74,182,000 children under the age of eighteen living in the U.S. For this calculation, we used the official 2010 Census data. See LINDSAY M. HOWDEN & JULIE A. MEYER, AGE AND SEX COMPOSITION: 2010 2 tbl.1 (2001), <https://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf> [<https://perma.cc/H CZ5-RKR9>]. Although more current population estimates exist, no significant change in the number children under the age of eighteen was noted since 2010. See, e.g., *POPI Child Population*, *supra* note 33.

91. Full analysis results are archived with the authors.

92. This calculation is based on a population of 328,347,000. U.S. population estimate is taken from <https://www.census.gov/popclock/> [<https://perma.cc/6RAD-CV3E>]. We tested the validity of the application to total population (adults and minors combined) by comparing our data to the state collected Adverse Childhood Experience Data incorporated in the CDC BRFSS survey, <https://www.cdc.gov/brfss/index.html> [<https://perma.cc/GH2N-7HMA>]. The survey is a population representative sample that covers retrospective self-reporting by adults of experiences they endured during childhood.

93. Full analysis results are archived with the authors.

Population: % of Exposure Under Each of the Triple-C Impact Categories – Gender Distribution						
	Direct Victimization	Family Violence	Community Violence	Parental Incarceration	Parental Victimization	Any Exposure
Total	52.31	22.94	34.87	4.77	No Data	64.12
Male	56.14	21.93	36.83	5.16	No Data	66.49
Female	48.3	23.99	32.81	4.36	No Data	61.64

Our findings also reinforce the fact that the aforementioned categories are not mutually exclusive. It is often the case that children experience poly-victimization: They suffer from multiple forms of direct and/or indirect crime exposures simultaneously.⁹⁴ More than 25.2 million children, comprising 33.94% of children in the United States, are affected by two or more different types of exposure.⁹⁵ A further 2.08%, or 1.5 million children, are impacted by four or more of the categories included in this study.⁹⁶ When compared to single-category exposure, cumulative exposure compounded in poly-victimization exacerbates the harmful effect to the child.⁹⁷

Poly-Victimization: % of Exposure to Multiple Different Triple-C Impact Categories			
# of exposures ⁹⁸	Total %	Male %	Female %
0	35.88	33.51	38.36
1	30.18	31.75	28.52
2	19.2	19.04	19.37
3	12.66	12.53	12.79
4+	2.08	3.15	0.96

94. See generally David Finkelhor et al., *Poly-Victimization: A Neglected Component in Child Victimization*, 31 CHILD ABUSE & NEGLECT 7 (2007).

95. Full analysis results are archived with the authors.

96. Full analysis results are archived with the authors.

97. See generally Finkelhor et al., *supra* note 94; David Finkelhor et al., *Pathways to Poly-Victimization*, 14 CHILD MALTREATMENT 316 (2009); Heather A. Turner et al., *Poly-Victimization in a National Sample of Children and Youth*, 38 AM. J. PREVENTIVE MED. 323 (2010).

98. This column reflects the number of different Triple-C Impact categories a child has been exposed to (e.g., exposure to direct victimization in addition to exposure to community crime). It does not account for multiple exposures under the same category (e.g., a case of child abuse and a case of sexual abuse will both be counted under the direct victimization category, and therefore will be counted in this table as only 1 exposure).

These overwhelming figures make it clear that the Triple-C Impact problem is vast and expansive, rather than an isolated occurrence reserved to marginalized populations. As determined by the Attorney General Task Force, the problem is “not limited to one community or one group of children. It occurs among all ethnic and racial groups; in urban, suburban, and rural areas; in gated communities and on tribal lands.”⁹⁹ In fact, our analysis establishes that every child living in the U.S. is more likely than not to be stung by the venom of crime at one point or another during their tender childhood years.¹⁰⁰ The colossal magnitude of this problem is a fact that can no longer be ignored. Each one of the Triple-C Impact forms of exposure serves as a trigger that starts the snowball rolling down the hill. Assuming that crime is a fact of life that will remain present in society to some degree, even with earnest prevention efforts, it is important to turn our focus to what takes place on the slippery slopes, while the snowball gains size and speed.

II. IDENTIFYING GAPS IN LAW AND POLICY

A primary factor influencing the level of harm caused by the Triple-C Impact is the manner in which affected children are addressed, identified, managed, and treated.¹⁰¹ We conducted a fifty-state survey to better understand states’ varied responses to the

99. LISTENBEE ET AL., *supra* note 25, at viii.

100. Full analysis results are archived with the authors.

101. Gilad, *supra* note 2, at 29. See generally Susan J. Ko et al., *Creating Trauma-Informed Systems: Child Welfare, Education, First Responders, Health Care, Juvenile Justice*, 39 PROF. PSYCHOL. 396 (2008); Judith A. Cohen et al., *Community Treatment of Posttraumatic Stress Disorder for Children Exposed to Intimate Partner Violence: A Randomized Controlled Trial*, 165 ARCHIVES PEDIATRIC & ADOLESCENT MED. 16 (2011); LISTENBEE ET AL., *supra* note 25, at 66; Spatz Widom, *Child Victims, supra* note 23; Tamra B. Loeb et al., *Associations Between Child Sexual Abuse and Negative Sexual Experiences and Revictimization Among Women: Does Measuring Severity Matter?*, 35 CHILD ABUSE & NEGLECT 946 (2011); Sarah E. Ullman et al., *Child Sexual Abuse, Post-Traumatic Stress Disorder, and Substance Use: Predictors of Revictimization in Adult Sexual Assault Survivors*, 18 J. CHILD SEXUAL ABUSE 367 (2009); Taryn Lindhorst et al., *Mediating Pathways Explaining Psychosocial Functioning and Revictimization as Sequelae of Parental Violence Among Adolescent Mothers*, 79 AM. J. ORTHOPSYCHIATRY 181 (2009); Jamison D. Fargo, *Pathways to Adult Sexual Revictimization: Direct and Indirect Behavioral Risk Factors Across the Lifespan*, 24 J. INTERPERSONAL VIOLENCE 1771, 1776 (2009); Jaclyn E. Barnes et al., *Sexual and Physical Revictimization Among Victims of Severe Childhood Sexual Abuse*, 33 CHILD ABUSE & NEGLECT 412 (2009).

Triple-C Impact problem¹⁰² and to assess their efforts to block the path of the accelerating snowball.

Our survey gathered data on statutory eligibility criteria for therapeutic services and other resources available to children directly and indirectly exposed to crime in each of the fifty states and the District of Columbia.¹⁰³ The survey addressed all five categories of the Triple-C Impact: direct child victims, children exposed to family violence, children exposed to community violence, children with a victimized parent, and children affected by parental incarceration. The survey's questionnaire was sent to a broad range of state agencies — state victim compensation agencies or assistance offices, state police departments and district attorney office, state department of children and family services, state department of human services, and state department of corrections, as well as nongovernmental organizations that serve children affected by crime. In conducting this survey, we aimed to answer fundamental questions such as: What resources are statutorily available on the state level? Which state agencies are charged with responding to affected children? Are there mechanisms to identify affected children? Which categories of children are statutorily eligible for services and resources?¹⁰⁴

In sum, the survey found that resources and services are theoretically available for affected children in most states. Furthermore, eligibility for services and resources is recognized by law in most states for many categories of exposure to crime. Nevertheless, access to these services and resources in practice is obstructed by a myriad of bureaucratic labyrinths and system design flaws. Additionally, there are currently no effective mechanisms in place to identify affected children and refer them to vital services. As a result, the majority of children harmed by crime cannot access available resources, and so never receive much-needed services and treatment to facilitate recovery from trauma caused by exposure to crime.

102. *See* Gilad, *supra* note 2.

103. Although the survey made some reference to services provided by the general public school and public health systems, or those provided through medical insurance, it did not directly cover them. The survey also did not cover services by Child Protective Services, which are exclusively for children facing risk from a caregiver, rather than the general population of children.

104. All state responses were cross-referenced and verified against the governing statutes, administrative rules, case law, agency guidelines and internal policies. The results were logged in descriptive form and then translated into numerical data and analyzed.

A. Statutory Mapping

Through the fifty-state survey, we took on the monumental task of meticulously mapping all state-level statutory provisions that detail eligibility criteria for children affected by each of the Triple-C Impact categories to qualify for services and resources. The results provide an empirical, systematic image of the manner in which state laws and policies address children affected by the Triple-C Impact.

A quantitative analysis of the survey's results reveals a relatively high number of state laws and agency guidelines that provide access to services and resources for affected children. These findings come in stark contradiction to the common hypothesis in existing literature and policy reports stating that the current deficiencies in response to the problem of childhood exposure to crime stem from statutory lacunas, narrow statutory definitions, and restrictive eligibility criteria that exclude many categories of exposed children from access to services.¹⁰⁵

To quantify and measure the level of each state's response to the problem, we created the Triple-C Impact Index ("TCII").¹⁰⁶ The TCII assigns each state a score between 0 to 6,¹⁰⁷ depending on the number of Triple-C Impact categories that were officially recognized by state law as eligible for therapeutic services or compensation.¹⁰⁸ The average state TCII score was 2.61, with the most common score being 3, indicating that most states (57%) recognize three or more of the Triple-C Impact categories by law. Indiana was lowest on the scale with a TCII score of 0, as it fails to statutorily recognize any of

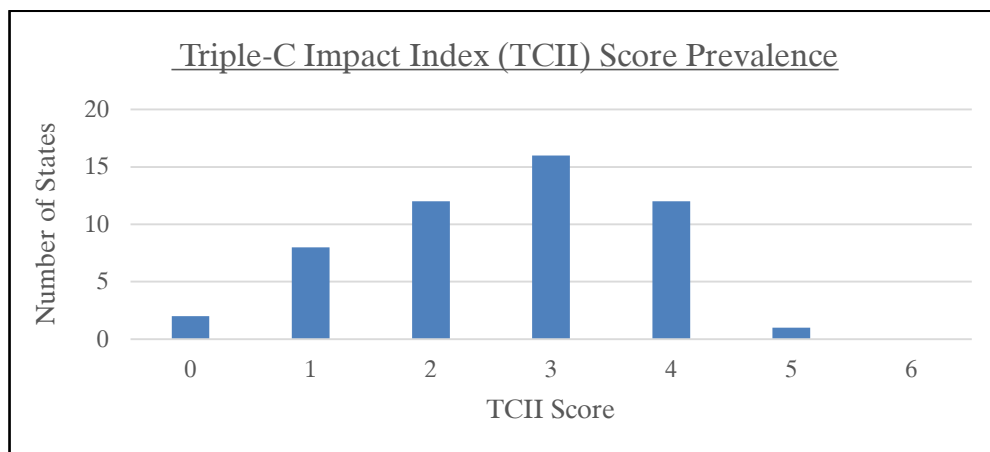
105. See SUSAN SCHECHTER & JEFFREY L. ELDELSON, OPEN SOCIETY INST., CTR. ON CRIME, COMMUNITIES & CULTURE, DOMESTIC VIOLENCE & CHILDREN: CREATING A PUBLIC RESPONSE 6–8 (2000); NAT'L CHILD TRAUMATIC STRESS NETWORK (NCTSN), *Identifying Children Affected by Domestic Violence*, <http://www.nctsn.org/content/identifying-children-affected-domestic-violence> [<https://perma.cc/46EF-49AZ>]. See generally Gilad & Gat, *supra* note 82; Abramowicz, *supra* note 80.

106. Gilad, *supra* note 2, at 33.

107. *Id.* The Index covers the 5 Triple-C Impact Categories (Direct victimization—existence of a specific Child Victims act or provision; exposure to family crime; exposure to community crime; parental victimization; parental incarceration). Importantly, an additional point is awarded if the state collects statistical data on the parental status of inmates under the custody of the state's department of corrections, raising the TCII from 5 to 6 total. Under each category, a state could be scored either 1 or 0. When no eligibility for services or other resources was available in any form, 0 was logged. When some degree of eligibility to services or other resources was available, 1 was logged. The states were given the "benefit of the doubt," receiving a score of 1 even when available services were minimal and eligibility criteria was limited and restricting.

108. Gilad, *supra* note 2, at 33.

the surveyed categories of Triple-C Impact.¹⁰⁹ On the other end, New York scored 5 on the TCII for recognizing five of the six surveyed categories, only excluding eligibility for services for children affected by parental incarceration.¹¹⁰



Among responding states, forty-five (88.2%) reported that children exposed to family crime were formally recognized and statutorily eligible for therapeutic services, compensation, or reimbursement.¹¹¹ Only five states (9.8%) explicitly excluded eligibility for this group of children.¹¹² Thirty-one of the responding states (60.8%) recognized eligibility for children with a victimized parent, even when the child was not a witness to the criminal act.¹¹³ Twenty-two states (43.1%) had laws authorizing services and resources to children exposed to community crime.¹¹⁴ Consistently excluded were children affected by parental incarceration, with only three states reporting the availability of any statutory recourse for this group of vulnerable children.¹¹⁵

109. The State of Maryland was also scored 0 by default, as it refused participation in the survey.

110. A full summary table of state scores is available in the Appendix.

111. Gilad, *supra* note 2, at 34.

112. *Id.* The five states are: Hawaii, Indiana, North Carolina, Rhode Island, and Wisconsin.

113. *Id.*

114. *Id.* Complete survey data is archived with the author.

115. *Id.* at 35. It should be noted that in the State of Vermont, therapeutic services to children with incarcerated parents are provided through the general behavioral health parity system, rather than through a dedicated policy that specifically targets this group of children. However, having an incarcerated parent is a factor that is explicitly considered as part of the eligibility assessment to accessing this program. Thus, we considered Vermont as having statutory eligibility for services for children

Furthermore, the majority of states (58.8%) do not collect any systematic data on whether inmates in correctional facilities are parents or caregivers, and therefore have no practical ability to identify or track children affected by parental incarceration.¹¹⁶ It should be noted that responses were obtained from fifty out of the fifty-one jurisdictions, amounting to a 98% response rate.¹¹⁷ Only the State of Maryland explicitly refused to provide information per our survey questionnaire.¹¹⁸

50-State Survey: Result Summary						
	Direct Victimization	Family Violence	Community violence	Parental Victimization	Parental Incarceration	Incarceration Data
Yes	11	45	22	31	3	21
No	39	5	28	19	47	19
No Info.	1	1	1	1	1	11
Recognition%	21.6%	88.2%	43.1%	60.8%	5.9%	41.2%

It should be clarified that only services and resources that are clearly mandated by law, and that target the specific population of children affected by each of the Triple-C Impact categories, were included in the survey.¹¹⁹ Some additional services may be available through a host of other means, such as grassroots or civil society organizations that provide assistance, as well as through private medical insurance or Medicaid, Medicare, and Children's Health Insurance Program (CHIP) coverage.¹²⁰ Additionally, child protective services agencies in many states provide some services to eligible children, but those are restricted to individual children who experience danger on the part of their caregivers, rather than the entire group of children affected by exposure to crime; these services are thus excluded from the survey.¹²¹ In several states, some counseling services are available through the public school system, but these do not specifically target Triple-C Impact children and are often sporadically available

affected by parental incarceration. Interview with Kim Bushey, Program Servs. Dir., Vt. Dep't of Corr. (Mar. 25, 2016) (on file with author).

116. Gilad, *supra* note 2, at 35. Complete survey data is archived with the author.

117. *Id.* at 33.

118. *Id.* Interview with D. Scott Beard, Exec. Dir., Criminal Injuries Comp. Bd., Dep't of Pub. Safety & Corr. Serv. (Mar. 8, 2017) (on file with the author).

119. Gilad, *supra* note 2, at 33.

120. *Id.*

121. *Id.*

depending on the budget and discretion of each school district in the state.¹²²

B. Statutory Application

Despite the letter of the law, a closer analysis of the survey results indicates that existing statutes, meant to serve as blockades to speeding snowballs by allocating resources to support children affected by the Triple-C Impact, are not applied effectively. Our survey revealed that even when statutes that provide eligibility for services and resources are readily available (as part of a state Victim Compensation system, for example), de facto claim rates for these resources are astonishingly low.

Number of State Victim Compensation Claims in 2015 by Category of Exposure		
State	Category	VC Claims in 2015 ¹²³
Arizona	Exposure to Family Crime	35
California	Exposure to Community Crime	35
Iowa	Exposure to Family Crime	21
Kentucky	Exposure to Family Crime	0
	Exposure to Community Crime	0
	Parental Victimization	0
Maine	Exposure to Family Crime	0
Montana	Exposure to Family Crime	15
	Exposure to Community Crime	0
Nebraska	Exposure to Family Crime	1
	Exposure to Community Crime	0
Nevada	Exposure to Family Crime	0
Virginia	Exposure to Family Crime	0
West Virginia ¹²⁴	Exposure to Community Crime	0

122. *Id.* In one case, school-based services were statutorily mandated to all school districts in the state, and eligibility criteria relied on the status of the child as affected by different categories of crime exposure. In this case, the services and resources provided were included in the survey.

123. Claims reported are for victim compensation.

124. In the case of West Virginia, there are 0 claims for exposure to community violence documented in the history of the state's Victim Compensation Program despite the fact that the governing statute theoretically permits eligibility for compensation for children under this category. Interview with Becky O'Fiesh, Chief Deputy Clerk, W. Va. Crime Victim Comp. Fund (Mar. 12, 2017) (on file with author).

These numbers are particularly astounding in light of the data presented in the previous section. The National Association of Crime Victim Compensation Boards estimates that the average victim compensation claim rate for all categories of victims is at 5–10%.¹²⁵ However, even when accounting for such low rates across the board the above figures are hard to explain. Take, as an example, the State of California: based on population estimates from 2015, approximately 1,650,223 children were exposed to community violence that year.¹²⁶ Assuming a common low victim compensation claim rate of 5%, approximately 82,511 claims should have been made that year. As indicated above, the actual number was shockingly low, thirty-five claims, amounting to only 0.002% of estimated victims. Similar numbers are observed in the State of Arizona, where the thirty-five claims made based on exposure to family violence amount to 0.025% of estimated exposures in this category that year,¹²⁷ and the State of Iowa where the twenty-one claims amount to 0.03% of estimated cases of children exposed to family violence statewide in

125. Interview with Dan Eddy, Exec. Dir., Nat'l Assoc. of Crime Victim Comp. Bds. (Feb. 25, 2016) (on file with author). According to Dan Eddy, there are various primary reasons that lead to such low claim rates across the board. Affected children or parents may not fully comprehend the severity of the harm endured by the child and the long-term implications that avoiding treatment will have. Some children can obtain services elsewhere through medical insurance, urgent care, or child protective services. Others are not interested in obtaining assistance from government agencies due to negative past experiences or general distrust common among marginalized communities. Interview with Dan Eddy, Exec. Dir., Nat'l Assoc. of Crime Victim Comp. Bds. (June 28, 2017) (on file with author).

126. In 2015, the population of the State of California was estimated at 28,993,940, of which 23% were minor children under the age of eighteen, estimated at 8,968,606. The rate of exposure to community violence this past year, based on the NatSCEV data, is estimated to be 18.4%; hence, 1,659,223 minor children were estimated to suffer exposure to community violence in the state of California that year. For population estimates, see *California Population 2018*, WORLD POPULATION REV., <http://worldpopulationreview.com/states/california-population/> [<https://perma.cc/6TJM-2X4W>]; U.S. CENSUS BUREAU, *California – Profile Data – Census Reporter*, <https://censusreporter.org/profiles/04000US06-california/> [<https://perma.cc/9C2D-UBM6>]. See generally Finkelhor et al., *supra* note 33.

127. In 2015, the population of the state of Arizona was estimated at 6,817,565, of which 24% were minor children under the age of eighteen, estimated at 1,636,215. The rate of exposure to family violence this past year, based on the NatSCEV data, is estimated to be 8.4%; hence, 137,442 minor children were estimated to suffer exposure to family violence in the state of Arizona that year. For population estimates, see *Arizona Population 2018*, WORLD POPULATION REV., <http://worldpopulationreview.com/states/arizona-population/> [<https://perma.cc/5LWG-7JHU>]; U.S. CENSUS BUREAU, *Arizona Profile Data – Census Reporter*, <https://censusreporter.org/profiles/04000US04-arizona/> [<https://perma.cc/S3LK-3FXF>]. See generally Finkelhor et al., *supra* note 33.

2015.¹²⁸ Certainly, not all exposed individuals will seek remedy and services the same calendar year as the exposure event, but chronological fluidity cannot explain such alarming gaps.

It is important to flag that the reporting systems of most states do not break down data according to the categories of our survey.¹²⁹ As a result, claim rate data was provided by only ten states,¹³⁰ and only for part of the surveyed categories. Thus, the available figures should be considered anecdotal, and although telling and indicative, cannot be construed as conclusive evidence. That said, these findings are supported by statements made by the Attorney General Task Force on Children Exposed to Violence, which recognized that few of the children affected by exposure to crime are effectively identified.¹³¹ Moreover, “[t]he majority of children in our country who are identified as having been exposed to violence never receive services or treatment that effectively help them to stabilize themselves, regain their normal developmental trajectory, restore their safety, and heal their social and emotional wounds.”¹³² There is also support from empirical studies that show professionals and service providers

128. In 2015, the population of the State of Iowa was estimated at 3,130,869, of which 23% were minor children under the age of eighteen, estimated at 720,100. The rate of exposure to family violence this past year, based on the NatSCEV data, is estimated to be 8.4%; hence, 60,488 minor children were estimated to suffer exposure to family violence in the State of Iowa that year. For population estimates, see *Iowa Population 2018*, WORLD POPULATION REV., <http://worldpopulationreview.com/states/iowa-population> [https://perma.cc/9BHS-F5L8]; U.S. CENSUS BUREAU, *American Community Survey 1-Year Estimates* (2017), <https://censusreporter.org/profiles/04000US19-iowa/> [https://perma.cc/ZNY4-WT9A]). See generally Finkelhor et al., *supra* note 33.

129. Interview with Dan Eddy, Exec. Dir., Nat’l Assoc. of Crime Victim Comp. Bds. (Feb. 25, 2016) (on file with author).

130. The numbers obtained are either from states with more sophisticated data systems, or those that agreed to hand-count the cases for the benefit of the survey.

131. See generally LISTENBEE ET AL., *supra* note 25. See generally David Finkelhor et al., *Children’s Exposure to Violence: A Comprehensive National Survey*, JUV. JUST. BULL. (Oct. 2009), <https://www.ncjrs.gov/pdffiles1/ojdp/227744.pdf> [https://perma.cc/6D5N-YB8J]; CHILDREN’S BUREAU, *Child Maltreatment 2010* (2010), http://www.ncdsv.org/images/HHS-Children’sBureau_ChildMaltreatment2010.pdf [https://perma.cc/857L-N7UN]; U.S. HEALTH RESOURCES AND SERVICES ADMIN., CHILD HEALTH USA 2011 4, 8 (2011), <http://mchb.hrsa.gov/chusa11/more/downloads/pdf/c11.pdf> [https://perma.cc/SBY5-9JTS]; Rebecca Wells et al., *Health Service Access Across Racial/Ethnic Groups of Children in the Child Welfare System*, 33 CHILD ABUSE & NEGLECT 282 (2009); John A. Fairbank & Doreen W. Fairbank, *Epidemiology of Child Traumatic Stress*, 11 CURRENT PSYCHIATRY REP. 289 (2009); Philip T. Yanos et al., *A Prospective Examination of Service Use by Abused and Neglected Children Followed up into Adulthood*, 61 PSYCHIATRIC SERVICES 796 (2010). See Gilad, *supra* note 2, at 29–30.

132. LISTENBEE ET AL., *supra* note 25, at 12; Gilad, *supra* note 2, at 30.

frequently fail to recognize the connection between exposure to crime and harm to children, and that responding agencies and institutions do not have proper protocols and procedures to assist children exposed to crime.¹³³ These findings were also confirmed by our survey results. Even in criminal cases, which are inevitably reviewed by a multitude of professionals and service providers, including judges, law enforcement agents, prosecutors, and caseworkers, the status of children affected by the Triple-C Impact is often overlooked, and few of the professionals involved in the criminal process inquire about affected children.¹³⁴

This aggregation of findings, from a varied array of sources, can explain why Triple-C Impacted children are commonly referred to as the “silent” or “hidden” victims of crime.¹³⁵ Their presence is habitually overlooked by the system, as they slide faster and faster down the snowy slope of life. To address this descent, we must develop a clearer understanding of the reasons behind this dire reality.

C. Root Causes

To provide a full and comprehensive depiction of the present state of affairs, one of the survey’s primary objectives was to identify the root causes behind the existing lapses in the access to services that are available to children harmed by crime and violence, who suffer

133. LISTENBEE ET AL., *supra* note 25, at 83. For example, a study of pediatric emergency department response to cases of child exposure to domestic violence revealed that only 4.2% of the surveyed pediatric emergency departments have a protocol in place for responding to such cases. Another study conducted by the American Prosecutors Research Institute has found that less than half of the prosecution offices responding to the survey were aware of protocols directing law enforcement officers to ask about child victims or witnesses when investigating domestic violence reports. *See* SCHECHTER & ELDELSON, *supra* note 105, at 7–8; DEBRA WHITCOMB, NAT’L CRIMINAL JUST. REFERENCE SERV., CHILDREN AND DOMESTIC VIOLENCE: THE PROSECUTOR’S RESPONSE III-6-3, III-6-5 (2004), <https://www.ncjrs.gov/pdffiles1/nij/199721.pdf> [<https://perma.cc/Z5A5-HR5T>]. *See generally* Rosalind J. Wright et al., *Response of Battered Mothers in the Pediatric Emergency Department: A Call for Interdisciplinary Approach to Family Violence*, 99 PEDIATRICS 186 (1997).

134. *See* SCHECHTER & ELDELSON, *supra* note 105, at 7–8; Gilad, *supra* note 2, at 31; Covington, *supra* note 86, at 126–27. *See generally* LISTENBEE ET AL., *supra* note 25.

135. *See* THE NAT’L CHILD TRAUMATIC STRESS NETWORK (NCTSN), IDENTIFYING CHILDREN AFFECTED BY DOMESTIC VIOLENCE, <http://www.nctsn.org/content/identifying-children-affected-domestic-violence> [<https://perma.cc/9QQN-WJ7B>]. *See generally* CUNNINGHAM & BAKER, *supra* note 83; Wildeman, *supra* note 84; Covington, *supra* note 86.

devastating consequences as a result. Qualitative review and analysis of states' responses to the survey unearthed several possible explanations.

As illustrated above, the quantitative results clearly show that for most Triple-C categories, the primary cause for the existing ineffective state response is not lack of statutory eligibility or narrow legal definitions. Despite the wealth of statutory provisions providing that Triple-C Impacted children are eligible for services, only a marginal fraction of these services are specifically geared towards and designed to accommodate the unique developmental needs of minor children. Most of the statutes identified were intended to address the general adult population, with children included as an afterthought — without any account for the substantial psychological and developmental differences between adults and children.¹³⁶ Only thirteen states (25.4%) reported having acts or provisions dedicated particularly to child victims.¹³⁷ Six additional states (11.7%)¹³⁸ reported a statutory provision with child-specific elements for at least one of the Triple-C categories.¹³⁹ Absent child-specific, developmentally-oriented accommodations, existing policies will inevitably have diminished efficacy.

Additionally, the vast majority (if not all) of the services and resources identified through the survey rely solely on parental initiative, which requires the child's parent or guardian to actively seek and apply for assistance.¹⁴⁰ None of the responding states reported the existence of an effective system designed to identify children affected by the Triple-C Impact and refer them to services, for any of the categories of children included in the survey.¹⁴¹ Only one state, Rhode Island, reported a systematic mechanism to identify and track children exposed to family crime.¹⁴² However, Rhode Island's identification method does not appear to be linked to any referral mechanism to provide further services.¹⁴³ It was also not extended to children exposed to crime under any of the other Triple-

136. *See supra* Part I.

137. Gilad, *supra* note 2, at 39. Complete survey data is archived with the author.

138. *Id.*

139. *Id.*

140. *Id.* at 39.

141. *Id.*

142. *Id.* at 39–40.

143. *Id.* at 40.

C Impact categories, such as exposure to community violence or parental incarceration.¹⁴⁴

The consequences of depending exclusively on parents to seek out services and support for children harmed by exposure to crime are aggravated by a lack of transparency in the system. The process of conducting the survey has unveiled an abundance of technical difficulties that obscure access to imperative information required to obtain statutorily available services.¹⁴⁵ These technicalities pose colossal hurdles for parents and guardians seeking assistance, who struggle to identify and tap into available support. Throughout the survey process, we repeatedly encountered difficulties in identifying the agency responsible for providing services to each of the surveyed categories. Once the agency was finally identified, locating the specific officials within these agencies who might hold relevant information was similarly tricky. Lack of availability or access to contact information for relevant public servants, such as phone numbers or email addresses, was a reoccurring issue in many states.¹⁴⁶ Some state agencies justified this lack of transparency by describing it as a security measure, to protect agents from threats.¹⁴⁷ While the physical safety of government agents is vital, the safety measures enforced should not be so extreme that they compromise vulnerable populations' ability to access needed services, especially when the methods of contact are not face-to-face.¹⁴⁸ Furthermore, even once we acquired contact information, we often experienced a lack of responsiveness from relevant state officials.¹⁴⁹ Phone contact often proved to be futile, as we would be frequently transferred from one person to another until reaching a dead end (usually a voicemail full to capacity).¹⁵⁰ Once again, the most notable difficulties were experienced in collecting data on children affected by parental incarceration—in some states, up to five different agencies had to be contacted in order to obtain and confirm the needed information.¹⁵¹

144. *Id.* Interview with Deborah DeBare, Exec. Dir., R.I. Coal. Against Domestic Violence (Mar. 22, 2016) (on file with author).

145. Gilad, *supra* note 2, at 41.

146. *Id.*

147. *Id.* Interview with Dan Eddy, Exec. Dir., Nat'l Assoc. of Crime Victim Comp. Bds. (June 28, 2017) (on file with author).

148. Gilad, *supra* note 2, at 41.

149. *Id.* It should be noted that there were also many states in which officials were extremely responsive and cooperative, provided a wealth of helpful information, and assisted in locating additional sources of information.

150. *Id.*

151. *Id.*

This slew of access barriers was so severe that it took over a full year of persistent and repeated efforts to compile all the data necessary to complete the survey.¹⁵²

The survey also revealed that lack of transparency and ineffective communication are not only external issues facing the general public, but are also internal problems among the stakeholders within the system itself. Varying agencies and personnel were often found to “speak a different language” in terms of the terminologies and definitions used.¹⁵³ We observed unwarranted inconsistencies between different actors’ understanding of the division of labor, the scope of responsibility, the expected standard of service and care, level of accessibility to existing services, and the amount of information publicly available.¹⁵⁴ No methodical attempts for standardization, model policies, or guidelines for “best practices” to ensure a minimum level of care were identified on the national or state level.¹⁵⁵ Absent fluent communication among all government and non-government players, the coordinated inter-agency response necessary to effectively combat the Triple-C Impact problem, as illustrated by the Attorney General Task Force,¹⁵⁶ is doomed to fail.

One clear demonstration of the deficiency in communication within the system, which was uncovered by our survey, is the myriad instances where statutorily available resources for affected children were wholly unknown to service providers, to advocates who serve these children, or even to government agencies entrusted with servicing the relevant populations. In the State of Kentucky, for example, a representative of the Victim Compensation Board reported that pending documentation of a medical practitioner indicating a child was emotionally injured in relation to a crime, the child could be considered for compensation and therapeutic services in cases of exposure to family crime, exposure to community crime, and parental victimization.¹⁵⁷ By contrast, a representative of a non-governmental youth advocacy organization that serves children affected by the Triple-C Impact in the state responded that children

152. *Id.*

153. *Id.* at 36.

154. *Id.* at 36–37.

155. *Id.* at 36.

156. *See generally* LISTENBEE ET AL., *supra* note 25; Letter from Eric H. Holder, Jr., U.S. Att’y Gen., to Members of the Nat’l Task Force on Children Exposed to Violence (Dec. 20, 2012), *in* LISTENBEE ET AL., *supra* note 25.

157. Gilad, *supra* note 2, at 37. Interview with Lindsay Crawford, Policy Advisor/Interim SAEP Coordinator, Ky. Crime Victims Comp. Bd. (Feb. 3–4, 2016) (on file with author).

under all three of the abovementioned categories “are not considered ‘victims of crime’ and are not eligible for services or compensation.”¹⁵⁸

Similar trends of miscommunication were detected among governmental agencies.¹⁵⁹ In Nebraska, while a representative of the Victim Reparation Program confirmed that “children who witness family crime are eligible for compensation,”¹⁶⁰ a Victim Specialist with the office of the State Attorney General stated she was “not familiar with any specific statutes or policies that provide for specific programming or services to children exposed to violence in their home.”¹⁶¹ Similarly, in the State of Virginia, the director of the state Criminal Injuries Compensation Fund reported that “for counseling purposes, minor child witnesses of violence involving a caretaker are considered to be [] primary victim[s]” and therefore eligible for services.¹⁶² Conversely, the Crime Victim Programs Manager at the Virginia Department of Justice asserted, “[a]s far as statutes or guidelines around eligibility for services to child witnesses to domestic violence, there are none.”¹⁶³

These findings depict a picture of a system in which each player on the field rarely knows what the others are doing, let alone works in tandem with them towards the common goal of assisting children affected by the Triple-C Impact.¹⁶⁴ This state of affairs flies in the face of our reasonable expectation that government agencies will work together in a cooperative and coordinated manner towards a common goal. Even more alarming is the fact that many non-government organizations and service providers in this field receive state and federal funding.¹⁶⁵ As such, they are mandated by law to assist and inform their clients of victim compensation benefits for

158. Gilad, *supra* note 2, at 37. Interview with Shannon Moody, Policy Dir., Ky. Youth Advocates (Feb. 1–2, 2016) (on file with author).

159. Gilad, *supra* note 2, at 37.

160. Interview with Sher Schrader, Crime Victims’ Reparations Program, Neb. Comm’n on Law Enf’t & Criminal Justice (Feb. 5, 2016) (on file with author).

161. Gilad, *supra* note 2, at 37–38. Interview with Patricia L. Sattler, MSW, Victim/Witness Specialist, Neb. Dep’t of Justice, Attorney Gen. Doug Peterson (Feb. 10, 2016) (on file with author).

162. Gilad, *supra* note 2, at 38. Interview with Jack Ritchie, Dir., Va. Criminal Injuries Comp. Fund (Mar. 9–10, 2016) (on file with author).

163. Gilad, *supra* note 2, at 38. Interview with Cassandra (Kay) Bullock, Victims Servs. Manager, Va. Dep’t of Criminal Justice Servs. (Mar. 8, 2016) (on file with author).

164. Gilad, *supra* note 2, at 37.

165. *Id.* at 38.

which they are eligible.¹⁶⁶ It is highly unlikely that these statutory obligations are fulfilled if relevant government agencies, as well as funded service providers, are not informed, educated, and regularly trained regarding the rights and eligibilities of each and every category of impacted children.¹⁶⁷

The survey identified another major systemic design flaw: improper division of labor and budget distribution under the Victims of Crime Act (VOCA). VOCA is the primary federal act that governs the field of assistance and services to victims of crime, and allocates funds to support the provision of such services on the state and federal level. VOCA facilitates federal funding to state entities through two main actors — the Victim Compensation Programs and the Victim Assistance Program. The Victim Compensation Programs allow eligible victims to receive reimbursement for costs associated with the harms caused by crime.¹⁶⁸ The Victim Assistance Program is a government-funded program that provides a variety of services to victims of crime.¹⁶⁹ At present, the vast majority of statutory provisions that explicitly offer counseling services for the relevant categories of children exposed to crime are funded through reimbursements from the states' Victim Compensation Programs. Yet, by design, these programs are not equipped to provide effective recourse to the scale of the problem. Compensation programs are severely underfunded, allocated with a negligible sliver of federal VOCA funds (only 7% of the total VOCA budget, which amounted to \$133 million in 2017 for all states and territories combined).¹⁷⁰ The application process for VOCA funding is long and tedious, and programs in most states do not have the capacity to process large volumes of applications.¹⁷¹ Most importantly, compensation agents do not have direct access to affected children, and thus do not have

166. *Id.* See 42 U.S.C. 10603 (b)(1)(E); Interview with Dan Eddy, Exec. Dir., Nat'l Assoc. of Crime Victim Comp. Bds. (Feb. 25, 2016) (on file with author).

167. Gilad, *supra* note 2, at 38.

168. See *Victim Compensation*, OFF. FOR VICTIMS OF CRIME, <https://ovc.ncjrs.gov/topic.aspx?topicid=58> [<https://perma.cc/ZVL2-82DN>].

169. *Victim and Witness Assistance*, OFF. FOR VICTIMS OF CRIME, <https://ovc.ncjrs.gov/topic.aspx?topicid=59> [<https://perma.cc/2QGC-692N>].

170. Gilad, *supra* note 2, at 40. *Crimes Victim Fund Allocation: Compensation*, OVC CRIMES FORMULA CHART 2017 (2017), <https://ojp.gov/ovc/grants/Crime-Victims-Fund-Compensation-Allocations-2017.pdf> [<https://perma.cc/ED73-DUMB>]. Interview with Dan Eddy, Exec. Dir., Nat'l Assoc. of Crime Victim Comp. Bds. (June 27, 2017) (on file with author).

171. Gilad, *supra* note 2, at 40. Interview with Dan Eddy, Exec. Dir., Nat'l Assoc. of Crime Victim Comp. Bds. (Feb. 25, 2016) (on file with author).

the capabilities or resources to pursue effective outreach, identification, or referral efforts.¹⁷²

At the same time, the federal Victim Assistance Program is allocated 93%, or \$1.8 billion,¹⁷³ of the federal VOCA budget, which prioritizes funds to services dedicated to child victims.¹⁷⁴ In theory, VOCA permits the use of grants to support a variety of local services and programs, including services to “secondary victims” such as children affected by indirect exposure to crime.¹⁷⁵ But eligibility criteria for the funded programs does not seem to be regulated by any overarching policies, either by law or internal protocols.¹⁷⁶ No state-reported protocols that assure funds are distributed to all affected categories of children.¹⁷⁷ All states that provided information on this issue in our survey stated that eligibility criteria depends on each program and a case-by-case examination.¹⁷⁸ No state could provide information about specific programs or services that accommodate the different categories of children affected by the Triple-C Impact.¹⁷⁹ Publicly available lists of VOCA funded programs in each state include only vague, general information, and do not specify whether eligibility criteria cover “secondary victims.”¹⁸⁰ Under these circumstances, increased burdens are placed on underfunded and unequipped state victim compensation programs,¹⁸¹ in a manner that prevents maximization of existing resources. This exacerbates already existing lack of transparency and severely hinders accessibility to relevant services that may be legally available for Triple-C Impacted children.

Ultimately, this cluster of bureaucratic hurdles and design flaws pushes the Triple-C Impact snowball onward as it proceeds rapidly

172. Gilad, *supra* note 2, at 40.

173. *Id.* *Crime Victims Fund Allocation: Assistance*, OVC CRIMES FORMULA CHART 2017 (2017), <https://ojp.gov/ovc/grants/Crime-Victims-Fund-Assistance-Allocations-2017.pdf> [<https://perma.cc/ED73-DUMB>]. Interview with Dan Eddy, Exec. Dir., Nat’l Assoc. of Crime Victim Comp. Bds. (June 27, 2017) (on file with author).

174. Gilad, *supra* note 2, at 40. The specific words of VOCA prioritize funds for child abuse prevention and treatment, but some broader interpretations for the term “child abuse” are available (42 U.S.C. § 10603(a)(2)(A)).

175. Gilad, *supra* note 2, at 40. Complete survey data is archived with the author.

176. *Id.*

177. *Id.*

178. *Id.* at 40–41.

179. *Id.* at 41.

180. *Id.*; *see, e.g., Locate a Program*, OFF. OF VICTIM SERVICES, <https://ovs.ny.gov/locate-program> [<https://perma.cc/H9SA-YMP2>].

181. Gilad, *supra* note 2, at 41.

downhill, uninterrupted, gaining size and speed. Once the deficiencies in the states' responses to the Triple-C Impact problem are understood, it is now possible to draw the connections between the overarching policies and the real lives of affected children. The next Part will examine the broad range of destructive outcomes suffered by the crime-exposed children who are left without effective recourse. A thorough and concrete understanding of these corollaries and their pervasiveness will help paint a full picture of the depth and magnitude of the harms caused by Triple-C Impact.

III. UNDERSTANDING THE CONSEQUENCES

The gaps created by the states' failure to provide for effective solutions to the Triple-C Impact, as outlined in Part II, create a reality in which millions of children across the nation are deprived of vital assistance and resources for trauma recovery. As reported by the Attorney General Task Force on Children Exposed to Violence, "without services or treatment, even children who appear resilient and seem to recover from exposure to violence still bear emotional scars that may result in health and psychological problems years or decades later"¹⁸²; this is also known as the "sleeper effect."¹⁸³ Furthermore, when there is no response to a child's trauma, the harmful effects of exposure can deepen due to a growing sense of isolation and betrayal.¹⁸⁴ As it continues rolling, each snowball gradually accelerates and expands.

Although each child is different, medical and social science studies have found a significant array of adverse symptoms closely associated with Triple-C Impact. These symptoms infiltrate all of life's disciplines, ranging from increased involvement with the criminal justice system and a heightened risk of substance abuse and dependence, to physical and mental health problems.¹⁸⁵ The studies

182. *Id.* at 30; LISTENBEE ET AL., *supra* note 25, at 12.

183. See Nicole L. Vu et al., *Children's Exposure to Intimate Partner Violence: A Meta-Analysis of Longitudinal Associations with Child Adjustment Problems*, 46 *CLINICAL PSYCHOL. REV.* 25, 26 (2016). See generally Megan R. Holmes, *The Sleeper Effect of Intimate Partner Violence Exposure: Long-Term Consequences on Young Children's Aggressive Behavior*, 54 *J. CHILD PSYCHOL. & PSYCHIATRY* 986 (2013).

184. Gilad, *supra* note 2, at 30; see LISTENBEE ET AL., *supra* note 25, at 30.

185. See generally Vincent J. Felitti et al., *Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study*, 14 *AM. J. PREVENTATIVE MED.* 245 (1998); Robert F. Anda et al., *The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology*, 256 *EUR. ARCHIVES PSYCHIATRY & CLINICAL NEUROSCIENCE* 174

further identified associations between crime exposure and unfavorable life outcomes, including poor educational outcomes, higher rates of unemployment and homelessness, and inferior economic well-being.¹⁸⁶ Considering the overarching similarities, each child's endured harm may vary depending on the type, severity, timing, and frequency of their exposure to violence.¹⁸⁷ The studies also found that a child's age, gender, socioeconomic status, level of familial support, and emotional capacity affect the degree of harm.¹⁸⁸

This Part examines the host of mechanisms and pathways that lead Triple-C Impacted children to experience adverse outcomes later in life. This involves exploring the complex interlocking ways through which different negative outcomes interact with one another, as various life disciplines and choices intertwine. In-depth comprehension of these intricate relationships, between exposure and adverse outcome, can help us better understand the snowball metaphor — how the ball continues to grow, layer upon layer, as it speeds downhill. This knowledge is also essential when designing effective solutions to the problem, by identifying the most efficient methods to bring the snowball to a halt, thereby minimizing future damage.

A. Criminal Justice

One of the more thoroughly researched outcomes for Triple-C impacted children is their increased involvement with the criminal justice system. This involvement can result from engagement in delinquent acts, from criminal activity once reaching adulthood, or

(2006); Murray et al., *supra* note 80, at 189–92; Leana A. Bouffard & Maria D.H. Koepfel, *Understanding the Potential Long-Term Physical and Mental Health Consequences of Early Experiences of Victimization*, 31 JUST. Q. 568 (2014); Olofsson et al., *supra* note 1.

