"Trauma Informed Courts-What Does That Mean to Courts, Attorneys and Clients?"

Joint Meeting of the Robert M. Foster Inns of Court and the Florida Family Law Inns of Court Thursday, February 18, 2021 5:30 p.m.



Lynn Tepper, Circuit Judge, Retired 6th Judicial Circuit, Pasco County, FL

"Trauma Informed Courts-What Does That Mean to Courts, Attorneys and Clients?"

Joint Meeting of the Robert M. Foster Inns of Court and the Florida Family Law Inns of Court Thursday, February 18, 2021 5:30 p.m.

Table of Contents

Family Court Guiding Principles1
What Are Aces?2
The Truth About Aces
Child Trauma: Connecting the Dots4
What is Executive Function?5
NCTSN-Helping Traumatized Children: Tips for Judges6
Child Maltreatment: Sexual Abuse and Psychological Maltreatment9
The Origins of Addiction: Evidence from the Adverse Childhood Experiences Study
NCTSN Bench Card For the Trauma-Informed Judge
National Child Traumatic Stress Network Resources40
Trauma-Responsive Practices for Attorneys41

Family court guiding principles

https://www.flcourts.org/Resources-Services/Court-Improvement/Family-Courts/Family-Court-Basics2/Family-Court-Tool-Kit-The-Basics/Family-court-guiding-principles#

- 1. Children should live in safe and permanent homes.
- 2. The needs and best interests of children should be the primary consideration of any family court.
- 3. All persons, whether children or adults, should be treated with objectivity, sensitivity, dignity and respect.
- 4. Cases involving inter-related family law issues should be consolidated or coordinated to maximize use of court resources to avoid conflicting decisions and to minimize inconvenience to the families.
- 5. Therapeutic justice should be a key part of the family court process. Therapeutic justice is a process that attempts to address the family's interrelated legal and nonlegal problems to produce a result that improves the family's functioning. The process should empower families through skills development, assist them to resolve their own disputes, provide access to appropriate services, and offer a variety of dispute resolution forums where the family can resolve problems without additional emotional trauma.
- 6. Whenever possible, parties and their attorneys should be empowered to select processes for addressing issues in their cases that are compatible with the family's needs, financial circumstances, and legal requirements.
- The court is responsible for managing its cases with due consideration of the needs of the family, the litigants, and the issues presented by the case.
- 8. There should be a means of differentiating among cases so that judicial resources are conserved and cases are diverted to non-judicial and quasi-judicial personnel for resolution, when appropriate and consistent with the ends of justice.
- 9. Trial courts must coordinate and maximize court resources and establish linkages with community resources.
- 10. The court's role in family restructuring is to identify services and craft solutions that are appropriate for long-term stability and that minimize the need for subsequent court action.
- 11. Court services should be available to litigants at a reasonable cost and accessible without economic discrimination.
- 12. Courts should have well trained and highly motivated judicial and nonjudicial personnel.

WHAT ARE ACES? AND HOW DO THEY RELATE TO TOXIC STRESS?

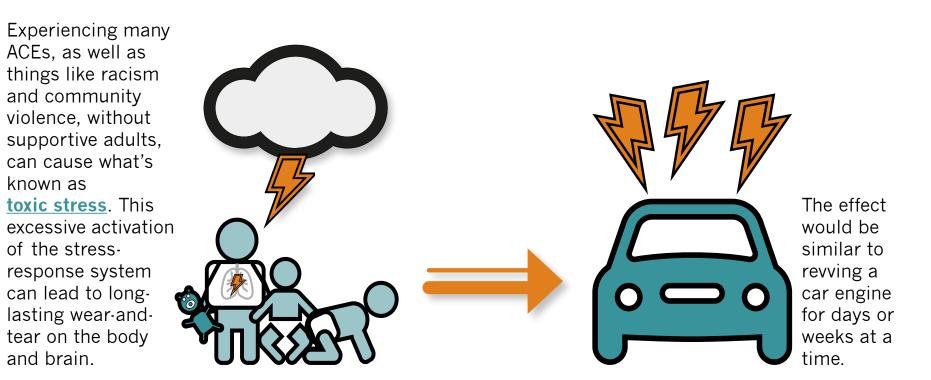
"ACEs" stands for "Adverse Childhood Experiences." These experiences can include things like physical and emotional abuse, neglect, caregiver mental illness, and household violence.



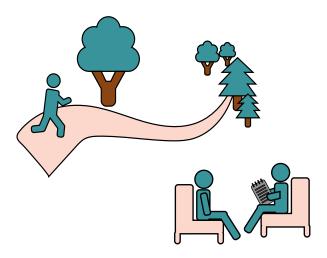
The more ACEs a child experiences, the more likely he or she is to suffer from things like heart disease and diabetes, poor academic achievement, and substance abuse later in life.

ONN

TOXIC STRESS EXPLAINS HOW A(ES "GET UNDER THE SKIN."



WE CAN REDUCE THE EFFECTS OF A(ES AND TOXIC STRESS.



For those who have experienced ACEs, there are a range of possible responses that can help, including therapeutic sessions with mental health professionals, meditation, physical exercise, spending time in nature, and many others.

The ideal approach, however, is to *prevent* the need for these responses by reducing the sources of stress in people's lives. This can happen by helping to meet their basic needs or providing other services.



Likewise, fostering strong, responsive relationships between children and their caregivers, and helping children and adults build core life skills, can help to buffer a child from the effects of toxic stress.

ACEs affect people at all income and social levels, and can have serious, costly impact across the lifespan. **No one who's experienced significant adversity (or many ACEs) is irreparably damaged**, though we need to acknowledge trauma's effects on their lives. By reducing families' sources of stress, providing children and adults with responsive relationships, and strengthening the core life skills we all need to adapt and thrive, we can prevent and counteract lasting harm.

Center on the Developing Child 🕎 HARVARD UNIVERSITY

Learn more about ACEs from the <u>Centers for Disease Control and Prevention</u>. For more information: <u>https://developingchild.harvard.edu/ACEs</u>











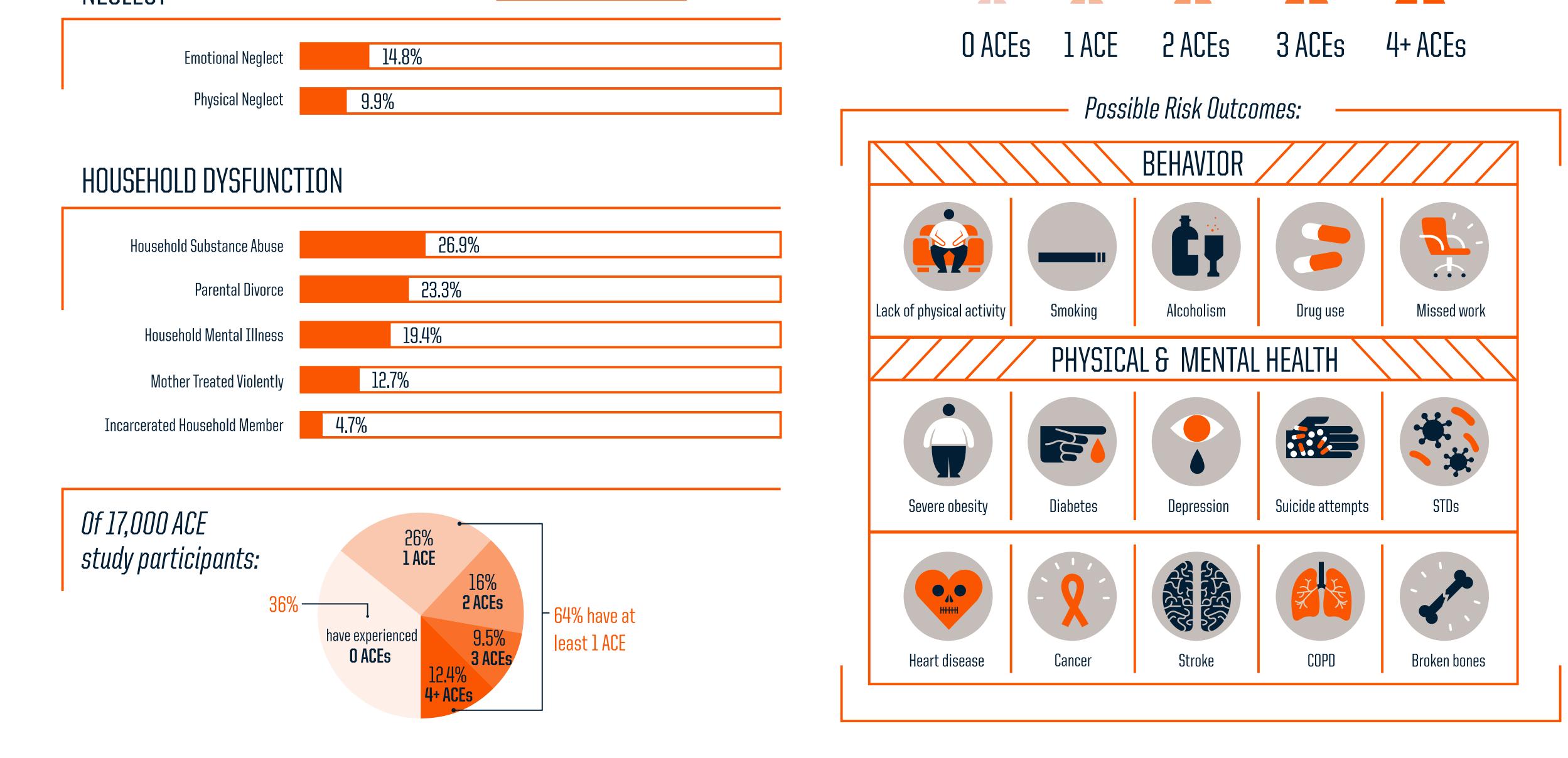
- <i>T</i>	he ACE study*	revealed the	following estimates:	
-------------------	---------------	--------------	----------------------	--

