

THE NEBRASKA LAW REVIEW BULLETIN

**Transforming Juvenile Justice: A Biopsychosocial Approach to
Trauma-Informed Care**

Abigail Bennetts

J.D. Candidate, University of Nebraska College of Law, 2025

TABLE OF CONTENTS

I. INTRODUCTION 3

II. UNDERSTANDING TRAUMA IN THE JUVENILE JUSTICE SYSTEM 5

 A. Trauma and Its Impact on Juveniles in the System 5

 B. The Prevalence of Trauma Among Justice-involved Children and Youth..... 7

 C. The Consequences of Unaddressed Trauma in the Juvenile Justice System 9

 D. Trauma-Informed Care 11

III. AN OVERVIEW OF THE BIOPSYCHOSOCIAL MODEL: THE APPLICATION TO MENTAL HEALTH AND THE LAW 12

IV. THE APPLICATION OF THE BIOPSYCHOSOCIAL MODEL IN THE CONTEXT OF TRAUMA 13

 A. Biological Effects of Trauma on Children and Youth..... 14

 B. Psychological Effects of Trauma on Children and Youth..... 16

 C. Social Effects of Trauma on Children and Youth 18

 D. The Interplay of Biological, Psychological, and Social Factors of Trauma on Children and Youth 20

V. PROPOSED COMPONENTS OF A TRAUMA-INFORMED JUVENILE JUSTICE SYSTEM: THE APPLICATION OF THE BIOPSYCHOSOCIAL MODEL 22

VI. CHALLENGES OF IMPLEMENTING AND LEGAL IMPLICATIONS 26

VII. THE BENEFITS AND POTENTIAL OUTCOMES OF A BIOPSYCHOSOCIAL APPROACH TO TRAUMA-INFORMED CARE 27

VIII. CONCLUSION..... 29

I. INTRODUCTION

When the juvenile justice system was first founded around the 1900s, there was initially an emphasis on rehabilitating children and youth who committed law violations.¹ Over time, the emphasis shifted to punishing children and youth, and by the 1960s, the system treated children and youth who committed law violations the same as adults.² Before the changes that shaped today's juvenile courts, children aged seven could stand trial like an adult in criminal court and be sentenced to prison or even death if found guilty.³ It was not until the 2000s that a shift back toward rehabilitation within the juvenile justice system took place.⁴ This shift was in large part a response to emerging neuroscience research and a better understanding of adolescent development.⁵ This research found that the developmental stage of the adolescent brain creates higher impulsivity and sensation seeking, leading to poor decision-making and greater susceptibility to peer influence.⁶ The brains of children and youth are very neuroplastic, meaning they have a high capacity for change.⁷ This implies that adolescents, in their high capacity for change during development, also have a high capacity for rehabilitation.⁸ In fact, most adolescents who exhibit delinquent behaviors do not continue behaving criminally beyond adolescent development.⁹ Adolescents do not always make the best, most thought-through decisions, but it is in part due to the lack of cognitive

¹ CHARLES PUZZANCHERA, SARAH HOCKENBERRY & MELISSA SICKMUND, NAT'L CTR. FOR JUV. JUST., *YOUTH AND THE JUVENILE JUSTICE SYSTEM: 2022 NATIONAL REPORT 77* (2022), <https://ojjdp.ojp.gov/publications/2022-national-report.pdf>.

² *See id.*

³ *See id.* at 78.

⁴ *See id.* at 80.

⁵ *Id.*

⁶ *See* K. Paige Harden, Patrick D. Quinn & Elliot M. Tucker-Drob, *Genetically Influenced Change in Sensation Seeking Drives the Rise of Delinquent Behavior During Adolescence*, 15 *Dev. Sci.* 150, 150 (2011), <https://onlinelibrary.wiley.com/doi/10.1111/j.1467-7687.2011.01115.x>.

⁷ *See* Sean C. McGarvey, Comment, *Juvenile Justice and Mental Health: Innovation in the Laboratory of Human Behavior*, 53 *JURIMETRICS* 97, 99 (2012); PUZZANCHERA ET AL., *supra* note 1, at 80.

⁸ *Id.*

⁹ PUZZANCHERA ET AL., *supra* note 1, at 80.

development.¹⁰ The juvenile system should reflect an understanding of the developmental processes that occur during adolescence.

This new research expanded people’s understanding of the adolescent mind and adolescent behaviors. Various United States Supreme Court holdings reflected adoption of this understanding, which impacted the nature of and procedures in the juvenile justice system, leading to better protection of children and youth during their developing adolescent years.¹¹ This refined understanding of adolescent development, or lack thereof, is also reflected in the juvenile codes developed across the United States.¹² Over half of the states emphasize a balanced approach in their juvenile codes, stating a purpose of “balanced and restorative justice”.¹³ The “balanced and restorative justice” approach states that juvenile justice systems should consider public safety, the development of life skills to help children and youth, and accountability to those affected by the decisions children and youth make.¹⁴ This balanced purpose adopted by a majority of states purports to create a juvenile justice system that aims to care for children and youth.¹⁵ While rehabilitation has shifted back towards the forefront, the juvenile justice system is still not currently

¹⁰ See Sean C. McGarvey, *supra* note 7, at 99.

¹¹ See, e.g., *Kent v. United States*, 383 U.S. 541, 562 (1966) (holding juveniles are afforded the protections of due process when being transferred to adult courts); *In re Gault*, 387 U.S. 1, 33, 41, 55 (1967) (holding that juveniles have the right to a notice of charges, access to counsel, confrontation and cross-examination during hearings that could result in commitment); *Breed v. Jones*, 421 U.S. 519, 541 (1975) (holding that trying an individual in criminal court for an offense already tried in juvenile court violates the double jeopardy clause); *Eddings v. Oklahoma*, 455 U.S. 104, 116 (1982) (holding that a defendant’s young age should be considered as a mitigating factor in death penalty cases); *Thompson v. Oklahoma*, 487 U.S. 815, 838 (1988) (holding that the Eighth and Fourteenth Amendments prohibit use of the death penalty for minors under the age of 16); *Stanford v. Kentucky*, 492 U.S. 361 (1989) (holding that imposing the death penalty against a 16 or 17 year old minor who murders another does not, by default, offend the Eighth Amendment), *abrogated by Roper v. Simmons*, 543 U.S. 551 (2005); *Roper v. Simmons*, 543 U.S. 551, 551 (2005) (holding that the minimum age for death penalty is 18); *Graham v. Florida*, 560 U.S. 48, 82 (2010) (holding that juveniles cannot be sentenced to life without parole for non-homicide cases); *Miller v. Alabama*, 567 U.S. 460, 489 (2012) (holding that mandatory sentences to life without parole for juveniles violate the Eighth Amendment); *Montgomery v. Louisiana*, 577 U.S. 190, 208–09 (2016) (holding that the ban on mandatory sentences to life without parole applies to juveniles retroactively).

¹² PUZZANCHERA ET AL., *supra* note 1, at 82.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

equipped to effectively address the profound implications of trauma in children and youth.¹⁶ If the juvenile justice system is to be truly rehabilitative, it needs to holistically address the needs of the children and youth it serves. A juvenile justice system that purports to be rehabilitative should consist of trauma-informed care, and the biopsychosocial model should be applied in the creation of that care.