186. See, e.g., Currie & Spatz Widom, *supra* note 25, at 117; Ross Macmillan & John Hagan, *Violence in the Transition to Adulthood: Adolescent Victimization, Education, and Socioeconomic Attainment in Later Life*, 14 J. RES. ADOLESCENCE 127, 152 (2004); Marilyn Metzler et al., *Adverse Childhood Experiences and Life Opportunities: Shifting the Narrative*, 72 CHILD. & YOUTH SERVICES REV. 141, 147 (2017); Joseph Murray & David P. Farrington, *The Effects of Parental Imprisonment on Children*, 37 CRIME & JUST. 133, 186 (2008); Wildeman, *supra* note 84, at 92.

187. GROVES ET AL., *supra* note 26, at 6; Holt et al., *supra* note 12, at 804; Sara R. Jaffee et al., *Individual, Family, and Neighborhood Factors Distinguish Resilient from Non-Resilient Maltreated Children: A Cumulative Stressors Model*, 31 CHILD ABUSE & NEGLECT 231, 248 (2007); PETERSEN ET AL., *supra* note 26, at 111; see Lucy Salcido Carter et al., *Domestic Violence and Children: Analysis and Recommendations*, 9 FUTURE CHILD. 4, 6 (1999).

188. Gilad, *supra* note 2, at 12; Carter et al., *supra* note 187; GROVES ET AL., *supra* note 26, at 6; Holt et al., *supra* note 12, at 804; Jaffee et al., *supra* note 187, at 247.

due to re-victimization.¹⁸⁹ Several different pathways and mechanisms can help us better understand the proclivity towards criminal conduct among children affected by the Triple-C Impact. As mentioned, the high levels of stress and neural overstimulation caused by exposure to crime trigger chemical reactions that affect the development of the child's delicate brain and nervous system.¹⁹⁰ One area found to be particularly affected is the brain's prefrontal cortex, which is responsible for executive functions such as impulse control, reflective regulation, decision-making, planning, and higher-level attentional processing.¹⁹¹ Once these critical functions are compromised, children are prone to higher levels of behavioral

189. See Bryndis B. Asgeirsdottir et al., *Associations Between Sexual Abuse and Family Conflict/Violence, Self-Injurious Behavior, and Substance Use: The Mediating Role of Depressed Mood and Anger*, 35 CHILD ABUSE & NEGLECT 210, 210 (2011); Laura Bevilacqua et al., *Interaction Between FKBP5 and Childhood Trauma and Risk of Aggressive Behavior*, 69 ARCHIVES GEN. PSYCHIATRY 62, 62 (2012); Sophie Boivin et al., *Past Victimization and Dating Violence Perpetration in Adolescence: The Mediating Role of Emotional Distress and Hostility*, 27 J. INTERPERSONAL VIOLENCE 662, 673–75 (2012); Shi Huang et al., *The Long-Term Effects of Childhood Maltreatment Experiences on Subsequent Illicit Drug Use and Drug-Related Problems in Young Adulthood*, 36 ADDICTIVE BEHAVIORS 95, 101 (2011); Deborah J. Jones et al., *Linking Childhood Sexual Abuse and Early Adolescent Risk Behavior: The Intervening Role of Internalizing and Externalizing Problems*, 41 J. ABNORMAL CHILD PSYCHOL. 139, 139 (2013); Eleni Maneta et al., *Links Between Childhood Physical Abuse and Intimate Partner Aggression: The Mediating Role of Anger Expression*, 27 VIOLENCE & VICTIMS 315, 315 (2012); Roberto Maniglio, *The Role of Child Sexual Abuse in the Etiology of Substance-Related Disorders*, 30 J. ADDICTIVE DISORDERS 216, 225 (2011); Christina S. Meade et al., *Methamphetamine Use Is Associated with Childhood Sexual Abuse and HIV Sexual Risk Behaviors Among Patrons of Alcohol-Serving Venues in Cape Town, South Africa*, 126 DRUG & ALCOHOL DEPENDENCE 232, 235 (2012); Lynette M. Renner & Stephen D. Whitney, *Risk Factors for Unidirectional and Bidirectional Intimate Partner Violence Among Young Adults*, 36 CHILD ABUSE & NEGLECT 40, 40 (2012); Sunny H. Shin et al., *Exposure to Childhood Neglect and Physical Abuse and Developmental Trajectories of Heavy Episodic Drinking from Early Adolescence into Young Adulthood*, 127 DRUG & ALCOHOL DEPENDENCE 31, 34 (2013); Wilson & Spatz Widom, *supra* note 25, at 236; Helen W. Wilson & Cathy Spatz Widom, *The Role of Youth Problem Behaviors in the Path from Child Abuse and Neglect to Prostitution: A Prospective Examination*, 20 J. RES. ADOLESCENCE 210, 210 (2010).

190. Gilad, *supra* note 2, at 7–8. See REPORT ON THE BIOPSYCHOSOCIAL CONSEQUENCES OF CHILDHOOD VIOLENCE, *supra* note 7, at 21; Margolin & Gordis, *supra* note 5; Kathryn R. Wilson et al., *The Traumatic Stress Response in Child Maltreatment and Resultant Neuropsychological Effects*, 16 AGGRESSION & VIOLENT BEHAV. 87, 89 (2011).

191. See Anda et al., *supra* note 185, at 175; McCoy, *supra* note 7, at 260–61. See generally Lahat & Schmidt, *supra* note 7.

reactivity, impulsive behavior, and aggression.¹⁹² Hence, the likelihood of resorting to violence and criminal or delinquent behavior increases.¹⁹³

Another vital aspect of child development negatively affected by the Triple-C Impact is the attachment between the child and the main caregiver, normally the parents.¹⁹⁴ This compromised attachment can “result in emotion regulation deficits, faulty social information processing, and hostile expectations about the meaning of relationships; these deficits may, in turn, increase the risk for aggressive behavior in childhood and across the life span,” which is likely to translate into criminal behavior later in life.¹⁹⁵

The General Strain Theory, developed by Robert Agnew,¹⁹⁶ further establishes the role that stressors and strain experienced due to childhood exposure to crime play as inducers of delinquent and criminal behavior. According to this theory, the loss of a positive stimulus and the presence of a negative stimulus are key sources of strain.¹⁹⁷ Such strain leads to intense negative emotions like anger and frustration and creates pressure for corrective action.¹⁹⁸ According to Agnew, exposure to crime and violence, whether direct

192. See Lahat & Schmidt, *supra* note 7, at 277; Margolin & Gordis, *supra* note 5, at 459–60; McCoy, *supra* note 7, at 261.

193. Margolin & Gordis, *supra* note 5, at 466; see also Lahat & Schmidt, *supra* note 7, at 275; McCoy, *supra* note 7, at 261.

194. JOHN BOWLBY, *Attachment and Loss*, in ATTACHMENT 291, 291 (2d ed. 1969).

195. Miriam K. Ehrensaft et al., *Intergenerational Transmission of Partner Violence: A 20-Year Prospective Study*, 71 J. CONSULTING & CLINICAL PSYCHOL. 741, 742 (2003); see also Kenneth A. Dodge et al., *Mechanisms in the Cycle of Violence*, 250 SCI. NEW SERIES 1678, 1679 (1990); Megan Eliot & Dewey G. Cornell, *Bullying in Middle School as a Function of Insecure Attachment and Aggressive Attitudes*, 30 SCH. PSYCHOL. INT’L 201, 209 (2009). See generally Cindy Sousa et al., *Longitudinal Study on the Effects of Child Abuse and Children’s Exposure to Domestic Violence, Parent–Child Attachments, and Antisocial Behavior in Adolescence*, 26 J. INTERPERSONAL VIOLENCE 111 (2011).

196. See Lisa Broidy & Robert Agnew, *Gender and Crime: A General Strain Theory Perspective*, 34 J. RES. CRIME & DELINQ. 275, 276 (1997); Stephen J. Watts & Thomas L. McNulty, *Childhood Abuse and Criminal Behavior: Testing a General Strain Theory Model*, 28 J. INTERPERSONAL VIOLENCE 3023, 3024 (2013). See generally Robert Agnew, *Foundation for a General Strain Theory of Crime and Delinquency*, 30 CRIMINOLOGY 47 (1992); Robert Agnew, *A Revised Strain Theory of Delinquency*, 64 SOC. FORCES 151 (1985); Robert Agnew, *Experienced, Vicarious, and Anticipated Strain: An Exploratory Study on Physical Victimization and Delinquency*, JUST. Q. 603, 604 (2002).

197. Chelsea Farrell & Gregory M. Zimmerman, *Does Offending Intensify as Exposure to Violence Aggregates? Reconsidering the Effects of Repeat Victimization, Types of Exposure to Violence, and Polyvictimization on Property Crime, Violent Offending, and Substance Use*, 53 J. CRIM. JUST. 25, 26 (2017).

198. Agnew, *Experienced, Vicarious, and Anticipated Strain*, *supra* note 196.

or vicarious, is one of the prime forms of strain most likely to lead an individual to pursue corrective action through negative coping mechanisms, which are manifested as socially unacceptable deviant acts. Affected individuals may engage in deviant actions “to reduce their strain (e.g., steal the money they desire, run away from the parents who abuse them), seek revenge against those who have mistreated them or related targets, or alleviate their negative emotions (e.g., through the use of illicit drugs).”¹⁹⁹

The Social Learning and Intergenerational Transmission of Violence theories provide another possible path from exposure to crime to criminal behavior. Those theories posit that “violent behavior, like any other behavior, is learned through processes of imitation, modeling, and reinforcement.”²⁰⁰ When children are continuously exposed to crime and violence in their natural environment during crucial years of socialization, they are likely to normalize violence and become desensitized to this kind of behavior.²⁰¹ Such exposure can foster the impression that violence is acceptable and an “appropriate way to deal with certain problems, and disrupt ties to conventional others as individuals retreat from social life or as their social skills suffer.”²⁰² This leads affected children to more readily take on the roles of perpetrators or victims.²⁰³

199. *Id.*; see also Farrell & Zimmerman, *supra* note 197.

200. Robert J. Franzese et al., *Adolescent Exposure to Violence and Adult Violent Victimization and Offending*, 42 CRIM. JUST. REV. 42, 43 (2017); see also Sharon W. Mihalic & Delbert Elliott, *A Social Learning Theory Model of Marital Violence*, 12 J. FAM. VIOLENCE 21, 22 (1977).

201. Timothy Brezina, *Adolescent Maltreatment and Delinquency: The Question of Intervening Processes*, 35 J. RES. CRIME & DELINQ. 71, 77 (1998); Franzese et al., *supra* note 200; Zena H. Rudo et al., *The Effects of Violence in the Home on Children’s Emotional, Behavioral, and Social Functioning: A Review of the Literature*, 6 J. EMOTIONAL & BEHAV. DISORDERS 94, 95 (1998); see also Stephen W. Baron et al., *Male Street Youths’ Conflict: The Role of Background, Subcultural, and Situational Factors*, 18 JUST. Q. 759, 780 (2001); L. D. Eron, *Seeing Is Believing: How Viewing Violence Alters Attitudes and Aggressive Behavior*, in CONSTRUCTIVE & DESTRUCTIVE BEHAVIOR: IMPLICATIONS FOR FAMILY, SCHOOL, & SOCIETY 51, 51 (Arthur C. Bohart & Deborah J. Stipek eds., 2001).

202. Agnew, *Experienced, Vicarious, and Anticipated Strain*, *supra* note 196, at 612.

203. Franzese et al., *supra* note 200, at 43; Sandra M. Smith et al., *The Intergenerational Transmission of Spouse Abuse: A Meta-Analysis*, 62 J. MARRIAGE & FAM. 640, 648 (2000); see also Holt et al., *supra* note 12, at 803; Fred E. Markowitz, *Attitudes and Family Violence: Linking Intergenerational and Cultural Theories*, 16 J. FAM. VIOLENCE 205, 215–16 (2001).

Furthermore, children have a developmental need to rationalize and justify observed behavior in order to cope with traumatic experiences. Children may inappropriately or inaccurately rationalize abusive behavior, and if not addressed, they are potentially at risk of adopting antisocial rationales for the abuse perpetrated against them or for their own abusive behavior.²⁰⁴ This faulty processing sequence is aggravated by the disruptions of the Legal Socialization process caused by crime exposure, leading to the development of distorted attitudes towards the law, the justice system, and legal actors.²⁰⁵ The failure of the legal system to protect the child from these harmful experiences is a breach of trust that can result in diminished regard for the law and a greater tendency towards deviant behavior.

Children affected by the Triple-C Impact who live in environments saturated with crime and violence may also adopt criminal behavior as a survival mechanism.²⁰⁶ They may feel compelled to resort to violence to avoid being perceived as weak and being targeted by bullies or other violent community members.²⁰⁷ Children living in such violent environments “may turn to gangs or criminal activities due to despair and powerlessness, perpetuating a cycle of violence by inflicting violence on others and becoming targets for further violence or incarceration.”²⁰⁸

Another approach, the Life-Course Theory, takes a broader perspective on this issue. It provides that the failure to reach critical developmental milestones, and failure to adopt proper developmental roles, as a result of the negative forces of the Triple-C Impact, ultimately leads to negative outcomes and fewer successes later in life.²⁰⁹ The inability to achieve socially approved goals can severely limit opportunities later in life for legitimate earning and economic well-being. For example, the reduced odds of graduating from high

204. Holt et al., *supra* note 12, at 803.

205. See Fagan et al., *supra* note 20, at 268; Fagan & Tyler, *supra* note 20, at 231.

206. See Janosz et al., *supra* note 58, at 607.

207. See *id.*; Gilad, *supra* note 2, at 21.

208. Gilad, *supra* note 2, at 21; LISTENBEE ET AL., *supra* note 25, at 33.

209. Maureen A. Allwood & Cathy Spatz Widom, *Child Abuse and Neglect, Developmental Role Attainment, and Adult Arrests*, 50 J. RES. CRIME & DELINQ. 551, 552 (2013); see also Robert J. Sampson & John H. Laub, CRIME IN THE MAKING: PATHWAYS & TURNING POINTS THROUGH LIFE 247–49 (1993) [hereinafter CRIME IN THE MAKING]; Robert J. Sampson & John H. Laub, *A Life-Course Theory of Cumulative Disadvantage and the Stability of Delinquency*, in DEVELOPMENTAL THEORIES OF CRIME & DELINQUENCY 2, 2 (T. P. Thornberry ed., 1997) [hereinafter *A Life-Course Theory*]. See generally Robert J. Sampson & John H. Laub, *A Life-Course View of the Development of Crime*, 602 ANNALS AM. ACAD. POL. & SOC. SCI. 12 (2005) [hereinafter *A Life-Course View*].

school due to childhood exposure to crime is highly likely to limit the possibility for higher education, employment, or home ownership, making crime a more appealing route to overcome financial struggles.²¹⁰

Triple-C Impact exposure can trigger a chain reaction that will continually reinforce aggressive and antisocial behavior throughout the child's life. Initially, the aggressive behavior is absorbed and learned, increasing stress levels and reducing impulse-control and self-regulation by altering brain development.²¹¹ As a result, the child's interpersonal skills and expectation from interpersonal relationships will be adversely affected.²¹² The child may exhibit more aggressive and impulsive behavior patterns that are "inconsistent with those normatively displayed by his or her peers," and therefore likely to experience rejection by them.²¹³ Such rejection will elevate strain and frustration and could also "limit future opportunities for learning constructive means of relating to others."²¹⁴ Being unwelcomed by the mainstream social circle, the child has a greater likelihood of gravitating towards more marginalized and even deviant social groups.²¹⁵ "The deviant peer group serves as a training ground for antisocial and violent behavior from middle to late adolescence," which reinforces learning and adoption of the violence the child is exposed to at home or in the community.²¹⁶ Being ostracized from mainstream peers can also affect opportunities for conventional successes later in life, increasing both mental and financial strain. This only serves to feed the cycle by creating a motivation to use violence and resort to crime as a coping

210. See Allwood & Spatz Widom, *supra* note 209, at 567; CRIME IN THE MAKING, *supra* note 209, at 247–49. See generally *A Life-Course Theory*, *supra* note 209, at 2; *A Life-Course View*, *supra* note 209, at 12.

211. Ehrensaft et al., *supra* note 195; see also Thomas J. Dishion et al., *Family, School, and Behavioral Antecedents to Early Adolescent Involvement with Antisocial Peers*, 27 DEVELOPMENTAL PSYCHOL. 172, 172 (1991).

212. Ehrensaft et al., *supra* note 195; see also Dishion et al., *supra* note 211.

213. Ehrensaft et al., *supra* note 195.

214. *Id.*

215. *Id.*; see also Dishion et al., *supra* note 211.

216. Ehrensaft et al., *supra* note 195. See generally Thomas J. Dishion et al., *Preventive Interventions for High-Risk Youth the Adolescent Transitions Program*, in PREVENTING CHILDHOOD DISORDERS (Ray DeV. Peters & Robert J. McMahon eds., 1996); Thomas J. Dishion et al., *Friendships and Violent Behavior During Adolescence*, 6 SOC. DEV. 207 (1997).

mechanism. This cyclical phenomenon is referred to as the Theory of the Continuity of Antisocial Behavior.²¹⁷

Empirical evidence collected on the effect that Triple-C Impact exposure has on potential involvement with the criminal justice system varies quite substantially in comparison with other outcomes discussed in this section. Children who have been exposed to crime have a greater chance of experiencing revictimization later in life. Children who were direct victims have a 43% greater chance of revictimization and children who were exposed to family violence have a 60% greater chance of revictimization.²¹⁸ Children who were direct victims have a 50% greater chance of juvenile arrest, and children who were exposed to family violence have between an 80% and 200% greater chance of juvenile arrest.²¹⁹ Exposure to most of the Triple-C Impact categories is associated with a 50% to 60% increase in the likelihood of adult arrest. Children who are affected by direct victimization and parental incarceration have 80% greater odds of engaging in criminal conduct in adulthood when compared to individuals who were never exposed to crime.²²⁰ The most significant effect is found on violent adult offending — the odds of Triple-C Impacted children committing a violent crime at some point in their

217. Ehrensaft et al., *supra* note 195; see also Deborah M. Capaldi & Sara Clark, *Prospective Family Predictors of Aggression Toward Female Partners for At-Risk Young Men*, 34 DEVELOPMENTAL PSYCHOL. 1175, 1185 (1998); Amy Holtzworth-Munroe & Gregory L. Stuart, *Typologies of Male Batterers: Three Subtypes and the Differences Among Them*, 116 PSYCHOL. BULL. 476, 492–93 (1994); Lynn Magdol et al., *Developmental Antecedents of Partner Abuse: A Prospective-Longitudinal Study*, 107 J. ABNORMAL PSYCHOL. 375, 375 (1998).

218. Chien-Chung Huang et al., *Children's Exposure to Intimate Partner Violence and Early Delinquency*, 30 J. FAM. VIOLENCE 953, 960 (2015); Katie A. Ports et al., *Adverse Childhood Experiences and Sexual Victimization in Adulthood*, 51 CHILD ABUSE & NEGLECT 313, 319 (2016); Charles L. Whitfield et al., *Violent Childhood Experiences and the Risk of Intimate Partner Violence in Adults: Assessment in a Large Health Maintenance Organization*, 18 J. INTERPERSONAL VIOLENCE 166, 177 (2003).

219. Jennifer E. Lansford et al., *Early Physical Abuse and Later Violent Delinquency: A Prospective Longitudinal Study*, 12 CHILD MALTREATMENT 233, 234 (2007); Sousa et al., *supra* note 195, at 9; Cathy Spatz Widom, *The Cycle of Violence*, NAT'L INST. JUST. RES. (Sept. 1992), <https://www.ncjrs.gov/pdffiles1/nij/136607.pdf> [<https://perma.cc/8XZG-ZLS7>]. See generally Allwood & Spatz Widom, *supra* note 209; Abigail A. Fagan, *The Short- and Long-Term Effects of Adolescent Violent Victimization Experienced Within the Family and Community*, 18 VIOLENCE & VICTIMS 445 (2003); Veronica M. Herrera & Laura Ann McCloskey, *Gender Differences in the Risk for Delinquency Among Youth Exposed to Family Violence*, 25 CHILD ABUSE & NEGLECT 1037 (2001); Joshua P. Mersky & Arthur J. Reynolds, *Child Maltreatment and Violent Delinquency: Disentangling Main Effects and Subgroup Effects*, 12 CHILD MALTREATMENT 246 (2007).

220. Burgess-Proctor et al., *supra* note 80, at 1048.

lives is found to be more than double, or even triple, according to some studies of the risk observed in the general population.²²¹ Similar effects are found regarding the probability of perpetrating domestic violence.²²²

Nevertheless, no deterministic forces are causing the commission of these crimes. Other than rare cases of duress, automatism, and extreme mental incapacitation, Triple-C affected individuals make conscious and willful choices to break the law. “[T]he choices a person makes are shaped by the choices a person has.”²²³ As clearly demonstrated throughout this section, Triple-C Impact influences the range of life choices available to affected children and increases the odds of tipping the scale towards unlawful choices.

B. Substance Abuse

Studies suggest that children affected by the Triple-C Impact are more likely to abuse and depend on substances such as tobacco, alcohol, and prescription or street drugs during adolescence and adulthood.²²⁴ Additionally, studies have found the age of first use to be younger, and the likelihood of using stronger substances, such as intravenously injected drugs, to be greater.²²⁵ Despite the firmly

221. Farrell & Zimmerman, *supra* note 197, at 31; Franzese et al., *supra* note 200, at 49.

222. Ehrensaft et al., *supra* note 195, at 746; Whitfield et al., *supra* note 218, at 178.

223. Metzler et al., *supra* note 186, at 142.

224. See Anda et al., *supra* note 185, at 178; Shane Darke & Michelle Torok, *The Association of Childhood Physical Abuse with the Onset and Extent of Drug Use Among Regular Injecting Drug Users*, 109 ADDICTION 610, 614 (2013); Shanta R. Dube et al., *Childhood Abuse, Neglect, and Household Dysfunction and the Risk of Illicit Drug Use: The Adverse Childhood Experiences Study*, 111 PEDIATRICS 564, 570 (2003); Ehrensaft et al., *supra* note 195, at 742; Farrell & Zimmerman, *supra* note 197, at 26; Esme Fuller-Thomson et al., *Three Types of Adverse Childhood Experiences, and Alcohol and Drug Dependence Among Adults: An Investigation Using Population-Based Data*, 51 SUBSTANCE USE & MISUSE 1451, 1454 (2016); Tom Luster et al., *The Correlates of Abuse and Witnessing Abuse Among Adolescents*, 17 J. INTERPERSONAL VIOLENCE 1323, 1333 (2002); Scott Menard et al., *Adolescent Exposure to Violence and Adult Illicit Drug Use*, 42 CHILD ABUSE & NEGLECT 30, 37 (2015); Michael E. Roettger et al., *Paternal Incarceration and Trajectories of Marijuana and Other Illegal Drug Use from Adolescence into Young Adulthood: Evidence from Longitudinal Panels of Males and Females in the United States*, 106 ADDICTION 121, 128 (2010).

225. Menard et al., *supra* note 224, at 37; Dube et al., *supra* note 224, at 567; Farrell & Zimmerman, *supra* note 197, at 31; Murray & Farrington, *supra* note 186, at 161; Ehrensaft et al., *supra* note 195, at 742; Roettger et al., *supra* note 224, at 128; Darke & Torok, *supra* note 224, at 613; Luster et al., *supra* note 224, at 1326; Anda et al., *supra* note 185, at 178; Fuller-Thomson et al., *supra* note 224, at 1454; Daniel P.

established association between the Triple-C Impact exposures and illicit substance use,²²⁶ as well as the intuitive link between the hardship caused by exposure to crime and substance abuse, there is less scientific knowledge as to the exact pathways that connect the two.²²⁷

According to the neurobiological approach, disruptions in the early development of a child's central nervous system caused by Triple-C exposure may impede the child's ability to cope with negative or disruptive emotions, leading to problems with emotional and behavioral self-regulation later in life. As a result, "[b]ehaviors such as substance use may manifest as a means to help regulate emotional states."²²⁸ Chemical imbalances in the brain caused by exposure to crime, coupled with the reciprocal effect that different illicit substances has on the brain's chemical environment, are also thought to play a role in drawing Triple-C Impacted children towards substance use.²²⁹ Substance use that is medically, socially, and often legally "viewed as a 'problem' may, from the perspective of the user, represent an effective immediate solution that leads to chronic use."²³⁰

Other known outcomes of the Triple-C Impact can also consequentially increase the odds that a child will turn to illicit substance use. For example, poor mental health, Post Traumatic Stress Disorder (PTSD), anxiety, and mood disorders — all known consequences of childhood exposure to violence — have been found

Mears & Sonja E. Siennick, *Young Adult Outcomes and the Life-Course Penalties of Parental Incarceration*, 53 J. RES. CRIME & DELINQ. 3, 9 (2016).

226. Dube et al., *supra* note 224, at 567; Robert F. Anda et al., *Adverse Childhood Experiences and Smoking During Adolescence and Adulthood*, 11 PERMANENTE J. 5, 6 (1999); Susan D. Hillis et al., *The Association Between Adverse Childhood Experiences and Adolescent Pregnancy, Long-Term Psychosocial Outcomes, and Fetal Death*, 113 PEDIATRICS 320, 322 (2004); Shin et al., *supra* note 189, at 36; Huang et al., *supra* note 189, at 98; Jones et al., *supra* note 189, at 2; Meade et al., *supra* note 189, at 234; Maniglio, *supra* note 189, at 222; Asgeirsdottir et al., *supra* note 189, at 210–11; Wilson & Widom, *supra* note 25, at 236; Wilson & Spatz Widom, *supra* note 189, at 215; Whitfield et al., *supra* note 218, at 179.

227. See generally Menard et al., *supra* note 224; Hanie Edalat & Marvin D. Krank, *Childhood Maltreatment and Development of Substance Use Disorders a Review and a Model of Cognitive Pathways*, 17 TRAUMA VIOLENCE & ABUSE 454 (2015); W. Alex Mason et al., *Parent and Peer Pathways Linking Childhood Experiences of Abuse with Marijuana Use in Adolescence and Adulthood*, 66 ADDICTIVE BEHAVIORS 70, 71 (2017).

228. Dube et al., *supra* note 224, at 570; see Perry & Pollard, *supra* note 6, at 45; Edalat & Krank, *supra* note 227, at 462.

229. Anda et al., *supra* note 185, at 181.

230. Felitti et al., *supra* note 185, at 253–54.

to have a strong association with substance dependence.²³¹ Additionally, sleep disorders and injuries or physical health conditions that involve pain can also increase substance use and addiction as a form of self-medication.²³² This situation can be aggravated under strenuous economic circumstances when mainstream medical care is less accessible and illicit self-medication is commonly used as a less-costly substitute.

The heightened tendency among children affected by the Triple-C Impact to gravitate towards marginalized and deviant social circles, discussed above, is another factor that can increase exposure and access to illicit substances.²³³ The impact peers have as behavioral models is heightened in circumstances where a child's attachment to parents and adult caregivers is weakened, as is often the case for children exposed to crime.²³⁴ Lastly, increased risk of homelessness plays a similar role,²³⁵ as life on the street brings more opportunities for substance use, particularly highly addictive street drugs.

231. Fuller-Thomson et al., *supra* note 224, at 1454; Susan Yoon et al., *Developmental Pathways from Child Maltreatment to Adolescent Substance Use: The Roles of Posttraumatic Stress Symptoms and Mother-Child Relationships*, 82 CHILD YOUTH SERV. REV. 271, 274 (2017); David M. Fergusson et al., *Exposure to Childhood Sexual and Physical Abuse and Adjustment in Early Adulthood*, 32 CHILD ABUSE & NEGLECT 607, 608 (2008); Muzi Li et al., *Maltreatment in Childhood Substantially Increases the Risk of Adult Depression and Anxiety in Prospective Cohort Studies: Systematic Review, Meta-Analysis, and Proportional Attributable Fractions*, 46 PSYCHOL. MED. 717 (2016); Deborah Hasin et al., *Prevalence, Correlates, Disability, and Comorbidity of DSM-IV Alcohol Abuse and Dependence in the United States: Results from the National Epidemiologic Survey on Alcohol and Related Conditions*, 64 ARCHIVES GEN. PSYCHIATRY 830, 844 (2007); Wilson M. Compton et al., *Prevalence, Correlates, Disability, and Comorbidity of DSM-IV Drug Abuse and Dependence in the United States: Results from the National Epidemiologic Survey on Alcohol and Related Conditions*, 64 ARCHIVES GEN. PSYCHIATRY 566, 570–71 (2007); Menard et al., *supra* note 224, at 3; Anda et al., *supra* note 185, at 175. *See generally* Bruce Perry, *The Neurodevelopmental Impact of Violence in Childhood*, in TEXTBOOK OF CHILD AND ADOLESCENT FORENSIC PSYCHIATRY 221 (D. Schetky & E. P. Benedict eds., 2001).

232. Fuller-Thomson et al., *supra* note 224, at 1458. *See generally* Peter Friedman & Michael Stein, *Disturbed Sleep and Its Relationship to Alcohol Use*, 26 SUBSTANCE ABUSE 1, 5 (2006); Laxmaiah Manchikanti et al., *Controlled Substance Abuse and Illicit Drug Use in Chronic Pain Patients: An Evaluation of Multiple Variables*, 9 PAIN PHYSICIAN 215, 220 (2006).

233. Ehrensaft et al., *supra* note 195, at 742; Thomas J. Dishion et al., *Peer Ecology of Male Adolescent Drug Use*, 7 DEV. PSYCHOPATHOLOGY 803, 805 (1995).

234. Mason et al., *supra* note 227, at 73.

235. *See* Wildeman, *supra* note 84, at 75; Deborah Keys et al., *Giving up on Drugs: Homeless Young People and Self-Reported Problematic Drug Use*, 33 CONTEMP. DRUG PROBS. 63, 65 (2006).

Agnew's Strain Theory is also applicable when considering substance abuse – the experience of strain caused by exposure to crime “may lead to different methods of adaptation, one of which, retreatism, is particularly associated with substance use problems. Retreatism involves the abandonment of both success goals and of normative constraints defining legitimate means of achieving goals.”²³⁶ Escapism to the cover of substance abuse is a coping mechanism to confront experienced strain, both from the traumatic exposure itself and from the consequent adverse outcomes.

Empirical studies have found that exposure to any of the Triple-C Impact categories is associated with an increase in the odds of an individual using an illicit drug at some point in his or her life by 60% to 70%, compared to individuals who were never exposed.²³⁷ When looking at specific categories of exposure, such as exposure to family violence and direct victimization, some studies estimate the odds of illicit drug use to increase by 90% to 100% specifically associated with such exposure.²³⁸ The odds of an individual turning to alcoholism doubles with exposure to any of the categories.²³⁹ Individuals affected by the Triple-C Impact are estimated to have 30% to 60% greater odds of using an intravenous drug.²⁴⁰ The effect on cigarette smoking is milder and is estimated at an increase of around 10%.²⁴¹ Among children exposed to family violence, the probability of substance abuse before age fourteen rises by 80%, and by 110% for children exposed to community violence.²⁴²

C. Mental Health

The Triple-C Impact can have significant adverse effects on children from a mental health perspective. Compared to the general population, affected children are at increased risk of suffering from depression, PTSD, anxiety, developmental and behavioral problems, aggression, attention disorders, personality disorders, suicide risk,

236. Menard et al., *supra* note 224, at 31; Scott Menard, *A Developmental Test of Mertonian Anomie Theory*, 32 J. RES. CRIME DELINQ. 136, 138 (1995); Scott Menard, *A Developmental Test of Cloward's Differential Opportunity Theory*, in THE FUTURE OF ANOMIE THEORY 142, 144 (N. Passas & Robert Agnew eds., 1997).

237. Anda et al., *supra* note 185, at 178; Felitti et al., *supra* note 185, at 245.

238. Dube et al., *supra* note 224, at 569–70; Menard et al., *supra* note 224, at 36.

239. Anda et al., *supra* note 185, at 179; Felitti et al., *supra* note 185, at 253; Fuller-Thomson et al., *supra* note 224, at 1457.

240. Felitti et al., *supra* note 185, at 253; Dube et al., *supra* note 224, at 570.

241. Anda et al., *supra* note 185, at 179; Felitti et al., *supra* note 185, at 252.

242. Dube et al., *supra* note 224, at 569.

attachment disorders and deficit in social adaptation.²⁴³ These conditions may affect the child in the short-term, immediately after the exposure itself, or in the long-term through adulthood.²⁴⁴ In some cases, symptoms may only appear years after the exposure, as the child struggles to process the experience without adequate assistance and support.²⁴⁵

The pathway leading from the Triple-C Impact to poor mental health is more direct than the paths to other outcomes discussed, such

243. Frank W. Putnam, *The Impact of Trauma on Child Development*, 57 JUV. FAM. CT. J. 1, 1 (2006); Ronald C. Kessler et al., *Childhood Adversities and Adult Psychopathology in the WHO World Mental Health Surveys*, 197 BRIT. J. PSYCHIATRY 378, 379–80 (2010); Margolin & Gordis, *supra* note 5, at 457–64; LISTENBEE ET AL., *supra* note 25, at 31; Jacqueline G. Hovens et al., *Impact of Childhood Life Events and Trauma on the Course of Depressive and Anxiety Disorders*, 126 ACTA PSYCHIATRICA SCANDINAVICA 198, 203 (2012); Sara Larsson et al., *High Prevalence of Childhood Trauma in Patients with Schizophrenia Spectrum and Affective Disorder*, 54 COMPREHENSIVE PSYCHIATRY 123, 125 (2012); Anna Plaza et al., *Childhood Physical Abuse as a Common Risk Factor for Depression and Thyroid Dysfunction in the Earlier Postpartum*, 200 PSYCHIATRY RES. 329, 329 (2012); Saaniya Bedi et al., *Risk for Suicidal Thoughts and Behavior After Childhood Sexual Abuse in Women and Men*, 41 SUICIDE & LIFE-THREATENING BEHAV. 406, 412 (2011); Laura P. Chen et al., *Sexual Abuse and Lifetime Diagnosis of Psychiatric Disorders: Systematic Review and Meta-Analysis*, 85 MAYO CLINIC PROC. 618, 620–21 (2010); Tracie O. Afifi et al., *Population Attributable Fractions of Psychiatric Disorders and Suicide Ideation and Attempts Associated with Adverse Childhood Experiences*, 98 AM. J. PUB. HEALTH 946, 948–49 (2008); Sarah Jonas et al., *Sexual Abuse and Psychiatric Disorder in England: Results from the 2007 Adult Psychiatric Morbidity Survey*, 4 PSYCHOL. MED. 709, 709 (2011); Luisa Sugaya et al., *Child Physical Abuse and Adult Mental Health: A National Study*, 25 J. TRAUMATIC STRESS 384, 384 (2012); Scott E. Hadland et al., *Suicide and History of Childhood Trauma Among Street Youth*, 136 J. AFFECTIVE DISORDERS 377, 378–79 (2012); Brigitte Wanner et al., *Childhood Trajectories of Anxiousness and Disruptiveness Explain the Association Between Early-Life Adversity and Attempted Suicide*, 42 PSYCHOL. MED. 2373, 2373 (2012); Mette Ystgaard et al., *Is There A Specific Relationship Between Childhood Sexual and Physical Abuse and Repeated Suicidal Behavior?*, 28 CHILD ABUSE & NEGLECT 863, 864 (2004); Paul Rohde et al., *Associations of Child Sexual and Physical Abuse with Obesity and Depression in Middle-Aged Women*, 32 CHILD ABUSE & NEGLECT 878, 884 (2008); Lena Sanci et al., *Childhood Sexual Abuse and Eating Disorders in Females: Findings from the Victorian Adolescent Health Cohort Study*, 162 ARCHIVES PEDIATRIC ADOLESCENT MED. 261, 265 (2008); Jacqueline C. Carter et al., *The Impact of Childhood Sexual Abuse in Anorexia Nervosa*, 30 CHILD ABUSE & NEGLECT 257, 264 (2006); Jennie G. Noll et al., *Sleep Disturbances and Childhood Sexual Abuse*, 31 J. PEDIATRIC PSYCH. 469, 475 (2006); Annmarie C. Hulette et al., *Dissociation in Middle Childhood Among Foster Children with Early Maltreatment Experiences*, 35 CHILD ABUSE & NEGLECT 123, 125 (2011).

244. LISTENBEE ET AL., *supra* note 25, at 12; Vu et al., *supra* note 183, at 31. See generally Holmes, *supra* note 183.

245. LISTENBEE ET AL., *supra* note 25, at 12; Vu et al., *supra* note 183, at 31. See generally Holmes, *supra* note 183.

as unemployment or criminal behavior. Triple-C exposure is considered a trauma-eliciting event.²⁴⁶ It triggers intense feelings of sadness, fear, shame, anger, hopelessness, and uncertainty.²⁴⁷ These will affect the child's self-image, perception of interpersonal relationships, sense of safety, and ability to trust.²⁴⁸ Exposure to violence is a stressful experience that requires psychological adaptation, which could overwhelm the limited adaptive capacity of the individual, resulting in psychological sequelae.²⁴⁹ Although human systems strive to adapt to trauma, "these adaptations often tax a child's developing biological and psychosocial systems, resulting in dysregulations (e.g., stress sensitization) that dilute psychological and physical well-being."²⁵⁰ Neurobiology is a key element in this process.²⁵¹ The alteration of central brain and neurological structures as a consequence of exposure is believed to affect information processing as well as mood and emotional regulation, which interferes with the individual's mental and emotional state.²⁵² The

246. Gayla Margolin & Katrina A. Vickerman, *Posttraumatic Stress in Children and Adolescents Exposed to Family Violence: I. Overview and Issues*, 38 PROF. PSYCHOL. 613, 614 (2007).

247. See Aaron Curry et al., *Pathways to Depression: The Impact of Neighborhood Violent Crime on Inner-City Residents in Baltimore, Maryland, USA*, 67 SOC. SCI. & MED. 23, 23–24 (2008); see also Margolin & Vickerman, *supra* note 246, at 614–15.

248. See generally Vu et al., *supra* note 183.

249. Cody W. Wilson & Beth S. Rosenthal, *The Relationship Between Exposure to Community Violence and Psychological Distress Among Adolescents: A Meta-Analysis*, 18 VIOLENCE & VICTIMS 335, 335–36 (2003); see Beth Spencer Rosenthal, *Exposure to Community Violence in Adolescence: Trauma Symptoms*, 35 ADOLESCENCE 271, 271–72 (2000). See generally I. Lisa McCann et al., *Trauma and Victimization: A Model of Psychological Adaptation*, 16 COUNSELING PSYCHOL. 531 (1988).

250. Paula S. Nurius et al., *Life Course Pathways of Adverse Childhood Experiences Toward Adult Psychological Well-Being: A Stress Process Analysis*, 45 CHILD ABUSE & NEGLECT 143, 149 (2015); see Andrea Danese & Bruce McEwen, *Adverse Childhood Experiences, Allostasis, Allostatic Load, and Age-Related Disease*, 106 PHYSIOLOGY & BEHAV. 29, 31 (2012). See generally Camelia E. Hostinar & Megan R. Gunnar, *The Developmental Effects of Early Life Stress: An Overview of Current Theoretical Frameworks*, 22 CURRENT DIRECTIONS PSYCHOL. SCI. 400 (2013).

251. See Terrie E. Moffitt, *Childhood Exposure to Violence and Lifelong Health: Clinical Intervention Science and Stress-Biology Research Join Forces*, 25 DEV. & PSYCHOPATHOLOGY 1619, 1626 (2013); see also Heledd Hart & Katya Rubia, *Neuroimaging of Child Abuse: A Critical Review*, 6 FRONTIERS HUM. NEUROSCIENCE 1, 4 (2012). See generally Eamon McCrory et al., *Research Review: The Neurobiology and Genetics of Maltreatment and Adversity*, 51 J. CHILD PSYCHOL. & PSYCHIATRY 1079 (2010).

252. See Anda et al., *supra* note 185, at 181; Margolin & Vickerman, *supra* note 246, at 615. See generally Martin H. Teicher et al., *Developmental Neurobiology of*

overwhelming experiences of dysregulation and emotional instability can eventually increase stress sensitization, leading to a state in which even “minor stressors can lead to serious distress.”²⁵³

Interference with the development of healthy attachment caused by the Triple-C Impact also affects the child’s short- and long-term mental health.²⁵⁴ Poor attachment is considered to be one of the risk factors for impaired resilience in children,²⁵⁵ negatively affecting their ability to explore their environment, learn skills of engagement, and develop confidence in their own ability to thrive independently.²⁵⁶ Absent secure attachment, children have a lesser capacity to cope with the mental strain of trauma and are more prone to emotional harm.

Beyond the direct effects of exposure to crime, circumstances in the child’s environment can exacerbate the impact of the exposure. The presence of crime and violence in the child’s home, school, or neighborhood can lead the child to perceive it as a bad and problematic place. Such negative perceptions of one’s environment have been found to increase the likelihood that a child might experience higher levels of stress and depression.²⁵⁷

Furthermore, stress tends to accumulate throughout an individual’s life.²⁵⁸ Exposure to toxic stressors such as crime and violence early in life has been shown to create a lasting vulnerability that acts as a catalyst for subsequent stressful experiences throughout youth and into adulthood, exacerbating stress and increasing the likelihood of

Childhood Stress and Trauma, 25 PSYCHIATRY CLINICAL NORTH AM. 397 (2002); Vu et al., *supra* note 183.

253. Margolin & Vickerman, *supra* note 246, at 615–16; see Nurius et al., *supra* note 250, at 144–45 (2015). See generally Bessel A. van der Kolk, *Posttraumatic Therapy in the Age of Neuroscience*, 12 PSYCHOANALYTIC DIALOGUES 381 (2008).

254. See generally BOWLBY, *supra* note 194.

255. See Laurel Davis & Rebecca J. Shlafer, *Mental Health of Adolescents with Currently and Formerly Incarcerated Parents*, 54 J. ADOLESCENCE 120, 125 (2017); see also Keva M. Miller, *Risk and Resilience Among African American Children of Incarcerated Parents*, 15 J. HUM. BEHAV. SOC. ENV’T 25, 26 (2007); Ann S. Masten et al., *Resilience and Development: Contributions from the Study of Children Who Overcome Adversity*, 2 DEV. & PSYCHOPATHOLOGY 425, 425 (1991).

256. See DOUGLAS DAVIES, *CHILD DEVELOPMENT: A PRACTITIONER’S GUIDE* 10 (2004); see also Sousa et al., *supra* note 195, at 156. See generally BOWLBY, *supra* note 194.

257. Curry et al., *supra* note 247, at 24; see Mary E. Schwab-Stone, *No Safe Haven: A Study of Violence Exposure in an Urban Community*, 34 AM. ACAD. CHILD ADOLESCENT PSYCHIATRY 1343, 1349 (1995).

258. See Davis & Shlafer, *supra* note 255, at 122; Nurius et al., *supra* note 250, at 144.

negative mental health.²⁵⁹ This is referred to as the construct of stress proliferation.²⁶⁰ In the short run, exposure to crime will often lead to significant changes in a child's everyday life: disruption to the family system, a parent leaving, an out-of-home placement, temporary relocation to a shelter or alternative housing, and added social stigma.²⁶¹ Such changes will intensify the mental and emotional struggle involved in the already negative experience of exposure to crime.²⁶²

In the longer run, as explained throughout this section, the Triple-C Impact can compound upon itself:

Consequences such as less educational achievement, which leads to financial insecurity that then increases risk of adult adversities such as homelessness, marital conflict, injuries, and unemployment. Subsequently, this cascade of adversities over the life course weakens opportunities for stable social supports, ability to obtain professional help, and maintenance of healthy habits; all of which collectively and progressively chip away at psychological well-being.²⁶³

In addition to the high levels of stress that Triple-C Impacted children must cope with, this group of children was found to possess fewer protective factors such as strong social networks, familial support, stability, and healthy and balanced lifestyles. Under normal circumstances, these factors enhance the individual's ability to confront stress and recover from trauma.²⁶⁴ Children affected by the Triple-C Impact must overcome the fatal combination of high-stress and low-resource, which results in the steady erosion of mental health and well-being.²⁶⁵

The Adverse Child Experience studies ("ACE studies") are the most comprehensive and reputable studies examining the effects of childhood crime exposure and other childhood adversities on mental and physical health.²⁶⁶ The ACE studies found that the odds of

259. Nurius et al., *supra* note 250, at 144.

260. *Id.*

261. See Margolin & Vickerman, *supra* note 246, at 614; Davis & Shlafer, *supra* note 255, at 121–22.

262. See generally Margolin & Vickerman, *supra* note 246; Davis & Shlafer, *supra* note 255, at 121–22.

263. Nurius et al., *supra* note 250, at 149.

264. *Id.* at 150.