ABUSE

	Physical Abuse		28.3%		
	Sexual Abuse	20.7	%		
	Emotional Abuse	10.6%			
				nercentage of study participants	
				percentage of study participants that experienced a specific ACE	
NEDIEU					

As the number of ACEs increases, so does the risk for negative health outcomes

RISK



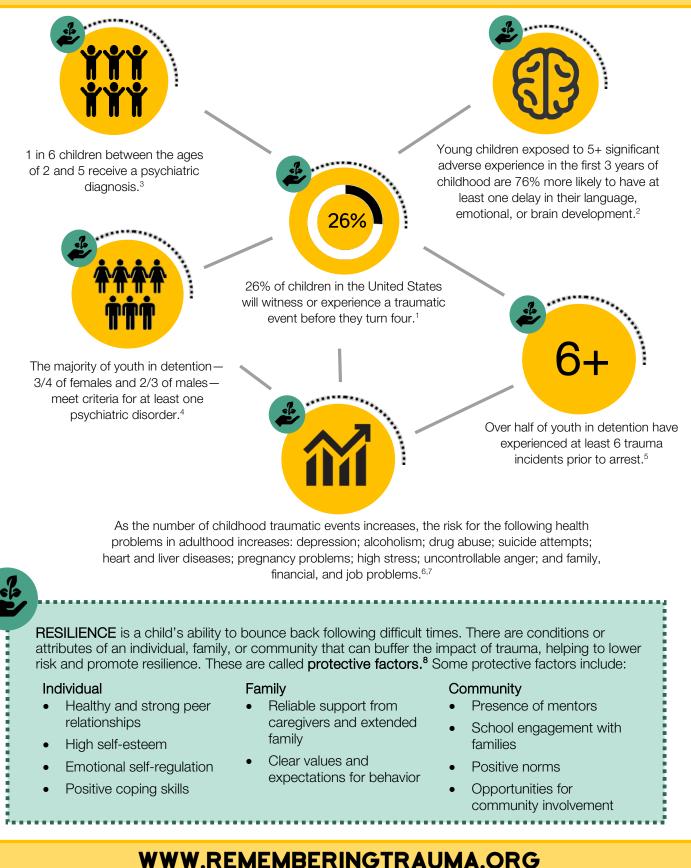






Trauma Informed Courts 003

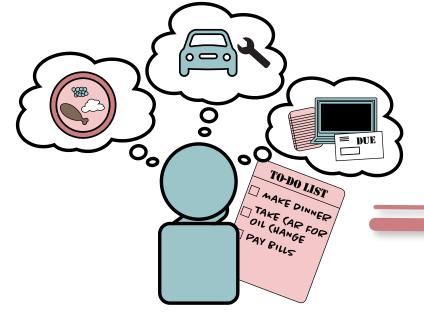
CHILD TRAUMA: CONNECTING THE DOTS



¹National Center for Mental Health Promotion and Youth Violence Prevention, 2012; ²Barth et al., 2008; ³Duke Early Childhood Study: Egger, 2016; ⁴Teplin et al, 2002; ⁵Abram et al., 2004; ⁶Felitti et al., 1998; ⁷Anda et al., 2004; ⁸ O'Connell, Boat, & Warner, 2009.

WHAT IS ECUTIVE FUNCTION? AND HOW DOES IT RELATE TO (HILD DEVELOPMENT?

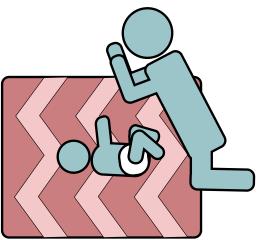
The phrase "executive function" refers to a set of skills. These skills underlie the capacity to plan ahead and meet goals, display self-control, follow multiple-step directions even when interrupted, and stay focused despite distractions, among others.



Much like an air traffic control system at an airport helps planes on different runways land and take off safely, executive function skills help our brains prioritize tasks, filter distractions, and control impulses.

NO ONE IS BORN WITH EXECUTIVE FUNCTION SKILLS, BUT NEARLY EVERYONE CAN LEARN THEM.

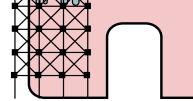
Our genes provide the blueprint for learning these skills, but they develop through experiences and practice. The foundation is laid in infancy, when babies first learn to pay attention. Relationships with

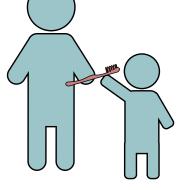


responsive caregivers are particularly important at this stage. Something as simple as playing a game of peekaboo can help build the early foundations of working memory and self-control as a baby anticipates the surprise.

Adults set up the framework for children to learn and practice these skills over time by establishing routines, breaking big tasks into smaller chunks, and encouraging games that promote imagination, role-playing, following rules, and controlling impulses. These techniques are

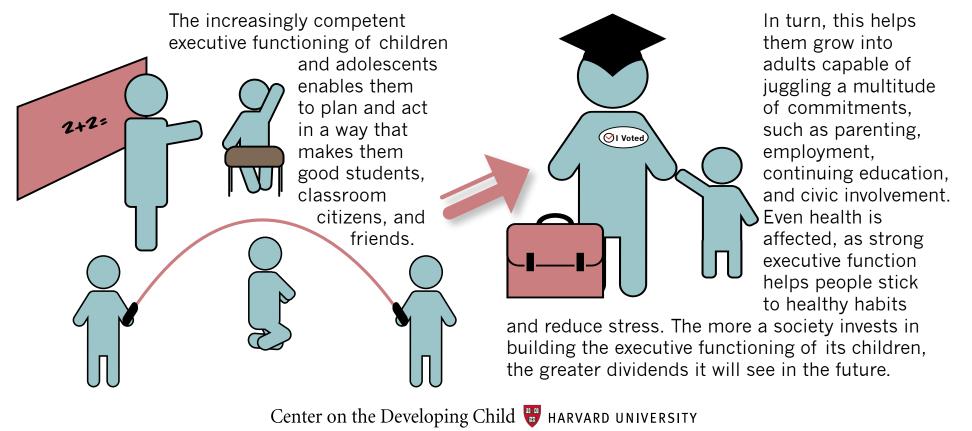
known as "scaffolding." Just as a scaffold supports workers while a building is being constructed, adults can use these activities to support the emergence of children's executive function skills until they can perform them on their own.





These skills typically develop most rapidly between ages 3.5, followed by another spike in development during the adolescent and early adult years. It takes a long time and a lot of practice to develop them, but, as children's executive function skills grow, adults can gradually allow children to manage more and more aspects of their environment.

BUILDING (HILDREN'S EXECUTIVE FUNCTION SKILLS BENEFITS EVERYONE.