II. UNDERSTANDING TRAUMA IN THE JUVENILE JUSTICE SYSTEM

A. *Trauma and Its Impact on Juveniles in the System*

“Trauma” is used to describe the emotional response to a distressing event.¹⁷ Trauma can encompass experiences that overwhelm an individual’s capacity to cope and further develop.¹⁸ Understanding the effects of trauma on the brain and body involves recognizing that trauma is a form of stress that exists along a spectrum.¹⁹ Positive stress, found at one end of the spectrum, involves mild, brief stress responses that are manageable with support from caring adults within safe relationships.²⁰ This level of stress is a normal part of child development.²¹ Toxic stress, on the other hand, is severe, frequent, or prolonged activation of the stress management system, often without supportive relationships.²² It can adversely affect development by altering brain structure or making the stress response system overly sensitive.²³

¹⁶ See Susan J. Ko et al., *Creating Trauma-Informed Systems: Child Welfare, Education, First Responders, Health Care, Juvenile Justice*, 39 PRO. PSYCH.: RSCH. & PRAC. 396, 397 (2008).

¹⁷ See *id.*

¹⁸ See *id.*

¹⁹ Eduardo R. Ferrer, *Transformation Through Accommodation: Reforming Juvenile Justice by Recognizing and Responding to Trauma*, 53 AM. CRIM. L. REV. 549, 563 (2016).

²⁰ *Id.*

²¹ *Id.*

²² *Id.*

²³ *Id.* at 563–64.

Adverse childhood experiences²⁴ and toxic stress profoundly impact child development, particularly during periods of heightened sensitivity to experiences and environments.²⁵ This stress exerts significant negative effects on the developing brain and body.²⁶ The impacts of toxic stress on brain structure and function include reduced volume in key brain regions like the corpus callosum and cerebellum, diminished electrical activity leading to attention and learning difficulties, and alterations in the prefrontal cortex and amygdala, affecting executive function and emotional regulation.²⁷ Toxic stress can also disrupt the neuroendocrine system, leading to adaptive responses that sensitize the stress response system.²⁸ This heightened reactivity increases the likelihood of maladaptive behaviors, potentially leading to academic difficulties or involvement in delinquency.²⁹ Overall, toxic stress during early development can have lasting consequences on brain architecture, behavior, and physical and mental health.

For juveniles, severe traumatic experiences and events can result in significant disruptions in development and cause detrimental biological, psychological, and social effects.³⁰ Trauma is experienced on a spectrum, and it can have a different impact on each adolescent.³¹ The impact of

²⁴ In 1998, Dr. Vincent J. Felitti and his team conducted the Adverse Childhood Experience Study (ACE Study) to investigate the link between childhood adversity and adult health. They surveyed over 28,500 patients, primarily white and over forty years old, about their childhood experiences. Nearly two-thirds reported at least one adverse childhood experience, and over 12.5% reported four or more. The study found that individuals who had experienced one ACE often had multiple ACEs. Moreover, there was a clear correlation between the number of ACEs reported and various health risk factors in adulthood, including increased likelihood of conditions like ischemic heart disease, cancer, and poor self-rated health. Subsequent research has further underscored the negative impact of ACEs, linking them to increased odds of incarceration, poor educational and employment outcomes, involvement in violence, and early pregnancies. Additionally, ACEs have been shown to cause immediate negative consequences, such as chromosome damage and changes to the developing brain. *See Ferrer, supra* note 19, at 568.

²⁵ *Id.* at 569.

²⁶ *Id.*

²⁷ *Id.* at 569–70.

²⁸ *Id.* at 570.

²⁹ *Id.* at 570–71.

³⁰ *See* NATIONAL CHILD TRAUMATIC STRESS NETWORK, TRAUMA-INFORMED LEGAL ADVOCACY: A RESOURCE FOR JUVENILE DEFENSE ATTORNEYS 4 (2018), https://www.nctsn.org/sites/default/files/resources/resource-guide/trauma_informed_legal_advocacy_a_resource_for_juvenile_defense_attorneys.pdf.

³¹ Ferrer, *supra* note 19, at 563.

trauma on children and youth is complex and can manifest in different ways depending on the individual.³² While some individuals may recover quickly after a traumatic event, others remain affected in some capacity for extended periods of time.³³

When children and youth experience repeated traumatic events, it can impact psychobiological development and increase the likelihood of academic underperformance, high-risk behavior, and encountering difficulties in peer and family social interactions.³⁴ Prolonged maltreatment and exposure to trauma in children and youth causes extreme stress that disrupts brain development and can harm the development of the nervous and immune systems.³⁵ This traumatic stress is also linked to children and youth having a higher likelihood of involvement with systems like child welfare and juvenile justice.³⁶

B. The Prevalence of Trauma Among Justice-involved Children and Youth

Children and youth can become involved with the courts for any combination of the following reasons: experiencing abuse or neglect, status offending, or law offending. The majority of justice-involved children and youth have been exposed to trauma, with up to 90% of youth in the juvenile justice system having experienced at least one traumatic event.³⁷ These traumatic events are often diverse and multifaceted, ranging from experiences of abuse, neglect, and maltreatment, to exposure to violence within their family or community.³⁸

³² Ko et al., *supra* note 16, at 397.

³³ *Id.*

³⁴ *Id.*

³⁵ Yael Cannon & Andrew Hsi, *Disrupting the Path from Childhood Trauma to Juvenile Justice: An Upstream Health and Justice Approach*, 43 FORDHAM URB. L. J. 425, 440 (2016).

³⁶ Ko et al., *supra* note 16, at 397.

³⁷ See Ferrer, *supra* note 19, at 574 (comparing this rate to an Ace Study sample which found that 64% reported at least one ACE); NATIONAL CHILD TRAUMATIC STRESS NETWORK, *supra* note 30, at 1. See also Christopher Edward Branson et al., *Trauma-Informed Juvenile Justice Systems: A Systematic Review of Definitions and Core Components*, 9 PSYCH. TRAUMA: THEORY, RSCH., PRAC., AND POL'Y 635, 635 (2017) (corroborating that an estimated 90% of children and youth in the juvenile justice system have experienced one or more types of trauma).

³⁸ See NATIONAL CHILD TRAUMATIC STRESS NETWORK, *supra* note 30, at 1.