265. See *id.*

266. The Triple-C Impact categories covered under the original ACE study are direct victimization, exposure to family violence, and parental incarceration. The category of exposure to community crime was empirically validated as an ACE

having committed a suicide attempt increases by 80% among individuals exposed to crime, compared to those not exposed,²⁶⁷ and the likelihood of suffering from depression increases by 50%.²⁶⁸ The odds of having difficulties controlling anger increases by 40%,²⁶⁹ while the odds of suffering from anxiety and high stress levels are elevated by 20%.²⁷⁰ Furthermore, there is a 10% increase in odds of experiencing hallucination disorders compared to non-exposed individuals.²⁷¹ Additional evidence is available regarding the effects of parental incarceration on the mental health of children, but broadly speaking, a meta-analysis found that exposure to parental incarceration at least doubles the chances that the child will experience mental health problems.²⁷² Further, the odds of attempting suicide is more than 150% greater among children with an incarcerated parent.²⁷³ Moreover, parental incarceration is associated with a 95% increase in the odds to resort to self-injury,²⁷⁴ 86% increase in likelihood to suffer from internalized mental health problems such as depression, anxiety, and withdrawal,²⁷⁵ and 72% increase in the likelihood to suffer from PTSD.²⁷⁶

D. Physical Health

Studies establish a strong link between childhood victimization and life-threatening health conditions, such as cancer, lung, heart, liver and skeletal diseases, sexually transmitted diseases, diabetes, and

adversity in a later study. See Eunju Lee et al., *Exposure to Community Violence as a New Adverse Childhood Experience Category: Promising Results and Future Considerations*, 98 FAMILIES SOC'Y 67 (2017); David Finkelhor et al., *A Revised Inventory of Adverse Childhood Experiences*, 48 CHILD ABUSE & NEGLECT 13 (2015)). It should be noted that, like most cited studies, the definitions of the ACE adversities are not identical to the definitions of the Triple-C Impact categories (see subsection G for explanation for methodological limitations).

267. See Felitti et al., *supra* note 185, at 252. See generally Leah K. Gilbert et al., *Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010*, 48 AM. J. PREVENTATIVE MED. 345 (2015).

268. See Anda et al., *supra* note 185, at 178; Felitti et al., *supra* note 185, at 252.

269. See Anda et al., *supra* note 185, at 180.

270. See *id.* at 178, 180.

271. See *id.* at 178.

272. See Murray & Farrington, *supra* note 186, at 157.

273. See Davis & Shlafer, *supra* note 255, at 129.

274. See *id.*

275. See *id.* at 128.

276. See Rosalyn D. Lee et al., *The Impact of Parental Incarceration on the Physical and Mental Health of Young Adults*, 131 PEDIATRICS 1188, 1192 (2013).

obesity.²⁷⁷ It is no surprise that children affected by the Triple-C Impact suffer from short-term injuries or ailments, either from direct violence or in the form of trauma soon after exposure to violence. However, the nexus between exposure to violence and long-term health conditions, which may manifest decades later, is more mysterious.

As with most other outcomes outlined here, brain and neuro-system chemistry serve as focal points when considering long-term physical health effects of violence exposure.²⁷⁸ In fact, the biomarker alterations associated with exposure to violence that onset in childhood were found to be present in the body into adulthood.²⁷⁹ Those findings support the strong connection between childhood exposure and health conditions that emerge later in life.

Findings from physiological research indicate that exposure to crime has an expansive effect on a child's developing brain. Exposure can adversely impact the volume and functioning of multiple central structures, including the hippocampus, corpus callosum, and amygdala. Furthermore, exposure to crime appears to alter central neurological structures that are involved in mediating the body's stress response, such as the hypothalamic–pituitary–adrenal axis.²⁸⁰ While, under normal circumstances, such stress responses are protective, alterations due to exposure can elevate them to a toxic level.²⁸¹ In particular, exposure to crime has the greatest effect on the nervous, endocrine, and immune systems.²⁸² Further, the developing

277. See generally Renée Boynton-Jarrett et al., *Child and Adolescent Abuse in Relation to Obesity in Adulthood: The Black Women's Health Study*, 130 PEDIATRICS 245 (2012); Alanna D. Hager & Marsha G. Runtz, *Physical and Psychological Maltreatment in Childhood and Later Health Problems in Women: An Exploratory Investigation of the Roles of Perceived Stress and Coping Strategies*, 36 CHILD ABUSE & NEGLECT 393 (2012); Roberto Maniglio, *The Impact of Child Sexual Abuse on Health: A Systematic Review of Reviews*, 29 CLINICAL PSYCHOL. REV. 647 (2009); Molly L. Paras et al., *Sexual Abuse and Lifetime Diagnosis of Somatic Disorders: A Systematic Review and Meta-Analysis*, 302 JAMA 550 (2009); Natalie Slopen et al., *Childhood Adversity and Cell-Mediated Immunity in Young Adulthood: Does Type and Timing Matter?*, 10 BRAIN BEHAV. & IMMUNITY 177 (2012); Gilad, *supra* note 2, at 14.

278. See generally Moffitt, *supra* note 251.

279. See *id.* at 1625.

280. See Meeyoung O. Min et al., *Pathways Linking Childhood Maltreatment and Adult Physical Health*, 37 CHILD ABUSE & NEGLECT 361, 362 (2013).

281. Olofsson et al., *supra* note 1, at 6–7.

282. See Mariette J. Chartier et al., *Health Risk Behaviors and Mental Health Problems as Mediators of the Relationship Between Childhood Abuse and Adult Health*, 99 AM. J. PUB. HEALTH 847, 847 (2009); Andrea Danese et al., *Biological Embedding of Stress Through Inflammation Processes in Childhood*, 16 MOLECULAR

immune system's long-term impairment was found to be especially detrimental, leaving exposed children "vulnerable to chronic health conditions and infections."²⁸³

Additionally, biochemical changes triggered by the Triple-C Impact were found to affect structures called "telomeres," which are present in human cells and serve as the caps at the end of the DNA strands that protect chromosomes. As our cells age, telomeres gradually erode and shorten. Without telomeres, DNA strands become damaged, and our cells cannot function.²⁸⁴ Studies have established a strong association between exposure to crime and telomere length. In those studies, adults who reported exposure during childhood "had significantly shorter telomere length, regardless of key potential confounding factors such as age, sex, smoking, or body mass index."²⁸⁵ This is hugely problematic from a physical health viewpoint, as "[s]horter telomere length and increased erosion rate are both associated with higher risk of morbidity and mortality."²⁸⁶

It is important to consider the interplay between mental health and physical health. As mentioned, there is a well documented association between Triple-C Impact and poor mental health.

PSYCHIATRY 244, 245 (2011); Andrea Danese et al., *Childhood Maltreatment Predicts Adult Inflammation in a Life-Course Study*, 104 NAT'L ACAD. SCI. 1319, 1319 (2007); Janice K. Kiecolt-Glaser et al., *Childhood Adversity Heightens the Impact of Later-Life Caregiving Stress on Telomere Length and Inflammation*, 73 PSYCHOSOMATIC MED. 16, 17 (2011); Kiley W. Liming & Whitney A. Grube, *Wellbeing Outcomes for Children Exposed to Multiple Adverse Experiences in Early Childhood: A Systematic Review*, 35 CHILD & ADOLESCENT SOC. WORK J. 317, 318 (2018); Min et al., *supra* note 280, at 362; Moffitt, *supra* note 251, at 1622; Elizabeth A. Shirtcliff et al., *Early Childhood Stress Is Associated with Elevated Antibody Levels to Herpes Simplex Virus Type 1*, 106 NAT'L ACAD. SCI. 2963, 2963 (2009); Natalie Slopen et al., *Early Life Adversity and Inflammation in African Americans and Whites in the Midlife in the United States Survey*, 72 PSYCHOSOMATIC MED. 694, 694 (2010); Paul Surtees et al., *Adverse Experience in Childhood as a Developmental Risk Factor for Altered Immune Status in Adulthood*, 10 INT'L J. BEHAV. MED. 251, 253 (2003).

283. Liming & Grube, *supra* note 282, at 318; *see also* Min et al., *supra* note 280, at 361.

284. *See What Is a Telomere?*, T.A. SCI., <https://www.tasciences.com/what-is-a-telomere/> [<https://perma.cc/9DG3-SRV5>].

285. Moffitt, *supra* note 251, at 1623.

286. *Id.* at 1622; *see also* Kiecolt-Glaser et al., *supra* note 282, at 1; Aoife O'Donovan et al., *Childhood Trauma Associated with Short Leukocyte Telomere Length in Posttraumatic Stress Disorder*, 70 BIOLOGICAL PSYCHIATRY 465, 465 (2011); Audrey R. Tyrka et al., *Childhood Maltreatment and Telomere Shortening: Preliminary Support for an Effect of Early Stress on Cellular Aging*, 67 BIOLOGICAL PSYCHIATRY 531, 531 (2010).

Population-based studies report that “depressive symptoms and lifetime occurrence of psychiatric disorders substantially explained the effects” of childhood crime exposure and various indicators of adult physical health.²⁸⁷ “[S]ome research suggests that violence exposure has its greatest effects on future health among the subset of violence-exposed individuals who develop mental disorders following violence exposure.”²⁸⁸ In other words, it is likely that psychiatric conditions, which develop due to exposure to crime, generate additional strain that weakens and wears on the body, thereby increasing the likelihood of physical health problems later in life.²⁸⁹ This is a prime example of the snowball speeding downhill—one adverse effect of Triple-C Impact begets another.

Severe ongoing stress throughout the child’s life is another factor that chips at the body’s fortifying walls. Stress may stem directly from the exposure itself, especially if unresolved and untreated. Alternatively, as explained throughout this section, the Triple-C Impact is associated with increased exposure to other adverse life events, that are either caused by, or occur simultaneously to, the exposure. Direct stress from exposure may thus compound and accumulate with subsequent secondary life stressors.²⁹⁰ This accumulated stress persistently burdens and tears at the body’s systems, particularly influencing immune functioning, which may, in turn, contribute to increased adult health problems.²⁹¹ The stress accumulation associated with the Triple-C Impact is “responsible for the etiology and progression of disease and contributes to overall vulnerability to illness by producing a cascade of neuroendocrine, cardiovascular, and immunological changes.”²⁹²

287. Min et al., *supra* note 280, at 362–63; see also Kristen W. Springer, *Childhood Physical Abuse and Midlife Physical Health: Testing a Multi-Pathway Life Course Model*, 69 SOC. SCI. MED. 138, 144 (2009).

288. Moffitt, *supra* note 251, at 1624 (citing Andrea Danese et al., *Elevated Inflammation Levels in Depressed Adults with a History of Childhood Maltreatment*, 65 ARCHIVES GEN. PSYCHIATRY 409 (2008)); Christine Heim et al., *Pituitary–Adrenal and Autonomic Responses to Stress in Women After Sexual and Physical Abuse in Childhood*, 284 J. AM. MED. ASS’N 592 (2000); Meena Vythilingam et al., *Childhood Trauma Associated with Smaller Hippocampal Volume in Women with Major Depression*, 159 AM. J. PSYCHIATRY 2072 (2002)).

289. See Anna W. Wright et al., *Systematic Review: Exposure to Community Violence and Physical Health Outcomes in Youth*, 42 J. PEDIATRIC PSYCHOL. 364, 365 (2017); see also Min et al., *supra* note 280, at 361; Springer, *supra* note 287, at 139.

290. See Min et al., *supra* note 280, at 370; Springer, *supra* note 287, at 145.

291. See Olofsson et al., *supra* note 1, at 7.

292. Min et al., *supra* note 280, at 362.

Another layer is added to the rolling snowball when considering the broad array of risk behaviors associated with the Triple-C Impact. As shown throughout this section, mounting evidence confirms the strong link between childhood exposure to crime and behaviors such as smoking, alcohol or drug abuse, overeating, or sexual promiscuity.²⁹³ These behaviors are likely to be “consciously or unconsciously used because they have immediate pharmacological or psychological benefit as coping devices in the face of the stress” of exposure and its aftermath.²⁹⁴ It is well documented that these kinds of risk behaviors are independently associated with poorer health outcomes.²⁹⁵

Health problems associated with the Triple-C Impact may be more pronounced, severe, and prolonged due to poor medical care, or lack of access to care. Parents affected by victimization, incarceration, or other life adversities associated with exposure to crime may not be able to manage healthcare needs of themselves and their children, or may have limited access to healthcare due to socioeconomic circumstances.²⁹⁶ Health struggles can also exist in the home, as “[p]arents can inadvertently promote poor health habits and lack of autonomy in children by failing to teach important skills, by communicating poor attitudes, and by providing negative role models.”²⁹⁷ Moreover, studies show that children affected by the Triple-C Impact are less medically responsive even to adequate treatment for both mental and physical health conditions, which aggravates the status and duration of illness.²⁹⁸

According to the findings of the ACE studies, exposure to any one of the Triple-C Impact categories is associated with increased odds of contracting a sexually transmitted disease by 40%.²⁹⁹ The associated odds of contracting chronic bronchitis or emphysema increases by 60%.³⁰⁰ The odds for obesity among exposed individuals is 10–30% higher.³⁰¹ For fatal conditions such as cancer, stroke, diabetes, and

293. *Id.*; see Chartier et al., *supra* note 282, at 847; Felitti et al., *supra* note 185, at 253; Springer, *supra* note 287, at 139; Cathy Spatz Widom & Joseph B. Kuhns, *Childhood Victimization and Subsequent Risk for Promiscuity, Prostitution and Teenage Pregnancy: A Prospective Study*, 86 AM. J. PUB. HEALTH 1607, 1607 (1996).

294. Felitti et al., *supra* note 185, at 253.

295. *See generally* Felitti et al., *supra* note 185; Min et al., *supra* note 280.

296. *See* Lee et al., *supra* note 276, at 1189.

297. Chartier et al., *supra* note 282, at 847.

298. *See* Moffitt, *supra* note 251, at 1625.

299. *See* Felitti et al., *supra* note 185, at 253.

300. *See id.* at 254.

301. *See id.* at 252; Anda et al., *supra* note 185, at 178.

asthma, the probability is elevated by 20%.³⁰² The odds of hepatitis and coronary heart disease increases by 10%.³⁰³ The odds of reaching a state of disability was found to increase by at least 40%.³⁰⁴ For some categories of exposure, the odds for disability is even higher, with a 90% increase associated with parental incarceration, and 120% to 140% increase associated with direct victimization.³⁰⁵

E. Education

A large number of studies have found that Triple-C Impacted children, as a group, do not perform as well as their peers in academic settings.³⁰⁶ They are prone to scoring a lower grade point average

302. See Felitti et al., *supra* note 185, at 254; Gilbert et al., *supra* note 267, at 348.

303. See Felitti et al., *supra* note 185, at 255; Gilbert et al., *supra* note 267, at 348.

304. See Gilbert et al., *supra* note 267, at 348.

305. Sophia Miryam Schüssler-Fiorenza Rose et al., *Adverse Childhood Experiences and Disability in U.S. Adults*, 6 PM&R 1, 19 (2014).

306. See Allwood & Spatz Widom, *supra* note 209, at 552; Joseph M. Boden et al., *Exposure to Childhood Sexual and Physical Abuse and Subsequent Educational Achievement Outcomes*, 31 CHILD ABUSE & NEGLECT 1101, 1101 (2007); Larissa A. Borofsky et al., *Community Violence Exposure and Adolescents' School Engagement and Academic Achievement over Time*, 3 PSYCHOL. VIOLENCE 381, 381 (2013); Natasha K. Bowen & Gary L. Bowen, *Effects of Crime and Violence in Neighborhoods and Schools on the School Behavior and Performance of Adolescents*, 14 J. ADOLESCENT RES. 319, 319 (1999); Nadine J. Burke et al., *The Impact of Adverse Childhood Experiences on an Urban Pediatric Population*, 35 CHILD ABUSE & NEGLECT 408, 412 (2011); Herbert C. Covey et al., *Effects of Adolescent Physical Abuse, Exposure to Neighborhood Violence, and Witnessing Parental Violence on Adult Socioeconomic Status*, 18 CHILD MALTREATMENT 85, 85 (2013); Currie & Spatz Widom, *supra* note 25, at 111; Dallaire, *supra* note 80, at 15; Holly Foster & John Hagan, *The Mass Incarceration of Parents in America: Issues of Race/Ethnicity, Collateral Damage to Children, and Prisoner Reentry*, 623 ANNALS AM. ACAD. POL. SOC. SCI. 179, 179 (2009); Christopher C. Henrich et al., *The Association of Community Violence Exposure with Middle-School Achievement: A Prospective Study*, 25 APPLIED DEVELOPMENTAL PSYCHOL. 327, 327 (2004); Hallam Hurt et al., *Exposure to Violence: Psychological and Academic Correlates in Child Witnesses*, 155 ARCHIVES PEDIATRICS ADOLESCENT MED. 1351, 1351 (2001); Alissa C. Huth-Bocks et al., *The Direct and Indirect Effects of Domestic Violence on Young Children's Intellectual Functioning*, 16 J. FAM. VIOLENCE 269, 283 (2001); Manuel E. Jimenez et al., *Adverse Experiences in Early Childhood and Kindergarten Outcomes*, 137 PEDIATRICS 1, 1 (2016); Johnson, *supra* note 80, at 195; Lisa R. Kiesel et al., *The Relationship Between Child Maltreatment, Intimate Partner Violence Exposure, and Academic Performance*, 10 J. PUB. CHILD WELFARE 434, 435 (2016); Stephen J. Lepore & Wendy Kliewer, *Violence Exposure, Sleep Disturbance, and Poor Academic Performance in Middle School*, 41 J. ABNORMAL CHILD PSYCHOL. 1179, 1184 (2013); Luster et al., *supra* note 224, at 1324 (2002); Macmillan & Hagan, *supra* note 186, at 152; Mears & Siennick, *supra* note 225, at 3; Metzler et al., *supra* note 186, at 144; Cho, *supra* note 80, at 273; Murray & Farrington, *supra* note 186, at 170; Murray et al., *supra* note 80, at 175; Niclas Olofsson et al., *Physical and Psychological Symptoms and Learning Difficulties in Children of Women Exposed*

(GPA), poorer reading and math skills, school disengagement, slower academic progress, and grade incompleteness.³⁰⁷ This effect was found to carry on to adulthood and higher education settings.³⁰⁸ The changes in brain structures and disruptions of the homeostasis of stress-biology systems that result from traumatic exposure to crime affect cognitive capacities, and therefore explain the elevated risk for inferior educational outcomes.³⁰⁹ Reduced cognitive capacities due to exposure impact skills integral to the learning process, such as memory, attention, concentration, executive functions, visual-spatial perceptual reasoning, and verbal comprehension.³¹⁰ Furthermore, children affected by the Triple-C Impact were shown to have deficits in the omnibus IQ.³¹¹ When controlling for alternative explanatory factors, studies found that affected children scored on average five to ten IQ points lower than peers in their cohort.³¹² This gap was shown

and Non-Exposed to Violence: A Population-Based Study, 56 INT'L J. PUB. HEALTH 89, 91 (2011); Stacy Overstreet & Shawnee Braun, *A Preliminary Examination of the Relationship Between Exposure to Community Violence and Academic Functioning*, 14 SCH. PSYCHOL. Q. 380, 380 (1999); Cynthia M. Perez & Cathy Spatz Widom, *Childhood Victimization and Long-Term Intellectual and Academic Outcomes*, 18 CHILD ABUSE & NEGLECT 617, 626 (1994); David Schwartz & Andrea Hopmeyer Gorman, *Community Violence Exposure and Children's Academic Functioning*, 95 J. EDUC. PSYCHOL. 163, 163 (2003); Tracy Vaillancourt & Patricia McDougall, *The Link Between Childhood Exposure to Violence and Academic Achievement: Complex Pathways*, 41 J. ABNORMAL CHILD PSYCHOL. 1177, 1177 (2013); Valerie McGaha-Garnett, *The Effects of Violence on Academic Progress and Classroom Behavior: From a Parent's Perspective*, VISTAS ONLINE (2013), https://www.counseling.org/docs/default-source/vistas/the-effects-of-violence-on-academic-progress-and-classroom-behavior.pdf?sfvrsn=1828de3f_12 [<https://perma.cc/YFE8-J7GE>]; Leila Morsy & Richard Rothstein, *Mass Incarceration and Children's Outcomes: Criminal Justice Policy Is Education Policy*, ECON. POL'Y INST. (Dec. 15, 2016), <https://www.epi.org/publication/mass-incarceration-and-childrens-outcomes/> [<https://perma.cc/PT24-ZJX9>].

307. See *supra* note 306 and accompanying text.

308. *Id.*

309. See McGaha-Garnett, *supra* note 306, at 2; Moffitt, *supra* note 251, at 1625; Wilson et al., *supra* note 190, at 89.

310. See Moffitt, *supra* note 251, at 1625–26.

311. See *id.* at 1625; Wilson et al., *supra* note 190, at 93. See generally Normand J. Carrey et al., *Physiological and Cognitive Correlates of Child Abuse*, 34 J. AM. ACAD. CHILD & ADOLESCENT PSYCHIATRY 1067 (1995); Virginia Delaney-Black et al., *Violence Exposure, Trauma, and IQ and/or Reading Deficits Among Urban Children*, 156 ARCHIVES PEDIATRIC & ADOLESCENT MED. 280–95 (2002); Karestan C. Koenen et al., *Domestic Violence Is Associated with Environmental Suppression of IQ in Young Children*, 15 DEV. & PSYCHOPATHOLOGY 297 (2013).

312. See Moffitt, *supra* note 251, at 1626; see also Koenen et al., *supra* note 311, at 297.

to remain, or even to increase, as exposed children approach adulthood.³¹³

Another variable that explains the lower academic performances of Triple-C Impacted children is the higher rate of psychological distress, PTSD, depression, and anxiety among affected children.³¹⁴ Amongst the common symptoms of such internalizing conditions are sleep disturbances, intrusive thoughts, difficulties in controlling negative emotions, decreased feelings of self-efficacy, loss of energy, decreased motivation, impaired concentration and memory, as well as persistent worrying and fearfulness.³¹⁵ Additionally, children exposed to crime are more likely to exhibit lack of interest in social activities, have lower self-esteem, develop damaged perceptions of agency and self-efficacy, avoid peer relations, maintain unhealthy relationships, and practice increased rebellion through defiant behaviors in the school environment.³¹⁶ These psychological and social outcomes of exposure to crime impair the child's ability to learn and function in the classroom, and the desire to invest in future-oriented activities such as excelling at school.³¹⁷

In parallel, the prevalence of externalizing conditions that result from exposure to crime and violence also have a critical effect.³¹⁸

313. See Moffitt, *supra* note 251, at 1626; Wilson et al., *supra* note 190, at 93.

314. Borofsky et al., *supra* note 306, at 383; see also Tara Mathews et al., *Effects of Exposure to Community Violence on School Functioning: The Mediating Role of Posttraumatic Stress Symptoms*, 47 BEHAV. RES. & THERAPY 586, 586 (2009).

315. See Schwartz & Hopmeyer Gorman, *supra* note 306, at 164. See also Borofsky et al., *supra* note 306, at 383; Lynch & Cicchetti, *supra* note 59, at 243; Margolin & Gordis, *supra* note 5, at 446; Pedro Martinez & John E. Richters, *The NIMH Community Violence Project: II. Children's Distress Symptoms Associated with Violence Exposure*, 56 PSYCHIATRY INTERPERSONAL & BIOLOGICAL PROCESSES 22, 28 (1993).

316. See McGaha-Garnett, *supra* note 306, at 3.

317. Ross Macmillan, *Adolescent Victimization and Income Deficits in Adulthood: Rethinking the Costs of Criminal Violence from a Life-Course Perspective*, 38 CRIMINOLOGY 553, 559 (2000) (“[T]he most immediate consequence of violent victimization is diminished investments in education. Such investments include educational aspirations, the amount of education that one hopes to attain, and the time and energy devoted to schoolwork. As these investments are explicitly purposive and future-oriented, diminished perceptions of agency and self-efficacy stemming from criminal victimization should limit educational investments.”); see, e.g., Borofsky et al., *supra* note 306, at 382; Michele Cooley-Quille & Raymond Lorion, *Adolescents' Exposure to Community Violence: Sleep and Psychophysiological Functioning*, 27 J. COMMUNITY PSYCHOL. 367, 386 (1999); Kliewer & Sullivan, *supra* note 58, at 860; Margolin & Gordis, *supra* note 5, at 449; McGaha-Garnett, *supra* note 306, at 2; Macmillan & Hagan, *supra* note 186, at 131.

318. See, e.g., Borofsky et al., *supra* note 306, at 391; Delaney-Black et al., *supra* note 311, at 285; Schwartz & Hopmeyer Gorman, *supra* note 306, at 171; Dexter R. Voisin et al., *Mechanisms Linking Violence Exposure and School Engagement*

Externalizing disorders involve intense feelings of anger, irritability, and powerful mood states, which can overwhelm children's developing capacities for self-regulation, reducing their ability to "adaptively modulate emotion, attention, and behavior."³¹⁹ Externalized conditions are characterized by behaviors that, under normal circumstances, are defined as "disruptive" and are not welcomed or acceptable in the classroom, such as aggression, hyperactivity, temper tantrums, and frequent fighting.³²⁰ Indeed,

[i]t seems likely that children who experience problems with behavioral control will have difficulty negotiating the academic demands of school. Children who are impulsive, hyperactive, or easily distracted will find it hard to stay on task in the classroom and remain engaged in schoolwork over long periods of time. Aggressive or noncompliant behavior might also interfere with a child's functioning in the classroom.³²¹

There is also a powerful connection between social relationships and success in academic settings. As discussed above, children exposed to crime struggle to create mainstream social relationships, and subsequently develop inclinations towards deviant peer groups. Such deviant relationships can exacerbate school disengagement.³²² Additionally, the use of alcohol or drugs in an effort to cope and achieve immediate relief for the symptoms of distress, which is more likely for children exposed to crime, will aggravate the problem even further. Indeed, some researchers have observed a cyclical

Among African American Adolescents: Examining the Roles of Psychological Problem Behaviors and Gender, 81 AM. J. ORTHOPSYCHIATRY 61, 61 (2011).

319. Schwartz & Hopmeyer Gorman, *supra* note 306, at 164.

320. See, e.g., Schwartz & Hopmeyer Gorman, *supra* note 306, at 164; McGaha-Garnett, *supra* note 306, at 3; Voisin et al., *supra* note 318, at 61.

321. Schwartz & Hopmeyer Gorman, *supra* note 306, at 164; see also John D. Coie & Gina Krehbiel, *Effects of Academic Tutoring on the Social Status of Low-Achieving, Socially Rejected Children*, 55 CHILD DEV. 1465, 1466 (1984); David Schwartz & Laura J. Proctor, *Community Violence Exposure and Children's Social Adjustment in the School Peer Group: The Mediating Roles of Emotion Regulation and Social Cognition*, 68 J. CONSULTING & CLINICAL PSYCHOL. 670, 671 (2000); Ann Shields et al., *The Development of Emotional and Behavioral Self-Regulation and Social Competence Among Maltreated School-Age Children*, 6 DEV. & PSYCHOPATHOLOGY 57, 58 (1994). See generally Alice W. Pope & Karen L. Bierman, *Predicting Adolescent Peer Problems and Antisocial Activities: The Relative Roles of Aggression and Dysregulation*, 35 DEV. PSYCHOL. 335 (1999).

322. Borofsky et al., *supra* note 306, at 390; see Todd I. Herrenkohl et al., *Developmental Risk Factors for Youth Violence*, 26 J. ADOLESCENT HEALTH 176, 177 (2000); Yibing Li & Richard M. Lerner, *Trajectories of School Engagement During Adolescence: Implications for Grades, Depression, Delinquency, and Substance Use*, 47 DEV. PSYCHOL. 233, 233 (2011).

deleterious pattern: exposure to violence places adolescents at risk of becoming disengaged at school, and children “who perform poorly in school may spend more time on the streets and associating with delinquent peers which, in turn, may create more circumstances to be exposed to violence.”³²³

Lastly, it is of note that even without an official mental health diagnosis, the experience of exposure to crime and violence is tantalizing. Especially when not treated and processed, the exposure is likely to preoccupy young minds and divert focus and attention away from taught curriculum. Additionally, the instability associated with many of the Triple-C Impact categories, particularly parental incarceration and exposure to family violence, can severely affect school attendance, the ability to complete school assignments, and exam preparation.³²⁴ This is another route by which exposure to crime inevitably affects academic performance — the snowball only grows larger.

The range of scientific studies investigating the effect of the Triple-C Impact on education yields several interesting findings. Exposure is associated with an increase in odds of suffering from Attention Deficit Hyperactivity Disorder (ADHD); the effect ranges from 40% increase for children affected by parental incarceration to 63% for children affected by direct victimization.³²⁵ Another study estimates the attributed increase in odds of having an attention disorder at 90% when compared to non-exposed children.³²⁶ Triple-C Impact exposure is correlated to a 50% increase in the odds of having poor language and literacy skills, and 60% for poor math skills.³²⁷ The Triple-C Impact was also found to be associated with a 30% to 45% decrease in the odds of graduating from high school.³²⁸

323. Borofsky et al., *supra* note 306, at 382; *see also* Herrenkohl et al., *supra* note 322, at 178; Li & Lerner, *supra* note 322, at 280.

324. *See* Delaney-Black et al., *supra* note 311, at 280; Hurt et al., *supra* note 306, at 1354. *See generally* Macmillan & Hagan, *supra* note 186.

325. Tenah K.A. Hunt et al., *Adverse Childhood Experiences and Behavioral Problems in Middle Childhood*, 67 CHILD ABUSE & NEGLECT 391, 399 (2017) (finding no effect on children exposed to family violence).

326. Jimenez et al., *supra* note 306, at 6.

327. *Id.* at 5.

328. *See* Allwood & Spatz Widom, *supra* note 209, at 568; Lansford et al., *supra* note 219, at 240; Mears & Siennick, *supra* note 225, at 21.

F. Economic Well-Being

It is well documented that the Triple-C Impact is most prevalent among children coming from lower socioeconomic backgrounds.³²⁹ However, there is strong evidence that even when controlling for background and other covariates, exposure to violence in childhood can lead to diminished economic well-being in adulthood.³³⁰ This is detected in higher rates of unemployment, income deficit, higher rates of poverty and homelessness, higher utilization of social services, lower rates of health care coverage and a greater reliance on Medicaid.³³¹

The process of socioeconomic success is considered a life-course phenomenon, built sequentially through life's stages.³³² The pathways leading from Triple-C exposure to diminished economic well-being in adulthood serve as a culmination of the snowball effect, and demonstrate the power of the metaphor — the Triple-C Impact snowball grows from the host of adverse outcomes outlined throughout this section.

Socioeconomic well-being is most directly impacted by the detrimental effects of

329. See Currie & Spatz Widom, *supra* note 28, at 117. See generally Holly Foster et al., *Poverty/Socioeconomic Status and Exposure to Violence in the Lives of Children and Adolescence*, THE CAMBRIDGE HANDBOOK OF VIOLENT BEHAVIOR AND AGGRESSION (Daniel J. Flannery et al. eds., 2007); Deborah Gorman-Smith & Patrick Tolan, *The Role of Exposure to Community Violence and Developmental Problems Among Inner-City Youth*, 10 DEV. & PSYCHOPATHOLOGY 101 (1998).

330. See Macmillan & Hagan, *supra* note 186, at 131–32. See generally Macmillan, *supra* note 317; Metzler et al., *supra* note 186; Allwood & Spatz Widom, *supra* note 209; David S. Zielinski, *Child Maltreatment and Adult Socioeconomic Well-Being*, 33 CHILD ABUSE & NEGLECT 666 (2009); Covey et al., *supra* note 306; Murray & Farrington, *supra* note 186; Randy A. Sansone et al., *Five Forms of Childhood Trauma: Relationships with Employment in Adulthood*, 36 CHILD ABUSE & NEGLECT 676 (2012); Currie & Spatz Widom, *supra* note 25; Yong Liu et al., *Relationship Between Adverse Childhood Experiences and Unemployment Among Adults from Five US States*, 48 SOC. PSYCHIATRY & PSYCHIATRIC EPIDEMIOLOGY 357 (2013); Will Dobbie et al., *The Intergenerational Effects of Parental Incarceration* (The National Bureau of Economic Research, NBER Working Paper No. 24186, 2018), <https://www.princeton.edu/~wdobbie/files/parentspillovers.pdf> [<https://perma.cc/HY87-F9PR>]; Mears & Siennick, *supra* note 225; Foster & Hagan, *supra* note 306.

331. *Id.* See Zielinski, *supra* note 330, at 674 (“The results additionally showed maltreatment to be associated with lower rates of health care coverage and a greater reliance on Medicaid.”). See generally Wildeman, *supra* note 84.

332. See generally Macmillan & Hagan, *supra* note 186; Glen H. Elder, *Models of the Life Course*, 21 CONTEMP. SOC. 632 (1992).

Triple-C Impact on education,³³³ which often leads to employment and thus to a steady income.³³⁴ Exposure undermines academic performance and potential educational achievement, which has a bearing on the odds of successful participation in the labor force, stability of employment over time and occupational status; all of these factors directly impact, if not determine, future earnings and economic productivity.³³⁵ In fact, studies estimate that each additional year of education increases potential annual income by approximately \$1,500.³³⁶

The increased risk for poor mental and physical health among Triple-C Impacted children is also an important factor for socioeconomic stability.³³⁷ The debilitating symptoms of health conditions can affect one's ability to participate in the labor force and to maintain a stable position over time, as well as potentially limiting the type of jobs one can take on.³³⁸ As such, adverse health consequences of exposure to crime inevitably have a negative effect on earning capacity. Moreover, involvement in risky behaviors such as criminal offending and illicit substance abuse can affect

333. See generally Zielinski, *supra* note 330; Macmillan & Hagan, *supra* note 186, at 152.

334. See generally WILLIAM H. SEWELL & ROBERT M. HAUSER, EDUCATION, OCCUPATION, AND EARNINGS: ACHIEVEMENT IN EARLY CAREER (1975); W. Norton Grubb, *Postsecondary Education and the Sub-Baccalaureate Labor Market: Corrections and Extensions*, 14 ECON. EDUC. REV. 285 (1995); Metzler et al., *supra* note 186; Macmillan & Hagan, *supra* note 186; Avshalom Caspi et al., *Continuities and Consequences of Interactional Styles Across the Life Course*, 57 J. PERSONALITY 375 (1989); Currie & Spatz Widom, *supra* note 25; Liu et al., *supra* note 330; Orley Ashenfelter & Cecilia Rouse, *Income, Schooling, and Ability: Evidence from a New Sample of Identical Twins*, 113 Q.J. ECON. 253 (1998); Stacey Berg Dale & Alan B. Krueger, *Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables*, 117 Q.J. ECON. 1491 (2002); JENNIFER CHEESEMAN DAY & ERIC C. NEWBERGER, U.S. CENSUS BUREAU, THE BIG PAYOFF: EDUCATIONAL ATTAINMENT AND SYNTHETIC ESTIMATES OF WORK-LIFE EARNINGS (2002), <https://www.census.gov/prod/2002pubs/p23-210.pdf> [<https://perma.cc/V4RZ-7F8H>].

335. See generally SEWELL & HAUSER, *supra* note 334; Zielinski, *supra* note 330; Ashenfelter & Rouse, *supra* note 334; Dale & Krueger, *supra* note 334; DAY & NEWBERGER, *supra* note 334; Macmillan & Hagan, *supra* note 186; Grubb, *supra* note 334.

336. Macmillan, *supra* note 317, at 570.

337. See Daniel B. Herman et al., *Adverse Childhood Experiences: Are They Risk Factors for Adult Homelessness?*, 87 AM. J. PUB. HEALTH 249, 253–54 (1997). See generally Currie & Spatz Widom, *supra* note 25; Liu et al., *supra* note 330; Metzler et al., *supra* note 186.

338. See generally Zielinski, *supra* note 330; Anne Case et al., *The Lasting Impact of Childhood Health and Circumstances*, 24 J. HEALTH ECON. 365 (2005).

employment stability and income, particularly when such behaviors lead to incarceration.³³⁹

Reduced familial and social support associated with the Triple-C Impact was also found to affect economic well-being and risk for homelessness.³⁴⁰ The family and close social circle are important potential sources of assistance to individuals in trouble — absent these, there is a higher probability for financial struggles to deteriorate until they reach a critical point.³⁴¹ Additionally, Triple-C Impacted children were found to be “more likely to report marital disruption such as divorce and separation.”³⁴² Marital status can influence economic status in a host of ways, including the financial benefits of a two-income household, the social support and stability commonly provided through marital relationships, and the financial strains associated with divorce proceedings.³⁴³

Agnew’s General Strain theory also attempts to explain the complex relationship between the Triple-C Impact and socioeconomic status. Agnew suggests that the disjunction between culturally approved goals and one’s ability to achieve those goals through socially acceptable means can be a significant source of strain, and exposure to the Triple-C Impact may lead one to develop a variety of negative adaptations to reduce that strain.³⁴⁴ One form of adaptation, previously discussed regarding increased criminality, is “innovation” — circumstances where one maintains culturally acceptable goals, such as acquiring wealth, but opts to pursue these through illegitimate means, such as criminal behaviors.³⁴⁵ More relevant adaptations to the context of diminished economic well-being are “retreatism,” which involves rejecting both the goals and the societal norms for achieving those goals, and “ritualism,” where

339. See Zielinski, *supra* note 330, at 675–76.

340. See Herman et al., *supra* note 337, at 253. See generally Liu et al., *supra* note 330.

341. See Herman et al., *supra* note 337, at 253.

342. Liu et al., *supra* note 330, at 358; see Allwood & Spatz Widom, *supra* note 209, at 554; Covey et al., *supra* note 306, at 87; Herman et al., *supra* note 337, at 253. See generally David Finkelhor et al., *Sexual Abuse and Its Relationship to Later Sexual Satisfaction, Marital Status, Religion, and Attitudes*, 4 J. INTERPERSONAL VIOLENCE 379 (1989); Mark A. Whisman, *Childhood Trauma and Marital Outcomes in Adulthood*, 13 PERS. RELATIONSHIPS 375 (2006).

343. See Herman et al., *supra* note 337, at 253. See generally Macmillan & Hagan, *supra* note 186; Ross Macmillan, *Violence and the Life Course: The Consequences of Victimization for Personal and Social Development*, 27 ANN. REV. SOC. 1 (2001); Liu et al., *supra* note 330; Whisman, *supra* note 342.

344. See Covey et al., *supra* note 306, at 86.

345. *Id.*

individuals continue to apply socially acceptable means, but lower their aspirations and abandon “culturally approved goals for success.”³⁴⁶ To relieve the strain caused by childhood exposure to crime, a ritualist may abandon conventional goals such as income and wealth, while a retreatist would abandon not only the goals but also the means of achieving them, such as education and legitimate employment.³⁴⁷ Regardless of the chosen form of adaptation, “[b]oth retreatism and ritualism suggest reduced effort to achieve success, which would result in lower socioeconomic statuses in the form of lower levels of income, education, and other positively valued socioeconomic statuses.”³⁴⁸

Going beyond the effects of the Triple-C Impact on the individual, lower educational attainment, higher unemployment, and lower household income have a multigenerational impact.³⁴⁹ Studies show that undereducation, underemployment, and poverty have a “cyclical and intergenerational effects.” Children of parents who experience any of these conditions were found to have a “heightened risk for poor educational outcomes that result in greater risk of unemployment and lower incomes.”³⁵⁰ The Triple-C Impact can “increase the likelihood of adults living in poverty, which in turn can put their children at greater risk for remaining in poverty and experiencing lower attainment of life opportunities as adults, causing an intergenerational effect.”³⁵¹

Empirical studies indicate that the average income deficit of adults who have been affected by direct victimization during childhood can be as high as \$5,000³⁵² to \$6,000³⁵³ a year, at peak earning.³⁵⁴ The expected lifetime income loss per individual is estimated to be \$82,400.³⁵⁵ Children exposed to crime are also twice as likely to fall

346. *Id.*

347. *Id.* at 87.

348. *Id.* at 86.

349. See Metzler et al., *supra* note 186, at 146.

350. Metzler et al., *supra* note 186, at 146; see also John H. Tyler & Magnus Lofstrom, *Finishing High School: Alternative Pathways and Drop-Out Recovery*, 19 FUTURE CHILD. 77, 85 (2009). See generally Gary Solon, *Intergenerational Income Mobility in the United States*, 82 AM. ECON. REV. 393 (1992); SARAH FASS ET AL., NAT'L CTR FOR CHILDREN IN POVERTY, CHILD POVERTY AND INTERGENERATIONAL MOBILITY (2009), http://www.nccp.org/publications/pdf/text_911.pdf [<https://perma.cc/YT8C-CYE6>].

351. Metzler et al., *supra* note 186, at 146.

352. Currie & Spatz Widom, *supra* note 25, at 117.

353. Macmillan, *supra* note 317, at 570.

354. Currie & Spatz Widom, *supra* note 25, at 117.

355. Macmillan, *supra* note 317, at 574.

below the poverty line and rely on Medicaid for healthcare coverage,³⁵⁶ and 740% more likely to experience homelessness.³⁵⁷ One study estimated the annual deficit among children exposed to parental incarceration at \$2,953 during young adulthood, rather than peak earning.³⁵⁸ Several studies have found Triple-C Impact exposure to double the risk for unemployment in adulthood.³⁵⁹

G. Methodological Limitations

It is important to explain that it is statistically impossible to empirically prove a relationship of direct causation between the Triple-C Impact and the range of adverse outcomes discussed herein. The reason stems from the nature of this field, which is characterized by frequent co-occurrence of confounding factors and circumstances. Childhood crime exposure often overlaps with other serious life adversities such as poverty, social marginalization, and family dysfunctions, as well as cultural and language barriers.³⁶⁰ Furthermore, as shown above, the Triple-C Impact categories are not mutually exclusive and often coincide. That said, existing studies clearly demonstrate a strong association between the different categories of exposure and harm. The use of sophisticated statistical tools and sensitivity tests help control for competing causes of negative outcomes, and to distill the specific effect attributed to the Triple-C Impact. Nevertheless, like any social science or medical research, all the reviewed studies are affected by a range of limitations and methodical complexities.³⁶¹ Disparities in research findings can also be attributed to differences in study design, variable definitions, sample size, and characteristics, and the exact models and methodologies applied. Hence, while we must always remain conscious and mindful of these constraints and the improbability of absolute accuracy in results, the pronounced risk to children affected by the Triple-C Impact established in empirical studies requires our utmost attention and exacting investigation.

356. Zielinski, *supra* note 330, at 671.

357. Herman et al., *supra* note 337, at 252.

358. See Mears & Siennick, *supra* note 225, at 22.

359. See, e.g., Macmillan & Hagan, *supra* note 186, at 150; Zielinski, *supra* note 330, at 671; Liu et al., *supra* note 330, at 361; Putnam, *supra* note 243, at 2 (“As adults, they [maltreated children] are twice as likely to be unemployed.”).

360. See Todd I. Herrenkohl et al., *Intersection of Child Abuse and Children’s Exposure to Domestic Violence*, 9 TRAUMA VIOLENCE & ABUSE 84, 89 (2008).