Helping Traumatized Children: Tips for Judges

A majority of children involved in the juvenile justice system have a history of trauma.¹ Children and adolescents who come into the court system frequently have experienced not only chronic abuse and neglect, but also exposure to substance abuse, domestic violence, and community violence.²

The psychological, emotional, and behavioral consequences of these experiences can be profound, but may go unrecognized if judges and related personnel do not delve more deeply into the backgrounds of children and adolescents who come before the court.^{2,3} By understanding the impact of trauma on children's development, beliefs, and behaviors, judges can become more effective in addressing the unique needs and challenges of traumatized children and adolescents involved in the juvenile and family court system.

Effects of Trauma on Children and Adolescents

Child abuse and neglect have been shown to adversely affect the growth of the brain, nervous, and endocrine systems and to impair many aspects of psychosocial development, including the acquisition of social skills, emotional regulation, and respect for societal institutions and mores.⁴ Although a significant proportion of traumatized children seen in court meet the diagnostic criteria for posttraumatic stress disorder (PTSD),^{5,6} many others suffer from traumatic stress responses that do not meet the clinical definition of PTSD. Traumatic stress may manifest differently in children of different ages. **Table 1** lists some of the most common traumatic stress reactions seen in children of various ages.

Table 1. Child Traumatic Stress Reactions (By Age Group)				
Age Group	Common Traumatic Stress Reactions			
Young children (Birth–5 y)	 Withdrawal and passivity Exaggerated startle response Aggressive outbursts Sleep difficulties (including night terrors) Separation anxiety Fear of new situations Difficulty assessing threats and finding protection (especially in cases where a parent or caretaker was aggressor) Regression to previous behaviors (e.g., baby talk, bed-wetting, crying) 			
School-age children (6–12 y)	 Abrupt and unpredictable shifts between withdrawn and aggressive behaviors Social isolation and withdrawal (may be an attempt to avoid further trauma or reminders of past trauma) Sleep disturbances that interfere with daytime concentration and attention Preoccupation with the traumatic experience(s) Intense, specific fears related to the traumatic event(s) 			
Adolescents (13-18 y)	 Increased risk taking (substance abuse, truancy, risky sexual behaviors) Heightened sensitivity to perceived threats (may respond to seemingly neutral stimuli with aggression or hostility) Social isolation (belief that they are unique and alone in their pain) Withdrawal and emotional numbing Low self esteem (may manifest as a sense of helplessness or hopelessness) 			

This project was funded by the Substance Abuse and Mental Health Services Administration, US Department of Health and Human Services.

Assessing the Effects of Trauma

Formal trauma assessment is critical to identifying children and adolescents in the courtroom who are suffering from traumatic stress.^{2,3} Well-validated trauma screening tools include:

- UCLA PTSD Reaction Index⁷
- Trauma Symptom Checklist for Children (TSCC)⁸
- Trauma Symptom Checklist for Young Children (TSCYC)^{9, 10}
- Child Sexual Behavior Inventory^{11, 12}

Judges should use professionals experienced in administering and interpreting these assessments to make recommendations to the court. In Stark County, the court now understands that when children have been affected by trauma, they are "stuck" in a hypervigilant response. Being constantly on alert to danger decreases the ability of a youth to study and learn... They lose their temper and fight with little or no provocation.

For years our court treated these cases as "bad behavior" and "lack of self control." It is only in the last several years that we, as a court, have educated ourselves about trauma. As a result, we now know that it is important to ask about trauma. Indeed, we often discover a history of trauma that has gone undetected, despite attempts to help the child through traditional counseling services.³

Judge Michael L. Howard & Robin R. Tener, PhD.

Choosing Appropriate Service Providers

When referring traumatized children and families for care, courts have the unique opportunity to choose practitioners or agencies that understand the impact of trauma on children and can provide evidence-based treatment appropriate to the child's needs.²

While treatment needs to be individualized depending on the nature of the trauma a child has experienced, clinicians should use treatments that have clinical research supporting their use. Evidence-based treatment practices are those that have been rigorously studied and found to be effective in treating child or adolescent trauma. Information on specific evidence-based treatments for child traumatic stress is available from:

- The California Evidence-Based Clearinghouse for Child Welfare (http://www.cachildwelfareclearinghouse.org)
- The National Child Traumatic Stress Network– Empirically Supported Treatments And Promising Practices (http://www.nctsnet.org/nccts/nav.do?pid=ctr_top_trmnt_prom)
- The National Crime Victims Research and Treatment Center– Child Physical and Sexual Abuse: Guidelines for Treatment (http://academicdepartments.musc.edu/ncvc/resources_prof/OVC_guidelines04-26-04.pdf)

Judges may want to develop a list of community providers who have training and experience in delivering evidence-based trauma practices. If the community lacks trained trauma professionals, creating an advisory group that can increase community awareness of evidence-based practices and necessary training requirements might be helpful. It is important to remember that trauma treatment may need to be combined with treatment for other conditions as well, such as substance abuse or learning disabilities. By becoming trauma-informed and encouraging the development and mobilization of traumafocused interventions, judges can "make the difference between recovery and continued struggle"³ for traumatized youth and their families.

Helping Traumatized Children: Tips for Judges The National Child Traumatic Stress Network www.NCTSN.org 2

For More Information On Child Trauma in the Court

The Juvenile and Family Court Journal has published two special editions (Winter 2006 and Fall 2008) on child trauma as it relates to dependency and delinquency issues that come before the court. They are available at http://www.ncjfcj.org/content/blogcategory/364/433/.

References

- 1. Abram, K. M., Teplin, L. A., Charles, D. R., Longworth, S. L., McClelland, G. M., & Dulcan, M. K. (2004). Posttraumatic stress disorder and trauma in youth in juvenile detention. *Arch Gen Psychiatry*, 61(4), 403-410.
- 2. Igelman, R. S., Ryan, B. E., Gilbert, A. M., Bashant, C., & North, K. (2008). Best practices for serving traumatized children and families. *Juvenile and Family Court Journal*, 59(4), 35-47.
- 3. Howard, M. L., & Tener, R. R. (2008). Children who have been traumatized: One court's response. Juvenile and Family Court Journal, 59(4), 21-34.
- 4. Putnam, F. W. (2006). The impact of trauma on child development. Juvenile and Family Court Journal, Winter, 1-11.
- 5. Arroyo, W. (2001). PTSD in children and adolescents in the juvenile justice system. In S. Eth (Ed.), *PTSD in Children and Adolescents* (Vol. 20, pp. 59-86). Arlington, VA: American Psychiatric Publishing, Inc.
- 6. Steiner, H., Garcia, I. G., & Matthews, Z. (1997). Posttraumatic stress disorder in incarcerated juvenile delinquents. J Am Acad Child Adolesc Psychiatry, 36(3), 357-365.
- 7. Steinberg, A. M., Brymer, M. J., Decker, K. B., & Pynoos, R. S. (2004). The University of California at Los Angeles Post-traumatic Stress Disorder Reaction Index. *Curr Psychiatry Rep, 6*(2), 96-100.
- 8. Briere, J. (N.D.). *Trauma Symptom Checklist for Children™ (TSCC™)*. Available from Psychological Assessment Resources, Inc., Luz, FL: http://www3.parinc.com/products/product.aspx?Productid=TSCC
- 9. Briere, J. (N.D.). *Trauma Symptom Checklist for Young Children™ (TSCYC™)*. Available from Psychological Assessment Resources, Inc., Luz, FL: http://www3.parinc.com/products/product.aspx?Productid=TSCYC
- Briere, J., Johnson, K., Bissada, A., Damon, L., Crouch, J., Gil, E., et al. (2001). The Trauma Symptom Checklist for Young Children (TSCYC): Reliability and association with abuse exposure in a multi-site study. *Child Abuse Negl*, 25(8), 1001-1014.
- 11. Friedrich, W. N., Fisher, J. L., Dittner, C. A., Acton, R., Berliner, L., Butler, J., et al. (2001). Child Sexual Behavior Inventory: Normative, psychiatric, and sexual abuse comparisons. *Child Maltreat*, 6(1), 37-49.
- 12. Friedrich, W. N. (N.D.). *Child Sexual Behavior Inventory (CSBI™)*. Available from Psychological Assessment Resources, Inc., Luz, FL: http://www3.parinc.com/products/product.aspx?Productid=CSBI

This product was developed by the Justice System Consortium of the National Child Traumatic Stress Network, comprised of mental health, child welfare, and legal professionals with expertise in the field of child traumatic stress.

This project was funded by the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health & Human Services (HHS). The views, policies, and opinions expressed are those of the authors and do not necessarily reflect those of SAMHSA or HHS.