Repetitive and severe trauma has been associated with similarly repetitive and severe delinquent behavior.³⁹ In some cases, the trauma juveniles experience correlates with the offenses they commit.⁴⁰ Children and youth who have experienced sexual abuse are nearly five times more likely than non-offenders to commit sexual crimes.⁴¹ Experiencing physical violence increases the likelihood of offending by four times.⁴² Additionally, children and youth who experience trauma are twice as likely to be arrested as those who do not.⁴³ Violence is cyclical.⁴⁴ Today's traumatized children and youth are at a higher risk of being tomorrow's offenders.⁴⁵

³⁹ See Cannon & Hsi, *supra* note 35, at 449. See also Carolyn Smith & Terence P. Thornberry, *The Relationship Between Childhood Maltreatment and Adolescent Involvement in Delinquency*, 33 CRIMINOLOGY 45, 463 (1995) (analyzing the prevalence and frequency of delinquency amongst maltreated minors); Karen M. Abram et al., *Posttraumatic Stress Disorder and Trauma in Youth in Juvenile Detention*, 61 ARCHIVES GEN. PSYCHIATRY 403, 404–06 (2004) (The research involved a random selection of 898 African-American, non-Hispanic white, and Hispanic youth aged 10-18 who had recently been arrested or detained in Cook County, Illinois. Among the participants, males reported experiencing a higher incidence of trauma (93%) compared to females (84%). Approximately 11.2% of the youth met the criteria for a diagnosis of post-traumatic stress disorder (PTSD) within the past year. The most prevalent form of trauma reported among the youth was witnessing violence. Interestingly, while 92.5% of the youth in the study reported experiencing one or more traumas, studies focusing on the general population have shown that by the age of 16, only 60% of adolescents have encountered at least one traumatic event); William E. Copeland et al., *Traumatic Events and Posttraumatic Stress in Childhood*, 64 ARCHIVES GEN. PSYCHIATRY 577, 579 (2007) (analyzing the prevalence and duration of posttraumatic stress in minors following traumatic events); David Finkelhor et al., *Children's Exposure to Violence: A Comprehensive National Survey*, 2009 JUV. JUST. BULL. 1, 1 (2009) (finding that more than 60% of surveyed children were exposed to violence within the last year).

⁴⁰ See Cannon & Hsi, *supra* note 35, at 450 (noting that justice-involved youth who experienced sexual abuse trauma were about five times more likely to engage in sexual offenses than those who had not experienced sexual abuse trauma) See also, Cathy Spatz Widom, *Victims of Childhood Sexual Abuse—Later Criminal Consequences*, NAT'L INST. JUST. RES. BRIEF 1, 6 (1995) (finding that people victimized by sexual abuse as children are significantly more likely to be arrested for a sex crime).

⁴¹ Cannon & Hsi, *supra* note 35, at 450.

⁴² *Id.*

⁴³ *Id.* See also Jennifer E. Lansford et al., *Early Physical Abuse and Later Violent Delinquency: A Prospective Longitudinal Study*, 12 CHILD MALTREATMENT 233, 238 (2007) (conducting a study and finding that adolescents who had been physically abused before age 5 were more likely to be arrested as a juvenile); Widom, *supra* note 40, at 4–5 (indicating that for any abuse or maltreatment, youth victims were 26% more likely to face juvenile arrests compared to non-abused and non-neglected youth, who had a 16% chance); Kathleen M. Heide & Eldra P. Solomon, *Biology, Childhood Trauma, and Murder: Rethinking Justice*, 29 INT'L. J. L. & PSYCHIATRY 220, 224 (2006) (noting that the earlier children and youth experience trauma, the more likely they are to offend).

⁴⁴ See Cannon & Hsi, *supra* note 35, at 450.

⁴⁵ *Id.*

C. *The Consequences of Unaddressed Trauma in the Juvenile Justice System*

Unaddressed trauma in justice-involved children and youth can have far-reaching implications for the affected child, their families, and broader system outcomes, contributing to increased delinquent behavior, retraumatization⁴⁶, and chronic justice involvement.⁴⁷ Without appropriate trauma-informed care and support, trauma-related behaviors and issues may persist beyond adolescence and contribute to preventable recidivism, lingering adversity, and social marginalization.⁴⁸ Often, traumatized children exhibit symptoms resembling mental illnesses, such as Bipolar Disorder, Attention Deficit Hyperactivity Disorder, Oppositional Defiant Disorder, Substance Abuse, and Psychotic Disorder.⁴⁹ Despite the correlation, a trauma-informed system should be hesitant to make these diagnoses before considering trauma's impact on symptoms.

Unaddressed trauma significantly impacts how children and youth interact with the juvenile justice system and the professionals involved in the process, just as it affects their functioning in every part of life. Experiencing trauma in early life can drastically alter the brain.⁵⁰ This brain alteration can emphasize existing vulnerabilities and increase the chances of adverse outcomes.⁵¹ Justice-involved children and youth who have experienced trauma may find it difficult to efficiently navigate complex legal procedures, leading to misunderstandings, breakdowns in

⁴⁶ Retraumatization can occur when a traumatized individual relives the traumatic event(s) and reexperiences the stress response associated with the trauma. It can also occur when the traumatized individual encounters a new, similar stimuli or incident that leads them to reexperience the past trauma. *See What is Retraumatization Anyway?*, TRAUMA TREATMENT COLLECTIVE (Oct. 3, 2022), <https://traumatreatmentcollective.com/what-is-retraumatization-anyway/>.

⁴⁷ Ko et al., *supra* note 16, at 400.

⁴⁸ *See id.*

⁴⁹ Gene Griffin, Edward J. Germain & Raymond G. Wilkerson, *Using a Trauma-Informed Approach in Juvenile Justice Institutions*, 5 J. CHILD & ADOLESCENT TRAUMA 271, 277 (2012).

⁵⁰ Cannon & Hsi, *supra* note 35, at 443 (discussing research that found “toxic stress disrupts the developing brain architecture of children”). *See also* NATIONAL CENTER FOR CHILD TRAUMATIC STRESS, *supra* note 30, at 4 (noting that traumatic experiences alter brain functioning including perceptions of treats and hyper engagement in survival coping strategies resulting in aggressive or avoidant behaviors).

⁵¹ *See* Cannon & Hsi, *supra* note 35, at 443.

communication, and contentious interactions with legal professionals in the system.⁵² These obstacles may impair the path to justice for children and youth in the system, leading to outcomes from a system that does not adequately serve adolescents in the way they deserve.⁵³ A lack of proper trauma-informed care may minimize adolescents' rights and safeguards, as well as perpetuate patterns of victimization, retraumatization, and recidivism within the justice system.⁵⁴

Children and youth who have experienced trauma are not best served by the invasive and coercive practices often used in the justice system. Things like strip searches, pat-downs, out-of-home placements in facilities, and punitive seclusion or restraint may expose justice-involved youth to retraumatization and lead to further biopsychosocial distress and damage.⁵⁵ Moreover, justice-involved children and youth who have experienced trauma can have a diminished capacity to utilize and benefit from interventions and services within the juvenile justice system if those services are not trauma-informed.⁵⁶ The cognitive and emotional effects of trauma can disrupt engagement in treatment, hinder rehabilitation, and increase the risk of non-adherence with services.⁵⁷ An absence of trauma-informed services for justice-involved youth diminishes the efficacy of interventions and can lead to persistent cycles of trauma and recidivism.⁵⁸ Ignored and

⁵² NATIONAL CENTER FOR CHILD TRAUMATIC STRESS, *supra* note 30, at 6.

⁵³ *Id.*

⁵⁴ *See* NATIONAL CHILD TRAUMATIC STRESS NETWORK, *supra* note 30, at 4–8 (explaining how trauma-related behaviors can be misinterpreted by courts and counsel, impairing youth's ability to meaningfully participate in legal proceedings and exercise procedural safeguards); Ko et al., *supra* note 16, at 399–400.

⁵⁵ Branson et al., *supra* note 37, at 636 (noting that children and youth involvement in the juvenile justice system places them at risk for experiencing additional trauma or becoming triggered and retraumatized; psychological distress is associated with retraumatization when children and youth are placed in facilities, physically restrained, and have limited access to loved ones).