361. See Holt et al., *supra* note 12, at 798–99.

On a more technical note, it should be clarified that all the percentage figures presented in Part III of the Article reflect the increase in the odds of experiencing the different outcomes associated with the Triple-C Impact exposure. Alternative terminology was occasionally used to enhance flow and ease the reading of the text.

As clearly reflected throughout this section, the Triple-C Impact involves a complex system of reciprocal and sometimes cyclical variables. For some individuals, only one pathway will be activated. For others, several mechanisms will coalesce to create negative outcomes. It is possible, of course, that another segment of exposed children will manage to bypass all pathways and avoid negative outcomes. Gaining an understanding of these intertwining pathways is a critical step in selecting impactful strategies and devising effective solutions to the Triple-C Impact problem—to spot the snowball as close as possible to the top of the hill, bring it to an abrupt stop, and prevent the consequences of cascading deterioration. The next Part will demonstrate how such ongoing deterioration creates a spill-over effect that goes beyond the harms inflicted on individual children exposed to the violence, to adversely impacting our society as a whole.

IV. THE SPILL-OVER EFFECT

When masses of snowballs roll down the mountainside, they create an avalanche with a destructive force. In our existing reality, millions of Triple-C Impacted children across the nation, as well as adults who were impacted during childhood, are left untreated due to insufficient policies. As a result, they suffer the dire consequences that negatively affect their ability to conduct healthy and productive lifestyles. The heightened risk for criminal behavior, delinquency, substance abuse, and re-victimization among affected individuals feeds the cycle of violence and inevitably compromises community safety. The greater likelihood to experience unemployment and homelessness reduces the contribution of this sizeable group of individuals as productive members of society, and places an unnecessary strain on public funds.³⁶² Deteriorating state of physical and mental health throughout these children's lives, as explained in Part III, further aggravates the effect.

362. See, e.g., Mills, *supra* note 14, at 462; REPORT ON THE BIOPSYCHOSOCIAL CONSEQUENCES OF CHILDHOOD VIOLENCE, *supra* note 7, at 2. See generally ERICA J. ADAMS, JUST. POL'Y INST., HEALING INVISIBLE WOUNDS: WHY INVESTING IN TRAUMA-INFORMED CARE FOR CHILDREN MAKES SENSE (2010).

The financial burden created by this aggregated effect of the masses of Triple-C Impacted children is placed on the “public systems, such as child welfare, social services, the public health system, law enforcement, juvenile justice, [the departments of correction,] and, in particular, [public] education.”³⁶³ This burden is paired with the staggering loss of productivity over the children’s lifetimes, which influences tax inputs, while also disrupting the ecosystem of the market economy.³⁶⁴ Furthermore, the effect of this harmful phenomenon is destined to deepen preexisting socioeconomic gaps and inequalities, as the communities disproportionately hurt by the Triple-C Impact are those already at a disadvantage.³⁶⁵

The lack of inclusive examination of the Triple-C Impact problem in its entirety thus far prevents us from gauging the full cost of the ongoing neglect of affected children to the state and our society. Nevertheless, the existing partial economic indicators are already overwhelming.³⁶⁶ The Attorney General Task Force report has described the financial costs of the problem as “astronomical.”³⁶⁷ To provide a sense of the magnitude of the sums involved, the annual costs of the public health system alone are estimated to range from \$333 billion to \$750 billion. One study estimates the annual national costs of only direct victimization, without consideration of the four other Triple-C Impact categories, at \$94,076,882,529.³⁶⁸ Another study evaluated the average lifetime cost per victim of nonfatal child maltreatment is \$210,012 in 2010 dollars and the estimated average

363. LISTENBEE ET AL., *supra* note 25, at 5.

364. *Id.*; Zielinski, *supra* note 330, at 676.

365. *See generally* Foster et al., *supra* note 329; Herrenkohl et al., *supra* note 360.

366. *See generally* THERESA DOLEZAL ET AL., ACADEMY ON VIOLENCE & ABUSE, HIDDEN COSTS IN HEALTH CARE: THE ECONOMIC IMPACT OF VIOLENCE AND ABUSE (2009); Kathryn E. McCollister et al., *The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation*, 108 DRUG ALCOHOL DEPENDENCE 98 (2010); Patrick Sidmore, ALASKA MENTAL HEALTH BOARD & THE ADVISORY BOARD ON ALCOHOLISM & DRUG ABUSE, ECONOMIC COSTS OF ADVERSE CHILDHOOD EXPERIENCES IN ALASKA: THE PRICE OF NOT INTERVENING BEFORE TRAUMA OCCURS, <http://dhss.alaska.gov/abada/ace-ak/Documents/ACEsEconomicCosts-AK.pdf> [https://perma.cc/VY6F-FFBX].

367. LISTENBEE ET AL., *supra* note 25, at 5.

368. SUZETTE FROMM, TOTAL ESTIMATED COST OF CHILD ABUSE AND NEGLECT IN THE UNITED STATES: STATISTICAL EVIDENCE 3 (2001).

lifetime cost per death is \$1,272,900, including \$14,100 in medical costs and \$1,258,800 in productivity losses (in 2010 dollars).³⁶⁹

Thus, a spillover effect is created that touches every facet of our society. These massive expenditures deplete limited and much needed available public resources. In fact, some researchers estimate that the Triple-C Impact phenomenon is one of the most costly public health and public safety problems in the United States today.³⁷⁰ This comes at a time when states' revenues are already stretched to their limit, as many states are facing severe budget deficits that amount to a serious fiscal crisis, and every dollar counts.³⁷¹ This burden ultimately rests on the tax-payers' shoulders, impairs fiscal efficiency, and has a significant negative bearing on the quality of life of each and every one of us.

CONCLUSIONS

Now when we imagine the steep snowy slope of the Triple-C Impact, it is no longer black and white. We can visualize the rippling transition between the initial exposure to crime that sets the snowball in motion, to the gradually accumulating stress and strain, to alterations in cerebral neurobiology, to psychological distress and poor mental health, to self-medication through substance abuse in searching for relief of the unbearable pain. We can imagine the transition from extreme anger and frustration, to aggression and socially maladaptive interaction with peers, to gravitation towards marginalized social groups, resulting in the adoption of delinquent and deviant behaviors. The snowball passes from distraction and inability to focus, to disinterest in school and difficulties to excel academically, to dropping out of school, struggling to integrate in the workforce or to maintain a stable job, to financial strain coupled with

369. Xiangming Fang et al., *The Economic Burden of Child Maltreatment in the United States and Implications for Prevention*, 36 CHILD ABUSE & NEGLECT 156 (2012).

370. REPORT ON THE BIOPSYCHOSOCIAL CONSEQUENCES OF CHILDHOOD VIOLENCE, *supra* note 7, at 2; ADAMS, *supra* note 362, at 33.

371. *See generally American States Face a Revenue Crisis*, ECONOMIST (Apr. 7, 2018), <https://www.economist.com/united-states/2018/04/07/american-states-face-a-revenue-crisis> [<https://perma.cc/66T7-79KJ>]; ELIZABETH MCNICHOL & SAMANTHA WAXMAN, CTR. ON BUDGET & POL'Y PRIORITIES, STATES FACED REVENUE SHORTFALLS IN 2017 DESPITE GROWING ECONOMY: POLICYMAKERS CAN TAKE STEPS TO STRENGTHEN THEIR TAX SYSTEMS AND RESERVES (Oct. 2017); NAT'L ASSOC. OF STATE BUDGET OFFICERS, SUMMARY: FALL 2017 FISCAL SURVEY OF STATES (Dec. 14, 2017), https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/Issue%20Briefs%20Summary_-_Fall_2017_Fiscal_Survey.pdf [<https://perma.cc/642E-BXPY>].

a lack of social or familial sources of assistance and support, finally ending in homelessness. Throughout this long, unwinding slope, there are broken gates that let the snowball pass through — deficient policies that rely on political intuition rather than on true understanding of the unique needs of children and the processes they go through once experiencing traumatized exposure to crime. These policies fail to halt the rapidly rolling snowballs. We can imagine the missed opportunities for intervention that could have stopped the snowball in its tracks.

When we have a better understanding of that steep slope, we are better equipped to fortify those gates. For example, since accumulating psychological distress appears to be at the heart of many of the cascading Triple-C Impact outcomes, early identification and provision of trauma-informed cognitive therapy is essential. This can help children process their trauma, equip them with techniques to relieve unbearable stress, and channel them towards positive and constructive coping mechanism. Social isolation is another gate that can be closed through a host of methods: providing behavioral therapy, assisting exposed children in developing skills to generate positive interpersonal interaction, demonstrating alternatives to aggression, helping exposed children regain trust in relationships, and reinforcing the importance of engagement in education. As can be inferred from the volume of evidence presented in this Article, the higher up on the hill we position these reinforced gates, the greater the likelihood of effectively stopping the rolling snowball before it grows too large. A delayed response, when the snowball nears the bottom of the hill, will require costlier and less effective approaches such as substance rehabilitation or complex medical treatment for debilitating mental and physical health conditions.

Efforts must focus on gaining an understanding of the full societal value of investment in early identification of children plagued by the Triple-C Impact, followed by effective intervention. This full understanding necessarily calls for considerations beyond the undisputable life-changing benefits for individual children affected by the Triple-C Impact. It would entail assessing the dollar values of the many adverse outcomes discussed in this Article. These financial figures would have to be amalgamated with the exposure prevalence data presented here, and the risk percentages extracted from empirical studies, in order to provide the most accurate and comprehensive quantification of the short- and long-term economic loss to the state and our society due to the existing statutory gaps and ineffective response to the Triple-C Impact problem.

Once these “wasted” resources are identified, they can then be compared against the costs of developing an effective infrastructure of identification and intervention. This is likely a hidden goldmine, where investment in effective recourse and early-intervention will not only improve the lives and well-being of millions of children, but also provide an almost unparalleled opportunity for savings on fiscal and social costs. Since the muffled cries of millions of children across the nation have yet to motivate policy-makers to act, maybe money will talk on their behalf.

APPENDIX: 50-STATE SURVEY RESULTS

Table 1: State-by-State Triple-C Impact Statutory Recognition by Category (as of 2016)

The table catalogs which of the Triple-C Impact categories are statutorily recognized in each of the fifty states and the District of Columbia. The table presents the results in a 0/1 form. “1” is logged where the state’s law recognizes the category and provides eligibility for therapeutic services or compensation for children under the category. “0” is logged when there is no statutory recognition for the category in the state. Blank logs were placed when information was unavailable.

STATE	Direct Victims: Child Specific Victim Rights Act\Provision	Family Violence	Community Violence	Parental Victimization	Parental Incarceration	Data on Parental status of Inmates	Total
Alabama	0	1	0	1	0	1	3
Alaska	0	1	1	1	0	0	3
Arizona	0	1	0	0	1		2
Arkansas	0	1	0	1	0	0	2
California	0	1	1	1	0	0	3
Colorado	1	1	0	1	0	0	3
Connecticut	0	1	0	1	0	1	3
Delaware	1	1	0	1	1	0	4
Florida	0	1	1	0	0	1	3
Georgia	0	1	1	1	0	1	4
Hawaii	0	0	0	0	0	1	1
Idaho	0	1	0	1	0	0	2
Illinois	0	1	1	1	0	1	4
Indiana	0	0	0	0	0	0	0
Iowa	0	1	0	1	0	1	3
Kansas	0	1	0	1	0	0	2
Kentucky	0	1	1	1	0		3
Louisiana	0	1	0	1	0	0	2
Maine	0	1	0	0	0		1
Maryland					0	0	0
Massachusetts	0	1	0	0	0		1
Michigan	0	1	0	1	0	0	2

Minnesota	1	1	1	1	0		4
Mississippi	1	1	1	1	0		4
Missouri	0	1	0	1	0	1	3
Montana	0	1	1	0	0	0	2
Nebraska	0	1	1	0	0		2
Nevada	0	1	1	0	0	1	3
New Hampshire	0	1	0	1	0	1	3
New Jersey	0	1	0	1	0	1	3
New Mexico	0	1	1	1	0	1	4
New York	1	1	1	1	0	1	5
North Carolina	0	0	0	0	0	1	1
North Dakota	1	1	1	0	0		3
Ohio	0	1	0	0	0	1	2
Oklahoma	0	1	0	0	0	0	1
Oregon	0	1	1	0	0	1	3
Pennsylvania	1	1	1	1	0		4
Rhode Island	1	0	0	0	0	0	1
South Carolina	0	1	1	1	0	1	4
South Dakota	0	1	1	1	0		3
Tennessee	0	1	0	0	0	0	1
Texas	0	1	0	1	0	0	2
Utah	1	1	0	1	0	1	4
Vermont	0	1	1	1	1	0	4
Virginia	0	1	0	0	0	0	1
Washington	1	1	1	0	0	1	4
West Virginia	0	1	1	1	0	0	3
Wisconsin	1	0	0	0	0	1	2
Wyoming	0	1	1	1	0	1	4
Washington DC	0	1	0	1	0		2
Total	11	45	22	31	3	21	Average 2.61

The Tragedy of Wasted Funds and Broken Dreams: An Economic Analysis of Childhood Exposure to Crime and Violence

Michal Gilad¹ & Abraham Gutman²

Abstract

In 2012, Attorney General Eric E. Holder’s Task Force declared childhood exposure to crime and violence a “national crisis.” The problem of childhood crime exposure, which we previously coined the Triple-C Impact, is estimated to be one of the most damaging and costly public health and public safety problems in our society today. Yet, thus far no one knows how much it actually costs us.

This article aims to answer this daunting question and provide an empirical economic analysis of the cost of the Triple-C Impact problem to the state and to society.

Children whose lives are touched by crime are left with deep scars that gravely affect their mental and physical health, as well as their life outcomes. Such negative corollaries inflict hefty costs on the state and on society at large. In fact, our analysis reveal a total annual cost of over \$458 billion each year.

Despite the severity and cost of the problem, little is done to help affected children recover. The analysis presented in this article will form the basis for an evidence-based argument as to the unparalleled economic benefits of investment in early intervention efforts to alleviate the injurious and costly outcomes for children affected by crime exposure.

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Table of Contents

Introduction 4

Section I - The Problem 6

 A. The Unique Effect of Crime on Children 7

 B. The States’ Response..... 10

Section II - Methodology 16

Section III - Prevalence..... 26

 A. Direct Victimization 26

 B. Exposure to Family Crime..... 27

 C. Exposure to Community Crime 29

 D. Parental Victimization 31

 E. Parental Incarceration..... 33

 F. The Bottom Line..... 35

Section IV - Risks and Costs 37

 A. Criminal Justice..... 39

 B. Substance Use and Use Disorders..... 45

 C. Mental Health..... 49

 D. Physical Health..... 52

 E. Education 56

 F. Productivity & Economic Well-Being 59

 G. The Bottom Line..... 62

 H. Sensitivity Testing..... 63

Conclusion..... 66

Appendix I: 50-State Survey Results..... 69

Appendix II: Outcome Studies Summary 71

Introduction

The problem of childhood exposure to crime and violence has been flagged for several decades as a monumental issue of great proportion. We have previously named the problem the Comprehensive Childhood Crime Impact, or Triple-C Impact for short.³ In 2012, Attorney General Eric E. Holder’s Task Force on Children Exposed to Violence declared the problem “a national crisis and a threat to the health and well-being of our nation’s children and of our country.”⁴ Going back 40 years, in 1979 the U.S. Surgeon General Julius B. Richmond named the same problem a “public health crisis of the highest priority.”⁵ Others have estimated the problem to be one of the most costly public health and public safety problem in our society today.⁶ But how much does it cost us?

In today’s world, crime penetrates the lives of children from all different directions. Children witness violence at school, in the neighborhood, or even in the “safety” of their own home. Children may also be affected indirectly when parents fall victims to crime, or when a parent is incarcerated. The unique developmental, social, and cultural characteristics of children make them particularly prone to the negative forces of crime. Childhood crime exposure leaves deep scars that gravely affect the mental and physical health, as well as the life outcomes, of affected children.⁷

Despite the severity of the Triple-C Impact problem, and the devastating effect it has on millions of children nationwide, little is done on the policy level to heal the open wounds. The majority of children harmed by crime do not receive the much needed services to facilitate recovery from trauma.⁸ At present, there are no effective mechanisms in place to identify affected children and

³ Michal Gilad, *Falling Between the Cracks: Understanding Why States Fail in Protecting Our Children From Crime*, 2019 *University of Illinois Law Review* 907 (2019); Michal Gilad et al., *The Snowball Effect of Crime & Violence: Measuring the Triple-C Impact*, 46 *Fordham Urban Law Journal* 1 (2019).

⁴ Robert L. Listenbee, et al., *Report of the Attorney General’s National Task Force on Children Exposed to Violence* 36 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>

⁵ Robert L. Listenbee, et al., *Report of the Attorney General’s National Task Force on Children Exposed to Violence* 3 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>

⁶ Frank W. Putnam, *The Impact of Trauma on Child Development*, 57 *Juvenile and Family Court Journal*, 1, 2 (2006); Erica J. Adams, *Justice Policy Institute, Healing Invisible Wounds: Why Investing in Trauma-Informed Care for Children Makes Sense* 1 (2010).

⁷ More on the potential outcomes of the Triple-C Impact problem see Michal Gilad, et al., *The Snowball Effect of Crime & Violence: Measuring the Triple-C Impact*, 46 *Fordham Urban Law Journal* 1 (2019).

⁸ Robert L. Listenbee, et al., *Report of the Attorney General’s National Task Force on Children Exposed to Violence* (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>;

refer them to vital services. Although resources and services for affected children do exist in most States, access is obstructed by a myriad of bureaucratic hurdles and flaws in the system's design.⁹

The ramifications of this ongoing state of neglect go beyond compromising the well-being of individual children, and have a spill-over effect on society. With millions of children across the nation untreated and hampered from conducting a healthy and productive lifestyle, and with heightened risk for acute health problems, substance use, criminal behavior, and repeat victimization, community safety is inevitably compromised. These negative outcomes of imposing proportions carry hefty costs that are inevitably shouldered by society as a whole, and unnecessarily burden public funds. This comes at a time when states' revenues are already stretched to their limit, as many states are facing severe budget deficits that amount to a serious fiscal crisis, and every dollar counts.¹⁰

Although the attention given to the problem and its costs has repeatedly receded over the years, thus far no one has empirical knowledge as to the exact level of financial expenditure associated with the Triple-C Impact problem, and the issue remains an elusive mystery. This gap in knowledge stems from many sources, such as the compartmentalized approach through which the problem has been examined, the scarcity of relevant systematic nationally representative datasets, the co-occurrence of the Triple-C Impact with other life adversities, and the broad range of methodological hurdles and limitations involved in the analytical process. In addition, for some, it may be convenient to overlook the sums of money being spent each year due to the ongoing neglect of affected children.

It is often said that “money talks.” Perhaps it is worth experimenting with having its voice heard on behalf of our children. This paper takes on the challenge of pursuing a data-driven economic

⁹ See more detailed explanation in Section II(B), also see Michal Gilad, *Falling Between the Cracks: Understanding Why States Fail in Protecting Our Children From Crime*, 2019 *University of Illinois Law Review* 907 (2019).

¹⁰ See generally *American States Face a Revenue Crisis*, *ECONOMIST* (Apr. 7, 2018), <https://www.economist.com/usa/2018/04/07/american-states-face-a-revenue-crisis> [<https://perma.cc/66T7-79KJ>]; ELIZABETH MCNICHOL & SAMANTHA WAXMAN, *CTR. ON BUDGET & POL'Y PRIORITIES, STATES FACED REVENUE SHORTFALLS IN 2017 DESPITE GROWING ECONOMY: POLICYMAKERS CAN TAKE STEPS TO STRENGTHEN THEIR TAX SYSTEMS AND RESERVES* (Oct. 2017); *NAT'L ASSOC. OF STATE BUDGET OFFICERS, SUMMARY: FALL 2017 FISCAL SURVEY OF STATES* (Dec. 14, 2017), https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/Issue%20Briefs%20/Summary_-_Fall_2017_Fiscal_Survey.pdf [<https://perma.cc/642E-BXPY>].

analysis of the Triple-C Impact problem, assessing the broad range of cost elements associated with the problem.

It is the instinctive tendency of legal scholars to offer prompt solutions to the problems they uncover. It is essential to clarify that the objective of this article is not to offer solutions to the monumental Triple-C Impact problem. Nevertheless, it builds another critical block of the underpinnings on which an empirically informed plan to address this devastating problem can be established.¹¹ Ultimately, the analysis presented in this article sets the foundations for the development of an evidence-based argument as to the unparalleled opportunity for long-term fiscal savings and economic benefits of investment in early intervention efforts that will facilitate recovery of affected children and alleviate the risk for injurious outcomes.

Section I of the paper outlines the Triple-C Impact problem, and the ongoing failure of the states to effectively respond to the problem. Section II provides a detailed explanation of the methodology used for the economic analysis of the Triple-C Impact problem, and the design of the economic model at its foundation. In section III, data-driven estimates of the prevalence of the problem in our society are presented. Section IV expounds on the adverse outcomes associated with the Triple-C Impact. Empirical evidence on the level of risk posed to affected children will be analyzed, and the potential costs accrued by the risk outcomes will be assessed. Conclusions will follow.

Section I - The Problem

The Triple-C Impact problem consists of two integral and interlocking elements. The first is the unique effect crime exposure has on children due to their distinct developmental attributes. The second is the manner in which children are addressed and treated once they have been exposed to crime. This section will expound on these two key components in order to fully depict the Triple-C Impact problem.

¹¹ In conjunction with our previous publications on this topic: Michal Gilad, Falling Between the Cracks: Understanding Why States Fail in Protecting Our Children From Crime, 2019 University of Illinois Law Review 907 (2019); Michal Gilad, et al., The Snowball Effect of Crime & Violence: Measuring the Triple-C Impact, 46 Fordham Urban Law Journal 1 (2019).

A. The Unique Effect of Crime on Children

The Triple-C Impact is a term reflecting the distinct effect of direct and indirect crime exposure on children, and the destructive impact of such exposure to their lives and society as a whole. The Triple-C Impact concept rests on empirical and scientific studies that identify relevant developmental, social, and cultural differences between children and adults, which significantly amplify and expand the vulnerability of children to the effect crime exposure.¹²

The most visible difference is the smaller physical stature of most children, which increases their vulnerability to threats posed by larger perpetrators. However, despite common misperceptions, children are not merely miniature adults. The plasticity of a child's central nervous system leads the human brain to be extremely malleable during childhood,¹³ and dramatically increases the effect of early experiences.¹⁴ Exposure to crime and violence during childhood causes heightened levels of stress and overstimulation of certain brain structures, which can lead to chemical imbalance in the child's brain and abnormal neurological development.¹⁵

Children are also at a critical stage of their emotional and cognitive development. Their identity is not yet formed, their personality traits are in transitory stages, and they are less mentally stable than adults.¹⁶ This state of psychological immaturity makes it difficult for children to process and cope with trauma without external assistance.¹⁷ There is an increased risk that damage caused by crime exposure at this delicate developmental stage will disrupt developmental trajectories and

¹² Niclas Olofsson Et Al., Long-Term Health Consequences of Violence Exposure in Adolescence: A 26-Year Prospective Study, 12 BMC Public Health 411, 411-2 (2012)

¹³ Gayla Margolin and Elana B. Gordis, The Effects Of Family And Community Violence On Children, 51 Annu. Rev. Psychol. 445, 459 (2000); Bruce Perry, Incubated In Terror: Neurodevelopmental Factors In The "Cycle of Violence", in Children in a Violent Society 124 (Joy D. Osofsky ed. 1997)

¹⁴ Michael J. S. Weiss & Sheldon H. Wagner, What Explains The Negative Consequences Of Adverse Childhood Experiences On Adult Health? Insights From Cognitive And Neuroscience Research, 14 Am. J. Prev. Med. 356 (1998); Gayla Margolin and Elana B. Gordis, The Effects Of Family And Community Violence On Children, 51 Annu. Rev. Psychol. 445, 459 (2000); B. D. Perry & R. Pollard, Homeostasis, Stress, Trauma, and Adaptation: Neurodevelopmental View of Childhood Trauma, 7 Child Adolesc. Psychiatry Clin. N. Am. 33 (1998).

¹⁵ Gayla Margolin and Elana B. Gordis, The Effects Of Family And Community Violence On Children, 51 Annu. Rev. Psychol. 445, 459 (2000); Richard J. Loewenstein & Frank W. Putnam (Eds.), Report Of The American Psychiatric Association Task Force On The Biopsychosocial Consequences Of Childhood Violence (June 2013),

<http://www.researchgate.net/publication/239939460>

¹⁶ Roper v. Simmons, 543 U.S. 551, 569-70 (2005). See also: Jessica Feierman et al., The Eighth Amendment Evolves: Defining Cruel And Unusual Punishment Through The Lens Of Childhood And Adolescence, 15 University of Pennsylvania Journal of Law and Social Policy 285, 294-297 (2012).

¹⁷ Jessica Feierman et al., The Eighth Amendment Evolves: Defining Cruel And Unusual Punishment Through The Lens Of Childhood And Adolescence, 15 University of Pennsylvania Journal of Law and Social Policy 285, 296 (2012); Gayla Margolin and Elana B. Gordis, The Effects Of Family And Community Violence On Children, 51 Annu. Rev. Psychol. 445, 450 (2000).

progression through age-appropriate milestones,¹⁸ and will become permanently embedded in the individual's core personality structure.¹⁹

Children are in the midst of their legal socialization, a process that unfolds during childhood and adolescence, through which children develop an inclination towards compliance with the law and cooperation with legal actors.²⁰ Exposure to crime and violence, and the failure of the criminal justice system to protect children from these harmful experiences, are likely to interfere with the process of affected children.²¹ Disruption of this fundamental developmental process may explain a proclivity towards criminal behavior and illicit substance use in individuals affected by crime during childhood.²²

As a factor of their social and psychological immaturity, children are dependent on adults for their survival and basic psychical and emotional needs.²³ They have little choice over their living environment and the people with whom they associate. Additionally, they do not have the capabilities or resources to remove themselves from harmful circumstances induced by crime and violence.²⁴ When a caregiver is incapacitated by victimization, substance use disorder, or incarceration, the dependent children are often deprived of the care, guidance, and protection that

¹⁸ Gayla Margolin and Elana B. Gordis, *The Effects Of Family And Community Violence On Children*, 51 *Annu. Rev. Psychol.* 445, 449 (2000); S. Boney-McCoy & David Finkelhor, *Psychosocial Sequelae Of Violent Victimization In a National Youth Sample*, 63 *J. Consult. Clin. Psychol.* 726 (1995); Suzanne G. Martin, *Children Exposed to Domestic Violence: Psychological Considerations For Health Care Practitioners*, 16(3) *Holistic Nursing Practice* 7 (2002); Jennifer E. McIntosh, *Thought In The Face Of Violence: A Child's Need*, 26 *Child Abuse and Neglect* 229 (2002); Stephanie Holt, Helen Buckley & Sadhbh Whelan, *The Impact of Exposure To Domestic Violence On Children And Young People: A Review of The Literature*, 32 *Child Abuse & Neglect* 797, 802 (2008).

¹⁹ Linda G. Mills, *The Justice of Recovery: How the State Can Heal the Violence of Crime*, 57 *Hastings L.J.* 457, 486 (2005).

²⁰ Jeffrey Fagan & Tom R. Tyler, *Legal Socialization of Children and Adolescent*, 18 *Social Justice Research* 217, 219-222 (2005). See also: Jeffrey Fagan, et al., *Developmental Trajectories of Legal Socialization among Adolescent Offenders* 96 *Journal of Criminal Law and Criminology* 267 (2005).

²¹ Jeffrey Fagan & Tom R. Tyler, *Legal Socialization of Children and Adolescent*, 18 *Social Justice Research* 217 (2005).

²² Cathy Spatz Widom, *Child Victims: Searching For Opportunities To Break The Cycle of Violence*, 7(4) *Appl. Prev. Psychol.* 225 (1998); Dean G. Kilpatrick, et al., *Risk Factors For Adolescent Substance Abuse And Dependence: Data From a National Sample*, 68 *Journal of Consulting and Clinical Psychology* 19 (2000).

²³ Elizabeth Scott, *The Legal Construction of Childhood*, 29 *Hofstra U. L. Rev.* 541, 546 (2000).

²⁴ David Finkelhor & Patricia Y. Hashima, *The Victimization of Children & Youth: A Comprehensive Overview*, in *Law and social science perspectives on youth and justice* (S.O. White, Ed.) 49, 59-61 (2001); Brief For The American Psychological Association, American Psychiatric Association, National Association Of Social Workers, And Mental Health America As Amici Curiae Supporting Petitioners at 15, *Graham v. Florida*, 130 S. Ct. 2011, 2017 (2010) (Nos. 08-7412, 08-7621), <http://www.apa.org/about/offices/ogc/amicus/graham-v-floridasullivan.pdf>; Alan E. Kazdin, *Adolescent Development, Mental Disorders, and Decision Making of Delinquent Youths*, in *Youth on Trial* 33, 47 (Thomas Grisso & Robert G. Schwartz eds., 2000); *Miller v. Alabama*, 132 S. Ct. 2455 (2012). (Although this series of Supreme Court cases, including *Roper*, *Graham* and *Miller*, dealt with juveniles offenders rather than victims, the court and amici's analysis of scientific developmental psychology is useful for an understanding of the special needs of juvenile and their unique characteristics and behavioral traits).

are essential for their development. Moreover, such caregivers' ability to make coherent decisions on behalf of their children as their legal guardians, and to fully consider the children's best interests, is inevitably diminished.²⁵

Empirical evidence shows that one of the prime corollaries of the aforementioned differences between adults and minor children is the expansion of crime-induced harm beyond the conventional direct victimization.²⁶ Hence, even when a criminal offence is not committed directly against the body of the child, and the child is "only" indirectly exposed, it can leave marks that are acute, and often long lasting.²⁷ In response to these imperative findings, the Triple-C Impact concept was designed to incorporate the full range of direct and indirect forms of crime exposure that commonly affect children. When evaluating the exact forms of crime exposure to be included under the Triple-C Impact umbrella, the primary criterion used is the presence of significant empirical evidence to support and demonstrate potential harm to the child, which rises to a level similar to that caused by the "gold standard" of direct victimization.²⁸ Through meticulous review

²⁵ Gayla Margolin and Elana B. Gordis, *The Effects Of Family And Community Violence On Children*, 51 *Annu. Rev. Psychol.* 445, 450 (2000).

²⁶ David Finkelhor, *Developmental Victimology: The comprehensive study of childhood victimization*, in R. C. David, et al. (Eds), *Victims of crime* (3rd ed.) 9,12 (2007); Gayla Margolin and Elana B. Gordis, *The Effects Of Family And Community Violence On Children*, 51 *Annu. Rev. Psychol.* 445, 450 (2000); Niclas Olofsson Et Al., *Long-Term Health Consequences of Violence Exposure in Adolescence: A 26-Year Prospective Study*, 12 *BMC Public Health* 411, 411-2 (2012).

²⁷ Robert L. Listenbee, et al., *Report of the Attorney General's National Task Force on Children Exposed to Violence* 66 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; I. Harpaz-Rotem, et al., *Clinical epidemiology of urban violence: responding to children exposed to violence in ten communities*, 22(11) *Journal of Interpersonal Violence* 1479 (2007); W. W. Harris, A. F. Lieberman & S. Marans, *In the best interests of society*, 48(3-4) *Journal of Child Psychology and Psychiatry and Allied Disciplines* 392 (2007); P. Chauhan & C. S. Widom, *Childhood maltreatment and illicit drug use in middle adulthood: the role of neighborhood characteristics*, 24(3) *Development and Psychopathology* 723 (2012); C. S. Widom, et al., *A prospective investigation of physical health outcomes in abused and neglected children: new findings from a 30-year follow-up*, 102(6) *American Journal of Public Health* 1135 (2012); H. W. Wilson & C. S. Widom, *Pathways from childhood abuse and neglect to HIV-risk sexual behavior in middle adulthood*, 79(2) *Journal of Consulting and Clinical Psychology* 236 (2011); V. Nikulina, C. S. Widom, & S. Czaja, *The role of childhood neglect and childhood poverty in predicting mental health, academic achievement and crime in adulthood*, 48(3-4) *American Journal of Community Psychology* 309 (2011); J. Currie & C. S. Widom, *Long-term consequences of child abuse and neglect on adult economic well-being*, 15(2) *Child Maltreatment* 111 (2010); T. Bentley & C. S. Widom, *A 30-year follow-up of the effects of child abuse and neglect on obesity in adulthood*, 17(10) *Obesity (Silver Spring)* 1900 (2009); H. W. Wilson & C. S. Widom, *Does physical abuse, sexual abuse, or neglect in childhood increase the likelihood of same-sex sexual relationships and cohabitation? A prospective 30-year follow-up*, 39(1) *Archives of Sexual Behavior* 63 (2010); R. Gilbert, et al., *Burden and consequences of child maltreatment in high-income countries*, 373 *Lancet* 68 (2009); C. S. Widom, S. J. Czaja & M. A. Dutton, *Childhood victimization and lifetime revictimization*, 32(8) *Child Abuse & Neglect* 785 (2008).

²⁸ Due consideration should be given to the fact that children are not equally affected by crime victimization and trauma. Some children are deeply traumatized by victimization, whether direct or indirect, while others exhibit high levels of resilience (David Finkelhor, *Developmental Victimology: The comprehensive study of childhood victimization*, in R. C. David, et al. (Eds), *Victims of crime* (3rd ed.) 9,12 (2007)). The exact combination of factors that allow some children to develop higher levels of resilience than others is not yet fully understood. However, factors such as age, gender, relationship with the caregiver, personal strengths and vulnerabilities, characteristics of the child's family and community, and the frequency and severity of the victimization, were shown by empirical research to have an effect on children's responses (Betsy Mcalister Groves, et al., *Family Violence Prevention Fund, Identifying and Responding to Domestic Violence: Consensus Recommendations For child and*

of over 150 studies, which examine different aspects of the effect of crime exposure on all life facets of children, five categories of exposure that met this rigorous standard were identified: direct child victims;²⁹ children exposed to family crime;³⁰ children exposed to community crime;³¹ children with a victimized parent;³² and children affected by parental incarceration.³³ As science evolves and advances, this list could potentially change to adapt to new findings, relying on similar harm-based criteria.

B. The States' Response

A principal factor influencing the level of harm caused by the Triple-C Impact is the manner in which affected children are addressed – identified, managed, and treated.³⁴ In order to construct a potent response to affected children on the policy level, the paramount differentiating factors between children and adults outlined above must be taken into account.

In previous papers³⁵ we published the results of a 50-state survey designed to gain a better understanding of the existing state responses to the Triple-C Impact problem, and their ability to meet the unique developmental needs of minor children.³⁶ The survey took on the monumental

Adolescents Health 6 (2004), <http://www.futureswithoutviolence.org/userfiles/file/HealthCare/pediatric.pdf>; Anne Petersen, Joshua Joseph, & Monica Feit, *New Directions in Child Abuse and Neglect* 133 (2013)).

²⁹ Children who had a crime committed against their own person.

³⁰ Witnessing crime in the home or among family members, when the child is not physically harmed (most common are cases of domestic violence or inter-familial sexual abuse).

³¹ Witnessing crime outside the home (e.g. neighborhood or school) committed among non-relatives, when the child is not physically harmed.

³² Children with a parent or a primary caregiver who was a victim of a violent crime, where the child was not a witness to the crime, but was affected in some way by proxy.

³³ Children with a parent or primary caregiver who is incarcerated in a county, state or federal correctional facility.

³⁴ S. J. Ko, et al., *Creating trauma-informed systems: Child welfare, education, first responders, health care, juvenile justice*, 39(4) *Professional Psychology: Research and Practice* 396 (2008); J. A. Cohen, A. P. Mannarino & S. Iyengar, *Community treatment of posttraumatic stress disorder for children exposed to intimate partner violence: a randomized controlled trial*, 165(1) *Archives of Pediatric and Adolescent Medicine* 16 (2011); Robert L. Listenbee, et al., *Report of the Attorney General's National Task Force on Children Exposed to Violence* 66 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; C. S. Widom, S. J. Czaja & M. A. Dutton, *Childhood victimization and lifetime revictimization*, 32(8) *Child Abuse & Neglect* 785 (2008); Loeb, T. B., et al.; *Associations between child sexual abuse and negative sexual experiences and revictimization among women: Does measuring severity matter?* 35(11) *Child Abuse & Neglect* 946 (2011); S. E. Ullman, C. J. Najdowski & H. H. Filipas, *Child sexual abuse, post-traumatic stress disorder, and substance use: predictors of revictimization in adult sexual assault survivors*, 18(4) *Journal of Child Sexual Abuse* 367 (2009); T. Lindhorst, et al., *Mediating pathways explaining psychosocial functioning and revictimization as sequelae of parental violence among adolescent mothers*, 79(2) *American Journal of Orthopsychiatry* 181 (2009); J. D. Fargo, *Pathways to adult sexual revictimization: direct and indirect behavioral risk factors across the lifespan*, 24(11) *Journal of Interpersonal Violence* 1771 (2009); J. E. Barnes, et al., *Sexual and physical revictimization among victims of severe childhood sexual abuse*, 33(7) *Child Abuse & Neglect* 412 (2009).

³⁵ See: Michal Gilad, *Falling Between the Cracks: Understanding Why States Fail in Protecting Our Children From Crime*, 2019 *University of Illinois Law Review* 907 (2019); Michal Gilad et al., *The Snowball Effect of Crime & Violence: Measuring the Triple-C Impact*, 46 *Fordham Urban Law Journal* 1 (2019).

³⁶ See chart with survey results in Appendix A.

task of meticulously mapping the state-level statutory provisions that address the Triple-C Impact problem. It gathered data on statutory eligibility criteria for therapeutic services and resources for children directly and indirectly exposed to crime in each of the fifty states and the District of Columbia.³⁷ The survey aimed to answer fundamental questions such as: What resources are statutorily available on the state level? Which state agencies are charged with responding to affected children? Are there mechanisms to identify affected children? Which categories of children are statutorily eligible for services and resources?

The survey's outcomes were insightful and surprising. The results largely refuted the original hypothesis that children under most of the Triple-C Impact categories are not formally recognized by law, and thus are ineligible to receive services to facilitate their recovery. Instead, the survey found that resources and services are theoretically available for affected children in most states. Furthermore, eligibility for services and resources is recognized by law in most states for many categories of exposure to crime, with the marked exception of children affected by parental incarceration (see Table 1). Nevertheless, access to these services and resources in practice is obstructed by a myriad of bureaucratic labyrinths and system design flaws, including flaws in inter-agency coordination, extensive access barriers, ineffective utilization of resources, and insufficient account for the distinct needs of minor children. As a result, the majority of children harmed by crime cannot access available resources, and so never receive much-needed services and treatment to facilitate recovery from trauma caused by exposure to crime. Thus, they carry dire and costly outcomes throughout their childhood and into adulthood.³⁸

³⁷ It should be clarified that only services and resources that are clearly mandated by law, and target the specific population of children affected by each of the Triple-C Impact categories, were included in the survey. Some additional services may be available by grass root and civil society organizations or privately under medical insurance of Medicaid/Medicare/CHIP coverage. Child Protective Services also provide some services to eligible children, but those are restricted to children who face danger from their caregivers, rather than the entire group of affected children, and thus are excluded from the survey. In several states, some counseling services are available through the public school system, but these do not specifically target Triple-C Impact Children, and are often sporadically available, depending on the budget and discretion of each school district in the state. In one case school based services were statutorily mandated to all school districts in the state, and eligibility criteria relied on the status of the child as affected by different categories of crime exposure. In this case the services and resources provided were included in the survey.

³⁸ Robert L. Listenbee, et al., Report of the Attorney General's National Task Force on Children Exposed to Violence 83 & 172 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; See also: David Finkelhor et al., Children's Exposure to Violence: A Comprehensive National Survey, *Juvenile Justice Bulletin* 9 (Oct. 2009), available at: <https://www.ncjrs.gov/pdffiles1/ojjdp/227744.pdf>; Child Maltreatment 2010 (2010), <http://archive.acf.hhs.gov/programs/cb/pubs/cm10/cm10.pdf>; U.S. Health Resources and Services Administration. *Child Health USA 2011* (2011), <http://mchb.hrsa.gov/chusa11/more/downloads/pdf/c11.pdf>; C. Ghosh Ippen, et al., Traumatic and stressful events in early childhood: can treatment help those at highest risk?, 35(7) *Child Abuse & Neglect* 504 (2011); J. A. Cohen, A. P.

Table 1: 50-State Survey - Statutory Eligibility for Services and Resources to Affected Children:

	Direct Victimization	Family Violence	Community violence	Parental Victimization	Parental Incarceration	Incarceration Data
Yes	11	45	22	31	3	21
No	39	5	28	19	47	19
No Info.	1	1	1	1	1	11
Recognition%	21.6%	88.2%	43.1%	60.8%	5.9%	41.2%

* This table charts the number of states in the United States that have specific statutory provisions that recognize the eligibility of children affected by each of the Triple-C Impact categories of crime exposure to receive services or resources to facilitate recovery.

Despite the wealth of statutory provisions acknowledging the eligibility of Triple-C Impacted children for state resources, only a marginal fraction is specifically geared towards minor children and designed to accommodate their unique developmental needs. Most of the identified statutes were intended by the legislature to address the general adult population, with children included as an afterthought and without any account for the substantial differences between adults and minor children outlined above.³⁹ Absent such vital developmentally-oriented accommodations, available policies are inevitably expected to have diminished efficacy.

Additionally, the vast majority (if not all) of the identified services and resources rely solely on parental initiative -- and require the child's parent or guardian to actively seek and apply for

Mannarino & S. Iyengar, Community treatment of posttraumatic stress disorder for children exposed to intimate partner violence: a randomized controlled trial, 165(1) Archives of Pediatric and Adolescent Medicine 16 (2011); R. Wells, et al., Health service access across racial/ethnic groups of children in the child welfare system, 33(5) Child Abuse & Neglect 282 (2009); D. J. Kolko, et al., Community treatment of child sexual abuse: a survey of practitioners in the National Child Traumatic Stress Network, 36(1) Administration and Policy in Mental Health 37 (2009); J. A. Fairbank & D. W. Fairbank, Epidemiology of child traumatic stress, 11(4) Current Psychiatry Reports 289 (2009); P. T. Yanos, S. J. Czaja & C. S. Widom, A prospective examination of service use by abused and neglected children followed up into adulthood, 61(8) Psychiatric Services 796 (2010); Susan Schechter & Jeffrey L. Eldelson, Open Society Institute's Center on Crime, Communities & Culture, Domestic Violence & Children: Creating A Public Response 7 (2000); Debra Whitcomb, Children and Domestic Violence: The Prosecutor's Response (2004), <https://www.ncjrs.gov/pdffiles1/nij/199721.pdf>; R. J. Wright, et al., Response of Battered Mothers in the Pediatric Emergency Department: A Call For Interdisciplinary Approach to Family Violence, 99 Pediatrics 186 (1997); Susan Schechter & Jeffrey L. Eldelson, Open Society Institute's Center on Crime, Communities & Culture, Domestic Violence & Children: Creating A Public Response 3 (2000); The National Child Traumatic Stress Network (NCTSN), Identifying Children Affected by Domestic Violence, <http://www.nctsn.org/content/identifying-children-affected-domestic-violence>.

³⁹ According to our findings, only 13 states (25.4%) reported having a dedicated child victims act or provision. Six additional states (11.7%) reported the availability of a statutory provision with child-specific elements for at least one of the Triple-C categories.

assistance. None of the responding states reported the existence of an effective referral system designed to identify children affected by the Triple-C Impact and to refer them to services, for any of the categories of children included in the survey.⁴⁰

The consequences of the exclusive dependence on parental initiative are further aggravated by lack of transparency in the system. The process of conducting the survey unveiled an abundance of technical difficulties that obscure access to imperative information required in order to obtain available resources. These pose a colossal hurdle in the ability of parents and guardians seeking assistance to identify and utilize the available services.⁴¹ Once again, the most notable difficulties were experienced in the collection of data on children affected by parental incarceration, where in some states up to five different agencies had to be contacted in order to obtain and confirm the needed information.