National Child Traumatic Stress Network

Established by Congress in 2000, the National Child Traumatic Stress Network (NCTSN) is a unique collaboration of academic and community-based service centers whose mission is to raise the standard of care and increase access to services for traumatized children and their families across the United States. Combining knowledge of child development, expertise in the full range of child traumatic experiences, and attention to cultural perspectives, the NCTSN serves as a national resource for developing and disseminating evidence-based interventions, trauma-informed services, and public and professional education.

Suggested Citation: National Child Traumatic Stress Network, Justice System Consortium. (2009). *Helping Traumatized Children: Tips for Judges*. Los Angeles, CA & Durham, NC: National Center for Child Traumatic Stress.

Judging Ne

SEXUAL ABUSE AND PSYCHOLOGICAL MALTREATMENT

> Encyclopedic Volume 2 of 3 Fourth Edition

STM Learning, Inc.

Leading Publisher of Scientific, Technical, and Medical Educational Resources Saint Louis www.stmlearning.com



The Lifelong Effects of Adverse Childhood Experiences

Vincent J. Felitti, MD Robert F. Anda, MD, MS

"They do not want to hear what their children suffer. They've made the telling of the suffering itself taboo."

Alice Walker, Possessing the Secret of Joy.

This chapter will document how adverse childhood experiences play a major and lifelong role in the difficulty, effectiveness, and cost of adult medical practice, and are the major origin of numerous important public health, medical, and social problems. In all of these areas, the relationship between adverse childhood experiences and adult well being ordinarily goes unrecognized. Our evidence comes from the Adverse Childhood Experiences (ACE) study, a collaborative effort between Kaiser Permanente and the Centers for Disease Control (CDC) involving over 17 000 adults in a major retrospective and prospective epidemiologic analysis. The ACE study reveals how 10 categories of adverse life experience in childhood have a demonstrable impact, decades later, on health risks, disease burden, social malfunction, medical care costs, and life expectancy. This chapter will show that events that are lost in time, and then further protected by (shame, Secrecy, and (social taboos' against exploring certain areas of human experience, cost us heavily in health, humanity, and dollars. Routinely (integrating) the inquiry about, acknowledgement, and discussion of traumatic life experiences into the medical history has major benefits to patients, and is generally welcomed by them, though it is often uncomfortable for physicians. This professional discomfort has secondary ramifications in limiting the availability of such information in medicine, social work, and in the law enforcement, legislative, and judicial systems.

ORIGINS OF THE ACE STUDY

The ACE study had its origins in our repeated counterintuitive experiences while operating a major obesity-reduction program using the technique of supplemented absolute fasting, which allows weight to be reduced non-surgically at approximately the rate of 300 lbs per year.¹ We repeatedly found many patients fleeing their own success when major weight loss occurred. We were forced to recognize that eating has major psychoactive benefits that are obvious enough to be built into the language: "Sit down and have something to eat; you'll feel better." Many of our patients had a significant need to feel better, though these rarely surfaced spontaneously and hence were not known. Further exploration led to discovering the protective *benefits* of obesity. We slowly discovered that many of these patients had life experiences for which being obese was protective. If one has a need to de-sexualize oneself, as in a reaction to rape or childhood sexual molestation, then gaining a hundred pounds is an effective approach. A former rape victim who gained 105 pounds in the year subsequent to her rape commented: "Overweight is overlooked, and that's the way I need to be." 5

Similarly, being larger than others can project a sense of power, as illustrated in the common expression, "Throwing your weight around."

Interviews with our obese patients unexpectedly led to discovering myriad long-term medical effects of seriously troubled childhoods. Such histories were almost never documented in their medical records. The high prevalence of abusive life experiences in the childhoods of our obese patients ultimately led us to consider to what degree this might also be the case in a general population. The ACE study was devised to determine in a general, middle-class, adult population the prevalence of 10 categories of stressful, traumatic childhood experiences that we had found so common in our obese population. And further, to determine what, if any, the additional long-term effects of these experiences might be.

These clinical observations at Kaiser Permanente's Department of Preventive Medicine in San Diego dovetailed with new approaches to understanding the emotional underpinnings of behavior and disease that had recently emerged at the CDC among studies of nationally representative samples of US adults. Among these studies were: linking self-reported stress to the incidence of peptic ulcer disease,² discovering the higher prevalence of smoking and lower incidence of quitting among persons who are depressed,³ and finding an increased incidence of coronary heart disease among persons experiencing, hopelessness. The combination of clinical observations at Kaiser Permanente (KP) and the public health approach using the tools of medical epidemiology at the CDC proved to be a powerful combination in designing the ACE study and quantifying and interpreting the observed long-term effects of ACEs.

The Department of Preventive Medicine at Kaiser Permanente in San Diego provided an unusual resource for carrying out such a study in its Health Appraisal division. At the time the ACE study began in 1995-1997, over 50 000 adults a year voluntarily chose to come for periodic comprehensive medical evaluation. This evaluation included detailed medical history, extensive laboratory testing, and complete physical examination. In any 4-year period, 81% of the adult members in San Diego chose to avail themselves of this service.

The ACE study consisted in our asking two groups of such adult Kaiser Health Plan members, each consisting of 13000 consecutive individuals requesting such health appraisal, whether they would help us understand how childhood experiences might affect health later in life. We explained that we would also track their medical records prospectively to follow their clinical courses forward in time. The study was carried out in two separate waves to allow mid-point revision if necessary. Almost 70% of those asked agreed to participate in the ACE study. All persons had high-quality health insurance from Kaiser Health Plan. Average agr was 57 years with a range from 26 into the nineties. Almost exactly half were men half women. Approximately 80% were white including Hispanic, 10% black, 10% Asian; 74% had attended college. This was clearly a middle-class American population, and not one that could be dismissed as "not in my practice." This may have a bearing on the deep intellectual interest the findings of this study have generated, as well as on the resistance to using them in practice.

Approval of the ACE study was slowed by institutional review board (IRB) concern that some patients might emotionally decompensate when faced with the intrusive questions that we proposed to ask by questionnaire about childhood experiences. Colleagues assured us that patients would be furious when faced with these types of questions and they believed that patients would be unlikely to respond truthfully. IRB agreement was ultimately obtained by arranging to have a responsible person carry a cell phone 24 hours a day for 3 years to accept emergency calls from those putative persons who might decompensate when asked about the reality of their lives. However, no phone calls were received. Instead, we had a number of patient compliments and a small collection of letters, one written on lined paper by an elderly woman: "Thank



Chapter 10: The Lifelong Effects of Adverse Childhood Experiences

you for asking. I feared I would die and no one would ever know what had happened."

Ten categories of adverse childhood experiences were queried by the 4-page ACE study questionnaire that was mailed home to participants after they had filled out and submitted a lengthy general medical questionnaire. Inquiry in the ACE questionnaire was specifically limited to the first eighteen years of life and initially consisted of eight categories. Three categories were of abuser physical abuse (not spanking) contact sexual abuse, and emotional abuse (typically recurrent humiliation). Five categories involved major household dysfunction) These consisted of growing up in a household: where the mother was treated violently; from which a household member was

imprisoned; in which a member was alcoholic or a drug user; where a member was seriously depressed, suicidal, or mentally ill; and where the biological parents had separated or divorced. In the second wave of the study, two categories were added relating to major emotional and physical neglect. Specifics of the actual questions are provided in the first ACE study publication.⁵

An ACE score was created which summed the number of categories that were experienced. The *number* of incidents or events within an ACE category was not summed. The ACE score can thus range from 0 to 8 in the first wave, and from 0 to 10 in the second group of 13 000 patients who were invited to participate. Surprisingly, the ten categories turned out to be essentially co-equal in terms of measured long-term effects. The conceptual design of the ACE study is depicted in Figure 10-1.