⁵⁶ Children's Bureau, *Supporting Brain Development in Traumatized Children and Youth*, CHILD WELFARE INFO. GATEWAY BULL. FOR PROS., Sept. 2017, at 2, <https://oaesv.org/wp-content/uploads/2021/04/braindevtrauma.pdf>.

⁵⁷ *Id.* (noting that exposure to ongoing maltreatment can compromise brain development and create emotional, behavioral, and learning challenges, especially in the absence of trauma-informed care).

⁵⁸ *See id.*

unaddressed trauma within juvenile justice systems can create more trauma for justice-involved youth and impact their future.

D. Trauma-Informed Care

Effectively addressing the trauma of justice-involved children and youth requires a comprehensive approach that recognizes the complex, interconnected biopsychosocial needs of these affected youth.⁵⁹ There is a growing recognition of the impact trauma has on justice-involved youth, and several national organizations have encouraged or helped fund a trauma-informed approach within the juvenile justice system.⁶⁰ Despite this growing recognition and support, however, the juvenile justice system requires further transformation to become truly trauma-informed and therefore effective in addressing the complexities of youth who have experienced trauma and are in the juvenile justice system.

Trauma-informed care utilizes comprehensive assessments for individualized treatment plans.⁶¹ Both clinicians and juvenile justice staff are needed to accomplish this trauma-informed care.⁶² This kind of care shifts the focus from viewing children and youth as delinquents who deserve punishment to viewing them as adolescents in need of support and guidance as they heal and grow. Such a trauma-informed system should be developed through a holistic lens, utilizing the biopsychosocial model to comprehensively address the complex nature of trauma. Trauma-

⁵⁹ McGarvey, *supra* note 7, at 101–04.

⁶⁰ Some of these organizations include the National Commission on Correctional Healthcare, the National Council of Juvenile and Family Court Judges, the National Juvenile Defenders Center, The Department of Justice and its Office of Juvenile Justice and Delinquency Programs, the National Institute of Justice, The American Bar Association, and the Attorney General’s National Task Force on Children Exposed to Violence. *See* NATIONAL CHILD TRAUMATIC STRESS NETWORK, *supra* note 30, at 2, 26; Ko et al., *supra* note 16, at 400–01.

⁶¹ Griffin et al., *supra* note 49, at 277. *See also*, Branson et al., *supra* note 37, at (discussing the origin of trauma-informed care in 2001. Since then, there have been many attempts to define what this means and what it looks like, but most agree it involves integrating trauma awareness into service systems, like the juvenile justice system).

⁶² *See* McGarvey, *supra* note 7, at 113–14.

informed care should be responsive to the biological, psychological, and social causes and results of trauma experienced by youth in the juvenile justice system. Recognizing that trauma is a multifaceted issue influenced by each of these domains allows for a more comprehensive and effective understanding of treatment and support for these juveniles.⁶³ By implementing a biopsychosocial approach to trauma-informed care within the juvenile justice system, professionals in the juvenile justice system can effectuate improved outcomes for justice-involved children and youth.⁶⁴

III. AN OVERVIEW OF THE BIOPSYCHOSOCIAL MODEL: THE APPLICATION TO MENTAL HEALTH AND THE LAW

The biopsychosocial model was originally introduced by George Engel in 1977.⁶⁵ The biopsychosocial model calls for a more dynamic approach, considering the interplay of biological, psychological, and social factors in its application to any given field.⁶⁶ The model acknowledges that no outcome can be comprehensibly determined or understood by a single factor or faction of factors.⁶⁷ The model suggests that biological factors, such as genetics and physiology, interact with psychological factors, including thoughts, emotions, and behaviors, which are further shaped by social determinants such as family dynamics, cultural norms, socioeconomic status, and environmental factors.⁶⁸ This holistic perspective acknowledges that health and behavior cannot be fully understood by focusing solely on one aspect, but instead require, and in some cases

⁶³ See Ko et al., *supra* note 16, at 399–402; McGarvey, *supra* note 7, at 101–04.

⁶⁴ See Ko et al., *supra* note 16, at 399–402; McGarvey, *supra* note 7, at 115–17.

⁶⁵ See George L. Engel, *The Need for a New Medical Model: A Challenge for Biomedicine*, 40 PSYCHODYNAMIC PSYCH. 377, 377 (2012) (Engel was an American psychiatrist who created the biopsychosocial model in response to medical advances resulting in the traditional biomedical model to be reductionist).

⁶⁶ *Id.* at 387.

⁶⁷ *Id.*

⁶⁸ *Id.*

demand, consideration of multiple dimensions.⁶⁹ It is the broad encompassing of the complexities of experiences that gives the biopsychosocial model strength. By analyzing and evaluating the multitude of factors collectively, a more comprehensive and accurate understanding of whatever model is being applied to can be obtained.

The biopsychosocial model can also hold significant relevance in the context of mental health and the law. Mental health issues are often the result of many interacting factors, which makes the holistic application of the biopsychosocial model an effective approach.⁷⁰ Like physical health, emotions, the surrounding environment, and other social factors affect mental health, including how trauma affects an individual.⁷¹ An assessment of all these factors is relevant for evaluating mental health's contributors and allows for a clearer path to appropriately addressing and treating trauma responses within the juvenile justice system.

IV. THE APPLICATION OF THE BIOPSYCHOSOCIAL MODEL IN THE CONTEXT OF TRAUMA

While most legal systems do not purport to be rehabilitative, the juvenile justice system does.⁷² The juvenile justice system currently fails to accurately identify and treat trauma in children and youth and often responds in counterproductive ways, such as treating juveniles like criminals, removing adolescents from their homes, and overusing detention facilities.⁷³ To effectively rehabilitate, factors leading children and youth to involve themselves in the juvenile justice system should also be evaluated and considered during their time in the system. The biopsychosocial model should be applied to identify the factors that led to their involvement, and the

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ Children's Bureau, *supra* note 56, at 7.

⁷² *See* PUZZANCHERA ET AL., *supra* note 1, at 77.

⁷³ *See id.*

biopsychosocial model should be applied to assist in the appropriate acknowledgement and treatment of those factors. Not everything is a treatable factor, but there are factors, if acknowledged, that can help in better understanding the children in the juvenile justice system, including why they behave or respond in certain ways.⁷⁴ A trauma-informed approach will allow the juvenile justice system to proactively determine the origins of minors' behavior rather than only react to and, in some cases, worsen the symptoms and responses of trauma.

A. Biological Effects of Trauma on Children and Youth

It is important to acknowledge that not all delinquent behavior is the result of trauma or negative experiences from childhood and youth. As the adolescent brain develops, an increased amount of sensation-seeking is influenced by genetic factors.⁷⁵ This sensation-seeking alone increases delinquent behavior but considering that the majority⁷⁶ of children and youth in the juvenile justice system have experienced trauma, it is also important to assess the biological effects of trauma in relation to juvenile justice.