The survey further revealed that such lack of transparency and ineffective communication are not only external, towards the general public, but also internal, among the stakeholders within the system itself. The different players on the field were often found to be “speaking a different language” in terms of the terminologies and definitions used. Unwarranted inconsistency was observed in the understanding of the division of labor, scope of responsibility, the expected standard of service and care, level of accessibility to existing services, and the amount of information publicly available. A clear demonstration of the deficiency in communication within the system are the numerous examples, uncovered by the survey, in which resources were statutorily available to affected children, but were not known to service providers and advocates who serve these children, or even to government agencies entrusted with serving the relevant populations.⁴² No methodical attempts for standardization, model policies, or guidelines for “best

⁴⁰ Complete Survey data is archived with the author. Only one state (Rhode Island) reported a systematic mechanism for identification and tracking of children exposed to family crime. However, this identification method does not appear to be linked to a referral mechanism. It was also not extended to children under any of the other Triple-C Impact categories (Interview with Deborah DeBare, Executive Director of the RI Coalition Against Domestic Violence (March 22, 2016)(on file with author)).

⁴¹ We repeatedly encountered difficulties in identifying the agency responsible for provision of services for each of the surveyed categories, and locating the specific officials within the agencies who held the relevant information. Lack of transparency of contact information for relevant public servants (phone numbers, email addresses) was a reoccurrence in many states. The lack of transparency in contact information of government agents was justified by some as a security measure, to protect agents from threats.⁴¹ Furthermore, even once the required contact information was obtained, we often experienced lack of responsiveness from the side of relevant state officials.⁴¹ Phone contact frequently proved to be futile, as the caller seeking information was transferred from one person to another until reaching a dead-end (usually a voicemail full to capacity).

⁴² For example, in the state of Virginia, the director of the state Criminal Injuries Compensation Fund reported that “for counseling purposes, minor child witnesses of violence involving a caretaker are considered to be a primary victim” and therefore

practices” in order to assure a minimum level of care were identified on the national nor the state level. Absent fluent communication among all the governmental and non-governmental players involved, any coordinated inter-agency response for effectively combating the Triple-C Impact problem, as warranted by the Attorney General Task Force,⁴³ is doomed to failure.

The survey identified another major systemic design flaw: improper division of labor and budget distribution under the Victims of Crime Act (VOCA). VOCA is the primary federal act that governs the field of assistance and services to victims of crime, and allocates funds to support the provision of such services on the state and federal level. The Act facilitates federal funding to state entities through two main sources—the federal Victim Compensation Program and the states’ Victim Assistance Programs. The Victim Compensation Programs allow eligible victims to receive reimbursement for costs associated with the harms caused by crime.⁴⁴ The Victim Assistance Programs are government-funded programs that provide a variety of services to victims of crime.⁴⁵ At present, the vast majority of statutory provisions that explicitly provide counseling services for the relevant categories of children exposed to crime are funded through reimbursement from the states’ Victim Compensation Programs. Yet, by design, these programs are not equipped to provide effective recourse to the scale of the problem. Compensation programs are severely underfunded, allocated with a negligible sliver of federal VOCA funds (only 7% - amounting to \$133 million - of the total VOCA budget in 2017 for all states and territories combined).⁴⁶ The application process for VOCA funding is long and tedious, and programs in most states do not

eligible for services. Conversely, the Crime Victim Programs Manager at the Virginia Department of Justice asserted that “[a]s far as statutes or guidelines around eligibility for services to child witnesses to domestic violence, there are none.” (Interview with Lindsay Crawford, Policy Advisor / Interim SAEP Coordinator, Kentucky Crime Victims Compensation Board (February 3-4, 2016)(on file with author); Interview with Shannon Moody, Policy Director, Kentucky Youth Advocates (February 1-2, 2016)(on file with author); Interview with Sher Schrader, Crime Victims’ Reparations Program, Nebraska Commission on Law Enforcement & Criminal Justice (February 5, 2016)(on file with author); Interview with Patricia L. Sattler, MSW, Victim/Witness Specialist, Nebraska Department of Justice, Attorney General Doug Peterson (February 10, 2016)(on file with author); Interview with Jack Ritchie, Director, Virginia Criminal Injuries Compensation Fund (March 9-10, 2016)(on file with author); Interview with Kassandra (Kay) Bullock, Victims Services Manager, Virginia Department of Criminal Justice Services (March 8, 2016)(on file with author)).

⁴³ Robert L. Listenbee, et al., Report of the Attorney General’s National Task Force on Children Exposed to Violence 19 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; Eric H. Holder, Jr., U.S. Attorney General, Letter of the Attorney General to members of the National Task Force on Children Exposed to Violence (Dec. 20, 2012).

⁴⁴ Office for Victims of Crime, Victim Compensation, see: <https://ovc.ncjrs.gov/topic.aspx?topicid=58>

⁴⁵ Office for Victims of Crime, Victim and Witness Assistance, see: <https://ovc.ncjrs.gov/topic.aspx?topicid=59>

⁴⁶ Office of Victims of Crime (OVC) Formula Chart 2017 Crime Victims Fund Allocation: Compensation, <https://ojp.gov/ovc/grants/Crime-Victims-Fund-Compensation-Allocations-2017.pdf>

Interview with Dan Eddy, Executive Director of the National Association of Crime Victim Compensation Boards (June 27, 2017) (on file with author).

have the capacity to process large volumes of applications. Most importantly, compensation agents do not have direct access to affected children, and thus do not have the capabilities or resources to pursue effective outreach, identification or referral efforts.⁴⁷

At the same time, Victim Assistance Program grants are allocated 93% or \$1.8 billion⁴⁸ of the federal VOCA budget. The act prioritizes funds to services dedicated to child victims.⁴⁹ In theory, the act permits the use of the grants to support a variety of local services and programs, including services to “secondary victims” such as children affected by indirect crime exposure. Yet, eligibility criteria for the funded programs do not seem to be regulated by any overarching policies (either by law or internal protocols). No state has reported protocols that assure that funds are distributed to all affected categories of children. All states that provided information on this issue in our survey stated that eligibility criteria depend on each individual program and case-by-case examination.⁵⁰ No state could provide information about specific programs/services that accommodate the different categories of children affected by the Triple-C Impact. Publicly available lists of VOCA funded programs in each state include only very general information, and do not specify whether eligibility criteria cover “secondary victims”. Under these circumstances, increased burden is thrust towards the underfunded and unequipped Victim Compensation programs in a manner that prevents maximization of the existing resources. As a result, lack of transparency is further deepened, and accessibility of any relevant services that may be available for Triple-C Impacted children is severely hindered.

There could be many, more benign, reasons for suboptimal utilization of services and resources by Triple-C Impacted children. The affected child or parent may not fully comprehend the severity of the harm endured, and the long-term implications of avoiding treatment. Some are able to obtain services elsewhere through medical insurance, urgent care or child protective services. Others are

⁴⁷ Interview with Dan Eddy, Executive Director of the National Association of Crime Victim Compensation Boards (Feb. 25, 2016) (on file with author).

⁴⁸ Office of Victims of Crime (OVC) Formula Chart 2017 Crime Victims Fund Allocation: Assistance, <https://ojp.gov/ovc/grants/Crime-Victims-Fund-Assistance-Allocations-2017.pdf>

Interview with Dan Eddy, Executive Director of the National Association of Crime Victim Compensation Boards (June 27, 2017) (on file with author).

⁴⁹ The specific words of the Act prioritize funds for child abuse prevention and treatment, but some broader interpretations for the term “child abuse” are available (42 U.S. Code § 10603(a)(2)(A)).

⁵⁰ Complete Survey data is archived with the author.

disinterested in obtaining assistance from government agencies due to negative past experiences or general distrust common to marginalized communities.⁵¹

Yet, one can only wonder whether these persistent and recurring system design flaws and administrative roadblocks are not entirely coincidental, and may be the manifestation of political forces aiming to disincentivize the use of resources in order to generate some level of short-term fiscal savings. As the analysis presented below demonstrates, such short-term savings are likely to result in epic long-term costs borne by taxpayers and society.

Section II - Methodology

After gaining an understanding of the nature and scope of the problem, the next step is to design an economic model that will enable us to conduct an evidence-based cost analysis of the Triple-C Impact problem, and yield an estimate of the cost of the problem to the state and to society. Yet, even more important than producing the bottom-line financial figures, a paramount objective of the analysis process is to provide a clear and comprehensive understanding of the multitude of cost components that must be integrated into the calculation, and the complexity of the nexus between these components. To this end, a detailed documentation of the methodology and a break-down of the work process are vital.

The ideal study enabling one to make the most precise determination on the economic cost of crime exposure would require summoning a nationally representative sample of children, randomizing different types of crime and violence exposures among them, and then following these children into adulthood, recording data on their health, employment, criminal involvement, substance use, etc. Then, one could calculate the costs of the observed outcomes. However, such a study is unfeasible (and unethical). Facing “real world” constraints, the design of our study necessitated overcoming numerous methodological challenges and limitations, while making tough compromises, in order to reach our objectives.

⁵¹ These are some factors that explain general low claim rate for victim compensation assistance, which are estimated to steadily stand at approximately 5-10% in most states (Interview with Dan Eddy, Executive Director of the National Association of Crime Victim Compensation Boards (June. 28, 2017) (on file with author)).

First, it is important to clarify that statistically proving a direct causal relationship between crime exposure and adverse outcomes is highly unlikely. Only the improbable nationally representative randomized controlled trial describe above would allow the establishment of a causal relationship between exposure and outcomes. Barring such research endeavor, all studies need to account for the nature of this field, which is characterized by frequent co-occurrence of confounding factors and circumstances. Childhood crime exposure often overlaps with other serious life adversities, such as poverty, social marginalization, structural racism, and family dysfunctions, as well as cultural and language barriers.⁵² As shown in the next section, even the Triple-C Impact categories themselves are not mutually exclusive and often coincide. While these limitations should not detract from the pronounced risk established in empirical studies to children affected by the Triple-C Impact, it is important to remain conscious and mindful of these constraints and the improbability of absolute accuracy in results.

Second, the adverse outcomes associated with the Triple-C Impact form an intricate web. Each outcome affects the others in a reciprocal, often cyclical pattern.⁵³ Under these circumstances, it is necessary to assure that each cost element is counted only once during the analysis, in order to avoid an overestimation of the total cost. Such distortion would negatively impact the credibility and accuracy of the analysis and consequently lessen the weight and persuasion power of the economic argument.

Third, the adverse effect of the Triple-C Impact is characterized by substantial heterogeneity. The specific effect on each individual child may vary depending on the type, severity, timing and frequency of the exposure, as well as the child's characteristics, such as age, gender, socio-economic status, level of familial support, and the child's emotional capacity.⁵⁴ The presently

⁵² Holly Foster, Jeanne Brooks-Gunn & Anne Martin, Poverty/Socioeconomic Status and Exposure to Violence in the Lives of Children and Adolescence, in *The Cambridge Handbook of Violent Behavior and Aggression* (Daniel J Flannery, et al., Eds.) 664 (2007); Todd I. Herrenkohl et al., Intersection of Child Abuse and Children's Exposure to Domestic Violence, 9 *Trauma, Violence & Abuse* 84, 87 (2008).

⁵³ Michal Gilad et al., The Snowball Effect of Crime & Violence: Measuring the Triple-C Impact, 46 *Fordham Urban Law Journal* 1 (2019).

⁵⁴ Betsy Mcalister Groves, et al., Family Violence Prevention Fund, Identifying and Responding to Domestic Violence: Consensus Recommendations For child and Adolescents Health 6 (2004), <http://www.futureswithoutviolence.org/userfiles/file/HealthCare/pediatric.pdf>; S. R. Jaffee, et al., Individual, family, and neighborhood factors distinguish resilient from non-resilient maltreated children: a cumulative stressors model, 31(3) *Child Abuse & Neglect* 231 (2007); Anne Petersen, Joshua Joseph, & Monica Feit, *New Directions in Child Abuse and Neglect* 133 (2013); Stephanie Holt, Helen Buckley & Sadhbh Whelan, The Impact of Exposure To Domestic Violence On Children And Young People: A Review of The Literature, 32 *Child Abuse & Neglect*

available empirical data and studies do not enable adequate reflection of this variance in the cost analysis. We have taken several measures to obtain the most realistic cost estimates under these conditions. The guiding principle throughout our analysis is to always choose the most conservative estimate and to err on the side of undercounting. To this end, the lowest level of exposure was selected from each study for the calculation of the attributable risk (in most cases the effect of one exposure was used). Similar principles guided the valuation of monetary costs of each outcome. Additionally, we calculated the adjusted prevalence using both the upper and lower bounds of the 95 percent confidence interval of the odds ratio. We also reported the variance in the estimated cost for each category based on these intervals.

Fourth, the analysis relies on existing data-sets and studies. While the data used were not specifically tailored for this study, we have made adjustments and inferences to assure the most effective and appropriate utilization of these pre-existing sources. Like any social science, and even medical research, all the studies used in our analysis are affected by a range of limitations and methodical complexities.⁵⁵ Variances in study results are affected by differences in study design, variable definitions, sample size and characteristics, and the exact models and methodologies applied. To minimize the impact of these limitations on our model as much as possible, we have carefully screened the studies incorporated into our analysis, and have relied on the most methodologically rigorous available studies. These studies are based on relatively large samples, and use sophisticated statistical tools and sensitivity tests to control for competing causes for the negative outcomes, and to distill the specific effect attributed to the Triple-C Impact. Additionally, when more than one study of equal methodological rigor was available, we opted to rely on the most conservative finding (whether in the estimated level of risk or appraised costs), to avoid inflation on our bottom-line financial figures.

Fifth, at present, the field of childhood exposure to crime and violence is severely understudied. Elaborate nationally representative data in the field is scarce and limited. We had to integrate

797, 804-5 (2008); Lucy Salcido Carter, Lois A. Weithorn & Richard E. Behrman, Domestic Violence And Children: Analysis And Recommendations, 9(3) *The Future of Children* 4 (1999); Stephanie Holt, Helen Buckley & Sadhbh Whelan, The Impact of Exposure To Domestic Violence On Children And Young People: A Review of The Literature, 32 *Child Abuse & Neglect* 797, 802-3 (2008).

⁵⁵ Some examples for the common limitations and methodological difficulties are described here: Stephanie Holt, Helen Buckley & Sadhbh Whelan, The Impact of Exposure To Domestic Violence On Children And Young People: A Review of The Literature, 32 *Child Abuse & Neglect* 797, 798-9 (2008).

several different data-sets in order to include all the variables needed for our model,⁵⁶ as no existing data-set was sufficiently inclusive. Still, we encountered many gaps in information, concerning such variables as when did exposure occurred? When has the outcome first appeared? and how long each outcome persisted. As aforementioned, such missing information hinders the ability to account for the heterogeneity of the effect of childhood crime exposure. To overcome these gaps, we again took the approach of selecting the most conservative value, in order to avoid overestimation. We also focused the initial analysis on one specific cohort (U.S. population born in the year 2002) in order to limit the margins of error. Only outcomes supported by studies of sufficient rigor and quality were counted. For some categories of exposure, such as the prevalence of parental victimization, no data currently exist altogether, and thus had to be excluded from the analysis.

Furthermore, even when data sources and studies did exist, significant drawbacks materialized. For example, most risk studies calculate the lifetime odds to experience the outcome, while cost studies and budget documents calculate annual costs. This incompatibility added to the complexity of the analysis process and narrowed the range of studies that could effectively be incorporated. Also, most available risk studies do not rely on nationally representative data. To mitigate the problem, we attempted to use ACE (Adverse Childhood Experiences) studies and data⁵⁷ whenever possible, which, despite their limitations,⁵⁸ rely on very large samples and are considered a widely-acceptable resource in the field. Nevertheless, these issues clearly highlight the urgent need for more data-driven research in this field.

⁵⁶ For example, prevalence and risk variables do not appear in one unified dataset

⁵⁷ See: Center of Disease Control and Prevention (CDC), Adverse Childhood Experiences (ACEs), <https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/aboutace.html>

It should be considered that the ACE studies average the effect of several childhood adversities together. While many of the adversities included in these studies are relevant to our analysis, some, like parental divorce, are not crime related, and are the level of trauma induced is likely to be lower than crime exposure. Thus, the effect presented in these studies are likely to be somewhat diluted.

⁵⁸ The ACE studies measure the effect of childhood adversities on physical and mental health conditions. The adversities included in the studies are not limited to childhood crime exposure, but include other childhood hardships, such as parental separation/divorce, household mental illness, and physical and emotional neglect. Most studies do not measure the effect of each type of adversity separately, but average the effect of all types of adversities. The averaged results could potentially be diluted. While the original ACE studies include a very large sample (n=17,000), the sample is not nationally representative. Subsequent ACE studies that rely on BRFSS data are representative of the population of the states in which the data were collected, but do not provide nationally representative samples. The studies are survey-based and the measures of both adversities and outcomes rely on retrospective self-reporting, which is prone to biases.

The Economic Model

In light of the aforementioned challenges, our economic model was designed to confront the limitations and aims to produce the most realistic results under the imperfect circumstances. In the model's design, we have selected to apply the methodology referred to as the "bottom-up approach."⁵⁹ This approach aims to identify and enumerate all of the ways in which childhood crime exposure can inflict costs on society, to estimate and quantify each of these costs, and, finally, to aggregate them.⁶⁰ The application of this approach allows to paint a more finely detailed picture of the wide range of elements incorporated in the cost estimate, thus contributing to a deeper understanding of the problem and the scope and reach of its effect. At the same time, it is recognized that it is virtually impossible to account for all of the potential cost elements associated with the problem, especially under the existing constraints of the availability of empirical data.⁶¹

The designed model consists of three core variables:

- Prevalence of exposure – This variable represents the proportion of children in the population who have been exposed to at least one of the Triple-C Impact categories. Nationally representative data (NetSCEV III),⁶² combined with official census data,⁶³ was used to assess the prevalence of the Triple-C Impact and translate it to concrete numbers.
- Attributable risk – This variable represents the increase in the probability of experiencing each adverse outcome, which is specifically attributed to the Triple-C Impact.⁶⁴ Since, every individual in our society, whether exposed to crime or not, has a certain risk of

⁵⁹ This is different from the "top-down" approach (also known as contingent valuation), which divides the total budget for the service by the number of people served and assigns the same value to each person. This is "a survey-based valuation technique used to value goods that are not bought and sold in the free market, and for which prices are therefore difficult to compute. . . . Typically, contingent valuation survey questions ask individuals how much money they would be willing to pay for an increase in some non-market good (such as safety), or, alternatively, how much money they would need to be fully compensated for a decrease in the quantity of a non-market good." The third, less commonly used approach is hedonic pricing, a "technique used to estimate the value of a non-market good by decomposing the total value of a market good." (Aaron Chalfin, Economic Costs of Crime, The encyclopedia of Crime and Punishment (2015),

<https://onlinelibrary.wiley.com/doi/full/10.1002/9781118519639.wbecpx193>)

⁶⁰ Aaron Chalfin, Economic Costs of Crime, The encyclopedia of Crime and Punishment (2015),

<https://onlinelibrary.wiley.com/doi/full/10.1002/9781118519639.wbecpx193>

⁶¹ David S. Abrams, The Prisoner's Dilemma: A Cost-Benefit Approach to Incarceration, 940

⁶² Collected by Dr. David Finkelhor Et Al., The National Survey of Children's Exposure to Violence (NatSCEV) includes a representative sample of US telephone numbers from August 28, 2013, to April 30, 2014.

⁶³ United States Census Bureau, 2010 Census, <https://www.census.gov/2010census/data/>

⁶⁴ Chittaranjan Andrade, Understanding Relative Risk, Odds Ratio, And Related Terms: As Simple As It Can Get, 76(7) Journal of Clinical Psychiatry 857 (2015).

experiencing any of these outcomes, empirical medical and social science studies were used to estimate the percentage by which childhood exposure to crime increased one's likelihood to experience the outcome.⁶⁵ In other words, the attributable risk variable represents the proportion of exposed individuals with an outcome beyond the proportion among the non-exposed, after controlling for confounding risk factors.⁶⁶

- **Cost** – This variable is a calculation of the monetary dollar value linked with each of the adverse outcomes associated with the Triple-C Impact. In other words, it is an appraisal of the life-time cost placed on the state and society of a child experiencing the outcome. To this end, state and federal budget documents as well as secondary studies were used. All cost figures in this article are adjusted to 2017 dollars.⁶⁷

These three elements were synthesized together in the following formula:

$$\mathbf{Cost}_{ib} = \mathbf{Prevalence}_i * \mathbf{Attributable Risk}_b * \mathbf{Monetary}_b * \mathbf{Population Count}^{68}$$

The most arduous segment of the analysis was the estimation of the attributable risk variable. For the purpose of our analysis, we needed to extract the marginal effect of childhood crime exposure – by how much does risk increase due to exposure? One approach to the problem is to use naïve estimations. This method involves comparing the proportion of the group of exposed children experiencing each outcome, against the proportion of individuals experiencing the same outcome in the unexposed group.⁶⁹ The problem with this approach is that it does not take into account any co-variables that may contribute to the difference between the two groups. This problem is particularly severe in this area of study, characterized by high rates of co-occurring and competing risk factors. Take the example of asthma as a possible outcome. While individuals who

⁶⁶ Although the level of attributable risk at times varies between the different Triple-C Impact categories of exposure, there were no sufficient studies of rigorous standards to calculate customized risk attribution for all the outcomes accounted in the analysis for each of the categories of exposure. Therefore, we have opted to use either the average risk level for any single exposure. When an average was not available, we have selected the most conservative available estimate.

⁶⁷ Calculation is based on the Federal Reserve Bank of Minneapolis Consumer Price Index (CPI), <https://www.minneapolisfed.org/community/financial-and-economic-education/cpi-calculator-information/consumer-price-index-and-inflation-rates-1913>

⁶⁸ Such that i = the type of crime exposure, b = the adverse outcome. The full cost accounting is a summation of the various \mathbf{Cost}_{ib} minus any cost components for which there is a concern it has been tallied more than once.

⁶⁹ For example, if the prevalence of asthma in the unexposed group is 7.2 percent and in the exposed group it is 9 percent,⁶⁹ following the naïve approach the attributable risk would be 1.8 percentage points.

experienced crime exposure in childhood are more likely to develop asthma,⁷⁰ perhaps this same group is also more likely to live in substandard housing with mold that contributes to the development of asthma. In this case, some of the increase in the risk for asthma may be attributed to housing conditions rather than solely to crime exposure. Thus, using the naïve methodological approach risks overestimating the effect of crime exposure on the outcomes and consequently inflating the final cost estimate.

In order to address this challenge and properly account for the commonality of confounding risk factors and co-variables, we selected a different methodological approach that relies on adjusted odds ratios.⁷¹ Odds ratio “represents the odds that an outcome will occur given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure.”⁷² The odds ratio can also be used “to determine whether a particular exposure is a risk factor for a particular outcome, and to compare the magnitude of various risk factors for that outcome.”⁷³ The statistical analysis that manufactures an odds ratio, a multivariate logistics regression analysis, takes into account co-variables by using statistical controls. In other words, when comparing the odds of one group experiencing an outcome with the odds of another, the analysis adjusts its estimates by discounting the effect of other possible causing factors. Some of the common controls incorporated in studies that calculate odds ratios are age, sex, income, and race. Comparing the difference in the odds ratio of experiencing an outcome in the unexposed population with that of the population of children exposed to crime allows us to calculate the attributable risk variable. This method helps filter and distill the actual effect of crime exposure from that of other co-occurring factors, and hence provides a more accurate estimate of the association of the studied outcomes and crime exposure.

Odds ratio methodologies are widely used in epidemiology and medical studies, and therefore were presented in most of the studies that our analysis relied upon to measure the outcomes of

⁷⁰ Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) *Am. J. Prev. Med.* 345 (2015)

⁷¹ Jun Zhang & Kai F. Yu, What's the Relative Risk? A Method of Correcting the Odds Ratio in Cohort Studies of Common Outcomes, 280(9) *JAMA* 1690 (1998). A similar methodology was used in two recent studies conducted by the Centers of Disease Control and prevention (CDC), see Cora Peterson, et al., Lifetime Economic Burden of Intimate Partner Violence Among U.S. Adults, 55(4) *Am J Prev Med.* 433 (2018); Cora Peterson et al., Lifetime Economic Burden of Rape among US Adults, 52(6) *Am J Prev Med.* 691 (2017).

⁷² Magdalena Szumilas, Explaining Odds Ratios, 19(3) *J. Can. Acad. Child Adolesc. Psychiatry* 227, 227 (2010).

⁷³ Magdalena Szumilas, Explaining Odds Ratios, 19(3) *J. Can. Acad. Child Adolesc. Psychiatry* 227, 227 (2010).

exposure.⁷⁴ Nevertheless, the use of odds ratio is not common in economic studies. Odds ratio remains relatively “unfamiliar to non-researchers, and their relationship to probability implications is not well understood by researchers.”⁷⁵ Some consider them hard to interpret and even misleading.⁷⁶

To overcome this challenge and make our results more accessible to a wide, diverse audience, we have converted the odds ratio results reported in the analyzed risk studies to a linear probability model, also known as relative risk (RR), using the methodology proposed by Zhang et al. (1998).⁷⁷ The calculated RR for the population of exposed children was then compared against the probability of the outcome in the unexposed group in order to calculate the attributable risk associated with crime exposure. Multiplying the attributable risk probability with the total population of exposed children allowed us to compute the adjusted prevalence variable, which represents the estimated number of children who were exposed to crime AND have experienced (or will in the future) a specific outcome measured by our study.

Like any statistical estimate, there are limitations to the external validity that can be extrapolated from the statistical results of one single study. That is, for all the reasons discussed above, there is limited ability to generalize the findings from the study population to the general population. In light of these limitations, we took several precautionary measures. Before using any of the studies’ results, we verified that the magnitude of the effect reported was in line with estimates reported in other similar studies, if these existed. Furthermore, the range of the 95% confidence interval was calculated and reported for each outcome.

Another measure applied to reduce the margin of error was the focusing of the cost analysis on a single birth cohort. We selected the cohort of individuals living in the United States who were born

⁷⁴ Edward C. Norton, Bryan E. Dowd & Matthew L. Maciejewski, Odds Ratios—Current Best Practice and Use, 320(1) JAMA 84 (2018); Chittaranjan Andrade, Understanding Relative Risk, Odds Ratio, And Related Terms: As Simple As It Can Get, 76(7) Journal of Clinical Psychiatry 857 (2015).

⁷⁵ Jun Zhang & Kai F. Yu, What's the Relative Risk? A Method of Correcting the Odds Ratio in Cohort Studies of Common Outcomes, 280(9) JAMA 1690 (1998).

⁷⁶ Akiva M. Liberman, National Institute of Justice, How Much More Likely? The Implications of Odds Ratios for Probabilities, 26(2) American Journal of Evaluation 253, 253 (2005).

⁷⁷ Akiva M. Liberman, National Institute of Justice, How Much More Likely? The Implications of Odds Ratios for Probabilities, 26(2) American Journal of Evaluation 253, 259 (2005), see also: Australian Bureau of Statistics, Odds, Odds Ratios And Predicted Probability (2012),

<https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4441.0.55.002Explanatory+Notes5Jun+2012>

in the year 2002 (entering adulthood (i.e. turning 18) in 2020). The analysis will measure the costs of the negative outcomes attributed to childhood crime exposure for the duration of their adult life, accounting for the life expectancy of the cohort estimated at 76.9 years (or 58.9 adult years).⁷⁸ By focusing on one birth cohort, we aim to limit the possible range of some of the unknown variables discussed above. For similar reasons, we have selected to count only costs accrued during adulthood to overcome the fact that the age of first exposure is unknown to us. While some children are exposed in their first years of life suffer consequences throughout childhood, others experience first exposure in their late teens, close to the transition to adulthood. Thus, while childhood outcome costs, such as juvenile delinquency, early intervention for developmental delays, special education programs, and child protective services, will be thoroughly discussed in Section IV, they will not be tallied in the total cost estimate. Ultimately, the cohort analysis allows us to calculate average costs per-individual, which can later be extrapolated to some degree to draw inferences as to the estimated costs for the total population of individuals affected by the Triple-C Impact in the United States.

To clarify the analytical process, the box below provides a concrete demonstration of the application of our methodology on one sample outcome – asthma.

⁷⁸ Based on World Bank data, <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=US>

Example: The process of calculating the cost of asthma associated with crime exposure:

- Parameters for the calculation:

- Prevalence of asthma in the group of unexposed children: **7.2%**
- Prevalence of asthma in the group of children exposed to crime: **9%**
- Odds ratio (95%confidence interval): **1.2 (1.1, 1.4)**
- Number of children in the 2002 birth cohort with at least 1 crime exposure: **2,578,731**

- Conversion of Odds Ratio to Linear Probability Model:

$$1.2 / ((1-0.072) + (0.072*1.2)) = 118.3 (109.6, 136.1)$$

= Exposure to crime increases the risk for asthma by 18.3% (9.6%, 36.1%)

- Attributable Risk is calculated by multiplying the prevalence of the unexposed with the RR, and then deducting the two figures:

$$7.2 * (118.3/100) = 8.52^a (7.86, 9.8)$$

$$8.52 - 7.2 = 1.32 (0.66, 2.6)$$

- The number of children that are estimated to have asthma that we attribute to crime exposure is calculated by multiplying the attributable risk with the number of exposed children in the cohort:

$$(1.32/100) * 2,578,731 = 34,039 (17,020, 67,047)$$

- This number is multiplied with the annual medical cost of asthma per individual (\$3,259) in order to calculate the annual medical cost of asthma associated with crime exposure for the entire cohort:

$$36,102 * 3,259 = 110,933,101 (55,468,180, 218,506,173)$$

The estimated annual cost of asthma associated with crime exposure for the cohort of 2002 =

110,933,101

^a While the actual prevalence of asthma in the exposed population is 9% rather than 8.52%, 0.48 percent points of the difference are not attributed to crime exposure, but to other competing risk factors.

Section III - Prevalence

To commence our investigation, we first must gain an understanding of the size of the problem. How many individuals in our society are affected? This section endeavors to provide a data-driven answer to the question. The analysis process necessitates first defining the scope and boundaries of each of the Triple-C Impact categories of crime exposure, then estimating the prevalence of exposure under each of these categories, and finally translating the prevalence percentages into the concrete numbers of affected children in our society. Since our cost analysis focuses on the 2002 birth cohort, a specific drill-down calculation of the prevalence of the Triple-C Impact exposure in that group is also presented.

Due to the aforementioned understudy of the field, few data sources exist that measure the number of children affected by crime across the nation. To provide the most accurate prevalence indicators for each of the Triple-C Impact categories of exposure outlined below, we utilized the raw data of the National Survey of Children's Exposure to Violence (NetSCEV III).⁷⁹ We designed a customized analysis model of this nationally representative dataset that reflects the specific categories and definitions of the Triple-C Impact.⁸⁰

A. Direct Victimization

The first and most conventional and commonly recognized form of crime exposure is direct victimization. It occurs when an act defined by law as a criminal offense is committed against the person of the child. As a result, the child can be physically injured or suffer emotional and mental impairments.

The analysis has found that 52.31% of minor children nationwide become the direct victims of a violent crime during their childhood years. This includes physical assault with or without a

⁷⁹ Collected by Dr. David Finkelhor Et Al., The National Survey of Children's Exposure to Violence (NatSCEV) includes a representative sample of US telephone numbers from August 28, 2013, to April 30, 2014. Via telephone interviews, self-reported information was obtained on 4000 children 0 to 17 years old, with information about exposure to violence, crime, and abuse provided by youth 10 to 17 years old and by caregivers for children 0 to 9 years old. It is important to note that only the raw survey data was used in our analysis. The definitions and categories of our analysis differ from those used by Dr. Finkelhor's team, and therefore our results also vary from those presented in their published study. For comparison, see: David Finkelhor Et Al., Prevalence of Childhood Exposure to Violence, Crime, and Abuse: Results From the National Survey of Children's Exposure to Violence, 169(8) JAMA Pediatrics 746, 752(2015).

⁸⁰ All the statistical figures included in Part I of this paper are derived from the authors original analysis of the NetSCEV data.

weapon, sexual assault, kidnapping, violent bullying, or attempts to commit any of these acts against the child. When the percentages are applied on the total U.S. population estimates, they result in a figure of 43.6 million minor children who fell victims to a violent crime nationwide,⁸¹ 2.1 million of which are in the 2002 birth cohort.⁸² Boys are affected at a higher rate than are girls, 56.14% compared to 48.3%. This is the category in which the difference between boys and girls is most significant, amounting to nearly eight percent points.

B. Exposure to Family Crime

The most well-known manifestation of indirect crime exposure is witnessing family crime and violence. These are cases where the child witnesses⁸³ a crime committed in the home, among immediate family members, but does not suffer direct physical harm as a result of the witnessed crime.

The presence of crime and violence in the home disrupts the sense of safety, security and stability that such an environment is meant to foster in a child, which is vital for healthy development.⁸⁴ Affected children are often preoccupied with fear of losing a parent, whether it is the battered parent who is in imminent danger of being severely injured or killed,⁸⁵ or the batterer who may be

⁸² Calculation based on: Joyce A. Martin et al., Births: Final Data for 2002, 52(10), National Vital Statistics Reports (Dec. 2003), https://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52_10.pdf

⁸³ For the purpose of this paper, a child is considered to be a witness to a crime when he or she perceives the criminal incident in one of their senses (sight, hearing, etc.) or observes the aftermath of the crime (injuries, damage to property, etc.).

⁸⁴ Jennifer E. McIntosh, Thought In The Face Of Violence: A Child's Need, 26 Child Abuse and Neglect 229 (2002); Suzanne G. Martin, Children Exposed to Domestic Violence: Psychological Considerations For Health Care Practitioners, 16(3) Holistic Nursing Practice 7 (2002); Stephanie Holt, Helen Buckley & Sadhbh Whelan, The Impact of Exposure To Domestic Violence On Children And Young People: A Review of The Literature, 32 Child Abuse & Neglect 797, 802-3 (2008); Robert L. Listenbee, et al., Report of the Attorney General's National Task Force on Children Exposed to Violence 32 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; E. M. Cummings, et al., Children and Violence: The Role of Children's Regulation in The Marital Aggression-Child Adjustment Link, 12(1) Clinical Child and Family Psychology Review 3 (2009); S. C. Perkins, et al., The Mediating Role of Self-Regulation Between Intrafamilial Violence and Mental Health Adjustment in Incarcerated Male Adolescents, 27(7) Journal of Interpersonal Violence 1199 (2012).

⁸⁵ P. T. Davies, et al., (2002). Child Emotional Security and Interparental Conflict, 67(3) Monographs of the Society for Research in Child Development i-v, vii-viii, 1-115 (2002); A. C. Schermerhorn, E. M. Cummings & P. T. Davies, Children's Representations of Multiple Family Relationships: Organizational Structure and Development in Early Childhood, 22(1) Journal of Family Psychology 89 (2008); E. M. Cummings, et al., Interparental Discord and Child Adjustment: Prospective Investigations of Emotional Security As An Explanatory Mechanism, 77(1) Child Development 132 (2006); D. S. Schechter, et al., Distorted Maternal Mental Representations and Atypical Behavior in a Clinical Sample of Violence-Exposed Mothers and Their Toddlers, 9(2) Journal of Trauma and Dissociation 123 (2008); A. J. Botsis, et al., Parental loss and family violence as correlates of suicide and violence Risk, 25(2) Suicide and Life-Threatening Behavior 253 (1995); T. Gaensbauer, et al., Traumatic loss in a one-year-old girl, 34(4) Journal of the American Academy of Child & Adolescent Psychiatry 520 (1995).

incarcerated or even executed.⁸⁶ The developmentally ego-centric thinking of children frequently leads them to be burdened by profound guilt, as they are inclined to hold a belief that they are at fault for causing the violence, or could/should have done something to prevent it.⁸⁷ Affected children also describe deep confusion and ambivalence towards both parents, including “fear and empathy” towards the abuser, and “compassion coupled with a sense of obligation to protect” the abused.⁸⁸ The rattling presence of violence in the home can lead to an erroneous conceptualization of aggression as a functional and legitimate part of intimate relationships and family dynamics,⁸⁹ and a belief in an intrinsic dominance and privilege of men.⁹⁰ This ongoing exposure to aggression in the immediate environment was shown to put the child at potential risk of adopting anti-social rationalization for their own abusive behavior or abuse perpetrated against them,⁹¹ and thus contributing to the creation of an inter-generational cycle of violence.⁹²

Preoccupation with the dysfunctional dynamics saturated with violence is also likely to make the parents themselves less available as effective caregivers, with the abusers perceived as

⁸⁶ E. Beck & S. J. Jones, *Children of The Condemned: Grieving The Loss of a Father to Death Row*, 56(2) *Omega* (Westport) 191 (2007).

⁸⁷ A. Fortin, M. Doucet, & D. Damant, *Children’s Appraisals As Mediators of The Relationship Between Domestic Violence and Child Adjustment*, 26(3) *Violence and Victimology* 377 (2011); Stephanie Holt, Helen Buckley & Sadhbh Whelan, *The Impact of Exposure To Domestic Violence On Children And Young People: A Review of The Literature*, 32 *Child Abuse & Neglect* 797, 803 (2008); Robert L. Listenbee, et al., *Report of the Attorney General’s National Task Force on Children Exposed to Violence* 32 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; P. T. Davies, E. M. Cummings & M. A. Winter, *Pathways Between Profiles of Family Functioning, Child Security in The Interparental Subsystem, and Child Psychological Problems*, 16(3) *Development and Psychopathology* 525 (2004).

⁸⁸ Hadass Goldblatt, *Strategies of Coping Among Adolescents Experiencing Interparental Violence*, 18(2) *Journal of Interpersonal Violence* 532 (2003); Stephanie Holt, Helen Buckley & Sadhbh Whelan, *The Impact of Exposure To Domestic Violence On Children And Young People: A Review of The Literature*, 32 *Child Abuse & Neglect* 797, 802 (2008).

⁸⁹ Joy D. Osofsky, *Prevalence Of Children’s Exposure To Domestic Violence And Child Maltreatment: Implications For Prevention And Intervention*, 6(3) *Clinical Child and Family Psychology Review* 161(2003); George W. Holden, *Children Exposed To Domestic Violence And Child Abuse: Terminology And Taxonomy*, 6(3) *Clinical Child and Family Psychological Review* 151(2003); Sandra A. Graham-Bermann & Victoria Brescoll, *Gender, Power And Violence: Assessing The Family Stereotypes Of The Children Of Batterers*, 14(4) *Journal of Family Psychology* 600 (2000).

⁹⁰ Sandra A. Graham-Bermann & Victoria Brescoll, *Gender, Power And Violence: Assessing The Family Stereotypes Of The Children Of Batterers*, 14(4) *Journal of Family Psychology* 600 (2000).

⁹¹ Stephanie Holt, Helen Buckley & Sadhbh Whelan, *The Impact of Exposure To Domestic Violence On Children And Young People: A Review of The Literature*, 32 *Child Abuse & Neglect* 797, 803 (2008).

⁹² K. D. O’Leary, K. D., A. M. Smith Slep & S. G. O’Leary, *Multivariate Models of Men’s and Women’s Partner Aggression*, 75(5) *Journal of Consulting and Clinical Psychology* 752 (2007); Christine Wekerle & David A. Wolfe, *Dating Violence In Mid-Adolescence: Theory, Significance, And Emerging Prevention Initiatives*, 19(4) *Clinical Psychological Review* 435 (1999); Alytia A. Levendosky, Alissa C. Huth-Bocks & Michael A. Semel, *Adolescent Peer Relationships And Mental Health Functioning In Families With Domestic Violence*, 31(2) *Journal of Clinical Child Psychology* 206 (2002).

“unpredictable and frightening” while the abused parents are distracted by basic issues of safety and survival for themselves and their children.⁹³

The cumulative effect of these factors leads experts in the field to conclude that childhood exposure to family violence “has the potential to induce catastrophic and long-term trauma in the child witness.”⁹⁴ They further warn that the fact that a child does not exhibit distinct symptoms does not necessarily mean that s/he is unaffected by the violence, as the child may still develop physical or emotional symptoms later in life.⁹⁵

Our analysis found that more than 1 in every 5 children, or a total of 22.95%, is exposed to family violence. This includes violent physical assault of a parent by a spouse, violent assault of a sibling by a parent (beyond spanking), other violent altercation between immediate family members at the home, and violent destruction of property. When translated to numerical figures, over 19 million children living in the US witness a crime in their own home before turning 18,⁹⁶ over 900,000 in the 2002 birth cohort.⁹⁷ This is the only category in which girls experience a slightly higher risk of exposure, at 24%, in comparison to 21.93% of boys.

C. Exposure to Community Crime

Even when the child’s home environment is violence-free, the child could be exposed to community crime. The child may witness criminal activity outside the home, among non-relatives (for example in the neighborhood or school). Although the child is not directly physically injured,

⁹³ Gayla Margolin and Elana B. Gordis, The Effects Of Family And Community Violence On Children, 51 *Annu. Rev. Psychol.* 445, 451 (2000); Gayla Margolin, Effects of Domestic Violence On Children, in *Violence Against Children In The Family And The Community* 57 (Penelope K. Trickett & Cynthia J. Schellenbach, eds., 1998).

⁹⁴ Hadass Goldblatt, Strategies of Coping Among Adolescents Experiencing Interparental Violence, 18(2) *Journal of Interpersonal Violence* 532 (2003)

⁹⁵ Katherine M. Kitzmann, Et al., Child Witness To Domestic Violence: A Meta-Analytic Review, 71(2) *Journal of Consulting and Clinical Psychology* 339 (2003); Jennifer E. McIntosh, Children Living With Domestic Violence: Research Foundations For Early Intervention, 9(2) *Journal of Family Studies* 219 (2003); Gayla Margolin and Elana B. Gordis, The Effects Of Family And Community Violence On Children, 51 *Annu. Rev. Psychol.* 445, 446 (2000); Stephanie Holt, Helen Buckley & Sadhbh Whelan, The Impact of Exposure To Domestic Violence On Children And Young People: A Review of The Literature, 32 *Child Abuse & Neglect* 797, 806 (2008).

⁹⁶ Calculation based on official 2010 census data: Centers of Disease Control and Prevention (CDC), Age and Sex Composition: 2010, 2010 Census Briefs (May 2011), <https://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf>. Although more current population estimates exist, no significant change in the number children under the age of 18 was noted since 2010 (see for example: The American Community Survey (ACS), available at: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>).

⁹⁷ Calculation based on: Joyce A. Martin et al., Births: Final Data for 2002, 52(10), *National Vital Statistics Reports* (Dec. 2003), https://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52_10.pdf

significant harm can result from the traumatic exposure. Negative effect was documented for children who witnessed violence directly through sight or sound, as well as those who only heard about the violence in retrospect.⁹⁸ Children living in economically impoverished families and communities are particularly prone to this form of crime exposure.⁹⁹

Like the home, the neighborhood and school are considered to be part of the child's primary safe haven.¹⁰⁰ Exposure to crime and violence in this environment can cause a loss of its protective and comforting qualities that are necessary for the development of the child's sense of security and trust.¹⁰¹ The inability to feel safe in their own schools and neighborhoods can be interpreted by a child to mean that the world is unsafe, and that "relationships are too fragile to trust because one never knows when violence will take the life of a friend or loved one."¹⁰² This can often lead to a state of hypervigilance, where the child is constantly wired and anticipates an outbreak of violence.¹⁰³ Alternatively, the child may resort to believing that s/he is unworthy of being kept safe, affecting self-esteem and the perception of self-worth.¹⁰⁴ It may also lead the child to believe

⁹⁸ Michael Lynch, Consequences of Children's Exposure to Community Violence, 6(4) *Clinical Child and Family Psychology Review* 265, 267(2003); Dawn K. Wilson, Violence Exposure, Catecholamine Excretion, and Blood Pressure Non-Dipping Status In African-American Male Versus Female Adolescents, 64 *Psychosomatic Medicine* 906 (2002); Patrick T. Sharkey, et al., The Effect of Local Violence on Children's Attention and Impulse Control, 102(2) *American Journal of Public Health* 2287 (2012); Patrick T. Sharkey, The acute effect of local homicides on children's cognitive performance, 107(26) *PNAS* 11733 (2010).