ACE scores, the number of categories (not incidents) of adverse childhood experiences, represent the eff-acknowledged prevalence of traumatic life experiences during the childhoods of the 17 337 middle class adults in our study cohort. The prevalence of traumatic life experiences in childhood and adolescence was far higher than had been conceived. In retrospect, there was no basis for any opinion in terms of the prevalence of ACEs, because such information is well protected by share and secrecy, and we had previously been inhibited by our own ignorance against the routine exploration of certain areas of human experience. Prevalence data for the 10 ACE categories is presented in **Table 10-1**. One readily sees that only 33% had an ACE score of 0, while one in six adults acknowledged an ACE score of 4 or more categories during

Abuse, by Category	Prevalence (%)
Psychological (by parents)	11%
Physical (by parents)	28%
Sexual (anyone)	22%
Neglect, by Category	
Emotional	15% ·
Physical	10%
HOUSEHOLD DYSFUNCTION, BY CATEGORY	
Alcoholism or drug use in home	27%
Divorce or loss of biological parent <18	23%
Depression or mental illness in home	17%
Mother treated violently	13%
Imprisoned household member	5%

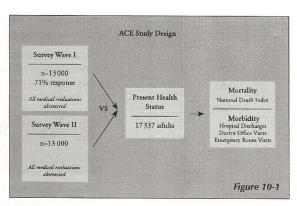


Figure 10-1. ACE Study design.

1:6 yormone

205

childhood. The question, of course, is whether this matters. Doesn't time heal? Aren't children resilient?

However, we were to find that, in this realm, time does not heal. Rather, time conceals, and resilience is real but partial, and is too commonly attributed, merely because of the achievement of focal economic or social success.

This chapter will approach the biomedical relevance of adverse childhood experiences to various outcomes, first by addressing common health risks underlying disease, then disease itself, and finally death. Subsequently, this chapter will address the emotional toll and the social effects of adverse childhood experiences.

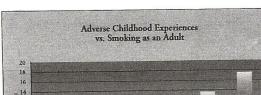
HEALTH RISKS

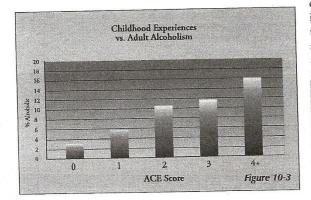
The harmful effects of smoking tobacco have been widely recognized for the past five decades. Nicotine is considered an addicting substance, addiction being defined as the unconscious (compulsive use of psychoactive agents. A more colloquial explanation of addiction is that people find it difficult to get enough of something that *umost* works to alleviate stress. (worry anxiety, or any similar negative experience. Generally, addiction has been thought to be due to a substance having unspecified molecular properties that act on the brain, resulting in some form of capture from repeated exposure. Indeed, nicotinic receptors are widespread in the brain, supporting this concept. Given the popularity of the belief that addiction is substance-dependent, it is thus easy to overlook the significant differences in life experiences between individuals, underlying the likelihood of their compulsive, use of certain commonly available substances like nicotine/alcohol/ or street drugs/

Figure 10-2. Adverse childhood experiences vs. smoking as an adult. All graphics have a p value of .001 or better.

Figure 10-3. Adverse childhood experiences vs. alcoholism.

The ACE study found that the likelihood of current smoking in San Diego, a city with heavy public health pressures against smoking, is directly proportionate to ACE score.⁷ This is illustrated in **Figure 10-2**, and is not compatible with addiction being simply due to repeated exposure to nicotine.





Alcoholism has major biomedical and social ramifications that are generally accepted as consequences of the addicting qualities of alcohol. Among the multiple ACE questionnaire items referring to alcoholism, the most direct was Question 18, "Have you ever considered yourself to be an alcoholic?" Figure 10-3 illustrates the proportionate relationship to self-acknowledged alcoholism of developmental life experiences captured in the ACE score.⁸ If the addicting qualities of alcohol were intrinsic to the substance, there would not be this strong, proportionate relationship to an individual's ACE score.

The strongest relationship of the ACE score to addiction is seen with <u>injection</u> of street drugs.^{6,9} The long-term impact of injection drug use is heavily medical and social, with major involvement of law enforcement. It is commonly believed that repeated use of many street drugs will in itself produce addiction. Our findings challenge those views. Figure 10-4 shows the dramatic and proportionate relationship of ACE score to self-acknowledged injection drug use. At ACE score 6, there is a 4600% increase in the likelihood of later, becoming an injection drug user, compared to the likelihood at ACE score 0. Several epidemiologists at CDC described thisintense relationship of injection drug use to prior traumatic lifeexperiences as being of a magnitude seen once in a career.

The nature of the relationship between the ACE score and intravenous drug use strongly suggests that addiction has Partere

relatively little to do with supposed addicting properties of certain substances, other than their all providing a desirable psychoactive relief. Rather, it is clear that the ameliorating effect that is being sought is proportionate to the sum of the number of categories of traumatic life experiences suffered. In other words, this is an understandable attempt at self-treatment with something that *almost* works, thus creating a drive for further doses. An additional insight may be obtained by realizing that the demonized crystal meth is the very same psychoactive chemical, methamphetamine, which was first introduced in the US as a prescription antidepressant by Burroughs Wellcome in 1940 under the brand name Methedrine. Amphedroxyn was the Lilly brand name.

The broad public health perspective brought by the collaboration of Kaiser Permanente with CDC led to the inclusion of a wide array of health behaviors, disease risk factors, and health outcomes into the design of the Adverse Childhood Experiences study: eg, obesity inactivity promiscuity liver disease, and mortality, Further information about them, their relationship to antecedent life experiences, and their consequences may readily be found in seventy ACE study publications, most of which are abstracted at the CDC's ACE study web site: http://www.cdc.gov/ACE/ index.htm.

Ultimately, one sees that many of the more serious public health problems, while indeed undesirable for society, are *also* unconsciously attempted solutions to personal problems that are unrecognized because they are lost in time, and further protected by shame, by secrecy, and by social taboos against exploring certain realms of human experience and activity. This represents a public health paradox wherein the public health problem is also a personal solution. This public health paradox underlies many of our most difficult current problems in medicine and public health: in general people are not eager to give up the thing that comes closest to helping, especially at the behest of those who have no idea what has gone on in their lives. As an example, some people continue to smoke in the face of life-threatening pulmonary or cardiovascular disease.¹⁰ Given the reality of some people's lives, it is important to at least try to understand that not everyone wishes to serve out a full life sentence, and that help is sometimes best given by understanding than by trying to impose superficial advice.

BIOMEDICAL DISEASE

In the three prior examples of easily recognized health risks, there is a pathway that transmutes life experience in childhood to biomedical disease in adult life. The relationship of smoking, alcoholism, and use of illicit drugs to subsequent disease is too obvious to belabor; these coping devices are major intermediary mechanisms leading to disease. Traumatic life experiences in childhood, captured by the ACE score, appear to be a major cause underlying the unconscious selection of those substances that are used because of their psychoactive benefits. Their risks are certainly major, but distant. Most of us understand that when stresses are sufficient, the future will often be sold out to obtain current relief. Nevertheless, in spite of the routine co-occurrence of opposing forces in nature, many find it difficult to accept that the same substance may have both good and bad qualities. As physicians we often approach complex and difficult behavioral problems by paying attention to only half the equation, and so we are at a significant disadvantage.

In looking at common disease outcomes like chronic obstructive pulmonary disease (COPD) and coronary artery disease (CAD), one may recognize that not every person with COPD has been a smoker, nor does everyone with CAD have the underlying risk factors identified in the Framingham study. This raises the question: what causes their disease? In coronary artery disease, approximately 10-15% of cases have

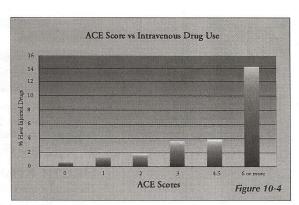


Figure 10-4. Adverse childhood experiences vs. intravenous drug use.

none of the currently recognized underlying risk factors. However, when ACE scores are evaluated in this group, nine of the ten categories of adverse childhood experience are found to be associated with a distinct increase in the likelihood of coronary disease in adult life, even in the absence of the Framingham risk factors.¹¹ This indicates a second major pathway leading from life experience in childhood to biomedical disease in adult life: the effect of major unrelieved stress over prolonged periods of time. It is a pathway that is currently under extensive study; its ultimate limits and ramifications are yet to be worked out.

In an analysis of 21 different autoimmune diseases, it was possible to demonstrate a proportionate relationship between ACE score and the likelihood of developing autoimmune diseases decades later in adult life.¹² Our evolving understanding of these mechanisms involves adverse early life experiences affecting development of

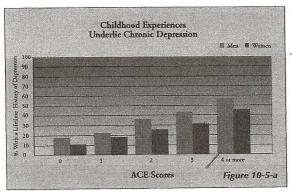
ences for selected outcomes in women. Figure 10-5-c. Adverse childhood experiences vs. 50-year antidepressant use.