Trauma experienced during adolescence and periods of brain development shapes the brain's structure and function, and has profound lasting effects on biological processes.⁷⁷ Trauma exposure disrupts and alter the circuits of the brain and regulatory systems.⁷⁸ This disruption has a long-lasting influence on physiology, behaviors, and overall health.⁷⁹ Exposure to trauma can

⁷⁴ See Ko et al., *supra* note 16, at 399 (emphasizing that systems must account for trauma histories to accurately assess youth behavior; not every factor is modifiable, but acknowledging them improves intervention).

⁷⁵ See Harden et al., *supra* note 6, at 150.

⁷⁶ Ferrer, *supra* note 19, at 574.

⁷⁷ Cannon & Hsi, *supra* note 35, at 442.

⁷⁸ *Id.* at 440–41. See also Miomira Kostic, *Biological and Psychological Theories on Juvenile Delinquency*, 11 FACTA UNIVERSITATIS, SERIES: L. & POL. 1, 5 (2013) (focusing on the basic tenets of anthropological, bio-psychological and psychological theories dealing with the causes of deviant behavior among children and juveniles, their recidivism and victimization).

⁷⁹ Cannon & Hsi, *supra* note 35, at 440.

also cause changes in hormonal control of stress reactions, which can contribute to chronic health conditions through adolescence and into adulthood.⁸⁰

Childhood maltreatment affects the brain's regions and can also interact with genetics.⁸¹ Maltreatment influences the risk of psychiatric disorders by interfering with and altering how chemicals are transported within the body.⁸² One chemical often impacted by childhood maltreatment and trauma is serotonin, which is a chemical that affects and controls mood.⁸³ A negative impact on the function of chemicals like these can increase the risk of psychiatric disorders.⁸⁴ Additional neurobiological effects of trauma include a reduction in the size of the hippocampus, which has a major role in learning and memory, as well as increased reactivity in the amygdala, which regulates fear, emotion, and motivation.⁸⁵ These effects often lead to abnormalities in brain regions that are responsible for stress responses and emotional regulation.⁸⁶

Further, experiencing trauma in adolescence may impact a child's predisposition to mimicry.⁸⁷ Some aggression-related delinquent behavior may be a product of imitating violent behavior from a parent or adult figure in the adolescent's life.⁸⁸ Children and youth who are victims of violence and aggression may also exhibit similar violence and aggression later in their lives.⁸⁹

⁸⁰ *Id.* at 440–41.

⁸¹ See Martin. H. Teicher & Jacqueline. A. Samson, *Childhood Maltreatment and Psychopathology: A Case for Ecophenotypic Variants as Clinically and Neurobiologically Distinct Subtypes*. 170(10) THE AM. J. OF PSYCHIATRY 1114 (2013).

⁸² *Id.* at 1115.

⁸³ *Id.*

⁸⁴ *Id.* at 1119.

⁸⁵ See Katie. A. McLaughlin, Margeret. A. Sheridan & Hilary. K. Lambert, *Childhood Adversity and Neural Development: Deprivation and Threat as Distinct Dimensions of Early Experience*. 47 NEUROSCIENCE AND BIOBEHAVIORAL REV. 578 (2014).

⁸⁶ See Lindsey E. Wylie & Katrina A. Rufino, *The Impact of Victimization and Mental Health Symptoms on Recidivism for Early System-Involved Juvenile Offenders*, 42 L. & HUM. BEHAV. 558 (2018).

⁸⁷ Kostic, *supra* note 78, at 7.

⁸⁸ *Id.* See also Albert Bandura, Dorothea Ross & Sheila. A. Ross, *Transmission of Aggression Through Imitation of Aggressive Models*, 63(3) THE J. OF ABNORMAL AND SOC. PSYCH. 575 (1961) (A study looking at the transmission of aggression indicated that children imitated the behavior they were presented with. When models would behave aggressively, the children and youth would mimic that aggression and behave in a similar way).

⁸⁹ Kostic, *supra* note 78, at 7.

These biological factors all play an important role as children and youth are in development. Understanding these biological mechanisms provides an initial framework as the psychological and social factors are also applied.

B. Psychological Effects of Trauma on Children and Youth

Trauma amongst children and youth also influences psychological factors. Some of the psychological factors come about as direct results of biological factors, indicating a clear connection across domains and the importance of considering the effects holistically.⁹⁰ Trauma affected brain regions can lead to mental health issues like depression, anxiety, and post-traumatic stress disorder both during adolescence and into adulthood.⁹¹ Children and youth who are involved in the juvenile justice system experience higher rates of post-traumatic stress disorder and other mental health disorders when compared to their counterparts not in the system.⁹² Compared to their counterparts, children and youth in the juvenile justice system have twice the risk of major depressive disorder, three times the risk for post-traumatic stress disorder, and up to eight times the risk for comorbid disorders throughout their lifetime.⁹³ There is a psychological complexity of

⁹⁰ *Id.* at 2.

⁹¹ Cannon & Hsi, *supra* note 35, at 426. *See also* McLaughlin et al., *supra* note 85, at 585 (In paradigms involving uncontrollable shock delivered to pups, early threat exposure is associated with persistent anxiety and depression-like behaviors).

⁹² McLaughlin et al., *supra* note 85, at 585. *See also* Cannon & Hsi, *supra* note 35, at 426 (A groundbreaking public health study funded by the U.S. Centers for Disease Control and Prevention (CDC) and the Kaiser Foundation found astoundingly high rates of childhood trauma, including experiences like abuse, neglect, parental substance abuse, mental illness, and incarceration); Jennifer Delima & Graham Vimpani., *The Neurobiological Effects of Childhood Maltreatment: An Often-Overlooked Narrative Related to the Long-Term Effects of Early Childhood Trauma?* 89 *FAM. MATTERS* 42 (2011) (brain injury in children as a result of maltreatment, from the subtle to the glaringly obvious, has been well documented from early in-utero, and may continue to affect development well into the third decade of life); McGarvey, *supra* note 7, at 103 (scarred by childhood trauma and other societal challenges, youth within the juvenile justice system frequently struggle with mental health issues, which all too often go unnoticed and untreated); Teicher & Samson, *supra* note 81, at 1117–18 (multiple lines of evidence suggest that maltreated individuals with PTSD continue to differ from their non-maltreated counterparts in adulthood); Wylie & Rufino, *supra* note 86, at 585 (youth with official records of abuse/neglect, person crime victimization, and property crime victimization were more likely to recidivate sooner than those without these victimization experiences).

⁹³ Cannon & Hsi, *supra* note 35, at 458.

the children and youth in the juvenile justice system, with about 66% of the adolescents having a diagnosable mental health disorder.⁹⁴

Trauma also affects areas of the brain involved in regulation and decision-making, which can influence coping mechanisms and change development and behavior.⁹⁵ This influence on coping mechanisms and regulation results in indifference, defiance, and aggression, as well as negatively affect the ability to manage stress throughout life.⁹⁶ Regulating emotions after experiencing trauma becomes increasingly difficult for children and youth.⁹⁷ The internalization of these problems often results in anxiety and depression, while the externalization is often manifested through aggression, behavioral conduct issues, and defiant actions.⁹⁸ These are behaviors often seen in children and youth who are in the system, and many think it is intentional and malicious, which can result in this behavior being punished instead of it being identified and treated.⁹⁹ This punishment will further impact children and create negative social effects.