⁹⁹ C. B. Cunradi, et al., Neighborhood Poverty As A Predictor of Intimate Partner Violence Among White, Black, and Hispanic Couples in The United States: A Multilevel Analysis, 10(5) *Annals of Epidemiology* 297 (2000); L. A. Goodman, et al. (2009), When Crises Collide: How Intimate Partner Violence and Poverty Intersect to Shape Women's Mental Health and Coping, 10(4) *Trauma Violence Abuse* 306 (2009); L. Corzine & J. Corzine, J., *Deadly Connections: Culture, Poverty, and The Direction of Lethal Violence*, 69(3) *Social Forces* 55 (1991).

¹⁰⁰ Gayla Margolin and Elana B. Gordis, The Effects Of Family And Community Violence On Children, 51 *Annu. Rev. Psychol.* 445, 449 (2000)

¹⁰¹ Gayla Margolin and Elana B. Gordis, The Effects Of Family And Community Violence On Children, 51 *Annu. Rev. Psychol.* 445, 449 (2000).

¹⁰² Robert L. Listenbee, et al., Report of the Attorney General's National Task Force on Children Exposed to Violence 33 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>.

¹⁰³ M. Janosz, et al., Are There Detrimental Effects of Witnessing School Violence in Early Adolescence? 43(6) *Journal of Adolescent Health* 600 (2008); N. Shields, K. Nadasen & L. Pierce, L. (2008). The Effects of Community Violence on Children in Cape Town, South Africa, 32(5) *Child Abuse & Neglect* 589 (2008); P. J. Fowler, et al., Community Violence: A Meta-Analysis On The Effect of Exposure and Mental Health Outcomes of Children and Adolescents, 21(1) *Development & Psychopathology* 227 (2009); N. M. Malik, Exposure to Domestic and Community Violence in a Nonrisk Sample: Associations With Child Functioning, 23(4) *Journal of Interpersonal Violence* 490 (2008); W. Kliewer & T. N. Sullivan, Community Violence Exposure, Threat Appraisal, and Adjustment in Adolescents, 37(4) *Journal of Clinical Child & Adolescent Psychology* 860 (2008).

¹⁰⁴ Gayla Margolin and Elana B. Gordis, The Effects Of Family And Community Violence On Children, 51 *Annu. Rev. Psychol.* 445, 458 (2000); Michael Lynch & Dante Cicchetti, An Ecological Transactional Analysis of Children And Contexts: The Longitudinal Interplay Among Child Maltreatment, Community Violence, And Children's Symptomatology, 10 *Dev. Psychopathol* 235 (1998).

that violence is “normal,”¹⁰⁵ and to feel compelled to resort to aggression, gangs, or criminal activity to avoid being viewed as weak and being targeted.¹⁰⁶

Living in a community saturated with crime and violence may also negatively affect parents’ caretaking due to their own feelings of helplessness, fear, and grief. “Efforts to protect the child may be exhibited in authoritarian and restrictive parenting practices, as well as in certain precautions that may heighten the child’s anxiety.”¹⁰⁷ Other parents may yield to the sense of helplessness and cease any efforts to protect the child.

Nationally, community violence was found to affect 34.87%, or 25.8 million, of children, (36.83% of boys, and 32.81% of girls). In the 2002 birth cohort, 1.4 million individuals were affected. This measure includes witnessing assault with or without a weapon, witnessing shooting, bombing or violent street riots, and witnessing illegal drug trade.

D. Parental Victimization

When the child’s parent is a victim of a violent crime, the child is often affected in some way by proxy. Parental victimization can inflict harm even when the child does not perceive the committing of a crime through his/her own senses and is not considered a witness to the crime against the parent.¹⁰⁸ “Simply put, the well-being of a child is inextricably linked to the well-being of the adults in his or her life”, and hence if caregivers are victims of violence, this also impacts the children.¹⁰⁹ The most extreme scenario of parental victimization is homicide cases, where a child loses a parent to crime. The more common cases concern parents who have experienced violent victimization in childhood or adulthood, and suffer harmful implications

¹⁰⁵ Robert L. Listenbee, et al., Report of the Attorney General’s National Task Force on Children Exposed to Violence 33 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>.

¹⁰⁶ M. Janosz, et al., Are There Detrimental Effects of Witnessing School Violence in Early Adolescence? 43(6) *Journal of Adolescent Health* 600 (2008); N. Shields, K. Nadasen & L. Pierce, L. (2008). The Effects of Community Violence on Children in Cape Town, South Africa, 32(5) *Child Abuse & Neglect* 589 (2008); Robert L. Listenbee, et al., Report of the Attorney General’s National Task Force on Children Exposed to Violence 33 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; C. A. Taylor, et al., Cumulative Experiences of Violence Among High-Risk Urban Youth, 23(11) *Journal of Interpersonal Violence* 1618 (2008).

¹⁰⁷ Gayla Margolin and Elana B. Gordis, The Effects Of Family And Community Violence On Children, 51 *Annu. Rev. Psychol.* 445, 452 (2000).

¹⁰⁸ Thus differ from the category of exposure to family crime and violence, when the child perceives the crime in one of their senses and is considered a direct witness.

¹⁰⁹ Robert L. Listenbee, et al., Report of the Attorney General’s National Task Force on Children Exposed to Violence 110 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>;

that spill over to their children.¹¹⁰ The effect of parental victimization is found to be most severe when the parent does not receive treatment and services to facilitate recovery.

Victimized parents have an increased probability of suffering from a range of mental health problems, and poorer state of physical health, in comparison to non-victimized caregivers.¹¹¹ Some evidence shows that victimization may also affect parenting skills and the interaction between parent and child.¹¹² Survivors of victimization may have difficulties establishing clear generational boundaries with their children, be over-permissive as parents, or conversely exhibit restrictive parenting practices and be more inclined to use harsh physical discipline.¹¹³ Crime-induced trauma can compromise a parent's ability to play a stable, consistent role in the child's life, and be emotionally available, sensitive, and responsive to their children.¹¹⁴ A victimized parent who is depressed or overwhelmed may have difficulty meeting young children's need for structure or managing their developmental inability to understand and control

¹¹⁰ Jennie G. Noll, et al. The Cumulative Burden Borne By Offspring Whose Mothers Were Sexually Abused As Children: Descriptive Results From A Multigen-Erational Study, 24(3) *Journal of Interpersonal Violence* 424 (2009); Robert L. Listenbee, et al., Report of the Attorney General's National Task Force on Children Exposed to Violence 31 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>

¹¹¹ Cindy E. Weisbart, et al., Child and Adult Victimization: Sequelae for Female Caregivers of High-Risk Children, 13(3) *Child Maltreatment* 235 (2008).

¹¹² Heidi N. Bailey, et al., The Impact Of Childhood Maltreatment History On Parenting: A Comparison Of Maltreatment Types And Assessment Methods, 36(3) *Child Abuse & Neglect* 236 (2012); Robert L. Listenbee, et al., Report of the Attorney General's National Task Force on Children Exposed to Violence 32-33 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; P. T. Davies, et al., A Process Analysis of The Transmission of Distress From Interparental Conflict to Parenting: Adult Relationship Security As An Explanatory Mechanism, 45(6) *Developmental Psychology* 1761 (2009); Stephanie Holt, Helen Buckley & Sadhbh Whelan, The Impact of Exposure To Domestic Violence On Children And Young People: A Review of The Literature, 32 *Child Abuse & Neglect* 797, 800-801 (2008).

¹¹³ David DiLillo, Parenting Characteristics of Women Reporting a History of Childhood Sexual Abuse, 8 *Child Maltreatment* 319 (2003); Richard Thompson, Mothers' Violence Victimization and Child Behavior Problems: Examining the Link, 77 *American Journal of Orthopsychiatry* 306 (2007); Robert L. Listenbee, et al., Report of the Attorney General's National Task Force on Children Exposed to Violence 31 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; Carol Coohey, Battered Mothers Who Physically Abuse Their Children, 9(8) *Journal of Interpersonal Violence* 943 (2004); George W. Holden, Parenting Behaviour And Beliefs Of Battered Women, In *Children Exposed To Marital Violence: Theory, Research, And Applied Issues* (George W. Holden, Robert A. Geffner & Ernest N. Jouriles eds., 1998); Gayla Margolin and Elana B. Gordis, The Effects Of Family And Community Violence On Children, 51 *Annu. Rev. Psychol.* 445, 452 (2000).

¹¹⁴ Joy D. Osofsky, The Impact of Violence on Children, 9 *DOMESTIC VIOLENCE AND CHILDREN* 33, 40 (1999); Kihyun Kim, Penelope K. Trickett & Frank W. Putnam, Childhood Experiences Of Sexual Abuse And Later Parenting Practices Among Non-Offending Mothers of Sexually Abused And Comparison Girl, 34(8) *Child Abuse & Neglect* 610 (2010); E. Buchbinder, Motherhood Of Battered Women: The Struggle For Repairing The Past, 23(3) *Clinical Social Work Journal* 307 (2004); Alytia A. Levendosky & S. A. Graham-Bermann, Parenting In Battered Women: The Effects Of Domestic Violence On Women And Their Children, 16(2) *Journal of Family Violence* 171(2001); Jennifer E. McIntosh, Thought In The Face Of Violence: A Child's Need, 26 *Child Abuse and Neglect* 229 (2002); Joy D. Osofsky, The Impact of Violence on Children, 9 *DOMESTIC VIOLENCE AND CHILDREN* 33 40-1 (1999); Melanie Marysko, et al., History Of Childhood Abuse Is Accompanied By Increased Dissociation in Young Mothers Five Months Postnatally, 43(2) *Psychopathology* 104 (2010); George W. Holden, Children Exposed To Domestic Violence And Child Abuse: Terminology And Taxonomy, 6(3) *Clinical Child and Family Psychological Review* 151(2003); Alytia A. Levendosky & Sandra A. Graham-Bermann, The Moderating Effects Of Parenting Stress On Children's Adjustment In Woman-Abusing Families, 13(3) *Journal of Family Violence* 383 (1998).

their own emotions, thus impacting their children’s experience of emotional expression.¹¹⁵ The quality of attachment between parent and child has also been found to be affected.¹¹⁶ A victimized parent, particularly in cases of ongoing victimization, may be “living in constant fear, they may deny their children normal developmental transitions and the sense of basic trust and security that is the foundation of healthy emotional development.”¹¹⁷

As a result, parental victimization has considerable detrimental consequences to child development, outcomes, behavior, and the child’s relationship with the parent, even absent awareness or direct exposure to the criminal act committed against the parent.

As of June 2019, there are no known data on the state or national level that measure the number of children affected by parental victimization in the United States. This is the only category for which estimation of extent of exposure is completely unknown. It is hoped that by raising awareness to the cumulative impact parental victimization has on children, future attempts will be made by state agencies and empirical scientists to assess prevalence.

E. Parental Incarceration

The fifth and last form of crime exposure identified under the Triple-C Impact umbrella is parental incarceration. It occurs when a child is separated from a primary caregiver as a result of confinement in a correction facility. Incarceration of a parent normally causes major negative economic, social and psychological consequences to the child, and may have life-long repercussions.

When the incarcerated parent is the primary caregiver, the family’s life is fundamentally disrupted. The child is usually uprooted, and may be separated, not only from the incarcerated parent, but also from his/her siblings, other relatives, and friends. The child is at risk of being moved

¹¹⁵ Jeffrey L. Edleson, Children’s Witnessing Of Adult Domestic Violence, 14(8) *Journal of Interpersonal Violence* 839 (1999).

¹¹⁶ Stephanie Holt, Helen Buckley & Sadhbh Whelan, The Impact of Exposure To Domestic Violence On Children And Young People: A Review of The Literature, 32 *Child Abuse & Neglect* 797, 801 (2008); Alytia A. Levendosky, et al., The Impact Of Domestic Violence On The Maternal–Child Relationship And Preschoolage Children’s Functioning, 17(3) *Journal of Family Psychology* 275 (2003). See also: Hedy Cleaver, Ira Unell, & Jane Aldgate, Children’s Needs—Parenting Capacity, The Impact Of Parental Mental Illness, Problem Alcohol And Drug Use, And Domestic Violence On Children’s Development (1999).

¹¹⁷ Alytia A. Levendosky, Shannon M. Lynch, & Sandra A. Graham-Bermann, Mothers’ Perceptions Of The Impact Of Woman Abuse On Their Parenting, 6 *Violence Against Women* 248(2000); Alytia A. Levendosky & Sandra A. Graham-Bermann, Parenting In Battered Women: The Effects Of Domestic Violence On Women And Their Children, 16(2) *Journal of Family Violence* 171(2001)

frequently among caregivers and even becoming a ward of the state.¹¹⁸ Maintaining a close relationship and regular contact with the incarcerated parent over time is a significant challenge.¹¹⁹ If the child is too young to fully understand the reasons for the parent’s “disappearance”, destructive feelings of self-blame and anger can emerge. The remaining caregiver is often unable to render necessary support and to find a suitable way to convey the information to the child in an age-appropriate manner. Economic hardship is another likely possibility, due to the added legal expenses involved and the loss of income or social benefits.¹²⁰ The child left behind is also subjected to the negative stigma and shame associated with parental incarceration.¹²¹

This is the most controversial and seldomly recognized group of Triple-C Impacted children, due to the strong association with the perceived moral wrongdoing and blameworthiness of the parents. Children suffering from parental incarceration are often referred to as the “invisible victims” of crime, as they are forced to bear the consequences of their parents’ criminal behavior and the system’s inability, or possibly unwillingness, to address their needs and mitigate the displayed harms.

At present, there is no systematic national data collection on the parental status of inmates by the Department of Corrections. Only 40% of states collect such data in one form or another.¹²² Our analysis reveals that 4.77% of children are estimated to be affected by either paternal or maternal incarceration at some point during childhood, amounting to approximately 4 million children,¹²³ with over 190,000 in the 2002 birth cohort.¹²⁴ Parental incarceration affects boys (5.16%) slightly

¹¹⁸ Donna K. Metzler, *Neglected by the System: Children of Incarcerated Mothers*, 82 ILL. B.J. 428, 430 (1994).

¹¹⁹ See detailed discussion in: Michal Gilad & Tal Gat, *U.S. v. My Mommy: Evaluation of Prison Nurseries as a Solution for Children of Incarcerated Women*, 37 N.Y.U. REV. L. & SOC. CHANGE 371 (2013), available at: <http://socialchangenyu.files.wordpress.com/2013/05/us-v-my-mommy2.pdf>

¹²⁰ Donald Braman, *Doing Time On The Outside: Incarceration And Family Life In Urban America* (2004); Nell Bernstein, *All Alone In The World: Children Of The Incarcerated* 109-42 (2005)

¹²¹ See; Sarah Abramowicz, *Rethinking Parental Incarceration*, 82 U. COLO. L. REV. 793 (2011); Denise Johnston, *Services For Children of Incarcerated Parents*, 50 FAM. CT. REV. 91 (2012); Donna K. Metzler, *Neglected By The System: Children of Incarcerated Mothers*, 82 ILL. B.J. 428 (1994); Julie Poehlmann, *Children of Incarcerated Mothers And Fathers*, 24 WIS. J.L. GENDER & SOC'Y 331 (2009).

¹²² See Triple-C Impact 50-States Survey results in Section II.

¹²³ Calculation based on official 2010 census data: Centers of Disease Control and Prevention (CDC), *Age and Sex Composition: 2010*, 2010 Census Briefs (May 2011), <https://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf>. Although more current population estimates exist, no significant change in the number children under the age of 18 was noted since 2010 (see for example: *The American Community Survey (ACS)*, available at: <https://factfinder.census.gov/aces/tableservices/jsf/pages/productview.xhtml?src=bkmk>).

¹²⁴ Calculation based on: Joyce A. Martin et al., *Births: Final Data for 2002*, 52(10), *National Vital Statistics Reports* (Dec. 2003), https://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52_10.pdf

more than girls (4.36%). Additionally, this form of exposure has particularly high prevalence among children of color and minority groups due to the disproportionate representation of members of these groups in the incarcerated population.¹²⁵

F. The Bottom Line:

Overall, an astonishing 64.12%, or 47.56 million¹²⁶ (2.58 million in the 2002 birth cohort)¹²⁷ children living in the United States today are affected by at least one form of crime exposure during their childhood. If we go one step further and apply these percentages to the total U.S. population (of all ages), we can conclude that there are approximately 210.5 million individuals walking among us who have been exposed to at least one category of the Triple-C Impact during childhood.¹²⁸ Boys are at a higher risk of exposure at 66.49% as compared to girls at 61.64%.

	Direct Victimization	Family Violence	Community Violence	Parental Incarceration	Parental Victimization	Any 1 exposure
Total	52.31	22.94	34.87	4.77	<i>No Data</i>	64.12
Male	56.14	21.93	36.83	5.16	<i>No Data</i>	66.49
Female	48.3	23.99	32.81	4.36	<i>No Data</i>	61.64

¹²⁵ Jennifer Bronson & E. Ann Carson, U.S. Department of Justice, Prisoners in 2017 (April 2019), <https://www.bjs.gov/content/pub/pdf/p17.pdf>; John Gramlich, The gap between the number of blacks and whites in prison is shrinking, FactTank News in The Numbers (April 2019), <https://www.pewresearch.org/fact-tank/2019/04/30/shrinking-gap-between-number-of-blacks-and-whites-in-prison/>

¹²⁶ Calculation based on official 2010 census data: Centers of Disease Control and Prevention (CDC), Age and Sex Composition: 2010, 2010 Census Briefs (May 2011), <https://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf>. Although more current population estimates exist, no significant change in the number children under the age of 18 was noted since 2010 (see for example: The American Community Survey (ACS), available at: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>).

¹²⁷ Calculation based on: Joyce A. Martin et al., Births: Final Data for 2002, 52(10), National Vital Statistics Reports (Dec. 2003), https://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52_10.pdf

¹²⁸ Calculation based on official 2010 census data: Centers of Disease Control and Prevention (CDC), Age and Sex Composition: 2010, 2010 Census Briefs (May 2011), <https://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf>. Although more current population estimates exist, no significant change in the number children under the age of 18 was noted since 2010 (see for example: The American Community Survey (ACS), available at: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>).

	Direct Victimization	Family Violence	Community Violence	Parental Incarceration	Parental Victimization	Any 1 exposure
Total Population ¹²⁹	161,504,791	70,826,226	107,659,569	14,727,162	<i>No Data</i>	197,967,639
Minors ¹³⁰ (under age 18)	43,557,259	1,9101,577	29,035,397	3,971,862	<i>No Data</i>	53,391,157
2002 Cohort ¹³¹	2,103,765	922,584	1,402,376	191,836	<i>No Data</i>	2,578,731

Our findings also reinforce the fact that the aforementioned categories are not mutually exclusive. It is often the case that children experience poly-victimization and suffer from multiple forms of direct or indirect crime exposures. Nearly 21 million children, comprising 33.94% of children in the United States are affected by two or more different types of exposure; 2.08%, or 1.7 million children, are impacted by four or more of the categories included in this study.¹³² Such cumulative exposure was found to further aggravate the harmful impact on the child.¹³³

¹²⁹ Calculation based on official 2010 census data: Centers of Disease Control and Prevention (CDC), Age and Sex Composition: 2010, 2010 Census Briefs (May 2011), <https://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf>. Although more current population estimates exist, no significant change in the number children under the age of 18 was noted since 2010 (see for example: The American Community Survey (ACS), available at: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>).

¹³⁰ Calculation based on official 2010 census data: Centers of Disease Control and Prevention (CDC), Age and Sex Composition: 2010, 2010 Census Briefs (May 2011), <https://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf>. Although more current population estimates exist, no significant change in the number children under the age of 18 was noted since 2010 (see for example: The American Community Survey (ACS), available at: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>).

¹³¹ Calculation based on: Joyce A. Martin et al., Births: Final Data for 2002, 52(10), National Vital Statistics Reports (Dec. 2003), https://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52_10.pdf

¹³² Calculation based on official 2010 census data: Centers of Disease Control and Prevention (CDC), Age and Sex Composition: 2010, 2010 Census Briefs (May 2011), <https://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf>. Although more current population estimates exist, no significant change in the number children under the age of 18 was noted since 2010 (see for example: The American Community Survey (ACS), available at: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>).

¹³³ David Finkelhor, Richard K. Ormrod & Heather A. Turner, Poly-Victimization: A Neglected Component In Child Victimization Trauma, 31 Child Abuse & Neglect 7 (2007); David Finkelhor, et al., Pathways To Poly-Victimization, 14(4) Child Maltreatment 316 (2009); Heather A. Turner, Richard K. Ormrod & David Finkelhor, Poly-Victimization in a National Sample of Children and Youth, 38(3) American Journal of Preventive Medicine 323 (2010).

Table 4: Poly-Victimization: % of Exposure to Multiple Different Triple-C Impact Categories:

No. of exposures¹³⁴	Total %	Male %	Female %
0	35.88	33.51	38.36
1	30.18	31.75	28.52
2	19.2	19.04	19.37
3	12.66	12.53	12.79
4+	2.08	3.15	0.96

These overwhelming figures make it clear that the Triple-C Impact problem is vast and expansive, rather than an isolated occurrence reserved to marginalized populations. As determined by the Attorney General Task Force, the problem is “not limited to one community or one group of children. It occurs among all ethnic and racial groups; in urban, suburban, and rural areas; in gated communities and on tribal lands.”¹³⁵ In fact, our analysis establishes that each and every child living in the U.S. is more likely than not to be stung by the venom of crime at one point or another during their tender childhood years.

Section IV - Risks and Costs

Once we have a better image of the prevalence of the Triple-C Impact problem, and a data-driven estimate of the number of affected children across the nation, we can proceed to grasp the risks looming in the future of these children. A thorough evidence-based understanding of the type and nature of the risk outcomes associated with the Triple-C Impact will also enable us to identify and estimate the potential costs these outcomes may accrue.

¹³⁴ This column reflects the number of different Triple-C Impact categories a child has been exposed to (E.g. exposure to direct victimization in addition to exposure to community crime). It does not account for multiple exposures under the same category (e.g. a case of child abuse and a case of sexual abuse will both be counted under the direct victimization category, and therefore will be counted in this table as 1 exposure).

¹³⁵ Robert L. Listenbee, et al., Report of the Attorney General’s National Task Force on Children Exposed to Violence viii (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>

Although each child is different, medical and social science studies have found a significant array of adverse outcomes closely associated with the Triple-C Impact. The observed harms were found to infiltrate all life's disciplines, ranging from increased involvement with the criminal justice system and heightened risk for substance use, to physical and mental health problems. Association with unfavorable life outcomes was also identified, including poor educational achievements, higher rates of unemployment and homelessness, and inferior economic well-being. Yet, as previously explained, there is substantial heterogeneity in the type and level of harm endured by each affected child.¹³⁶

The gaps created by the states' failure to provide an effective solution to the Triple-C Impact further exacerbate the problem. Without services or treatment, even children who appear resilient and seem to recover from exposure to violence still bear emotional scars that may lead them to experience health and psychological problems years or decades later, also known as the "sleepers effect".¹³⁷ Furthermore, the mere lack of response can further compound the caused harm by fostering a sense of isolation and betrayal.¹³⁸

*** Important note:** It should be noted that only the results of the studies incorporated in the analysis itself are presented in the form of linear probability. Many of the studies discussed in the text did not report figures required for the conversion and RR calculation, such as the prevalence of the outcome in the unexposed population. As a result, the effect sizes discussed in the text are still presented in odds form. For most of the outcomes discussed herein, the odds ratio serves as a relatively close proximation of the RR, as the prevalence of these

¹³⁶ Betsy Mcalister Groves et al., Family Violence Prevention Fund, Identifying and Responding to Domestic Violence: Consensus Recommendations for Child and Adolescent Health 6 (2004), <http://www.futureswithoutviolence.org/userfiles/file/HealthCare/pediatric.pdf>; S. R. Jaffee et al., Individual, Family, and Neighborhood Factors Distinguish Resilient From Non-Resilient Maltreated Children: A Cumulative Stressors Model, 31(3) Child Abuse & Neglect 231 (2007); Anne Petersen, Joshua Joseph, & Monica Feit, New Directions in Child Abuse and Neglect 133 (2013); Stephanie Holt, Helen Buckley & Sadhbh Whelan, The Impact of Exposure to Domestic Violence on Children and Young People: A Review of the Literature, 32 Child Abuse & Neglect 797, 804-5 (2008); Lucy Salcido Carter, Lois A. Weithorn & Richard E. Behrman, Domestic Violence and Children: Analysis and Recommendations, 9(3) The Future of Children 4 (1999); Stephanie Holt, Helen Buckley & Sadhbh Whelan, The Impact of Exposure to Domestic Violence on Children and Young People: A Review of the Literature, 32 Child Abuse & Neglect 797, 802-3 (2008).

¹³⁷ Robert L. Listenbee, et al., Report of the Attorney General's National Task Force on Children Exposed to Violence 12 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; Nicole L. Vu Et Al., Children's Exposure To Intimate Partner Violence: A Meta-Analysis of Longitudinal Associations With Child Adjustment Problems, 46 Clinical Psychology Review 25, 26 (2016); Megan R. Holmes, The Sleeper Effect of Intimate Partner Violence Exposure: Long-Term Consequences on Young Children's Aggressive Behavior, 54(9) Journal of Child Psychology and Psychiatry 986 (2013).

¹³⁸ Robert L. Listenbee, et al., Report of the Attorney General's National Task Force on Children Exposed to Violence 30 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>

outcomes in the population are small (<10%).¹³⁹ Yet, a few of the outcomes, such as the criminal justice outcomes, are more prevalent, and therefore the odds ratio proximation is less accurate, and could be somewhat inflated. Nevertheless, it provides a relative measure of the effect size observed in the different studies reviewed.

A. Criminal Justice

Increased involvement with the criminal justice system among Triple-C Impacted children is one of the more thoroughly researched outcomes. Such involvement with the system can be the result of engagement in delinquent acts, criminal activity once reaching adulthood, or due to repeat victimization.¹⁴⁰

The empirical evidence on the effect of Triple-C Impact exposure on criminal justice involvement varies quite substantially in comparison to other outcomes in this section. Where involvement in the juvenile justice system is concerned, results range from approximately 50% increased odds for juvenile arrests and offending among children affected by direct victimization, to 80%-200% increase among children exposed to family violence.¹⁴¹ Exposure to most of the Triple-C Impact

¹³⁹ See evaluation of the relationship between odds ratio and relative risk at Ian Shrier & Russell Steele, Understanding the Relationship Between Risks and Odds Ratios, 16(2) Clin J Sport Med 107, 108-109 (2006). Also see: Jun Zhang & Kai F. Yu, What's the Relative Risk? A Method of Correcting the Odds Ratio in Cohort Studies of Common Outcomes, 280(9) JAMA 1690 (1998); Chittaranjan Andrade, Understanding Relative Risk, Odds Ratio, and Related Terms: As Simple as It Can Get, 76(7) Journal of Clinical Psychiatry 857 (2015);

¹⁴⁰ Laura Bevilacqua, et al., Interaction Between FKBP5 And Childhood Trauma And Risk Of Aggressive Behavior, 69(1) Archives of General Psychiatry 62 (2012); Sunny H. Shin, Daniel P. Miller, & Martin H. Teicher, Exposure To Childhood Neglect And Physical Abuse And Developmental Trajectories Of Heavy Episodic Drinking From Early Adolescence Into Young Adulthood, 127 Drug and Alcohol Dependence 31 (2013); Shi Huang, et al., The Long-Term Effects Of Childhood Maltreatment Experiences On Subsequent Illicit Drug Use And Drug-Related Problems In Young Adulthood, 36 Addictive Behaviors 95 (2011); Sjoukje Berdina Beike De Boer, et al. Childhood Characteristics Of Adolescent Inpatients With Early-Onset And Adolescent-Onset Disruptive Behavior, 34(3) Journal of Psychopathology and Behavioral Assessment 415 (2012); Sophie Boivin, et al., Past Victimization And Dating Violence Perpetration In Adolescence: The Mediating Role Of Emotional Distress And Hostility, 27(4) Journal of Interpersonal Violence 662 (2012); Eleni Maneta, et al., Links Between Childhood Physical Abuse And Intimate Partner Aggression: The Mediating Role Of Anger Expression, 27(3) Violence and Victims 315 (2012); Deborah J. Jones, et al., Linking Childhood Sexual Abuse And Early Adolescent Risk Behavior: The Intervening Role Of Internalizing And Externalizing Problems, 41(1) Journal of Abnormal Child Psychology 139 (2013); Christina S. Meade, et al., Methamphetamine use is associated with childhood sexual abuse and HIV sexual risk behaviors among patrons of alcohol-serving venues in Cape Town, South Africa, 126 Drug and Alcohol Dependence 232 (2012); Roberto Maniglio, The Role Of Child Sexual Abuse In The Etiology Of Substance-Related Disorders, 30(3) Journal of Addictive Disorders 216 (2011); Bryndis B. Asgeirsdottir, et al., Associations Between Sexual Abuse And Family Conflict/Violence, Self-Injurious Behavior, And Substance Use: The Mediating Role Of Depressed Mood And Anger, 35(3) Child Abuse & Neglect 210 (2011); Helen W. Wilson & Cathy S. Widom, Pathways From Childhood Abuse And Neglect To HIV-Risk Sexual Behavior In Middle Adulthood, 79(2) Journal of Consulting and Clinical Psychology 236 (2011) Helen W. Wilson & Cathy S. Widom, The Role Of Youth Problem Behaviors In The Path From Child Abuse And Neglect To Prostitution: A Prospective Examination, 20(1) Journal of Research in Adolescence 210 (2010); Lynette M. Renner & Stephen D. Whitney, Risk Factors For Unidirectional And Bidirectional Intimate Partner Violence Among Young Adults, 36(1) Child Abuse & Neglect 40 (2012).

¹⁴¹ Joshua P. Mersky & Arthur J. Reynolds, Child Maltreatment and Violent Delinquency: Disentangling Main Effects and Subgroup Effects, 12(3) Child Maltreatment 246 (2007); Cathy Spatz Widom, The Cycle of Violence, National Institute of Justice

categories increase the likelihood of adult arrest by approximately 50%-60%.¹⁴² Increased odds for criminal offending is evaluated around 80% for both children affected by direct victimization and those affected by parental incarceration.¹⁴³ The most significant effect is found on violent adult offending, for which increase in risk more than doubles (and even triples according to some studies). Similar effect is found on the probability of perpetrating domestic violence.¹⁴⁴ The increase in re-victimization attributed to exposure ranges from 60%-240% greater likelihood of becoming a victim of domestic violence during adulthood,¹⁴⁵ to 43%-237% greater likelihood of experiencing sexual assault.¹⁴⁶

Nevertheless, it must be noted that there are no deterministic forces causing the committing of these crimes. Other than rare cases of duress, automatism, and extreme mental incapacitation, Triple-C affected individuals make conscious and willful choices to break the law. Yet, “the choices a person makes are shaped by the choices a person has.”¹⁴⁷ As clearly demonstrated

Research in Brief (Sep. 1992), available at: <https://www.ncjrs.gov/pdffiles1/nij/136607.pdf>; Jennifer E. Lansford Et Al., Early Physical Abuse and Later Violent Delinquency: A Prospective Longitudinal Study, 12(3) Child Maltreatment 233 (2007); Maureen A. Allwood & Cathy Spatz Widom, Child Abuse and Neglect, Developmental Role Attainment, and Adult Arrests, 50(4) Journal of Research in Crime and Delinquency 551 (2013); Abigail A. Fagan, The Short- and Long-Term Effects of Adolescent Violent Victimization Experienced Within the Family and Community, 18(4) Violence and Victims 445 (2003); Veronica M. Herrera & Laura Ann McCloskey, Gender Differences in the Risk for Delinquency Among Youth Exposed to Family Violence, 25 Child Abuse & Neglect 1037 (2001); Cindy Sousa Et Al., Longitudinal Study on the Effects of Child Abuse and Children’s Exposure to Domestic Violence, Parent–Child Attachments, and Antisocial Behavior in Adolescence, 26(1) Journal of Interpersonal Violence 111 (2011); Raymond R. Swisher & Unique R. Shaw-Smith, Parental Incarceration and Adolescent Well-Being: Life Course Contingencies and Other Moderators, 104(4) The Journal of Criminal Law & Criminology 929 (2015).

¹⁴² Maureen A. Allwood & Cathy Spatz Widom, Child Abuse and Neglect, Developmental Role Attainment, and Adult Arrests, 50(4) Journal of Research in Crime and Delinquency 551 (2013); Raeann E. Anderson, Timothy J. Geier & Shawn P. Cahill, Epidemiological Associations Between Posttraumatic Stress Disorder and Incarceration in The National Survey of American Life, 26 Criminal Behaviour and Mental Health 110 (2016); Amanda Burgess-Proctor, Beth M. Huebner & Joseph M. Durso, Comparing The Effects of Maternal And Paternal Incarceration On Adult Daughters’ and Sons’ Criminal Justice System Involvement, 43(8) Criminal Justice & Behavior 1034 (2016).

¹⁴³ Amanda Burgess-Proctor, Beth M. Huebner & Joseph M. Durso, Comparing The Effects of Maternal And Paternal Incarceration On Adult Daughters’ and Sons’ Criminal Justice System Involvement, 43(8) Criminal Justice & Behavior 1034 (2016).

¹⁴⁴ Chelsea Farrell & Gregory M. Zimmerman, Does Offending Intensify As Exposure To Violence Aggregates? Reconsidering The Effects of Repeat Victimization, Types of Exposure To Violence, And Polyvictimization On Property Crime, Violent Offending, And Substance Use, 53 Journal of Criminal Justice 25 (2017); Robert J. Franzese Et Al., Adolescent Exposure to Violence and Adult Violent Victimization and Offending, 42(1) Criminal Justice Review 42 (2017); Charles L. Whitfield, Et Al., Violent Childhood Experiences and the Risk of Intimate Partner Violence in Adults: Assessment in a Large Health Maintenance Organization, 18(2) Journal of Interpersonal Violence 166 (2003); Miriam K. Ehrensaft, Et Al., Intergenerational Transmission of Partner Violence: A 20-Year Prospective Study, 71(4) Journal of Consulting and Clinical Psychology 741 (2003).

¹⁴⁵ Charles L. Whitfield, Et Al., Violent Childhood Experiences and the Risk of Intimate Partner Violence in Adults: Assessment in a Large Health Maintenance Organization, 18(2) Journal of Interpersonal Violence 166 (2003); Chien-Chung Huang, Children’s Exposure to Intimate Partner Violence and Early Delinquency, 30 J. Fam. Viol. 953 (2015).

¹⁴⁶ Katie A. Ports, Derek C. Ford & Melissa T. Merrick, Adverse Childhood Experiences And Sexual Victimization In Adulthood, 51 Child Abuse & Neglect 313 (2016).

¹⁴⁷ Marilyn Metzler Et Al, Adverse Childhood Experiences and Life Opportunities: Shifting The Narrative, 72 Children and Youth Services Review 141, 142 (2017).

throughout this section, the Triple-C Impact influences the range of life choices laid before affected children, and increases the odds of tipping the scale towards unlawful choices.

There is a multitude of expenses that stem from an increase in criminal and delinquent activities. Law enforcement responds to the scene of the incident when reported, and may initiate an investigation, depending on the circumstances. In many cases, arrests can be made. The per-case cost of police response is estimated to be generally low, under \$170, with the exception of arson and murder cases, where the average cost stands at approximately \$2,300.¹⁴⁸ If the suspect is indicted, costs of prosecution and the judicial process are also added. These costs are estimated at \$2,000 on average per violent crime, and \$500 per property crime.¹⁴⁹ Another study tallies the combined cost of law enforcement, prosecution and the judicial process to range between \$3,200 for theft cases and \$446,000 for murder cases. Violent crimes such as assault and robbery range between \$9,800 to \$15,700 per case.¹⁵⁰ Pre-conviction detention costs should also be considered in some cases, which are evaluated to range on average between \$75-155 a day for each individual detained.¹⁵¹ Post-conviction, the costs of sentencing are added. The national annual average cost of prison stay per person is calculated at \$34,400.¹⁵² In juvenile cases, the cost is significantly higher, and estimated at an average annual cost of \$150,000 per youth, though this will not be added to the analysis.¹⁵³ Probation and parole are substantially less costly alternatives. For adults, the average cost of probation is estimated at \$1,400, and parole at \$3,130 per year.¹⁵⁴

¹⁴⁸ Ted R. Miller Mark A. Cohen Brian Wiersema, Victim Costs and Consequences: A New Look, National Institute of Justice Research Report (January 1996), available at: <https://www.ncjrs.gov/pdffiles/victcost.pdf>. Adjusted to 2017 dollars, using The American Institute of Economic Research (AIER) Cost of Living Calculator.

¹⁴⁹ Priscillia Hunt, James Anderson & Jessica Saunders, The Price of Justice: New National and State-Level Estimates of the Judicial and Legal Costs of Crime to Taxpayers, 42 American Journal of Criminal Justice 321 (2016). Adjusted to 2017 dollars, using The American Institute of Economic Research (AIER) Cost of Living Calculator.

¹⁵⁰ Kathryn E. McCollister, Michael T. French & Hai Fang, The Cost of Crime to Society, 108 Drug and Alcohol Dependency 98 (2010). Adjusted to 2017 dollars, using The American Institute of Economic Research (AIER) Cost of Living Calculator.

¹⁵¹ Will Dobbie, Jacob Goldin & Crystal S. Yang, The Effects of Pretrial Detention on Conviction, Future Crime, and Employment: Evidence from Randomly Assigned Judges, 108 American Economic Review 201 (2018).

¹⁵² Mai and Subramanian, "Price of Prisons: Examining State Spending Trends 2010-15," Vera Institute of Justice, at 8 Table 1 (2017), Adjusted to 2017 dollars, using The American Institute of Economic Research (AIER) Cost of Living Calculator.

¹⁵³ Sticker Shock: Calculating the Full Price Tag for Youth Incarceration." Justice Policy Institute (2014) <http://www.justicepolicy.org/research/8477>. Adjusted to 2017 dollars, using The American Institute of Economic Research (AIER) Cost of Living Calculator.

¹⁵⁴ One in 31: The Long Reach of American Corrections", Pew Charitable Trusts, (2009), available at: https://www.pewtrusts.org/~media/assets/2009/03/02/pspp_1in31_report_final_web_32609.pdf , It should be noted that some states charge the offender for at least some of the costs of supervision during the period of parole or probation.

On the other end of the gamut, we have the costs associated with the victims, whether medical expenses, lost wages for missed work days, child care costs, property damages, crime victim services, victim assistance programs, and victim compensation costs. The average crime victim costs are estimated to range from several hundred dollars to over \$1M per case, depending on the type of offense.¹⁵⁵ Additionally, the upsurge in volume of criminal activity is expected to cause an increase in prevention costs and enhance the law enforcement resources required to maintain public safety overtime.

To calculate the attributable risk for adult offending under our analysis model, we have selected to rely on a study that specifically measures the relationship between different types of direct and indirect forms of childhood crime exposure and criminal offending.¹⁵⁶ The study is one of the only studies in this field to be based on a large national longitudinal sample (N > 12,000).¹⁵⁷ It should be noted that the study measured whether participants committed a crime during the 12 months that preceded the interview, and therefore there is a likelihood of undercounting (see Table 5).

For the cost variable for each crime category, we accounted for the average expenditure on criminal justice costs, including all local, state, and federal government funds spent on police protection, legal and adjudication services, incarceration, and other corrections programs. To that we added the average direct victim costs, which include immediate medical costs and damage/loss of property. We counted one single crime as the lifetime cost under each category, although recidivism is a common occurrence based on the National Institute of Justice statistics.¹⁵⁸ We have again selected to err on the side of undercounting (see Table 5).

For the measure of re-victimization, there were fewer available studies that allow the calculation of the precise risk attributed to Triple-C Impact exposure. We have identified two robust studies on the topic. The first study evaluated the increase in odds for sexual victimization during

¹⁵⁵ Ted R. Miller Mark A. Cohen Brian Wiersema, Victim Costs and Consequences: A New Look, National Institute of Justice Research Report (January 1996), available at: <https://www.ncjrs.gov/pdffiles/victcost.pdf>

¹⁵⁶ Chelsea Farrell & Gregory M. Zimmerman, Does Offending Intensify As Exposure To Violence Aggregates? Reconsidering The Effects of Repeat Victimization, Types of Exposure To Violence, And Polyvictimization On Property Crime, Violent Offending, And Substance Use, 53 Journal of Criminal Justice 25 (2017).

¹⁵⁷ Chelsea Farrell & Gregory M. Zimmerman, Does Offending Intensify As Exposure To Violence Aggregates? Reconsidering The Effects of Repeat Victimization, Types of Exposure To Violence, And Polyvictimization On Property Crime, Violent Offending, And Substance Use, 53 Journal of Criminal Justice 25 (2017).

¹⁵⁸ U.S. Office of Justice Programs, National institute of Justice, Recidivist, <https://www.nij.gov/topics/corrections/recidivism/pages/welcome.aspx>

adulthood associated with childhood crime exposure, which is measured at 77%.¹⁵⁹ This study omitted statistical figures that are essential in the calculation of the attributable risk, such as prevalence of the outcome in the unexposed group, and a confidence interval for the results. Thus, it could not be incorporated in our analysis. The second study assessed the increase in domestic violence victimization associated with exposure. This study calculated the effect of exposure on re-victimization for women only. Therefore, it has allowed us to estimate the costs of re-victimization for the female population exclusively, and only where domestic violence victimization is concerned (see Table 5).¹⁶⁰ Although Triple-C Impacted children, both male and female, may be prone to repeat victimization of other crime types during their lifetime, we could not find sufficiently rigorous studies on this topic to include in our analysis. Moreover, the existing studies show that children who experience more than one crime exposure during childhood are found to have substantially greater odds of re-victimization, of up to 730%.¹⁶¹ While we remained consistent in our selection of the most conservative estimate, one should take into consideration severe undercounting in this category due to the lack of data. The calculated costs for this category consist of the average direct victim costs of the respective crimes (see Table 5).

¹⁵⁹ Katie A. Ports, Derek C. Ford & Melissa T. Merrick, Adverse Childhood Experiences And Sexual Victimization In Adulthood, 51 Child Abuse & Neglect 313 (2016)

¹⁶⁰ Charles L. Whitfield, Et Al., Violent Childhood Experiences and the Risk of Intimate Partner Violence in Adults: Assessment in a Large Health Maintenance Organization, 18(2) Journal of Interpersonal Violence 166 (2003).

¹⁶¹ Katie A. Ports, Derek C. Ford & Melissa T. Merrick, Adverse Childhood Experiences And Sexual Victimization In Adulthood, 51 Child Abuse & Neglect 313 (2016).