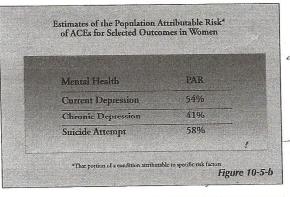
Figure 10-5-a. Adverse childhood experi-

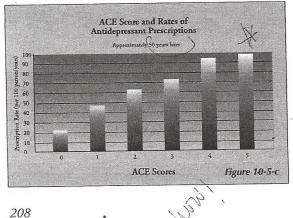
Figure 10-5-b. Estimates of the population

attributable risk of adverse childhood experi-

ences vs. depression.







the brain, thus altering the complex inter-relationship of neural, endocrine, and immune systems.¹³ Recently, it has become increasingly clear that the dyscontrol resulting from chronic stress in these systems causes the release of pro-inflammatory cytokines, chemicals which cause inflammatory changes in the endothelial lining of minute blood vessels thereby blocking circulation to tissues they ordinarily supply, resulting in various levels of scar formation and thus hypofunction.^{14,15}

Although the demonstrated relationship of adverse childhood experiences to a lifetime history of fractures² and liver disease¹⁶ is readily understandable via the intermediary mechanisms of drug-related accidents to fractures, and alcohol or hepatitis to liver disease, the basis for the proportionate relationship of ACE score to malignancy is more subtle.¹⁷ Once one gets beyond the relationship of smoking to lung cancer, we remember that all of us produce throughout our lives a low level of malignant cells that are processed out by our immune systems. Thus, "getting cancer" typically involves either an increased rate of production of malignant cells as in carcinogen exposure, or a decreased rate of clearance as in the immunosuppressed states required for organ transplantation. In recent years physicians have come to understand the role of major unrelieved stress in immunosuppression, both as a result of prolonged high levels of circulating cortisone analogues and by ultimate dysregulation of the hypothalamic pituitary-adrenal axis with its effects on the immune system.1

Given the above examples of the proportionate, dose-response relationship of ACE score to later biomedical disease, and not even including the upcoming relationship of traumatic childhood experiences to later suicide, it is not surprising that life expectancy would be shortened. Indeed, in the prospective arm of the ACE study, it was found that experiencing six or more categories of adverse life experience in infancy, childhood, or adolescence shortens an individual's life expectancy by almost twenty years.¹⁸

EMOTIONAL DISORDERS

That abusive life experiences should produce subsequent emotional disturbance is hardly unexpected, but the breadth, depth, and chronicity of those outcomes was distinctly greater than anticipated.¹⁹⁻²¹ Depression, suicidality, chronic anxiety, amnesia, and hallucinations exemplify most of our findings in

> stide

6

Nuditie

slide

6 or more

Chapter 10: The Lifelong Effects of Adverse Childhood Experiences

this area. **Figure 10-5-a** illustrates the pervasive relationship of childhood experiences to self-acknowledged chronic depression decades after the fact. Not all chronic depression can be traced to childhood, but when the population attributable risk was studied to estimate how much of the problem can be traced to childhood experiences, one can see that it is a major component (see **Figure 10-5-b**). **Figure 10-5-c** shows that antidepressant use on average a half-century later is still strongly related to childhood experiences. As Barbour has perceptively stated, depression is not a disease but a normal response to abnormal life experiences.²² The fact that neurochemical changes are demonstrable illustrates the necessary intermediary mechanisms for depression to manifest itself nor its causality. Mistaking mechanism for cause is a temptingly comfortable error to be avoided if advances in understanding are to be made.

A similar proportionate relation exists between childhood experiences and suicide attempts later in life, and is illustrated in **Figure 10-6**. At ACE score 7 and higher there is a dramatic increase in the likelihood of attempted suicide as compared to ACE score 0: a 31-fold or 3100% increase.²³

It appears inescapable that a major portion of depression and attempted suicide can be traced back to 10 categories of traumatizing life experiences in childhood. Further, prescription rates for a xiety-reducing medications approximately a halfcentury after childhood show a similar proportionate relationship to ACE score²⁴ as was demonstrated for anti-depressant medication over the course of a lifetime (see Figure 10-7).

Amnesia is rarely considered in the complete medical history. Given that it is wellrecognized as an unconscious response to trauma, this is a major oversight. Doctors often hear patients recount incidents of childhood memory loss. Figure 10-8 depicts the relationship of ACE score to partial amnesias of this type.²⁵

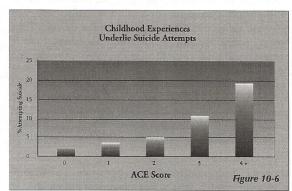
Suiville 3100%

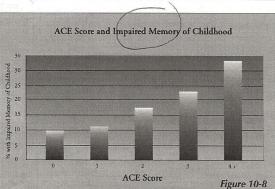
Figure 10-6. Adverse childhood experiences vs. suicidality.

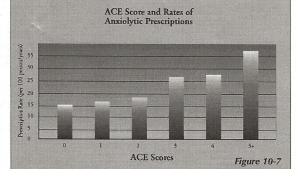
Figure 10-7. Adverse childhood experiences vs. rates of anxioloytic prescriptions.

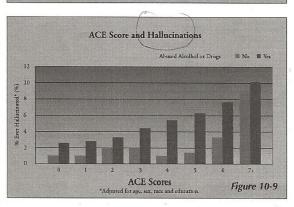
Figure 10-8. Adverse childhood experiences vs. impaired memory of childhood.

Figure 10-9. Adverse childhood experiences vs. hallucinations.









209

Similarly, most of us would consider it insulting to patients to inquire routinely about hallucinations, and most psychotic individuals recognize it does not profit them to speak openly of hallucinating. Yet, when individuals are openly and routinely questioned in a population-based manner, there is a striking relationship of ACE score to later hallucinations (Figure 10-9). This is independent of alcohol or street drugs possibly being used to moderate a high ACE score, and hence being a possible source of the hallucinations.²⁶

In Figure 10-10 (previously unpublished data), the relationship of multiple unexplained adult symptoms is presented in relation to a history of childhood sexual abuse. In addition to these clinical findings from the retrospective and prospective arms of the ACE Study, one recognizes that major economic costs are implicitly involved for individual care and for increasingly expensive prescription medications often used in treatment.

SOCIAL FUNCTION

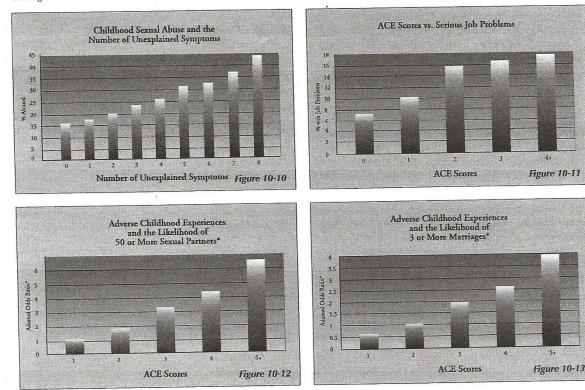
Figure 10-10. Childhood sexual abuse and the number of unexplained symptoms.

Figure 10-11. Adverse childhood experiences vs. serious job problems.

Figure 10-12. Adverse childhood experiences increase the likelihood of having 50 or more sexual partners.

Figure 10-13. Adverse childhood experiences increase the likelihood of having 3 or more marriages. Although toxic materials are certainly at many worksites, their number does not approach the number of toxic childhoods playing out at those worksites. These present in occupational medicine as unexplained symptoms, somatization disorders, absenteeism, or inadequate performance of ordinary tasks.²⁷ Figure 10-11 shows the proportionate relationship of ACE score to self-rated inadequate performance of one's job. The 2000 Nobel Laureate in Economics, James Heckman of the University of Chicago, has written extensively on the prolonged economic costs of these adverse childhood experiences.²⁸

In a totally different social realm, we have documented the relationship of ACE score to promiscuity (Figure 10-12),¹³ and to multiple marriages (Figure 10-13).²⁹ It seems clear that traumatizing life experiences during childhood are related to later



Chapter 10: The Lifelong Effects of Adverse Childhood Experiences

interpersonal instability, including of marital relationships, and that promiscuity can be understood as an ongoing quest for the one who will love me or a form of selfsoothing akin to alcohol, nicotine, or drug use.