Children and youth who are exposed to threat often have a hyperactive amygdala and have heightened responses to angry faces.¹⁰⁰ This implies that the physical rewiring in the brain of traumatized adolescents has created an attention bias towards identifying and responding to anger.¹⁰¹ This heightened response also impacts emotional regulation, reactivity and can facilitate maladaptive coping strategies, impacting relationships.¹⁰²

⁹⁴ McGarvey, *supra* note 7, at 101.

⁹⁵ Cannon & Hsi, *supra* note 35, at 461.

⁹⁶ *Id.* at 458.

⁹⁷ *Id.* at 443–44.

⁹⁸ *Id.* at 458–59.

⁹⁹ *Id.* at 488.

¹⁰⁰ McLaughlin et al., *supra* note 85, at 583.

¹⁰¹ *Id.* at 584.

¹⁰² *Id.*

Additionally, exposure to trauma is associated with decreased intelligence quotients and lower grade point averages.¹⁰³ Experiencing trauma affects the performance of children and youth in school, which has the social impact of a decrease in rates of graduation as well as an increase in the number of days absent from school.¹⁰⁴ When parts of the brain, like the hippocampus, are physically altered due to trauma, it impacts learning and information retention.¹⁰⁵ This impact on the brains of adolescents has further social implications.

C. Social Effects of Trauma on Children and Youth

Effects of trauma amongst children and youth affect their well-being and shape behaviors, responses, and decision-making, which also has an impact on social factors. These effects are also intertwined with various other factors. Trauma experienced by children and youth often occurs over time and in different contexts and settings.¹⁰⁶ Social determinants and environmental factors such as poverty, family violence, family substance abuse, and chronic maltreatment and neglect are associated with trauma exposure experienced by adolescents.¹⁰⁷ These factors can all have an impact on relationships between the parent and child as well as relationships in all other settings.¹⁰⁸ Trauma, maltreatment, and neglect all disrupt relationship and attachment bonds, stability within the family, and social support systems.¹⁰⁹ These disruptions contribute to the vulnerability of traumatized children and youth. When familial relationships are damaged or incomplete, emotional

¹⁰³ Ko et al., *supra* note 16, at 398.

¹⁰⁴ Ko et al., *supra* note 16, at 398.

¹⁰⁵ McLaughlin et al., *supra* note 85, at 585.

¹⁰⁶ Cannon & Hsi, *supra* note 35, at 451.

¹⁰⁷ *Id.* at 443.

¹⁰⁸ Delima & Vimpani, *supra* note 92, at 43.

¹⁰⁹ *Id.* See also McLaughlin et al., *supra* note 85, at 10 (evidence from animal and human studies demonstrates consistently that early exposure to threat is associated with long-term changes in neural circuits that underlie emotional learning); Teicher, *supra* note 81, at 1115 (risk for depression increased in a graded, dose-dependent fashion with the number of maltreatment-related adverse childhood experiences); Wylie & Rufino, *supra* note 86, at 567 (Early system-involved youth referred to juvenile diversion had high levels of mental health symptoms and many had prior experiences with various types of victimization that are based on official law enforcement records).

deficiencies occur and lead to insufficient socialization.¹¹⁰ When adolescents lack support and healthy relationships with access to positive adults in their lives, there is an increased risk of delinquency and an increased risk of those traumatized children and youth finding involvement in peer groups that are engaging in delinquent and criminal behavior.¹¹¹ The long-term physical changes in brain regions like the amygdala, hippocampus, and frontal cortex as a result of experiencing trauma in adolescence also impact social functioning.¹¹² Experiencing trauma in adolescence can be both a product of a negative social setting and lead to involvement in negative social settings.

Another important consideration is that children and youth in the low-income and/or ethnic minority demographic have increased vulnerability to the occurrence of and effects of trauma.¹¹³ This group disproportionately experiences trauma, violence, and maltreatment and neglect.¹¹⁴ There is also insufficient access to mental health care, which can further exacerbate both the origin and the results of trauma experienced by children and youth.¹¹⁵ Further, there are concerns that results of poverty are mistaken as results of maltreatment or neglect, which can introduce children and youth into the child welfare subset of the juvenile justice system more often and earlier than they should be, if they should be at all.¹¹⁶

¹¹⁰ Kostic, *supra* note 78, at 8.

¹¹¹ Delima & Vimpani, *supra* note 92, at 50.

¹¹² McLaughlin et al., *supra* note 85, at 583.

¹¹³ Ko et al., *supra* note 16, at 398.

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

D. The Interplay of Biological, Psychological, and Social Factors of Trauma on Children and Youth

The effects of trauma on children and youth are complex and multifaceted. They result from the interplay of biological, psychological, and social factors. These domains interact dynamically and repeatedly to shape the experiences and consequences of trauma during adolescence. To look at any of these factors individually would be to revert to the age-old question of nature versus nurture,¹¹⁷ which is never fully encompassing. Rather, all these factors, including nature and nurture, should be looked at as they relate to and impact one another. There is a heavy influence from all directions, and to isolate the factors is to misrepresent the effects.

Biological factors have a significant role in how trauma is experienced and processed. Trauma experienced in early life leads to structural and functional alterations in the brain. Neurobiological effects of trauma include changes in brain circuitry, hormonal regulation of stress, and alterations in brain regions involved in emotion regulation and cognitive function.¹¹⁸ Genetic predispositions can also influence susceptibility to the neurobiological effects of trauma.¹¹⁹ These biological factors interact with other factors to shape individual outcomes.

Psychological factors are equally important in understanding the impact of trauma on children and youth. Trauma can lead to a range of psychological consequences, including post-traumatic stress disorder, depression, anxiety disorders, and maladaptive coping strategies.¹²⁰ Emotional dysregulation, difficulty forming trusting relationships, and increased risk-taking

¹¹⁷ See Mick Serpell, *Guest Editorial*, 7(4) BRIT. J. OF PAIN 161 (2013) (The term nature versus nurture was first coined around 1850 by Francis Galton, a polymath and originator. He believed that hereditary factors alone influenced our characteristics, but this view has since been challenged and disproven).

¹¹⁸ Cannon & Hsi, *supra* note 35, at 461; McLaughlin et al., *supra* note 85, at 584.

¹¹⁹ Teicher & Samson, *supra* note 81, at 1117.

¹²⁰ Kostic, *supra* note 78, at 7.

behaviors are common psychological responses to trauma.¹²¹ Moreover, trauma can disrupt cognitive function, affect decision-making processes, and influence the development of personality traits such as sensation seeking.¹²²

Social factors also significantly shaped both the experience of trauma and its consequences for children and youth. Trauma often occurs within the context of adverse social environments, such as poverty, family violence, and chronic maltreatment and neglect.¹²³ Social determinants exacerbate the impact of trauma and increase vulnerability to delinquent behavior. Lack of support from networks, access to positive role models, and exposure to delinquent peer groups further compound the effects of trauma on social functioning and behavior.

It is the interplay of these biological, psychological, and social factors that underscore the complexity of trauma and children and youth. An outcome or behavior of an adolescent cannot be determined by one factor, especially when that outcome or behavior is a result of trauma. Identifying and addressing trauma comprehensively requires a holistic understanding of the inner connective domains of each of these factors.