Table 5: Criminal Justice - Attributable Risk and Costs

Outcome	Odds Ratio	Increase in Probability	Attributable Risk	No. of Individuals Affected	Lifetime Cost - Individual	Lifetime Cost - Cohort
Property Crime ¹⁶²	1.64 ¹⁶³ (1.42, 1.9)	45.38% (30.99, 61.0)	9.08% (6.20, 12.21)	234,172 (159,916, 314,787)	\$4,415 ¹⁶⁴	\$1,033,813,260 (705,990,807, 1,389,706,944)
Violent Crime ¹⁶⁵	2.64 ¹⁶⁶ (2.26, 3.09)	99.04% (80.69, 118.23)	19.71% (16.06, 23.53)	508,346 (414,090, 606,739)	\$35,986 ¹⁶⁷	\$18,289,908,513 (14,901,589,893, 21,834,323,383)
Re-Victimization (Domestic Violence – Women only) ¹⁶⁸	2.30 ¹⁶⁹ (1.6, 3.1)	121.64% (57.26, 192.2)	3.53% ¹⁷⁰ (1.66, 5.57)	90,969 (40,824, 143,737)	\$6,422 ¹⁷¹	\$584,213,811 (275,017,165, 923,092,302)
Total					\$7,720 (6,159, 9,364)	\$19,907,935,584 (15,882,597,865, 24,147,122,679)

¹⁶² Offending was self-reported by respondents at the Wave 2 in-home interview. The property crime variable measures whether or not (0 = No; 1 = Yes) participants engaged in one or more of the following acts in the year preceding the Wave 2 interview: deliberately damaged property; stole something worth more than \$50; entered a building or house to steal something; or stole something worth less than \$50. (Chelsea Farrell & Gregory M. Zimmerman, Does Offending Intensify as Exposure to Violence Aggregates? Reconsidering the Effects of Repeat Victimization, Types of Exposure to Violence, and Polyvictimization on Property Crime, Violent Offending, and Substance Use, 53 Journal of Criminal Justice 25 (2017)).

¹⁶³ Chelsea Farrell & Gregory M. Zimmerman, Does Offending Intensify As Exposure To Violence Aggregates? Reconsidering The Effects of Repeat Victimization, Types of Exposure To Violence, And Polyvictimization On Property Crime, Violent Offending, And Substance Use, 53 Journal of Criminal Justice 25 (2017).

¹⁶⁴ Calculation based on the findings of Kathryn E. McCollister, Michael T. French & Hai Fang, The Cost of Crime to Society, 108 Drug and Alcohol Dependency 98 (2010).

¹⁶⁵ Offending was self-reported by respondents. The violent offending variable measures whether or not (0 = No; 1 = Yes) participants engaged in one or more of the following violent offenses during the year preceding Wave 2: used or threatened to use a weapon to get something; took part in a group fight; pulled a knife or gun on someone; shot or stabbed someone; or got into a serious physical fight. (Chelsea Farrell & Gregory M. Zimmerman, Does Offending Intensify As Exposure To Violence Aggregates? Reconsidering The Effects of Repeat Victimization, Types of Exposure To Violence, And Polyvictimization On Property Crime, Violent Offending, And Substance Use, 53 Journal of Criminal Justice 25 (2017)).

¹⁶⁶ Chelsea Farrell & Gregory M. Zimmerman, Does Offending Intensify As Exposure To Violence Aggregates? Reconsidering The Effects of Repeat Victimization, Types of Exposure To Violence, And Polyvictimization On Property Crime, Violent Offending, And Substance Use, 53 Journal of Criminal Justice 25 (2017).

¹⁶⁷ Calculation based on the findings of Kathryn E. McCollister, Michael T. French & Hai Fang, The Cost of Crime to Society, 108 Drug and Alcohol Dependency 98 (2010).

¹⁶⁸ Victimization was a self-reported measure. Individuals who replied “yes” to the question “Has your partner ever threatened, pushed, or shoved you?” were logged as victims of domestic violence. The question was presented only to female participants in the survey.

¹⁶⁹ Charles L. Whitfield, Et Al., Violent Childhood Experiences and the Risk of Intimate Partner Violence in Adults: Assessment in a Large Health Maintenance Organization, 18(2) Journal of Interpersonal Violence 166 (2003) (Applies to women only).

¹⁷⁰ Calculated for women population only.

¹⁷¹ Includes the cost of treated injuries and short-term loss of productivity immediately after the incidence. Calculation based on the findings of Cora Peterson, et al., Lifetime Economic Burden of Intimate Partner Violence Among U.S. Adults, 55(4) [Am J Prev Med](#). 433 (2018).

B. Substance Use and Use Disorders

Children affected by the Triple-C Impact were found to have higher rates of substance use and use disorders during adolescence and adulthood, including tobacco, alcohol, prescription drugs, or illicit drugs. Additionally, studies have found the age of first initiation of use to be younger, and the likelihood of using intravenously injected drugs to be greater.¹⁷²

Scientific studies have found that any one exposure to any of the Triple-C Impact categories will increase the odds of an individual ever using an illicit drug by 60-70%, compared to individuals who were never exposed.¹⁷³ The odds of using injected drugs are estimated to increase by 30%-60%.¹⁷⁴ When looking at specific categories of exposure, such as exposure to family violence and direct victimization, some studies estimate the risk of illicit drug use to increase by as much as 90%-100% due to exposure.¹⁷⁵ The risk of an individual binge drinking or developing an alcohol

¹⁷² Scott Menard, Herbert C. Covey & Robert J. Franzese, Adolescent Exposure to Violence And Adult Illicit Drug Use, 42 *Child Abuse & Neglect* 30 (2015); Shanta R. Dube, Childhood Abuse, Neglect, and Household Dysfunction and The Risk of Illicit Drug Use: The Adverse Childhood Experience Study, 111(3) *Pediatrics* 564 (2003); Joseph Murray, David P. Farrington, & Ivana Sekol, Children's Antisocial Behavior, Mental Health, Drug Use, and Educational Performance After Parental Incarceration: A Systematic Review and Meta-Analysis, 138(2) *Psychological Bulletin* 175 (2012); Chelsea Farrell & Gregory M. Zimmerman, Does Offending Intensify As Exposure To Violence Aggregates? Reconsidering The Effects of Repeat Victimization, Types of Exposure To Violence, And Polyvictimization On Property Crime, Violent Offending, And Substance Use, 53 *Journal of Criminal Justice* 25 (2017); Joseph Murray and David P. Farrington, The Effects of Parental Imprisonment on Children, 37 *Crime and Justice: A review of research* 133 (2008); Miriam K. Ehrensaft, Et Al., Intergenerational Transmission of Partner Violence: A 20-Year Prospective Study, 71(4) *Journal of Consulting and Clinical Psychology* 741 (2003); Michael E. Roettger Et Al., Paternal Incarceration and Trajectories of Marijuana and Other Illegal Drug Use From Adolescence Into Young Adulthood: Evidence From Longitudinal Panels of Males and Females In the United States, 106 *Addiction* 121 (2010); Shane Darke & Michelle Torok, The Association of Childhood Physical Abuse with the Onset and Extent of Drug Use Among Regular Injecting Drug Users, 109 *Addiction* 610 (2013); Tom Luster, Stephen A. Small & Richard Lower, The Correlates of Abuse and Witnessing Abuse Among Adolescents, 17(12) *Journal of Interpersonal Violence* 1323 (2002); Joseph Murray & David P. Farrington, The Effects of Parental Imprisonment on Children, 37(1) *Crime and Justice* 133 (2008); Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 *Eur. Arch. Psychiatry Clin. Neurosci.* 174 (2006); Esme Fuller-Thomson, Jessica L. Roane & Sarah Brennenstuhl, Three Types of Adverse Childhood Experiences, and Alcohol and Drug Dependence Among Adults: An Investigation Using Population-Based Data, 51(11) *Substance Use & Misuse* 1451 (2016); Daniel P. Mears & Sonja E. Siennick, Young Adult Outcomes and the Life-Course Penalties of Parental Incarceration, 53(1) *Journal of Research in Crime and Delinquency* 3 (2016).

¹⁷³ Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 *Eur. Arch. Psychiatry Clin. Neurosci.* 174 (2006); Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) *Am J Prev Med* 245 (1998).

¹⁷⁴ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) *Am J Prev Med* 245 (1998); Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) *Am. J. Prev. Med.* 345 (2015); Shanta R. Dube, Childhood Abuse, Neglect, and Household Dysfunction and The Risk of Illicit Drug Use: The Adverse Childhood Experience Study, 111(3) *Pediatrics* 564 (2003).

¹⁷⁵ Shanta R. Dube, Childhood Abuse, Neglect, and Household Dysfunction and The Risk of Illicit Drug Use: The Adverse Childhood Experience Study, 111(3) *Pediatrics* 564 (2003); Scott Menard, Herbert C. Covey & Robert J. Franzese, Adolescent Exposure to Violence And Adult Illicit Drug Use, 42 *Child Abuse & Neglect* 30 (2015).

use disorder doubles with any one exposure, when compared to non-exposed peers.¹⁷⁶ Among children exposed to family violence, exposure was found to elevate the probability of early initiation of substance use (before the age of 14) by 80%, and by 110% for children exposed to community violence.¹⁷⁷

Recovery from substance use disorder could require long term treatment, either residential or outpatient. For example, the most efficacious treatment for opioid use disorder is the chronic use of medications such as buprenorphine or methadone. The average weekly cost of outpatient treatment for opioid use disorder (such as methadone treatment), for example, ranges from \$115 to \$270 per week.¹⁷⁸ That accumulates to a minimum of \$5,980 per patient each year. In addition to the direct costs of treatment, individuals suffering from substance addiction were found to have higher medical costs than those of the general population. The difference for Medicaid users was found to be approximately \$14,460, while Medicare users are estimated at \$17,900 annually.¹⁷⁹ Loss of productivity costs are also added, as substance use and addiction often hampers one's ability to integrate into the work force, hold a stable position, and perform other routine daily tasks.

The measures of the attributable risk of alcoholism and illicit drug use both rely on the original ACE studies.¹⁸⁰ While the sample in these studies is not nationally representative, the sample of the original dataset is very large. Moreover, the results are supported and replicated by following studies that rely on state collected ACE data under the Behavioral Risk Factor Surveillance System (BRFSS).¹⁸¹ While the effect of a single crime exposure on smoking was found to be statistically

¹⁷⁶ Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 Eur. Arch. Psychiatry Clin. Neurosci. 174 (2006); Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998); Esme Fuller-Thomson, Jessica L. Roane & Sarah Brennenstuhl, Three Types of Adverse Childhood Experiences, and Alcohol and Drug Dependence Among Adults: An Investigation Using Population-Based Data, 51(11) Substance Use & Misuse 1451 (2016).

¹⁷⁷ Shanta R. Dube, Childhood Abuse, Neglect, and Household Dysfunction and The Risk of Illicit Drug Use: The Adverse Childhood Experience Study, 111(3) Pediatrics 564 (2003).

¹⁷⁸ Medications to Treat Opioid Use Disorder," National Institute on Drug Abuse (2018), available at: <https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-addiction/overview>

¹⁷⁹ Florence, et al., The Economic Burden of Prescription Opioid Overdose, Abuse, and Dependence in the United States, 54 Medical Care 901 (2016), available at: https://journals.lww.com/lww-medicalcare/Abstract/2016/10000/The_Economic_Burden_of_Prescription_Opioid.2.aspx. Adjusted to 2017 dollars, using The American Institute of Economic Research (AIER) Cost of Living Calculator.

¹⁸⁰ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998).

¹⁸¹ The BRFSS is the U.S. premiere system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. It is run and supervised by

non-significant in the original ACE study, a newer study with a larger sample established a statistically significant effect that justified the inclusion of smoking as one of our study outcomes.¹⁸² The calculated costs for each category include medical treatment and loss of productivity (see Table 6).

the U.S. Centers for Disease Control and Prevention (CDC). See for example Leah K. Gilbert Et Al., *Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia*, 2010, 48(3) *Am. J. Prev. Med.* 345 (2015).

¹⁸² Calculated based on the findings of Earl S. Ford, et al., *Adverse childhood experiences and smoking status in five states*, 53(3) *Preventive Medicine* 188 (2011). sample is extracted from 5 states (Arkansas, Louisiana, New Mexico, Tennessee, and Washington), and is based on BRFSS data.

Outcome	Odds Ratio	Increase in Probability	Attributable Risk	No. of Individuals Affected	Lifetime Cost - Individual	Lifetime Cost - Cohort
Alcoholism ¹⁸³	2.0 ¹⁸⁴ (1.6, 2.7)	94.36% (36.51, 157.3)	2.74% (1.66, 4.56)	70,568 ¹⁸⁵ (42,60,248)	\$20,603 ¹⁸⁶	\$1,453,919,683 (882,298,026, 2,423,846,089)
Drug Use ¹⁸⁷	1.7 ¹⁸⁸ (1.4, 2.0)	62.71% (5.37, 87.97)	4.01% (2.34, 5.63)	103,497 ¹⁸⁹ (60,248, 145,184)	\$245,960 ¹⁹⁰	\$25,456,110,109 (14,818,667,173, 35,709,645,331)
Smoking ¹⁹¹	1.16 ¹⁹² (1.09, 1.24)	9.30% (30.99, 13.56)	3.56% (2.06, 5.19)	91,871 ¹⁹³ (53,017, 133,940)	\$70,053 ¹⁹⁴	\$6,435,845,618 (3,713,985,673, 9,382,877,278)
Total					\$12,931 (7,529, 18,426)	\$33,345,875,411 (19,414,950,872, 47,516,368,697)

¹⁸³ A self-reported measure, relying on an answer “yes” to the question, “Have you ever considered yourself to be an alcoholic?”

¹⁸⁴ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998).

¹⁸⁵ Calculation based on the findings of Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017); Ellen E. Bouchery et al., Economic Costs of Excessive Alcohol Consumption in the U.S., 2006, 41(5) Am J Prev Med 516 (2011); Jeffrey J. Sacks, et al., 2010 National and State Costs of Excessive Alcohol Consumption, 49(5) Am J Prev Med. e73 (2015).

¹⁸⁶ Cora Peterson, et al., Lifetime Economic Burden of Rape Among US Adults, 52(6) American Journal of Preventive Medicine 691 (2017); J. J. Sacks, et al., 2010 National and State Costs of Excessive Alcohol Consumption, 49(5) Am J Prev Med. E73 (2015); E. E. Bouchery et al., Economic Costs of Excessive Alcohol Consumption in The U.S., 2006, 41(5) Am J Prev Med. 516 (2011).

¹⁸⁷ A self-reported measure, relying on an answer “yes” to the question, “Have you ever used street drugs?”

¹⁸⁸ Calculated based on the findings of Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998).

¹⁸⁹ Calculation based on the findings of Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017); U.S. Department of Justice, National Drug Intelligence Center, The economic impact of illicit drug use on American Society (2011); Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies, Results from the 2007 National Survey on Drug Use and Health: National Findings (2008), <https://www.dpft.org/resources/NSDUHresults2007.pdf>

¹⁹⁰ Cora Peterson, et al., Lifetime Economic Burden of Rape Among US Adults, 52(6) American Journal of Preventive Medicine 691 (2017); U.S. Department of Justice, The Economic Impact of Illicit Drug Use on American Society (2011), <https://www.justice.gov/archive/ndic/pubs44/44731/44731p.pdf>; U.S. DHHS, Results From The 2007 National Survey on Drug Use and Health: National Findings, DHHS Publication No SMA 08-4343 (2009), <https://www.dpft.org/resources/NSDUHresults2007.pdf>.

¹⁹¹ Smoking is defined as smoking at least 100 cigarettes during a lifetime.

¹⁹² Calculated based on the findings of Earl S. Ford, et al., Adverse childhood experiences and smoking status in five states, 53(3) Preventive Medicine 188 (2011). sample is extracted from 5 states (Arkansas, Louisiana, New Mexico, Tennessee, and Washington), and is based on BRFSS data.

¹⁹³ Calculation based on the findings of Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

¹⁹⁴ Cora Peterson, et al., Lifetime Economic Burden of Rape Among US Adults, 52(6) American Journal of Preventive Medicine 691 (2017); Frank A. Sloan, et al., The Price of Smoking (2004).

C. Mental Health

From a mental health perspective, affected children were found to have an increased risk of suffering from depression, Post Traumatic Stress Disorder (PTSD), anxiety, developmental and behavioral problems, aggression, attention disorders, personality disorders, suicide risk, attachment disorders and deficit in social adaptation.¹⁹⁵ These conditions may affect the child in the short-term, immediately after the exposure incidence, or in the long-term through adulthood. In some cases, symptoms may appear years after the exposure, as the child struggles to process the experience without adequate facilitation.¹⁹⁶

The most comprehensive and reputable studies to examine the effect of childhood crime exposure, and other childhood adversities, on mental and physical health are the ACE studies. The studies have found that the odds of having committed a suicide attempt increased by 80% among exposed

¹⁹⁵ Frank W. Putnam, *The Impact of Trauma on Child Development*, 57 *Juvenile and Family Court Journal*, 1 (2006); R C. Kessler, et al. *Childhood adversities and adult psychopathology in the WHO World Mental Health Surveys*, 197 *British Journal of Psychiatry* 378 (2010); Gayla Margolin & E. B. Gordis, *The Effects of Family And Community Violence On Children*, 51 *Annual Review of Psychology* 445 (2000); Robert L. Listenbee, et al., *Report of the Attorney General's National Task Force on Children Exposed to Violence* 31-32 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; J. G. Hovens, et al., *Impact Of Childhood Life Events And Trauma On The Course Of Depressive And Anxiety Disorders*, 126(3) *Acta Psychiatrica Scandinavica* 198 (2012); Sara Larsson, et al., *High Prevalence Of Childhood Trauma In Patients With Schizophrenia Spectrum And Affective Disorder*, 54(2) *Comprehensive Psychiatry* 123 (2012); Anna Plaza, et al. *Childhood Physical Abuse As A Common Risk Factor For Depression And Thyroid Dysfunction In The Earlier Postpartum*, 200 *Psychiatry Research* 329 (2012); Saaniya Bedi, et al., *Risk For Suicidal Thoughts And Behavior After Childhood Sexual Abuse In Women And Men*, 41(4) *Suicide and Life-Threatening Behavior* 406 (2011); Laura P. Chen, et al., *Sexual Abuse And Lifetime Diagnosis Of Psychiatric Disorders: Systematic Review And Meta-Analysis*, 85(7) *Mayo Clinic Proceedings* 618 (2010); Tracie O. Afifi, et al., *Population Attributable Fractions Of Psychiatric Disorders And Suicide Ideation And Attempts Associated With Adverse Childhood Experiences*, 98(5) *American Journal of Public Health* 946 (2008); Sarah Jonas, et al., *Sexual Abuse And Psychiatric Disorder In England: Results From The 2007 Adult Psychiatric Morbidity Survey*, 41(4) *Psychological Medicine* 709 (2011); Luisa Sugaya, et al., *Child Physical Abuse And Adult Mental Health: A National Study*, 25(4) *Journal of Traumatic Stress* 384 (2012); Scott E. Hadland, et al., *Suicide And History Of Childhood Trauma Among Street Youth*, 136(3) *Journal of Affective Disorders* 377 (2012); B. Wanner, et al., *Childhood Trajectories Of Anxiousness And Disruptiveness Explain The Association Between Early-Life Adversity And Attempted Suicide*, 42(11) *Psychological Medicine* 2373 (2012); Matte Ystgaard, et al., *Is There A Specific Relationship Between Childhood Sexual And Physical Abuse And Repeated Suicidal Behavior?* 28(8) *Child Abuse & Neglect* 863 (2004); Paul Rohde, et al., *Associations Of Child Sexual And Physical Abuse With Obesity And Depression In Middle-Aged Women*, 32(9) *Child Abuse & Neglect* 878 (2008); Lena Sanci, et al., *Childhood Sexual Abuse And Eating Disorders In Females: Findings From The Victorian Adolescent Health Cohort Study*, 162(3) *Archives of Pediatric and Adolescent Medicine* 261 (2008); Jacqueline C. Carter, et al., *The Impact Of Childhood Sexual Abuse In Anorexia Nervosa*, 30(3) *Child Abuse & Neglect* 257 (2006); Jennie G. Noll, et al., *Sleep Disturbances And Childhood Sexual Abuse*, 31(5) *Journal of Pediatric Psychology* 469 (2006); Annmarie C. Hulette, Jennifer J. Freyd & Philip A. Fisher, *Dissociation In Middle Childhood Among Foster Children With Early Maltreatment Experiences*, 35(2) *Child Abuse & Neglect* 123 (2011); Terri L. Messman-Moore, Kate L. Walsh & David Dilillo, *Emotion Dysregulation And Risky Sexual Behavior In Revictimization*, 34(12) *Child Abuse & Neglect* 967 (2010).

¹⁹⁶ Robert L. Listenbee, et al., *Report of the Attorney General's National Task Force on Children Exposed to Violence* 12 (Dec. 20, 2012), available at: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>; Nicole L. Vu Et Al., *Children's Exposure To Intimate Partner Violence: A Meta-Analysis of Longitudinal Associations With Child Adjustment Problems*, 46 *Clinical Psychology Review* 25, 26 (2016); Megan R. Holmes, *The Sleeper Effect of Intimate Partner Violence Exposure: Long-Term Consequences on Young Children's Aggressive Behavior*, 54(9) *Journal of Child Psychology and Psychiatry* 986 (2013).

individuals in comparison to those not exposed.¹⁹⁷ Likelihood of suffering from depression increases by 50%.¹⁹⁸ The risk for having difficulties controlling anger increases by 40%.¹⁹⁹ The risk for suffering from anxiety and high stress levels is elevated by 20%. Furthermore, there is a 10% increase in risk for experiencing hallucination disorders in comparison to non-exposed individuals.²⁰⁰ Additional evidence is available on the effect of parental incarceration on the mental health of children. Broadly speaking, meta-analysis has found exposure to parental incarceration to at least double the risk of experiencing mental health problems.²⁰¹ The likelihood of attempted suicide is more than 150% greater among children with an incarcerated parent.²⁰² Moreover, for this group, the risk of resorting to self-injurious behavior is elevated by 95%,²⁰³ of experiencing internalizing mental health problems (i.e. depression, anxiety, withdrawal) by 86%,²⁰⁴ and of suffering from PTSD by 72%.²⁰⁵

The costs associated with mental health problems include the medical care required for recovery, and loss of productivity caused by the, often long-lasting, debilitating effect of mental illnesses. Cost of treatment varies significantly depending on the nature and severity of the condition, as well as the type and length of the chosen treatment. One data point that we were able to obtain is the cost of PTSD treatment, which is estimated at \$9,000 per individual for the first year, reduced

¹⁹⁷ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998); Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) Am. J. Prev. Med. 345 (2015).

¹⁹⁸ Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 Eur. Arch. Psychiatry Clin. Neurosci. 174 (2006); Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998).

¹⁹⁹ Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 Eur. Arch. Psychiatry Clin. Neurosci. 174 (2006).

²⁰⁰ Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 Eur. Arch. Psychiatry Clin. Neurosci. 174 (2006).

²⁰¹ Joseph Murray and David P. Farrington, The Effects of Parental Imprisonment on Children, 37 Crime and Justice: A review of research 133 (2008).

²⁰² Laurel Davis & Rebecca J. Shlafer, Mental Health of Adolescents With Currently and Formerly Incarcerated Parents, 54 Journal of Adolescence 120 (2017).

²⁰³ Laurel Davis & Rebecca J. Shlafer, Mental Health of Adolescents With Currently and Formerly Incarcerated Parents, 54 Journal of Adolescence 120 (2017).

²⁰⁴ Laurel Davis & Rebecca J. Shlafer, Mental Health of Adolescents With Currently and Formerly Incarcerated Parents, 54 Journal of Adolescence 120 (2017).

²⁰⁵ Rosalyn D. Lee, Xiangming Fang & Feijun Luo, The Impact of Parental Incarceration on the Physical and Mental Health of Young Adults, 131 Pediatrics 1188 (2013).

by nearly half during the second year of treatment, and then slowly decreasing by about \$100 per year.²⁰⁶ When hospitalization or residential treatment is required, the costs substantially increase.

The attributable risk analysis of the mental health outcomes also relies on the findings of the original ACE studies.²⁰⁷ In these studies, and most others, PTSD does not appear as an independent condition, but rather is included under the broader categories of anxiety and depression symptoms. The calculated costs reflect the average lifetime cost of medical treatment for the respective conditions, including “psychiatric service costs (e.g., counseling, hospitalization), non-psychiatric medical costs (e.g., emergency room treatment), and prescription drug costs.”²⁰⁸ For incidences of attempted suicide, the cost of loss of productivity due to the incident is also accounted for (see Table 7).

²⁰⁶ The Veterans Health Administration’s Treatment of PTSD and Traumatic Brain Injury Among Recent Combat Veterans”, Congressional Budget Office p. 19 (2012)
<https://www.cbo.gov/>. Adjusted to 2017 dollars, using The American Institute of Economic Research (AIER) Cost of Living Calculator.

²⁰⁷ Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 Eur. Arch. Psychiatry Clin. Neurosci. 174 (2006).

²⁰⁸ Paul E. Greenberg, et al., The Economic Burden of Anxiety Disorders in the 1990s, 60(7) J. Clin. Psychiatry 427, 429 (1999); Paul E. Greenberg, et al., The economic burden of adults with major depressive disorder in the United States (2005 and 2010), 76 *J Clin Psychiatry* 155, 156-7 (2015).

Table 7: Mental Health Outcomes – Attributable Risk and Costs

Outcome	Odds Ratio	Increase in Probability	Attributable Risk	No. of Individuals Affected	Lifetime Cost - Individual	Lifetime Cost - Cohort
Anxiety ²⁰⁹	1.2 ²¹⁰ (1.1, 1.4)	17.86% (9.01, 35.08)	1.62% (0.82, 3.19)	41,899 (21,139, 82,327)	\$73,393 ²¹¹	\$3,075,138,486 (1,551,434,945, 6,042,273,266)
Depressed affect ²¹²	1.5 ²¹³ (1.3, 1.6)	33.21% (20.86, 38.99)	8.37% (5.26, 9.82)	215,844 (135,575, 253,343)	\$75,772 ²¹⁴	\$16,354,872,676 (10,272,733,340, 19,196,233,461)
Suicide attempt ²¹⁵	1.8 ²¹⁶ (1.2, 2.6)	78.29% (19.71, 155.1)	0.94% (0.24, 1.86)	24,226 (6,100, 47,996)	\$17,978 ²¹⁷	\$435,541,544 (109,667,484, 862,878,223)
Total					\$7,704 (4,628, 10,122)	\$19,865,552,706 (11,933,835,769, 26,101,384,951)

D. Physical Health

On the physical front, a strong link was established between childhood exposure to crime and life-threatening health conditions, such as cancer, lung, heart, liver and skeletal diseases, sexually transmitted diseases, diabetes and obesity.²¹⁸

²⁰⁹ Measured by an answer “yes” to the question, “Do you have much trouble with nervousness?”

²¹⁰ Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 Eur. Arch. Psychiatry Clin. Neurosci. 174 (2006)

²¹¹ Calculation based on the findings of Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

²¹² Measured by an answer “yes” to the question, “Have you had or do you now have depression or feel down in the dumps?”

²¹³ Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 Eur. Arch. Psychiatry Clin. Neurosci. 174 (2006)

²¹⁴ Calculation based on the findings of Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

²¹⁵ Include all reported non-fatal suicide attempts.

²¹⁶ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998).

²¹⁷ Includes both medical treatment and loss of productivity in cases of non-fatal suicide attempts. Calculation based on the findings of Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017); Centers for Disease Control and Prevention (CDC) Web-based Injury Statistics Query and Reporting System (WISQARS), cost of injury reports 2010, both sexes, all ages, United States. www.cdc.gov/injury/wisqars/index.html Published 2010; P. S. Corso PS, et al., Medical costs and productivity losses due to interpersonal and self-directed violence in the United States, 32(6) Am J Prev Med. 474 (2007)..

²¹⁸ Renee Boynton-Jarrett, et al., Child and Adolescent Abuse in Relation To Obesity In Adulthood: The Black Women’s Health Study, 130(2) Pediatrics 245 (2012); Alanna D. Hager & Marsha G. Runtz, Physical And Psychological Maltreatment In Childhood and Later Health Problems in Women: An Exploratory Investigation Of The Roles Of Perceived Stress And Coping Strategies, 36(5) Child Abuse & Neglect 393 (2012); Natalie Slopen, et al. Childhood Adversity And Cell-Mediated Immunity In Young Adulthood: Does Type and Timing Matter? Brain, Behavior, and Immunity (2012); M. L. Paras, et al., Sexual Abuse And Lifetime Diagnosis Of Somatic Disorders: A Systematic Review And Meta-Analysis, 302(5) Journal of the American Medical Association

According to the findings of the ACE studies, exposure to any one of the Triple-C Impact categories increases the risk of contracting a sexually transmitted disease by 40%. The risk for chronic bronchitis or emphysema increases by 60%. The odds for obesity among exposed individuals are 30% higher. For chronic, and potentially fatal, conditions such as cancer, stroke, diabetes, and asthma probability is elevated by 20% when compared to those not exposed. The risk for hepatitis and coronary heart disease increases by 10%.²¹⁹ The odds of reaching a state of disability was found to increase by at least 30%.²²⁰ For some categories of exposure the risk for disability is even higher, with a 90% increase among children affected by parental incarceration, and a 120%-140% increase for children affected by direct victimization.²²¹

The added costs linked with the increased risk for health conditions associated with the Triple-C Impact is a highly complex matter that involves a large number of variables. One study has estimated the healthcare costs of an individual who was affected by child abuse to be approximately \$7,500 per year higher than that of an individual who has not experienced abuse. Less conservative models in the same study stipulate that the cost difference can be as high as \$10,800 to \$14,500 a year.²²²

Our analysis accounts for the average medical treatment costs of the conditions that were found to have statistically significant association with a single exposure to crime in the original ACE studies. Here too, we do not have data as to the duration of each condition or the number of outbreaks. Thus, for singular conditions such as skeletal fractures, sexually transmitted diseases (STDs), or myocardial infarction (heart attack), we counted the treatment of only one occurrence.

550 (2009); Roberto Maniglio, The Impact of Child Sexual Abuse On Health: A Systematic Review Of Reviews, 29(7) *Clinical Psychology Review* 647 (2009).

²¹⁹ Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 *Eur. Arch. Psychiatry Clin. Neurosci.* 174 (2006); Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) *Am J Prev Med* 245 (1998); Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) *Am. J. Prev. Med.* 345 (2015).

²²⁰ Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) *Am. J. Prev. Med.* 345 (2015).

²²¹ Sophia Miryam Schüssler-Fiorenza Rose, Dawei Xie & Margaret Stineman, Adverse Childhood Experiences and Disability in U.S. Adults, 6(8) *PM&R* 870 (2014).

²²² Dolezal, et al., Hidden Costs in Health Care: The Economic Impact of Violence and Abuse, *Academy on Violence and Abuse* (2009), available at: www.ccasa.org/wp-content/uploads/2014/01/economic-cost-of-vaw.pdf.

For chronic long-term conditions, such as asthma or diabetes, we counted the cost of average lifetime treatment in adulthood (see Table 8).

There are several health conditions that were not found to have a statistically significant effect on individuals having a single crime exposure, however effect was significant for individuals with multiple exposures. Although the effect of these conditions would surely influence the total cost for the cohort due to the high prevalence of poly-victimization, to assure the most conservative estimate, we opted not to incorporate these conditions in the analysis, unless we could find a more recent and robust study to establish a statistically significant effect. These conditions include severe obesity, stroke, hepatitis and jaundice.²²³

Outcome	Odds Ratio	Increase in Probability	Attributable Risk	No. of Individuals Affected	Lifetime Cost - Individual	Lifetime Cost - Cohort
Any cancer	1.2 ²²⁴ (1, 1.5)	19.55% (0, 48.59)	0.37% (0, 0.92)	9,577 (0, 23,806)	\$108,982 ²²⁵	\$1,043,674,956 (0, 2,594,454,979)
COPD	1.6 ²²⁶ (1.2, 2.1)	57.36% (19.33, 103.7)	1.61% (0.54, 2.9)	41,414 (13,958, 74,894)	\$47,690 ²²⁷	\$1,975,016,295 (665,671,098, 3,571,685,786)
Skeletal fracture	1.1 ²²⁸ (1, 1.2)	9.56% (0, 19.05)	0.38% (0, 0.76)	9,863 (0, 19,647)	\$4,299 ²²⁹	\$42,395,763 (0, 84,455,052)

²²³ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998); Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) Am. J. Prev. Med. 345 (2015); Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 Eur. Arch. Psychiatry Clin. Neurosci. 174 (2006).

²²⁴ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998)

²²⁵ Calculated as the average costs of treatment during the 4 years following diagnosis, based on the three most common types of cancer (lung, breast, and colorectal). Based on the findings of Gabriela Dieguez, Christine Ferro & Bruce S. Pyenson, A Multi-Year Look At the Cost Burden of Cancer Care, Milliman Research Report (April 2017), <http://us.milliman.com/uploadedFiles/insight/2017/cost-burden-cancer-care.pdf>

²²⁶ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998)

²²⁷ Discounted lifetime cost of a typical COPD patient (i.e. 60 years old, former smoker, GOLD stage I or II). Estimate is based on the cost for the male population, as it is lower than female costs. (Jeffrey D. Miller, et al., Lifetime costs and impact on life expectancy of chronic obstructive pulmonary disease (COPD) in the US: Projections from a decision-analytic model, 9(3) Value in Health A93 (2006)).

²²⁸ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998)

²²⁹ Calculated based on the Center of Disease Control and Prevention (CDC), Data & Statistics (WISQARSTM): Cost of Injury Reports, <https://wisqars.cdc.gov:8443/cost/>

Diabetes ²³⁰	1.2 ²³¹ (1.1, 1.4)	17.97% (9.06, 35.34)	1.55% (0.78, 3.04)	39,854 (20,097, 78,383)	\$90,952 ²³²	\$3,624,819,403 (1,827,858,984, 7,129,074,134)
Myocardial Infarction ²³³	1.3 ²³⁴ (1.1, 1.5)	28.46% (9.56, 47.06)	1.14% (0.38, 1.88)	29,355 (9,863, 48,541)	\$22,077 ²³⁵	\$648,052,143 (217,738,635, 1,071,615,635)
Asthma	1.2 ²³⁶ (1.1, 1.4)	18.30% (9.21, 36.08)	1.32% (0.66, 2.6)	33,971 (17,107, 66,991)	\$73,017 ²³⁷	\$2,480,452,461 (1,249,092,026, 4,891,467,686)
STD	1.4 ²³⁸ (1.1, 1.7)	36.93% (9.39, 63.59)	2.07% (0.53, 3.56)	53,334 (13,556, 91,826)	\$1,017 ²³⁹	\$54,223,737 (13,782,406, 93,357,496)
Total					\$3,827 (1541, 7,527)	\$9,868,625,795 (3,974,143,149, 19,436,110,769)

One should also consider that Triple-C Impacted individuals are found to be more than twice as likely as unexposed individuals to rely on Medicaid for their medical care.²⁴⁰ As a result, a significant portion of the mental and physical health costs delineated above will be borne by the state and tax payers.

²³⁰ Although the original ACE study found diabetes to have a non-significant effect for children exposed to 1 ACE, and more recent study with a much larger sample found a statistically significant effect under the 1-3 ACE category. Thus, we have opted to include diabetes in the analysis.

²³¹ Leah K. Gilbert et al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) Am. J. Prev. Med. 345 (2015).

²³² Calculated as the average lifetime medical costs of treating type 2 diabetes. X. Zhuo, P. Zhang, T. J. Hoerger, Lifetime direct medical costs of treating type 2 diabetes and diabetic complications, 45(3) *Am J Prev Med*, 253 (2013).

²³³ Including heart attack or use of nitroglycerin for exertional chest pain. (Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245, 248 (1998)).

²³⁴ Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) Am. J. Prev. Med. 345 (2015).

²³⁵ Calculated as the average cost of a single hospital stay for the treatment of Myocardial Infraction in 2013. *Celeste M. Torio & Brian J. Moore*, National Inpatient Hospital Costs: The Most Expensive Conditions by Payer 2013, Statistical Brief #204. Healthcare Cost and Utilization Project (HCUP) (May 2016), <https://www.hcup-us.ahrq.gov/reports/statbriefs/sb204-Most-Expensive-Hospital-Conditions.jsp>

²³⁶ Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) Am. J. Prev. Med. 345 (2015).

²³⁷ Reflects the lifetime cost of asthma treatment, including outpatient and inpatient medical care, and prescribed medications. Based on the findings of S. B. Barnett & T. A. Nurmagambetov Costs of asthma in the United States: 2002-2007, 127(1) *Journal of allergy and clinical immunology* 145 (2011) and Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) *American journal of preventive medicine* 691 (2017).

²³⁸ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245 (1998)

²³⁹ Calculated as the average total cost per year of the 8 most common STIs. Based on the findings of Harrell W. Chesson, et al., The Estimated Direct Medical Cost of Sexually Transmitted Diseases Among American Youth, 2000, 36(1) *Perspectives of Sexual and Reproductive Health* 11 (2004).

²⁴⁰ David S. Zielinski, Child Maltreatment and Adult Socioeconomic Well-Being, 33 *CHILD ABUSE & NEGLECT* 666 (2009); Ross Macmillan & John Hagan, Violence in the Transition to Adulthood: Adolescent Victimization, Education, and Socioeconomic Attainment in Later Life, 14 *J. RES. ADOLESCENCE* 127, 152 (2004) (Studies measure the effect on children exposed to direct victimization).

E. Education

A large number of studies have found that Triple-C Impacted children, as a group, do not perform as well as their peers in academic settings. They are prone to a lower grade-point average (GPA), poorer reading and math skills, school disengagement, slower academic progress and grade incompleteness. This effect was found to carry on to adulthood and higher education settings.²⁴¹ The changes in brain structures that result from traumatic exposure to crime affect cognitive capacities,

²⁴¹ Stacy Overstreet & Shawnee Braun, A Preliminary Examination of the Relationship Between Exposure to Community Violence and Academic Functioning, 14(4) *School Psychology Quarterly* 380 (1999); Marilyn Metzler Et Al, Adverse Childhood Experiences and Life Opportunities: Shifting The Narrative, 72 *Children and Youth Services Review* 141 (2017); Manuel E. Jimenez Et Al., Adverse Experiences in Early Childhood and Kindergarten Outcomes, 137(2) *Pediatrics* 1 (2016); Maureen A. Allwood & Cathy Spatz Widom, Child Abuse and Neglect, Developmental Role Attainment, and Adult Arrests, 50(4) *Journal of Research in Crime and Delinquency* 551 (2013); Cynthia M. Perez & Cathy Spatz Widom, Childhood Victimization And Long-Term Intellectual And Academic Outcomes, 18(8) *Child Abuse & Neglect* 617 (1994); Danielle H. Dallaire, Children With Incarcerated Mothers: Developmental Outcomes, Special Challenges And Recommendations, 28 *Journal of Applied Developmental Psychology* 15 (2007); Joseph Murray, David P. Farrington, & Ivana Sekol, Children's Antisocial Behavior, Mental Health, Drug Use, and Educational Performance After Parental Incarceration: A Systematic Review and Meta-Analysis, 138(2) *Psychological Bulletin* 175 (2012); Larissa A. Borofsky Et Al., Community Violence Exposure and Adolescents' School Engagement and Academic Achievement Over Time, 3(4) *Psychology of Violence* 381 (2013); David Schwartz & Andrea Hoppmeier Gorman, Community Violence Exposure and Children's Academic Functioning, 95(1) *Journal of Education Psychology* 163 (2003); Herbert C. Covey, Scott Menard & Robert J. Franzese, Effects of Adolescent Physical Abuse, Exposure to Neighborhood Violence, and Witnessing Parental Violence on Adult Socioeconomic Status, 18(2) *Child Maltreatment* 85 (2013); Natasha K. Bowen & Gary L. Bowen, Effects of Crime and Violence in Neighborhoods and Schools on the School Behavior and Performance of Adolescents, 14(3) *Journal of Adolescent Research* 319 (1999); Joseph Murray and David P. Farrington, The Effects of Parental Imprisonment on Children, 37 *Crime and Justice: A review of research* 133 (2008); Rucker C. Johnson, Ever-Increasing Levels of Parental Incarceration the Consequences and for Children, in *Do Prisons Make Us Safer? The Benefits and Costs of the Prison Boom* (Steven Raphael & Michael A. Stoll Eds.) 177 (2009); Joseph M. Boden, L. John Horwood & David M. Fergusson, Exposure to Childhood Sexual and Physical Abuse and Subsequent Educational Achievement Outcomes, 31 *Child Abuse & Neglect* 1101 (2007); Hallam Hurt Et Al., Exposure to Violence: Psychological and Academic Correlates in Child Witnesses, 155 *Arch. Pediatr. Adolesc. Med.* 1351 (2001); Joseph Murray & David P. Farrington, The Effects of Parental Imprisonment on Children, 37(1) *Crime and Justice* 133 (2008); Janet Currie & Cathy Spatz Widom, Long-Term Consequences of Child Abuse and Neglect on Adult Economic Well-Being, 15(2) *Child Maltreatment* 111 (2010); Leila Morsy & Richard Rothstein, Economic Policy Institute, Mass Incarceration and Children's Outcomes: Criminal Justice Policy Is Education Policy (Dec. 2016); Rosa Minhyo Cho, Maternal Incarceration and Children's Adolescent Outcomes: Timing and Dosage, 84(2) *Social Service Review* 257 (2010); Niclas Olofsson Et Al., Physical and Psychological Symptoms and Learning Difficulties in Children of Women Exposed and Non-Exposed to Violence: A Population-Based Study, 56 *Int J Public Health* 89 (2011); Christopher C. Henrich Et Al., The Association of Community Violence Exposure with Middle-School Achievement: A Prospective Study, 25 *Applied Developmental Psychology* 327 (2004); Alissa C. Huth-Bocks, Alytia A. Levendosky & Michael A. Semel, The Direct and Indirect Effects of Domestic Violence on Young Children's Intellectual Functioning, 16(3) *Journal of Family Violence* 269 (2001); Tom Luster, Stephen A. Small & Richard Lower, The Correlates of Abuse and Witnessing Abuse Among Adolescents, 17(12) *Journal of Interpersonal Violence* 1323 (2002); Valerie McGaha-Garnett, The Effects of Violence on Academic Progress and Classroom Behavior: From a Parent's Perspective, *Vistas* (2013), available at: https://www.counseling.org/docs/default-source/vistas/the-effects-of-violence-on-academic-progress-and-classroom-behavior.pdf?sfvrsn=1828de3f_12; Nadine J. Burke Et Al., The Impact of Adverse Childhood Experiences On An Urban Pediatric Population, 35 *Child Abuse & Neglect* 408 (2011); Tracy Vaillancourt & Patricia McDougall, The Link Between Childhood Exposure to Violence and Academic Achievement: Complex Pathways, 41 *J. Abnorm. Child Psychol.* 1177 (2013); Holly Foster & John Hagan, The Mass Incarceration of Parents in America: Issues of Race/Ethnicity, Collateral Damage to Children, and Prisoner Reentry, 623 *The Annals of the American Academy of Political and Social Science* 179 (2009); Lisa R. Kiesel, Kristine N. Piescher & Jeffrey L. Edleson, The Relationship Between Child Maltreatment, Intimate Partner Violence Exposure, and Academic Performance, 10(4) *Journal of Public Child Welfare* 434 (2016); Stephen J. Lepore & Wendy Klierer, Violence Exposure, Sleep Disturbance, and Poor Academic Performance in Middle School, 41 *J. Abnorm. Child Psychol.* 1179 (2013); Ross Macmillan & John Hagan, Violence in the Transition to Adulthood: Adolescent Victimization, Education, and Socioeconomic Attainment in Later Life, 14(2) *Journal of Research on Adolescence* 127 (2004); Daniel P. Mears & Sonja E. Siennick, Young Adult Outcomes and the Life-Course Penalties of Parental Incarceration, 53(1) *Journal of Research in Crime and Delinquency* 3 (2016).

and therefore explain the elevated risk for inferior educational outcomes.²⁴² Reduced cognitive capacities due to exposure impact skills integral to the learning process, such as memory, attention, concentration, executive functions, visual–spatial perceptual reasoning, and verbal comprehension.²⁴³ Furthermore, children affected by the Triple-C Impact were shown to have deficits in the omnibus IQ.²⁴⁴ When controlling for alternative explanatory factors, studies found that affected children scored on average 5 to 10 IQ points lower than peers in their cohort.²⁴⁵ This gap was shown to remain, and even to increase, as exposed children approach adulthood.²⁴⁶

The range of scientific studies investigating the effect of the Triple-C Impact on education yield several interesting findings. Exposed children have higher risk of suffering from ADD/ADHD; the effect ranges from a 40% increase in risk for children exposed to family violence to a 63% increase for children affected by direct victimization.²⁴⁷ Another study estimates the likelihood of having an attention disorder at a 90% increase when compared to non-exposed children.²⁴⁸ Triple-C Impact exposure is attributed with a 50% increase in poor language and literacy skills, and a 60%

²⁴² Terrie E. Moffitt, Childhood Exposure To Violence And Lifelong Health: Clinical Intervention Science And Stress-Biology Research Join Forces, 25 *Development and Psychopathology* 1619, 1625 (2013); Valerie McGaha-Garnett, The Effects of Violence on Academic Progress and Classroom Behavior: From a Parent’s Perspective, *Vistas* 2-3 (2013), available at: https://www.counseling.org/docs/default-source/vistas/the-effects-of-violence-on-academic-progress-and-classroom-behavior.pdf?sfvrsn=1828de3f_12; Kathryn R. Wilson, David J. Hansen & Ming Li, The traumatic stress response in child maltreatment and resultant neuropsychological effects, 16 *Aggression & Violent Behavior* 87 (2011).