INTEGRATION OF ACE FINDINGS INTO PRACTICE

Ultimately, it became obvious that what was being uncovered in the ACE study was profoundly relevant to the organization, delivery, outcomes, and cost of everyday medical practice. Further, that the impact of adverse childhood experiences played out strongly in the social sector as well, involving prisons, homelessness, and juvenile delinquency. The photojournalist Susan Madden Lankford, working as an urban anthropologist, has documented these latter relationships in three recent books that are sampled at her website.³⁰

Clearly, much of what we see in adult medical practice and as current major public health problems has its origins in what was present but unrecognized in pediatrics. There is a need to move from our current symptom-responsive approach in primary care to the comprehensive approach that was conceived but not attained-what George Engel described as a biopsychosocial approach.31 Stanford's Victor Fuchs has noted that such comprehensive care requires information, infrastructure, and incentive. Already blessed with extensive infrastructure, our first move was to improve our routine information base by integrating trauma-oriented questions in the already lengthy and detailed biomedical questionnaire that our patients filled out at home before coming in for comprehensive medical evaluation. Our examiner staff correctly perceived that their performance bar had abruptly been reset to a higher level; two of thirty examiners left to work in other departments, while the others became highly capable at routinely dealing with thematic material that most of us avoid. Internist and family practice colleagues, while commonly finding the ACE study quite interesting, generally did not want to use its findings in practice, citing time factors and lack of training as explanations. Those in fee-for-service practice additionally cited lack of insurance coverage. While superficially plausible, we saw these often were cover excuses for deeper resistance, sometimes related to the awakening of personal ghosts, as well as discomfort in discussing topics we have all been taught are protected by social taboos related to sex and the privacy of family lives.

We too faced these issues, as did our staff of examiners. Nevertheless, we proceeded to develop a lengthy, well-conceived, general medical questionnaire with traumaoriented components that patients filled out at home. When patients arrived in our Health Appraisal Center, this questionnaire was collected and fed into a digital scanner that took all Yes answers, organized them into a Review of Systems format, and provided a laser-printed medical history a few pages long that quickly enabled us to identify those areas needing further exploration or discussion. Because it was equally clear what body systems or areas did *not* need further exploration, the time we had was redirected and turned out to be adequate. This indeed was unexpected.

(, 33

The fact that intimate life experiences, which previously had never surfaced because of our own discomfort and not because of time, could be brought up and discussed in the course of comprehensive medical evaluation was a tribute to the effect of a well-devised, highly detailed medical questionnaire that got the information out in the safety of the patient's home, making it easier to bring it up for discussion in the doctor's office. Our discussion was brief, commonly following the pattern of: "I see on the questionnaire that you were... Tell me how that has affected you later in your life." Responses were typically a minute or two long, sometimes tearful, and often providing information that helped patients achieve new levels of understanding of their problems, and helped us understand what we might do to help.

After this expansion of our standard information base had taken place to include trauma-oriented questions, and we were satisfied with our new-found ability to make sense out of complex and confusingly intractable cases, an outside organization using

Bad VA(DWS depresse Chin

Slide

where?

the data mining technique of neural net analysis carried out a study of over 100 000 patients undergoing comprehensive medical evaluation with the new trauma-oriented medical questionnaire. The same physical examination and extensive laboratory testing were involved as before. Their findings showed a dramatic change that we had not anticipated.

In the year following comprehensive medical evaluation using the expanded questionnaire with trauma-oriented components, there was a 35% reduction in doctor office visits (DOVs) and an 11% reduction in ER visits compared to the year-before visits of that large patient cohort. A control group from some years earlier, when the evaluation process was similar except that trauma-oriented questions were absent, showed an 11% reduction in DOVs (unpublished data). ER visits had not then been studied. The obvious question was why this major change took place. Some physicians supposed these reductions in utilization were the result of patients being referred for psychotherapy, while others theorized that patients were avoiding needed medical care because they have been so humiliated by being forced to answer those questions.

Neither supposition has any factual basis. Almost no one was referred for therapy. Moreover, no complaints were heard and many patients were complimentary and grateful for the trauma-oriented approach. Obviously, some patients may have chosen to falsely answer No to trauma-oriented questions, but the number of Yes answers was so great that it was clear that an important new realm of the medical history had been uncovered. We thus came to see in adult medical practice the importance of the early years, the developmental years, and in particular the importance of damaging life experiences during those years. Gradually, we came to see that asking, listening, and enabling a patient to go home feeling still accepted, is in itself a major intervention. The clinical practice of asking, listening, and accepting is doing.

A profound change in disease patterns has occurred since the early 20th century when infectious and deficiency diseases were rife during childhood and were responsible for large portions of adult disease. Rheumatic heart disease has since been replaced by coronary disease, and the diseases of malnutrition have been replaced by diseases resulting from obesity. Polio, rickets, pellagra, and hookworm seem like ancient memories, although they occurred within the lifetime of many of us.

Our current problems in medical practice are not only diagnostic and therapeutic but now are heavily economic. One of the most important insights derived from the Adverse Childhood Experiences study may be its demonstration of the major intellectual, economic, and emotional benefits that result from moving into realms of the medical history that are generally closed by social nicety. There are only three sources of diagnostic information in all of medicine: history, physical examination including observation of interpersonal relationships, and laboratory studies. While experienced physicians have long understood that history is the most important of the three, producing diagnosis about 80% of the time, our practice patterns tend to focus on laboratory studies. The reasons behind this are complex, involving time, insurance reimbursement, lack of experience, physician discomfort discussing certain areas of human life like sex or family experiences, and the heavily biomedical teaching approaches of medical schools. Although the numerous publications from the ACE study have attracted widespread intellectual interest, there has been significant resistance to integrating that information into clinical practice. Clinical integration, while intellectually straightforward, represents major personal and organizational change, and hence threatens a crisis in self-esteem as is discussed by the philosopher Eric Hoffer in his monograph, The Ordeal of Change.32

We have shown in one large and unusual Department of Preventive Medicine that such clinical integration is routinely possible. It is affordable, acceptable, and beneficial to patient, physician, and third party payer. We have now successfully used this comprehensive approach with 440 000 adult patients in one department over an

212

stide

eight-year period. And yet, it has not spread, even within Kaiser Permanente.

In spite of all our advances, do our current ways of medical understanding limit us as Kirkengen has eloquently argued from Norway?33 We have choices: we can change nothing in medical practice itself, even while making significant biomedical advances and engaging in politicized discussions about the economics of healthcare; we can attempt difficult emotional and physical repair work in patients, after the fact and on an enormous scale; or we can attempt true primary prevention. No one knows how to carry out frimary prevention in this area, but it is the right problem to face.

SIGNS OF PROGRESS: ACE STUDY FINDINGS MOVE INTO PUBLIC HEALTH APPLICATIONS

By contrast, efforts to integrate the ACE study findings into public health practice are meeting with encouraging success. Information from the ACE study is now rapidly gaining traction both nationally and internationally. The Centers for Disease Control and the World Health Organization (WHO) have begun to face the reality that adverse childhood experiences pose the major public health and social problem of our times.³⁴ In his piercing book, Lost Lives, Helander has documented from his years at WHO the global prevalence of this problem.³⁵

Surveillance studies are a powerful tool for putting new concepts on the state, national, and international agendas that lead to changes in policy and practice. The CDC- and state-based Behavioral Risk Factor Surveillance System (BRFSS) now offers standardized questions about AGEs that allow participating states to have their own population-based ACE study,34 Interest in the public health burden of adverse childhood experiences is growing state-by-state across the country. Starting in 2009, 18 states are now routinely gathering ACE information, and around the world countries are working with the CDC and the WHO to pilot test the use of ACE questions in health surveys. Information from such sources will lead to changed perspectives on health, and in improved understanding of the root causes of today's most pressing public health problems! In spite of the complex problem of resistance to change, it is likely that public health) will lead these changes well in advance of primary care medical practice.37 When the use of comprehensive medical history, including routine inquiry into traumatic life experiences in the developmental years, ultimately penetrates clinical primary care, it may be one of the major public health When one advances of our time.