Changes in the physical brain can lead to emotional dysregulation, which often results in difficulty forming trusting relationships and increasing risk-taking behaviors.¹²⁴ Both of those social outcomes contribute to delinquent behavior but are a result of the biological and psychological factors working in the background. This connection provides an example of the direct correlation between biological, psychological, and social effects of trauma viewed together rather than in isolation. Another example is the dysregulation and change in size of brain regions

¹²¹ Cannon & Hsi, *supra* note 35, at 461. *See also* McLaughlin et al., *supra* note 85, at 584 (evidence from animal and human studies demonstrates consistently that early exposure to threat is associated with long-term changes in neural circuits that underlie emotional learning).

¹²² McLaughlin et al., *supra* note 85, at 584.

¹²³ Cannon & Hsi, *supra* note 35, at 481; Ko et al., *supra* note 16, at 398.

¹²⁴ Cannon & Hsi, *supra* note 35, at 461.

that lead to anxiety and depression-like behaviors, which also impact relationship and social functioning.¹²⁵ These factors do not and cannot operate in isolation. They interact dynamically to shape an individual's response to trauma.

There is not currently extensive research applying the biopsychosocial model to trauma, but as that research develops, a biopsychosocial approach can and should still be applied to the experiences of children and youth involved in the juvenile justice system. If the goal is to rehabilitate children and youth who encounter the system, those who interact with the adolescents should consider all the biological, psychological, and social factors that brought them to the system in the first place.

V. PROPOSED COMPONENTS OF A TRAUMA-INFORMED JUVENILE JUSTICE SYSTEM:

THE APPLICATION OF THE BIOPSYCHOSOCIAL MODEL

The implementation of a trauma-informed juvenile justice system should utilize the biopsychosocial model, which recognizes the interplay between biological, psychological, and social factors and how they shape individuals' responses to trauma.¹²⁶ By integrating this model into the operation of the juvenile justice system, the system can develop more effective strategies for identifying, assessing, addressing, and treating the needs of children and youth who have been impacted by trauma. A trauma-informed approach further removes the system from punitive measures, prioritizes rehabilitation, and mitigates the adverse effects of trauma. Trauma-informed care in the juvenile justice system can promote positive outcomes for justice-involved children and youth. Overall, a trauma-informed juvenile justice system should presume the children and youth

¹²⁵ McLaughlin et al., *supra* note 85, at 585.

¹²⁶ Griffin et al., *supra* note 49, at 277.

who enter the system have experienced trauma, identify that trauma, and implement treatment of that trauma.

Trauma-informed practices and care can begin in the early stages of any process within the juvenile justice system. Early identification of trauma experienced by children and youth who are now in the system allows for appropriate intervention to take place to prevent further traumatization or other escalation of delinquent behavior. Identification could begin as early as initial contact with law enforcement. Law enforcement is often one of the first professionals in the legal system that children and youth encounter. Trauma-informed care should occur at this level. The approach to children and youth who engage in delinquent behavior should be shifted from viewing them as problem makers towards viewing them as the results of problems that have happened to them.

Another step may be some kind of screening for trauma. Parents would be allowed to opt out of this, but it wouldn't have to be anything overly formal. It would not be unreasonable to have a presumption of trauma in the juvenile justice system, given what research has shown about the percentage of justice-involved children and youth who have experienced trauma.¹²⁷ The overwhelming evidence of trauma experienced by children prior to their involvement with the juvenile justice system demands the implementation of a presumption regarding a child's history of trauma.

Once screening is done, appropriate behavioral health treatments could take place. Some trauma-focused therapies include cognitive-behavioral therapy (TF-CBT). This therapy has the goal of reducing trauma symptoms, improving emotional regulation, and promoting resilience in

¹²⁷ Kostic, *supra* note 78, at 7.

children and youth who have experienced and been impacted by trauma.¹²⁸ Cognitive behavioral therapies often accomplish these goals by addressing destructive thoughts and fostering cognitive discipline.¹²⁹ Cognitive behavioral therapies often effectively reduce recidivism and improve overall mental health outcomes for children and youth who have experienced trauma.¹³⁰ Further, services that are provided should be done in safe settings. These evidence-based treatments would be best suited to take place at school, in the community, or at home.¹³¹

Trauma-informed and trauma-sensitive principles can be implemented and reevaluated through every stage of the juvenile justice process. Trauma should inform each aspect of the juvenile justice system, as trauma has implications throughout the whole process. In juvenile delinquency settings, trauma can be determinative of competency to stand trial, capacity to appreciate wrongfulness, understanding their rights, culpability, and much more.¹³² Adolescents can make it to this point in the system process without adequately considering or addressing their needs. In some cases, unless discovered by a defense attorney through interviews or the juvenile's history in the system, information about a juvenile's trauma is unknown,¹³³ and the process for that individual doesn't accurately consider the biological, psychological, or social impacts that may have brought them into the system in the first place. Children are already less culpable than adults, given their underdevelopment.¹³⁴ But when this already diminished culpability is viewed through

¹²⁸ Ferrer, *supra* note 19, at 566. *See also* Samantha Buckingham, *Trauma Informed Juvenile Justice*, 53 AM. CRIM. L. REV. 641, 645 (2016) (The intervention components of the TFCBT model include: psycho-education about trauma and the ways in which it can impact an individual, relaxation, expression and regulation of feelings, cognitive coping and reframing of the events to correct inaccurate attributions about cause and responsibility, gradual exposure to the traumatic memories and events, and completion of a trauma narrative).

¹²⁹ McGarvey, *supra* note 7, at 107.

¹³⁰ *Id.*

¹³¹ Buckingham, *supra* note 128, at 670.

¹³² *Id.*

¹³³ *Id.*

¹³⁴ *Id.*

the lens of trauma as well, it even further emphasizes the need for the juvenile justice system to consider and address trauma to be rehabilitative.

Additionally, as children and youth reenter the community, reunify with their families, or move on to the next part of their process in the juvenile justice system, trauma-informed care and services should be present. Any opportunity to identify and treat mental health concerns should be utilized if the system is truly purporting to be rehabilitative.

To implement a trauma-informed perspective in the juvenile justice system, the education of all professionals in the system should be promoted. While it will not be compulsory, increasing the number of continued legal education opportunities that provide information about trauma and trauma-informed care for attorneys and other professionals in the juvenile justice system may be a good first step in shifting toward trauma-informed care throughout the whole system. This education could include how to identify behaviors that result from trauma, how to mitigate those behaviors, proper treatments, and how to avoid re-traumatization while in the system. It should additionally include informing the professionals within the system of the myths surrounding race and socioeconomic status. This will be a good intermediary solution. Providing and requiring consistent training is likely very expensive and may be impractical. But, if more opportunities are presented and potentially incentivized by the juvenile justice system, some education is better than none.