²⁴³ Terrie E. Moffitt, Childhood Exposure To Violence And Lifelong Health: Clinical Intervention Science And Stress-Biology Research Join Forces, 25 *Development and Psychopathology* 1619, 1625 (2013).

²⁴⁴ Terrie E. Moffitt, Childhood Exposure To Violence And Lifelong Health: Clinical Intervention Science And Stress-Biology Research Join Forces, 25 *Development and Psychopathology* 1619, 1625 (2013); Karestan C. Koenen et al., Domestic Violence is Associated With Environmental Suppression of IQ In Young Children, 15 *Development and Psychopathology* 297 (2013); N. J. Carrey, et al., Physiological and cognitive correlates of child abuse, 34 *Journal of the American Academy of Child & Adolescent Psychiatry* 1067 (1995); V. Delaney–Black, et al., Violence exposure, trauma, and IQ and/or reading deficits among urban children., 156 *Archives of Pediatric and Adolescent Medicine* 280–295 (2002); ; Kathryn R. Wilson, David J. Hansen & Ming Li, The traumatic stress response in child maltreatment and resultant neuropsychological effects, 16 *Aggression & Violent Behavior* 87 (2011).

²⁴⁵ Terrie E. Moffitt, Childhood Exposure To Violence And Lifelong Health: Clinical Intervention Science And Stress-Biology Research Join Forces, 25 *Development and Psychopathology* 1619, 1626 (2013); Karestan C. Koenen et al., Domestic Violence is Associated With Environmental Suppression of IQ In Young Children, 15 *Development and Psychopathology* 297 (2013); Kathryn R. Wilson, David J. Hansen & Ming Li, The traumatic stress response in child maltreatment and resultant neuropsychological effects, 16 *Aggression & Violent Behavior* 87 (2011); C. M. Perez & Cathy S Widom, Childhood victimization and long-term intellectual and academic outcomes, 18 *Child Abuse & Neglect* 617 (1994).

²⁴⁶ Terrie E. Moffitt, Childhood Exposure To Violence And Lifelong Health: Clinical Intervention Science And Stress-Biology Research Join Forces, 25 *Development and Psychopathology* 1619, 1625-6 (2013); Kathryn R. Wilson, David J. Hansen & Ming Li, The traumatic stress response in child maltreatment and resultant neuropsychological effects, 16 *Aggression & Violent Behavior* 87 (2011).

²⁴⁷ Tenah K. A. Hunt, Kristen S. Slack & Lawrence M. Berger, Adverse Childhood Experiences And Behavioral Problems In Middle Childhood, 67 *Child Abuse & Neglect* 391 (2017); Manuel E. Jimenez Et Al., Adverse Experiences in Early Childhood and Kindergarten Outcomes, 137(2) *Pediatrics* 1 (2016).

²⁴⁸ Manuel E. Jimenez Et Al., Adverse Experiences in Early Childhood and Kindergarten Outcomes, 137(2) *Pediatrics* 1 (2016).

increase in poor math skills.²⁴⁹ High school graduation rates were found to be 30%-45% lower as a result of exposure to any one of the Triple-C Impact categories.²⁵⁰

To cope with learning obstacles, early intervention is needed for many affected children. In Pennsylvania, for example, such programs cost the state approximately \$560 a year per child.²⁵¹ However, the most significant portion of the costs associated with educational underperformance among children affected by the Triple-C Impact, are not the direct costs of services required for them, but rather its rolling effect on other life outcomes. Exposure to crime undermines academic performance and potential educational achievement, which has bearing on the odds of successful participation in the labor force, stability of employment over time and occupational status; all of these factors directly impact, if not determine, future earnings and economic productivity.²⁵² In fact, studies estimate that each additional year of education increases potential annual income by approximately \$1,500.²⁵³

The costs of the educational outcomes was not directly incorporated into our analysis. This is due to several considerations. First, many of the concrete costs associated with educational outcomes are incurred during the childhood years. As previously explained, we have refrained from accounting for costs incurred prior to age 18, due to the wide disparity in the age of first exposure, which leads to significant variance, and increases the risk of error. Second, educational outcomes were shown to have a direct effect on productivity and economic well-being outcomes, such as

²⁴⁹ Manuel E. Jimenez Et Al., Adverse Experiences in Early Childhood and Kindergarten Outcomes, 137(2) Pediatrics 1 (2016).

²⁵⁰ Maureen A. Allwood & Cathy Spatz Widom, Child Abuse and Neglect, Developmental Role Attainment, and Adult Arrests, 50(4) Journal of Research in Crime and Delinquency 551 (2013); Jennifer E. Lansford Et Al., Early Physical Abuse and Later Violent Delinquency: A Prospective Longitudinal Study, 12(3) Child Maltreatment 233 (2007); Daniel P. Mears & Sonja E. Siennick, Young Adult Outcomes and the Life-Course Penalties of Parental Incarceration, 53(1) Journal of Research in Crime and Delinquency 3 (2016).

²⁵¹ Early Intervention in Pennsylvania,” Pennsylvania State Interagency Coordinating Council, 2014-15 Annual Report, available at: <http://www.pattan.net/category/Resources/PaTTAN+Publications/Browse/Single/?id=5707ad4e140ba048578b45a4>. Adjusted to 2017 dollars, using The American Institute of Economic Research (AIER) Cost of Living Calculator.

²⁵² David S. Zielinski, Child Maltreatment And Adult Socioeconomic Well-Being, 33 Child Abuse & Neglect 666, 675 (2009); Orley Ashfelter & Cecilia Rouse, Income, schooling, and ability: Evidence from a new sample of twins. 113 *The Quarterly Journal of Economics* 253 (1998); S. B. Dale & A. B. Krueger, Estimating the payoff to attending a more selective college: An application of selection on observables and unobservables. 117(4) *The Quarterly Journal of Economics* 1491 (2002); Jennifer C. Day & Eric C. Newberger, US Census Bureau, The big payoff: Educational attainment and synthetic estimates of work-life earnings (2002)., available at: <https://www.census.gov/prod/2002pubs/p23-210.pdf>; Ross Macmillan & John Hagan, Violence in the Transition to Adulthood: Adolescent Victimization, Education, and Socioeconomic Attainment in Later Life, 14(2) Journal of Research on Adolescence 127 (2004); W. Seawell & R. Hauser, Education, occupation, and earnings: Achievement in early career (1975); W. N. Grubb, Postsecondary education and the sub-baccalaureate labor market: Corrections and extensions, 14(3) *Economics of Education Review* 285 (1995); Ross Macmillan & John Hagan, Violence in the Transition to Adulthood: Adolescent Victimization, Education, and Socioeconomic Attainment in Later Life, 14(2) Journal of Research on Adolescence 127, 131 (2004).

²⁵³ Ross Macmillan, Adolescent Victimization And Income Deficits In Adulthood: Rethinking The Costs Of Criminal Violence From A Life-Course Perspective, 38 *Criminology* 553, 570 (2000).

employment and earning capacity.²⁵⁴ As such, there is a high risk of “double counting” costs when accounting for two outcomes with such a level of interdependence. Under these circumstances, the calculation of the costs of decreased productivity are meant to encapsulate the effect of some of the educational outcomes described above. Despite the exclusion of this category of outcomes from the cost analysis, a thorough understanding of the educational outcomes associated with the Triple-C Impact and their potential costs are of paramount importance in order to obtain the full picture of the challenges endured by affected children.

F. Productivity & Economic Well-Being

It is well documented that the Triple-C Impact is most prevalent among children coming from lower socio-economic backgrounds.²⁵⁵ However, strong evidence establishes that even when controlling for socio-economic background and other covariates, violence exposure in childhood can lead to diminished economic well-being in adulthood, including higher rates of unemployment, income deficit, higher rates of poverty and homelessness, higher utilization of public assistance, lower rates of healthcare coverage and a greater reliance on Medicaid.

²⁵⁴ The Snowball Effect of Crime & Violence: Measuring the Triple-C Impact, 46 *Fordham Urban Law Journal* 1, 60-61 (2019); David S. Zielinski, Child Maltreatment and Adult Socioeconomic Well-Being, 33 *CHILD ABUSE & NEGLECT* 666 (2009); WILLIAM H. SEWELL & ROBERT M. HAUSER, Education, Occupation, And Earnings: Achievement In Early Career (1975); W. Norton Grubb, Postsecondary Education and the Sub-Baccalaureate Labor Market: Corrections and Extensions, 14 *ECON. EDUC. REV.* 285 (1995); Avshalom Caspi et al., Continuities and Consequences of Interactional Styles Across the Life Course, 57 *J. PERSONALITY* 375 (1989); Orley Ashenfelter & Cecilia Rouse, Income, Schooling, and Ability: Evidence from a New Sample of Identical Twins, 113 *Q.J. ECON.* 253 (1998); Stacey Berg Dale & Alan B. Krueger, Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables, 117 *Q.J. ECON.* 1491 (2002); JENNIFER CHEESEMAN DAY & ERIC C. NEWBERGER, U.S. CENSUS BUREAU, THE BIG PAYOFF: EDUCATIONAL ATTAINMENT AND SYNTHETIC ESTIMATES OF WORK-LIFE EARNINGS (2002), <https://www.census.gov/prod/2002pubs/p23-210.pdf> [<https://perma.cc/V4RZ-7F8H>]; Yong Liu et al., Relationship Between Adverse Childhood Experiences and Unemployment Among Adults from Five US States, 48 *SOC. PSYCHIATRY & PSYCHIATRIC EPIDEMIOLOGY* 357 (2013); Ross Macmillan & John Hagan, Violence in the Transition to Adulthood: Adolescent Victimization, Education, and Socioeconomic Attainment in Later Life, 14 *J. RES. ADOLESCENCE* 127, 152 (2004); Marilyn Metzler et al., Adverse Childhood Experiences and Life Opportunities: Shifting the Narrative, 72 *CHILD. & YOUTH SERVICES REV.* 141, 147 (2017); Janet Currie & Cathy Spatz Widom, Long-Term Consequences of Child Abuse and Neglect on Adult Economic Well-Being, 15 *CHILD MALTREATMENT* 111 (2010).

²⁵⁵ Janet Currie & Cathy Spatz Widom, Long-Term Consequences of Child Abuse and Neglect on Adult Economic Well-Being, 15 *CHILD MALTREATMENT* 111, 117 (2010); Holly Foster et al., Poverty/Socioeconomic Status and Exposure to Violence in the Lives of Children and Adolescence, *THE CAMBRIDGE HANDBOOK OF VIOLENT BEHAVIOR AND AGGRESSION* (Daniel J. Flannery et al. eds., 2007); Deborah Gorman-Smith & Patrick Tolan, The Role of Exposure to Community Violence and Developmental Problems Among Inner-City Youth, 10 *DEV. & PSYCHOPATHOLOGY* 101 (1998).

Empirical studies indicate the average income deficit of adults who have been affected by direct victimization during childhood to be at \$5,000²⁵⁶-\$6,000²⁵⁷ a year, at peak earning.²⁵⁸ This group of children was also found to be twice as likely to fall below the poverty line and to rely on Medicaid for healthcare coverage,²⁵⁹ and to be 80% more likely to experience homelessness.²⁶⁰ A similar study estimated the annual deficit among children exposed to parental incarceration at \$2,953 during young adulthood (rather than peak earning).²⁶¹ Several studies have found Triple-C Impact exposure to double the risk for unemployment in adulthood.²⁶²

The category of productivity and economic well-being is the most complicated to define and calculate, as it encompasses some degree of intangibility. It is also the most costly category of all the delineated outcomes. The most substantial cost, out of all the outcome categories, is that of reduced earnings. It comprises around 78% of the total estimated annual cost (See Table 10). Considering the previously discussed disadvantages in educational and professional attainments, as well as medical limitations, the reduced earnings category compounds the average difference in income attributed to crime exposure, after controlling for background characteristics.²⁶³ The study we relied on for this calculation is not optimal, as it focuses on children affected by different categories of maltreatment, rather than by the full scope of Triple-C Impact exposures, and thus required stipulation. However, this is the most reliable source we could identify that provides an in-depth look into this colossal outcome affecting Triple-C exposed children throughout their

²⁵⁶ Janet Currie & Cathy Spatz Widom, Long-Term Consequences of Child Abuse and Neglect on Adult Economic Well-Being, 15(2) Child Maltreatment 111 (2010).

²⁵⁷ Ross Macmillan, Adolescent Victimization And Income Deficits In Adulthood: Rethinking The Costs Of Criminal Violence From A Life-Course Perspective, 38 Criminology 553, 570 (2000).

²⁵⁸ Janet Currie & Cathy Spatz Widom, Long-Term Consequences of Child Abuse and Neglect on Adult Economic Well-Being, 15(2) Child Maltreatment 111 (2010).

²⁵⁹ David S. Zielinski, Child Maltreatment And Adult Socioeconomic Well-Being, 33 Child Abuse & Neglect 666 (2009).

²⁶⁰ Daniel B. Hernman Et Al., Adverse Childhood Experiences: Are They Risk Factors for Adult Homelessness?, 87(2) American Journal of Public Health 249 (1997).

²⁶¹ Daniel P. Mears & Sonja E. Siennick, Young Adult Outcomes and the Life-Course Penalties of Parental Incarceration, 53(1) Journal of Research in Crime and Delinquency 3, 22 (2016).

²⁶² Ross Macmillan & John Hagan, Violence in the Transition to Adulthood: Adolescent Victimization, Education, and Socioeconomic Attainment in Later Life, 14(2) Journal of Research on Adolescence 127 (2004); David S. Zielinski, Child Maltreatment And Adult Socioeconomic Well-Being, 33 Child Abuse & Neglect 666 (2009); Yong Liu Et Al., Relationship Between Adverse Childhood Experiences and Unemployment Among Adults from Five US States, 48 Soc. Psychiatry Psychiatr. Epidemiol. 357 (2013).

²⁶³ Xiangming Fang, The economic burden of child maltreatment in the United States and implications for prevention, 36 Child Abuse & Neglect 156, 159 (2012)..

adulthood. Moreover, the fact that over 80% of the affected group is exposed to direct victimization helps support the relative validity of the stipulation (see Table 9).

Added to the productivity costs is the increase in use of state and federally funded public assistance, such as unemployment stipends, food stamps, disability, etc. Use of public assistance programs is estimated to be 65%-100% higher among Triple-C Impacted children in comparison to unexposed individuals, even after controlling for background information.²⁶⁴ The odds of experiencing disability increases by 30% for individuals who experienced one exposure during childhood, when compared to unexposed children.²⁶⁵ These cost categories are imperative to address, as they amount to substantial sums that are borne entirely by the state and federal government, and thus funded by the entire population of taxpayers. The average total annual spending for the major welfare programs²⁶⁶ for each eligible family is estimated at \$14,204.²⁶⁷ As for disability assistance, the monthly stipend ranges from \$600-1,500, at an average of \$1,196.²⁶⁸ Unfortunately, the complex manner in which eligibility, duration and value of assistance are determined prevents us from establishing a reliable average lifetime cost estimate per individual that could be plugged into our model and tallied, and therefore could not be incorporated in the total estimated cost.

²⁶⁴ Violence in the Transition to Adulthood: Adolescent Victimization, Education, and Socioeconomic Attainment in Later Life, 14(2) Journal of Research on Adolescence 127, 151 (2004).

²⁶⁵ Sophia Miryam Schüssler-Fiorenza Rose, Dawei Xie & Margaret Stineman, Adverse Childhood Experiences and Disability in U.S. Adults, 6(8) PM&R 870 (2014), Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) Am. J. Prev. Med. 345 (2015).

²⁶⁶ Including Public Assistance, Supplemental Security Income (SSI), and Supplemental Nutrition Assistance Program (SNAP aka food stamps).

²⁶⁷ Based on the Bureau of Labor Statistics estimates, converted to 2017 dollars, see:

<https://www.bls.gov/opub/mlr/2018/article/program-participation-and-spending-patterns-of-families-receiving-means-tested-assistance.htm>

²⁶⁸ U.S. Social Security Administration, Annual Statistical Report on the Social Security Disability Insurance Program, 2017, https://www.ssa.gov/policy/docs/statcomps/di_asr/2017/sect01c.pdf (see table 20).

Table 9: Productivity and Economic Well-Being Outcomes – Attributable Risks and Costs

Outcome	Increase In Odds	Attributable Risk	No. of Individuals Affected	Lifetime Cost - Individual	Lifetime Cost – Cohort
Reduced Earnings	100% ²⁶⁹	100%	2,578,731	\$162,231 ²⁷⁰	\$418,350,711,043
Total				\$162,231	\$418,350,711,043

G. The Bottom Line

Dollar after dollar, the costs associated with the Triple-C Impact pile one on top of the other. At first glance, some of these cost figures, when viewed in isolation, appear to be negligible. However, it is clearly shown that when summed together, considering the high prevalence rates, and the large number of costly adverse outcomes threatening the millions of children affected by the Triple-C Impact, the bottom line is of colossal proportions. When the total cost of all Triple-C Impacted adults in the United States today is calculated, the sum amounts to over \$458.7 billion every single year (see Table 10). These results are even more astounding considering the fact that this is an extremely conservative analysis that consciously undercounts or excludes many cost components for the sake of avoiding over-estimation, including the exclusion of the entire group of children affected by parental victimization, for which data is currently unavailable.

²⁶⁹ This outcome calculates the average effect on the entire population of children exposed individuals, in comparison to those unexposed, and therefore applies to total number of affected individuals in the cohort. (Xiangming Fang, The economic burden of child maltreatment in the United States and implications for prevention, 36 Child Abuse & Neglect 156, 159 (2012)).

²⁷⁰ Xiangming Fang, The economic burden of child maltreatment in the United States and implications for prevention, 36 Child Abuse & Neglect 156, 159 (2012).

Table 10: Total Cost by Outcome Category

Outcome	Total Lifetime Cost Per-Person	Average Total Annual Cost Per-person	Total Annual Costs for All Affected Adults in the U.S.
Criminal Justice	\$7,720 (6,159, 9,364)	\$131 (105, 159)	\$18,216,783,990 (14,533,393,142, 22,095,858,004)
Substance Use	\$12,931 (7,529, 18,426)	\$220 (128, 313)	\$30,513,189,413 (17,765,677,647, 43,479,918,893)
Mental Health	\$7,704 (4,628, 10,122)	\$131 (79,172)	\$18,178,001,478 (10,920,072,925, 23,884,108,398)
Physical Health	\$3,837 (1,541, 7,537)	\$65 (26, 128)	\$9,030,299,649 (3,636,545,185, 17,785,040,040)
Productivity	\$162,231	\$2,754	\$382,812,396,732
Total	\$194,413 (182,088, 207,680)	\$3,301 (3,091, 3,526)	\$458,750,671,262 (429,668,085,631, 490,057,322,067)

H. Sensitivity Testing

To test the veracity of our estimates, we compared the results of our analysis to those of similar studies in the field (see Table 11). Thus far there are no studies that attempt to measure the cost of the full scope of the Triple-C Impact exposures. Therefore, comparison was conducted against studies that evaluate the cost of sub-categories that fall under the Triple-C Impact umbrella or similar types of crime exposure. All the comparison studies applied a “bottom-up” approach, similar to the methodology used in this study. The selected studies have included a per-victim lifetime cost calculation, which enables a levelled comparison.

Naturally, differences are expected due to the variation in the measured phenomena, the difference in definitions, and the methodologies used in the analysis, and the specific cost elements tallied in the process. Thus, a one-to-one comparison is impossible, but rather a broader conceptual evaluation is needed in order to identify and understand the sources of existing disparities. Only one of the comparison studies measured the cost of indirect crime exposure (exposure to intimate partner violence),²⁷¹ while the remaining three studies focused on direct exposure to child maltreatment²⁷² and rape.²⁷³ The child maltreatment studies covered physical and emotional

²⁷¹ Megan R. Holmes, et al., Economic Burden of Child Exposure to Intimate Partner Violence in the United States, 33 *Journal of Family Violence* 239 (2018)

²⁷² Xiangming Fang, The economic burden of child maltreatment in the United States and implications for prevention, 36 *Child Abuse & Neglect* 156, 159 (2012); Cora Peterson, Curtis Florence, & Joanne Klevens, The economic burden of child maltreatment in the United States, 2015, 86 *Child Abuse & Neglect* 178 (2018).

²⁷³ Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) *American journal of preventive medicine* 691, 692 (2017).

neglect, as well as emotional abuse, which were not included in our analysis. The rape study assumed that first exposure occurred at age 18, rather than during childhood.²⁷⁴ It should be noted that the three studies examining direct exposure have counted the costs of medical care, loss of productivity and property loss that directly resulted from the exposure, which were not accounted for in our analysis.

The most seemingly similar study (Fang, 2012) reaches an almost identical estimate to ours. Yet, this study counts the cost of short-term healthcare, child welfare, and special education, which in culmination comprises nearly 25% of the total estimate. These costs were not included in our analysis. At the same time, Fang et al. did not account for the costs associated with substance use. Moreover, their estimate of the criminal justice costs associated with exposure was lower, which appears to stem from difference in the methodology of calculating the attributable risk of adult criminal behavior, lack of differentiation between the cost of property and violent crime, and no account for the increase in risk for re-victimization among exposed children.

One surprising finding is the lower cost estimate obtained by the rape study (Peterson, 2017).²⁷⁵ Rape is considered to be among the most severe forms of direct victimization, and its long term adverse effect is established in a plethora of studies.²⁷⁶ Our study, on the other hand, averages the effect of a broad range of crime exposures of various characteristics and levels of severity. One may expect the averaged effect to be somewhat diluted, which will consequently lower the cost estimate associated with the predicted harm. Yet our estimate is almost double that provided by Peterson et al.²⁷⁷ The difference in this case seems to stem entirely from a difference in methodology in the calculation of productivity loss, which does not incorporate calculation of lifetime lost wages. Additionally, Peterson's paper addresses sexual victimization that occurred during adulthood, rather than childhood. Considering the relevant differences between children

²⁷⁴ Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

²⁷⁵ Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

²⁷⁶ See summary in: World Health Organization (WHO), World Report on Violence and Health, Sexual Violence, https://www.who.int/violence_injury_prevention/violence/global_campaign/en/chap6.pdf

²⁷⁷ Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

and adults discussed in Section I, such distinction is expected to affect the calculated attributable risks for some outcomes, and therefore alter the cost estimate.

The most extreme estimate emerges from the child maltreatment study by Peterson et al. (2018),²⁷⁸ which exceeds our own estimate four-fold. This difference is almost entirely due to the use made in that study of the new VSL and monetized QALY methodologies. These methodologies reflect “valuations of morbidity and mortality that aim to include intangible costs such as pain and suffering experienced not only by the affected individual but the wider community.”²⁷⁹ Following our guidelines of establishing the most conservative estimate, these cost elements were excluded from our study.

Table 11: Sensitivity Testing – Comparison to Similar Studies

Study	Measure	Original Results	Adjusted to \$2017	Possible Source of Difference
Fang et al., (2012) ²⁸⁰	Non-fatal child maltreatment	\$210,012	\$236,011	
Peterson, et al. (2018) ²⁸¹	Non-fatal child maltreatment	\$830,928	\$859,327	Included intangible costs
Holmes et al., (2018) ²⁸²	Exposure to intimate partner violence	\$50,495	\$51,568	Excluded productivity loss and substance use from analysis
Peterson et al., (2017) ²⁸³	Rape (adult victimization)	\$122,461	\$126,807	Additionally, used a different method to calculate loss of productivity, and did not count lost wages.

²⁷⁸ Cora Peterson, Curtis Florence, & Joanne Klevens, The economic burden of child maltreatment in the United States, 2015, 86 Child Abuse & Neglect 178 (2018).

²⁷⁹ Cora Peterson, Curtis Florence, & Joanne Klevens, The economic burden of child maltreatment in the United States, 2015, 86 Child Abuse & Neglect 178, 183 (2018).

²⁸⁰ Xiangming Fang, The economic burden of child maltreatment in the United States and implications for prevention, 36 Child Abuse & Neglect 156, 159 (2012).

²⁸¹ Cora Peterson, Curtis Florence, & Joanne Klevens, The economic burden of child maltreatment in the United States, 2015, 86 Child Abuse & Neglect 178 (2018).

²⁸² Megan R. Holmes, et al., Economic Burden of Child Exposure to Intimate Partner Violence in the United States, 33 Journal of Family Violence 239 (2018)

²⁸³ Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

Conclusion

In an ideal world, the safety and well-being of our children would be a first-order national priority. Legislators and policymakers would be motivated to act for the sole reason of bettering the lives of children and providing the optimal conditions to improve children's life-outcomes. At the very least, the prospect of protecting children from harm, or helping them heal from trauma would be a sufficient cause to bring the state into action.

But the reality is that children do not have voting power, and their voices are rarely heard in the political debate. Although their sweet faces grace election campaigns, when the national budget is distributed they are not present to negotiate their share. On the political front, the well-being of children only rarely appears to have an intrinsic value that is sufficient on its own to incentivize concrete state action and substantial investment of funds. Unfathomably, even the notion that the nation's future is inseparable from the success and productivity of its next generation seems to be too intangible and remote from a policy perspective, and a more direct "upside" is required to support any governmental financial investment in the well-being of children.²⁸⁴

When the system is broken, it is of no surprise that investment of funds will be required to fix it. In today's reality, where public funds are stretched to the limit, and most states are experiencing budgetary deficits that amount to a fiscal crisis, and some are nearing a state of bankruptcy,²⁸⁵ the political support required to execute such an investment is hard to come by. One argument that has proven effective in the past to incentivize investment in such social causes is demonstrating the concrete potential for long-term fiscal savings, which serve as an upside when state budgets are tallied.

²⁸⁴ Josh Bivens, Public Investment: The Next 'New Thing' for Powering Economic Growth, Economic Policy Institute Briefing Paper #338 (April 2012), available at: <https://www.epi.org/files/2012/bp338-public-investments.pdf>

²⁸⁵ The Economist, American states face a revenue crisis (April 17, 2018), available at: <https://www.economist.com/united-states/2018/04/07/american-states-face-a-revenue-crisis>; Elizabeth McNichol & Samantha Waxman, Center on Budget & Policy Priorities, States Faced Revenue Shortfalls in 2017 Despite Growing Economy: Policymakers Can Take Steps to Strengthen Their Tax Systems and Reserves (Oct. 2017); National Association of State Budget Officers (NASBO), Summary: Fall 2017 Fiscal Survey of States (Dec. 2017), available at: https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/Issue%20Briefs%20Summary_-_Fall_2017_Fiscal_Survey.pdf

One parallel area, where substantial change has been observed in recent years, is the drop in prison populations in many states across the nation.²⁸⁶ The incentive for this change was the potential for substantial reduction in costs of new prison construction and operations of corrections facilities. This was coupled with empirical evidence that reduction in prison population, if done in accordance with specific guidelines, is unlikely to cause an increase in crime rates.²⁸⁷ Additionally, it relied on evidence showing that rehabilitation programs and alternative sentencing are less costly options, that prove to be as or more effective in controlling crime.²⁸⁸ Thus, public safety is not expected to be compromised.

This campaign has borne fruits, as evidence emerged that the states who succeeded in prison population reduction were saving money, without causing an increase in crime rates. For example, a 1.6% reduction in the prison population of the state of Nevada from 2008 to 2009, saved the state \$38 million and prevented Nevada from spending \$1.2 billion on prison construction.²⁸⁹ Similarly, an investment in a work-release program by the state of Minnesota has saved the state \$1.25 million due to a decrease in the prison population. Minnesota prisoners who received job training paid \$459,819 more in income taxes than those who were not part of the program.²⁹⁰

Early intervention in cases of children affected by the Triple-C Impact are hypothesized to have the potential to yield a similar effect. This is due to the severe long-term adverse outcomes shown to be borne by affected children, and the monumental costs tied to these outcomes, as established in this article. In fact, the estimated annual costs of mass incarceration range between \$80-182 billion,²⁹¹ which is less than half of the estimated annual costs of the ongoing neglect of the Triple-C Impact problem. The evidence-based cost estimates presented above can now be compared against the costs of potential intervention policies that enable the effective and timely identification

²⁸⁶ German Lopez, States have steadily cut prison populations since 2010 — without increases in crime, Vox (January 3, 2017), available at: <https://www.vox.com/policy-and-politics/2017/1/3/14153196/prison-mass-incarceration-2015>

²⁸⁷ James Austin et al., Brenan Center for Justice, How Many Americans Are Unnecessarily Incarcerated? (2016), available at: https://www.brennancenter.org/sites/default/files/publications/Unnecessarily_Incarcerated.pdf; David S. Abrams, The Prisoner's Dilemma: A Cost-Benefit Approach to Incarceration, 98 Iowa Law Review 905 (2013).

²⁸⁸ John H. Esperian, The Effect of Prison Education Programs on Recidivism, 61 Journal of Correctional Education 332 (2010); Grant Duwe, An Outcome Evaluation of a Prison Work Release Program Estimating Its Effects on Recidivism, Employment, and Cost Avoidance, 26 Criminal Justice Policy Review 532 (2015).

²⁸⁹ John H. Esperian, The Effect of Prison Education Programs on Recidivism, 61 Journal of Correctional Education 332 (2010).

²⁹⁰ Grant Duwe, An Outcome Evaluation of a Prison Work Release Program Estimating Its Effects on Recidivism, Employment, and Cost Avoidance, 26 Criminal Justice Policy Review 532 (2015).

²⁹¹ Peter Wagner & Bernadette Rabuy, Prison Policy Initiative, Following the Money of Mass Incarceration (January 2017), <https://www.prisonpolicy.org/reports/money.html>

and treatment of Triple-C Impacted children. Such a cost/benefit analysis will allow the development of a cost-effective policy proposal that will be appealing to budget-conscious policymakers and stakeholders, while advancing the interests and well-being of affected children and society as a whole.

Since the muffled cries of millions of children across the nation have yet to awaken policy makers to act, perhaps money will “talk” on their behalf and incentivize change.

Appendix I: 50-State Survey Results

Table 12: State-by-State Triple-C Impact Statutory Recognition by Category (as of 2016)

The table shows the statutory recognition of each of the Triple-C Impact categories in each of the 50 states and the District of Columbia. The table presents the results in a 0/1 form, whereby “1” is logged where the state’s law recognizes the category and provides eligibility for therapeutic services or compensation for children under the category. The digit “0” is logged when no statutory recognition is available for the category in the state. Blank logs signify that information was unavailable.

STATE	Direct Victims: Child Specific Victim Rights Act/Provision	Family Violence	Community Violence	Parental Victimization	Parental Incarceration	Data on Parental status of Inmates	Total
Alabama	0	1	0	1	0	1	3
Alaska	0	1	1	1	0	0	3
Arizona	0	1	0	0	1		2
Arkansas	0	1	0	1	0	0	2
California	0	1	1	1	0	0	3
Colorado	1	1	0	1	0	0	3
Connecticut	0	1	0	1	0	1	3
Delaware	1	1	0	1	1	0	4
Florida	0	1	1	0	0	1	3
Georgia	0	1	1	1	0	1	4
Hawaii	0	0	0	0	0	1	1
Idaho	0	1	0	1	0	0	2
Illinois	0	1	1	1	0	1	4
Indiana	0	0	0	0	0	0	0
Iowa	0	1	0	1	0	1	3
Kansas	0	1	0	1	0	0	2
Kentucky	0	1	1	1	0		3
Louisiana	0	1	0	1	0	0	2
Maine	0	1	0	0	0		1
Maryland					0	0	0
Massachusetts	0	1	0	0	0		1
Michigan	0	1	0	1	0	0	2
Minnesota	1	1	1	1	0		4
Mississippi	1	1	1	1	0		4
Missouri	0	1	0	1	0	1	3
Montana	0	1	1	0	0	0	2
Nebraska	0	1	1	0	0		2

Nevada	0	1	1	0	0	1	3
New Hampshire	0	1	0	1	0	1	3
New Jersey	0	1	0	1	0	1	3
New Mexico	0	1	1	1	0	1	4
New York	1	1	1	1	0	1	5
North Carolina	0	0	0	0	0	1	1
North Dakota	1	1	1	0	0		3
Ohio	0	1	0	0	0	1	2
Oklahoma	0	1	0	0	0	0	1
Oregon	0	1	1	0	0	1	3
Pennsylvania	1	1	1	1	0		4
Rhode Island	1	0	0	0	0	0	1
South Carolina	0	1	1	1	0	1	4
South Dakota	0	1	1	1	0		3
Tennessee	0	1	0	0	0	0	1
Texas	0	1	0	1	0	0	2
Utah	1	1	0	1	0	1	4
Vermont	0	1	1	1	1	0	4
Virginia	0	1	0	0	0	0	1
Washington	1	1	1	0	0	1	4
West Virginia	0	1	1	1	0	0	3
Wisconsin	1	0	0	0	0	1	2
Wyoming	0	1	1	1	0	1	4
Washington DC	0	1	0	1	0		2
Total	11	45	22	31	3	21	Average 2.61

Appendix II: Outcome Studies Summary

Outcome	Risk Studies			Cost Studies	
	Author\year	sample	Method	Author\year	Method
Property Crime	Farrell & Zimmerman (2017) ²⁹²	Nationally representative sample <i>N</i> = 12,603	Longitudinal Study, logistics regression model	McCollister, French & Fang (2010) ²⁹³	Cost-of-illness and jury compensation methods
Violent Crime	Farrell & Zimmerman (2017) ²⁹⁴	Nationally representative sample <i>N</i> = 12,603	Longitudinal Study, logistics regression model	McCollister, French & Fang (2010) ²⁹⁵	cost-of-illness and jury compensation methods
Re-Victimization (Domestic Violence)	Whitfield et al. (2003) ²⁹⁶	Kaiser Permanente health plan members (San Diego) <i>N</i> = 8,629	Cross sectional Study, logistics regression model	Peterson, at al. (2018) ²⁹⁷	VSL/monetized QALYs
Alcohol use disorder	Felitti et al. (1998) ²⁹⁸	Kaiser Permanente health plan members (San Diego) <i>N</i> =13,494	Cross sectional Study, logistics regression model	Peterson, et al. (2017) ²⁹⁹	Cost-of-illness

²⁹² Chelsea Farrell & Gregory M. Zimmerman, Does Offending Intensify As Exposure To Violence Aggregates? Reconsidering The Effects of Repeat Victimization, Types of Exposure To Violence, And Polyvictimization On Property Crime, Violent Offending, And Substance Use, 53 Journal of Criminal Justice 25 (2017).

²⁹³ Kathryn E. McCollister, Michael T. French & Hai Fang, The Cost of Crime to Society, 108 Drug and Alcohol Dependency 98 (2010).

²⁹⁴ Chelsea Farrell & Gregory M. Zimmerman, Does Offending Intensify As Exposure To Violence Aggregates? Reconsidering The Effects of Repeat Victimization, Types of Exposure To Violence, And Polyvictimization On Property Crime, Violent Offending, And Substance Use, 53 Journal of Criminal Justice 25 (2017).

²⁹⁵ Kathryn E. McCollister, Michael T. French & Hai Fang, The Cost of Crime to Society, 108 Drug and Alcohol Dependency 98 (2010).

²⁹⁶ Charles L. Whitfield, Et Al., Violent Childhood Experiences and the Risk of Intimate Partner Violence in Adults: Assessment in a Large Health Maintenance Organization, 18(2) Journal of Interpersonal Violence 166 (2003).

²⁹⁷ Cora Peterson, at al., Lifetime Economic Burden of Intimate Partner Violence Among U.S. Adults, 55(4) [Am J Prev Med](#). 433 (2018).

²⁹⁸ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245, 248 (1998)

²⁹⁹ Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

Outcome	Risk Studies			Cost Studies	
	Author\year	sample	Method	Author\year	Method
Drug Use	Felitti et al. (1998) ³⁰⁰	Kaiser Permanente health plan members (San Diego) <i>N=13,494</i>	Cross sectional Study, logistics regression model	Peterson, et al. (2017) ³⁰¹	Cost-of-illness
Smoking	Ford et al. (2011) ³⁰²	BRFSS data of 5 states (WA, NM, AR, LO, TN) <i>N = 25,809</i>	Cross sectional study, log-binomial regression model	Peterson, et al. (2017) ³⁰³	Cost-of-illness
Anxiety	Anda et al. (2006) ³⁰⁴	Kaiser Permanente health plan members (San Diego) <i>N=17,337</i>	Cross sectional Study, logistics regression model	Peterson, et al. (2017) ³⁰⁵	Cost-of-illness
Depressed affect	Anda et al. (2006) ³⁰⁶	Kaiser Permanente health plan members (San Diego) <i>N=17,337</i>	Cross sectional Study, logistics regression model	Peterson, et al. (2017) ³⁰⁷	Cost-of-illness

³⁰⁰ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245, 248 (1998)

³⁰¹ Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

³⁰² Earl S. Ford, et al., Adverse childhood experiences and smoking status in five states, 53(3) Preventive Medicine 188 (2011). a

³⁰³ Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

³⁰⁴ Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 Eur. Arch. Psychiatry Clin. Neurosci. 174 (2006).

Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

³⁰⁶ Robert F. Anda Et Al., The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology, 256 Eur. Arch. Psychiatry Clin. Neurosci. 174 (2006).

³⁰⁷ Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

Outcome	Risk Studies			Cost Studies	
	Author\year	sample	Method	Author\year	Method
Suicide attempt	Felitti et al. (1998) ³⁰⁸	Kaiser Permanente health plan members (San Diego) <i>N=13,494</i>	Cross sectional Study, logistics regression model	Peterson, et al. (2017) ³⁰⁹ Corso, el al. (2007) ³¹⁰	Cost-of-illness
Any cancer	Felitti et al. (1998) ³¹¹	Kaiser Permanente health plan members (San Diego) <i>N=13,494</i>	Cross sectional Study, logistics regression model	Dieguez, Ferro & Pyenson (2017) ³¹²	Longitudinal study of total healthcare spending and patient OOP costs
COPD	Felitti et al. (1998) ³¹³	Kaiser Permanente health plan members (San Diego) <i>N=13,494</i>	Cross sectional Study, logistics regression model	Miller, et al. (2006) ³¹⁴	Markov decision-analytic model
Skeletal fracture	Felitti et al. (1998) ³¹⁵	Kaiser Permanente health plan members (San Diego) <i>N=13,494</i>	Cross sectional Study, logistics regression model	CDC WISQARS ³¹⁶ (July 2019)	Cost of injury

³⁰⁸ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245, 248 (1998)

³⁰⁹ Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

³¹⁰ P. S. Corso, et al., Medical costs and productivity losses due to interpersonal and self-directed violence in the United States, 32(6) Am J Prev Med. 474 (2007)..

³¹¹ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245, 248 (1998)

³¹² Gabriela Dieguez, Christine Ferro & Bruce S. Pyenson, A Multi-Year Look At the Cost Burden of Cancer Care, Milliman Research Report (April 2017), <http://us.milliman.com/uploadedFiles/insight/2017/cost-burden-cancer-care.pdf>

³¹³ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245, 248 (1998)

³¹⁴ Jeffrey D. Miller, et al., Lifetime costs and impact on life expectancy of chronic obstructive pulmonary disease (COPD) in the US: Projections from a decision-analytic model, 9(3) Value in Health A93 (2006).

³¹⁵ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245, 248 (1998)

³¹⁶ Center of Disease Control and Prevention (CDC), Data & Statistics (WISQARS™): Cost of Injury Reports, <https://wisqars.cdc.gov:8443/cost/>

Outcome	Risk Studies			Cost Studies	
	Author\year	sample	Method	Author\year	Method
Diabetes	Gilbert et al. (2015) ³¹⁷	BRFSS data of DC + 10 states (HI, ME, NE, NV, OH, PA, UT, VT, WA, and WI) <i>N = 53,998</i>	Cross sectional Study, logistics regression model	<u>Zhuo</u> , Zhang & Hoerger (2013) ³¹⁸	Simulation model
Myocardial Infarction	Gilbert et al. (2015) ³¹⁹	BRFSS data of DC + 10 states (HI, ME, NE, NV, OH, PA, UT, VT, WA, and WI) <i>N = 53,998</i>	Cross sectional Study, logistics regression model	Torio & Moore (2016) ³²⁰	Aggregate hospital costs and hospital stays data
Asthma	Gilbert et al. (2015) ³²¹	BRFSS data of DC + 10 states (HI, ME, NE, NV, OH, PA, UT, VT, WA, and WI) <i>N = 53,998</i>	Cross sectional Study, logistics regression model	Barnett & Nurmagambetov (2011) ³²² Peterson et al. (2017) ³²³	Generalized linear models (GLMs), binomial model, and human capital approach. Cost-of-illness
STD	Felitti et al. (1998) ³²⁴	Kaiser Permanente health plan members (San Diego) <i>N=13,494</i>	Cross sectional Study, logistics regression model	Chesson, et al. (2004) ³²⁵	Secondary analysis

³¹⁷ Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) Am. J. Prev. Med. 345 (2015)

³¹⁸ X. Zhuo, P. Zhang, T. J. Hoerger, Lifetime direct medical costs of treating type 2 diabetes and diabetic complications, 45(3) Am J Prev Med, 253 (2013).

³¹⁹ Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) Am. J. Prev. Med. 345 (2015)

³²⁰ Celeste M. Torio & Brian J. Moore, National Inpatient Hospital Costs: The Most Expensive Conditions by Payer 2013, Statistical Brief #204. Healthcare Cost and Utilization Project (HCUP) (May 2016), <https://www.hcup-us.ahrq.gov/reports/statbriefs/sb204-Most-Expensive-Hospital-Conditions.jsp>

³²¹ Leah K. Gilbert Et Al., Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010, 48(3) Am. J. Prev. Med. 345 (2015)

³²² S. B. Barnett & T. A. Nurmagambetov Costs of asthma in the United States: 2002-2007, 127(1)Journal of allergy and clinical immunology 145 (2011).

³²³ Cora Peterson, et al., Lifetime economic burden of rape among US adults, 52(6) American journal of preventive medicine 691 (2017).

³²⁴ Vincent J. Felitti Et Al., Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study, 14(4) Am J Prev Med 245, 248 (1998)

³²⁵ Harrell W. Chesson, et al., The Estimated Direct Medical Cost of Sexually Transmitted Diseases Among American Youth, 2000, 36(1) Perspectives of Sexual and Reproductive Health 11 (2004).

Outcome	Risk Studies			Cost Studies	
	Author\year	sample	Method	Author\year	Method
Reduced Earnings	Fang, et al., ³²⁶	Secondary data analysis		Fang, et al., ³²⁷	Incidence-based approach

³²⁶ Xiangming Fang, et al., The economic burden of child maltreatment in the United States and implications for prevention, 36 Child Abuse & Neglect 156, 159 (2012)

³²⁷ Xiangming Fang, et al., The economic burden of child maltreatment in the United States and implications for prevention, 36 Child Abuse & Neglect 156, 159 (2012)