Ideally, early intervention and prevention efforts would be taken prior to involvement within the system by means of trauma-informed care in other places like schools and within the medical field. Traumatic impacts can occur even before a child is born,¹³⁵ so the sooner any trauma

¹³⁵ Delima & Vimpani, *supra* note 92, at 49.

is identified, the better.¹³⁶ This collaborative, multi-disciplinary intervention and prevention would help disrupt and alter the cycle of experiencing trauma that leads to involvement in the juvenile justice system. It is more effective and less expensive to prevent trauma and toxic stress in children and youth from happening in the first place rather than retroactively treating the effects later.¹³⁷ These earlier efforts are needed to help children and youth who have experienced trauma and it will help them avoid the path towards the juvenile justice system. While this paper only addresses trauma-informed care within the juvenile justice system, trauma-informed care would be most impactful and beneficial in all places children and youth are.

VI. CHALLENGES OF IMPLEMENTING AND LEGAL IMPLICATIONS

Mental health systems must enhance coordination with various stakeholders in the juvenile justice system, including police, corrections, and probation. This collaboration may be particularly challenging in larger cities. Additionally, more therapists need training in trauma-focused evidence-based practices, accompanied by additional support to mitigate the risk of vicarious trauma. Current funding limitations hinder access to trauma-specific treatment for children in the juvenile justice system, suggesting a need for legislative reform. Resources, time, and money are always the roadblocks; however, upfront costs may be offset by reduced recidivism and future involvement in the system. Successful implementation could occur by leveraging support from organizations that have already encouraged and helped fund trauma-informed approaches. Some of these organizations include The National Commission on Correctional Healthcare, The National Council of Juvenile and Family Court Judges, The National Juvenile Defenders Center, The Department of Justice and its Office of Juvenile Justice and Delinquency Programs, The National

¹³⁶ Cannon & Hsi, *supra* note 35, at 490 (discussing research that indicated that early intervention is more successful than later interventions).

¹³⁷ Ferrer, *supra* note 19, at 586.

Institute of Justice, The American Bar Association, and The Attorney General’s National Task Force on Children Exposed to Violence.¹³⁸ This support would be beneficial when looking to make legislative changes that impact the juvenile justice system.

It will also be critical to ensure compliance with other legal and ethical standards, as with any new legislation or initiative. There may be concerns with confidentiality, privacy, privilege, rights of parents/guardians, and the children themselves. It would likely be the case that individuals could opt out of parts of trauma-informed care, like treatment, but the initial screenings that result in diagnosing may be compulsory in some regards. But, until anything is legislated as mandatory, initial issues will not likely be present.

Additionally, because there aren’t many established juvenile justice systems that have implemented trauma-informed care, especially none that have implemented a biopsychosocial approach to trauma-informed care, it is difficult to say with certainty the outcomes of a system like this. But looking at what is certain about the research and the impact of treatment for children and youth who have experienced trauma, the results are promising.

VII. THE BENEFITS AND POTENTIAL OUTCOMES OF A BIOPSYCHOSOCIAL APPROACH TO TRAUMA-INFORMED CARE

Trauma-informed approaches within the juvenile justice system offer significant benefits for the mental health of justice-involved youth. Trauma-informed practices better identify and treat

¹³⁸ The National Commission on Correctional Healthcare, <https://nicic.gov/weblink/national-commission-correctional-health-care> (last visited 3/6/2026); The National Council of Juvenile and Family Court Judges, <https://www.ncjfcj.org/> (last visited 3/6/2026); The National Juvenile Defenders Center, <https://www.defendyouthrights.org/> (last visited 3/6/2026); The Department of Justice and its Office of Juvenile Justice and Delinquency Programs, <https://ojjdp.ojp.gov/> (last visited 3/6/2026); The National Institute of Justice, <https://nij.ojp.gov/> (last visited 3/6/2026); The American Bar Association, <https://www.americanbar.org/> (last visited 3/6/2026); The Attorney General’s National Task Force on Children Exposed to Violence, <https://www.ojp.gov/ncjrs/virtual-library/abstracts/report-attorney-generals-national-task-force-children-exposed> (last visited 3/6/2026).

trauma, which is often an underlying issue for children and youth in the juvenile justice system.¹³⁹ Creating a holistic understanding of individual circumstances can reduce symptoms and improve mental well-being.¹⁴⁰ Additionally, initiating mental health support at a young age provides opportunities for skill development in coping, emotional regulation, and the formation of healthy attachments, ultimately promoting overall well-being in adolescents' transition into adulthood.

Trauma-informed care also addresses and treats the root causes of delinquent behavior rather than merely addressing symptoms. By addressing trauma triggers and risks through intervention and treatment at a young age, justice-involved children and youth may be less likely to engage in future delinquency or criminal acts. Emphasizing rehabilitation and the development of healthy skills can facilitate community reintegration and reduce the likelihood of reoffending. Trauma-informed care promotes positive outcomes beyond individual mental health, extending to relationships with parents or caregivers. Considering intergenerational traumas, interventions can help heal family dynamics and promote healthy social relationships.¹⁴¹ Through the biopsychosocial model, holistic well-being is fostered by addressing multiple domains of being—biological, psychological, and social.¹⁴²

Implementing trauma-informed approaches likely yields cost-effective and long-term societal benefits. Reductions in recidivism can lead to long-term savings through fewer criminal justice expenses. Further, improvements in mental health at young ages naturally results in fewer crises, emergencies, or inpatient interventions related to mental health, leading to additional cost savings. Justice-involved youth who receive trauma-informed care can contribute more

¹³⁹ See PUZZANCHERA ET AL., *supra* note 1, at 77.

¹⁴⁰ Engel, *supra* note 65, at 387.

¹⁴¹ Children's Bureau, *supra* note 56, at 2.

¹⁴² *Id.*

meaningfully to their own lives and society, fostering enhanced public health and safer communities overall.

Further research should be done to confirm and analyze these likely outcomes. As more juvenile justice systems integrate a trauma-informed approach through the biopsychosocial model, there will be real data to analyze, and adaptations to reality can be made accordingly. There is a need for continued research and development in this area as more systems adopt trauma-informed care, and more results can be analyzed. Policy recommendations and standards should be developed to best integrate trauma-informed care into juvenile justice systems.

VIII. CONCLUSION

Trauma is complex and multifaced so the method taken to address it should be equally complex and comprehensive to effectively remedy and treat the issue. Addressing trauma in the juvenile justice system requires a holistic, comprehensive approach that acknowledges the complexity of trauma by evaluating biological, psychological, and social factors that affect trauma and how it's treated and addressed in the juvenile justice system.

A trauma-informed juvenile justice system is imperative. Trauma greatly impacts individuals who experience traumatic events. Justice-involved children and youth and those in the system disproportionately experience trauma compared to the general population or other children and youth with otherwise similar backgrounds.

Applying the biopsychosocial model to a juvenile justice system with trauma-informed care will be critical for the overall well-being of children and youth currently involved in the juvenile justice system. By creating safe and supportive environments, professionals in the juvenile justice system can better care for currently involved children and youth as well as better prepare them for the future. If mental health issues can be properly taken care of while the children and

youth are still developing, there will likely be a reduced chance of recidivism for those justice-involved children and youth and instead contribute positively and healthily to their families and society.

Ultimately, by embracing the holistic biopsychosocial approach to trauma-informed care, the juvenile justice system can better serve justice-involved children and youth and act as a catalyst for positive change in the lives of young individuals affected by trauma. A juvenile justice system that purports to be rehabilitative should consist of trauma-informed care, and the biopsychosocial model should be applied in the creation of said trauma-informed care.