- Felitti VJ, Jakstis K, Pepper V, Ray A. Obesity: problem, solution, or both. *Permanente J.* 2010;14:24-30
- 2. Anda RF, Williamson DF, Remington PL, Escobedo LG, Mast EE, Madans J. Self-perceived stress and the risk of peptic ulcer disease: a national prospective study. Arch Int Med. 1992;152:829-833.
- Anda RF, Williamson DF, Escobedo LG, Mast EE, Giovino GA, Remington 3. PL. Depression and the dynamics of smoking: a national perspective. JAMA. 1990;264:1541-1545.
- 4. Anda RF, Williamson D, Jones D, et al. Depressed affect, hopelessness, and the risk of ischemic heart disease in a cohort of US adults. Epidemiology. 1993;4:285-294.
- Felitti VJ, Anda RF, Nordenberg D, et al. The relationship of adult health status to 5. childhood abuse and household dysfunction. Am J Prev Med. 1998;14:245-258.
- 6. Felitti VJ. Ursprünge des Suchtverhaltens-Evidenzen aus einer Studie zu belastenden Kindheitserfahrungen. Praxis der Kinderpsychologie und Kinderpsychiatrie. 2003;52:547-559.

www.cwsing

untern Servi

Cantu. childroh

- Anda RF, Croft JB, Felitti VJ, et al. Adverse childhood experiences and smoking during adolescence and adulthood. JAMA. 1999;282:1652-1658.
- Dube SR, Anda RF, Felitti VJ, Edwards VJ, Croft JB. Adverse childhood experiences and personal alcohol abuse as an adult. *Addict Behav.* 2002;27:713-725.
- Dube SR, Felitti VJ, Dong M, Chapman DP, Giles WH, Anda RF. Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: the Adverse Childhood Experience study. *Pediatrics*. 2003;111:564-572.
- Edwards VJ, Anda RF, Gu D, Dube SR, Felitti VJ. Adverse childhood experiences and smoking persistence in adults with smoking-related symptoms and illness. *Permanente J.* 2007;11:5-13.
- Dong M, Giles WH, Felitti VJ, et al. Insights into causal pathways for ischemic heart disease: Adverse Childhood Experiences study. *Circulation*. 2004;110:1761-1766.
- Dube SR, Fairweather D, Pearson WS, Felitti VJ, Anda RF, Croft JB. Cumulative childhood stress and autoimmune diseases in adults. *Psychosom Med.* 2009;71:243-250.
- 13. Anda RF, Felitti VJ, Bremner JD, et al. The enduring effects of abuse and related adverse experiences in childhood: a convergence of evidence from neurobiology and epidemiology. *Eur Arch Psychiatry Clin Neurosci.* 2006;256:174-186.
- Danese A, Pariante CM, Caspi A, Taylor A, Poulton R. Childhood maltreatment predicts adult inflammation in a life-course study. *Proc Nat Acad Sci USA*. 2007;104:1319-1324.
- 15. Sorrells SF, Sapolsky RM. An inflammatory review of glucocorticoid actions in the CNS. Brain Behav Immun. 2007;21:259-272.
- Dong M, Dube SR, Felitti VJ, Giles WH, Anda RF. Adverse childhood experiences and self-reported liver disease: new insights into a causal pathway. *Arch Intern Med.* 2003;163:1949-1956.
- Brown DW, Anda RA, Felitti VJ, et al. Adverse childhood experiences are associated with the risk of lung cancer: a prospective cohort study. *BMC Public Health.* 2010;10:20-32. http://www.miomedcentral.com/1471-2458/10/20. Accessed July 24, 2013.
- Brown DW, Anda RA, Tiemeier H, et al. Adverse childhood experiences and the risk of premature mortality. Am J Prev Med. 2009;37:389-396.
- Edwards VJ, Anda RF, Felitti VJ, Dube SR. Adverse childhood experiences and health-related quality of life as an adult. In: K Kendall-Tackett, ed. *Health Consequences of Abuse in the Family: A Clinical Guide for Evidence-Based Practice.* Washington, DC: American Psychological Association; 2003:81-94.
- Chapman DP, Anda RF, Felitti VJ, Dube SR, Edwards VJ, Whitfield CL. Epidemiology of adverse childhood experiences and depressive disorders in a large health maintenance organization population. J Affective Disord. 2004;82:217-225.
- 21. Chapman DP, Dube SR, Anda RF. Adverse childhood events as risk factors for negative mental health outcomes. *Psych Annals*. 2007;37:359-364.
- 22. Barbour A. Caring for Patients: A Critique of the Medical Model. Palo Alto, CA: Stanford University Press; 1995.
- 23. Dube SR, Anda RF, Felitti VJ, Chapman D, Williamson DF, Giles WH.

- 7. Anda RF, Croft JB, Felitti VJ, et al. Adverse childhood experiences and smoking during adolescence and adulthood. *JAMA*. 1999;282:1652-1658.
- Dube SR, Anda RF, Felitti VJ, Edwards VJ, Croft JB. Adverse childhood experiences and personal alcohol abuse as an adult. *Addict Behav.* 2002;27:713-725.
- 9. Dube SR, Felitti VJ, Dong M, Chapman DP, Giles WH, Anda RF. Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: the Adverse Childhood Experience study. *Pediatrics*. 2003;111:564-572.
- Edwards VJ, Anda RF, Gu D, Dube SR, Felitti VJ. Adverse childhood experiences and smoking persistence in adults with smoking-related symptoms and illness. *Permanente J.* 2007;11:5-13.
- Dong M, Giles WH, Felitti VJ, et al. Insights into causal pathways for ischemic heart disease: Adverse Childhood Experiences study. *Circulation*. 2004;110:1761-1766.
- 12. Dube SR, Fairweather D, Pearson WS, Felitti VJ, Anda RF, Croft JB. Cumulative childhood stress and autoimmune diseases in adults. *Psychosom Med.* 2009;71:243-250.
- 13. Anda RF, Felitti VJ, Bremner JD, et al. The enduring effects of abuse and related adverse experiences in childhood: a convergence of evidence from neurobiology and epidemiology. *Eur Arch Psychiatry Clin Neurosci.* 2006;256:174-186.
- Danese A, Pariante CM, Caspi A, Taylor A, Poulton R. Childhood maltreatment predicts adult inflammation in a life-course study. *Proc Nat Acad Sci USA*. 2007;104:1319-1324.
- 15. Sorrells SF, Sapolsky RM. An inflammatory review of glucocorticoid actions in the CNS. *Brain Behav Immun.* 2007;21:259-272.
- Dong M, Dube SR, Felitti VJ, Giles WH, Anda RF. Adverse childhood experiences and self-reported liver disease: new insights into a causal pathway. *Arch Intern Med.* 2003;163:1949-1956.
- Brown DW, Anda RA, Felitti VJ, et al. Adverse childhood experiences are associated with the risk of lung cancer: a prospective cohort study. *BMC Public Health.* 2010;10:20-32. http://www.miomedcentral.com/1471-2458/10/20. Accessed July 24, 2013.
- Brown DW, Anda RA, Tiemeier H, et al. Adverse childhood experiences and the risk of premature mortality. Am J Prev Med. 2009;37:389-396.
- Edwards VJ, Anda RF, Felitti VJ, Dube SR. Adverse childhood experiences and health-related quality of life as an adult. In: K Kendall-Tackett, ed. *Health Consequences of Abuse in the Family: A Clinical Guide for Evidence-Based Practice*. Washington, DC: American Psychological Association; 2003:81-94.
- Chapman DP, Anda RF, Felitti VJ, Dube SR, Edwards VJ, Whitfield CL. Epidemiology of adverse childhood experiences and depressive disorders in a large health maintenance organization population. J Affective Disord. 2004;82:217-225.
- 21. Chapman DP, Dube SR, Anda RF. Adverse childhood events as risk factors for negative mental health outcomes. *Psych Annals*. 2007;37:359-364.
- 22. Barbour A. Caring for Patients: A Critique of the Medical Model. Palo Alto, CA: Stanford University Press; 1995.
- 23. Dube SR, Anda RF, Felitti VJ, Chapman D, Williamson DF, Giles WH.

<u>The Origins of Addiction:</u> Evidence from the Adverse Childhood Experiences Study

Vincent J. Felitti, MD

Department of Preventive Medicine Kaiser Permanente Medical Care Program 7060 Clairemont Mesa Boulevard San Diego, California 92111 USA

English version of the article published in Germany as: Felitti VJ. Ursprünge des Suchtverhaltens – Evidenzen aus einer Studie zu belastenden Kindheitserfahrungen. Praxis der Kinderpsychologie und Kinderpsychiatrie, 2003; 52:547-559.

<u>The Origins of Addiction:</u> Evidence from the Adverse Childhood Experiences Study

"In my beginning is my end." T.S. Eliot, *"Four Quartets"*¹

ABSTRACT:

A population-based analysis of over 17,000 middle-class American adults undergoing comprehensive, biopsychosocial medical evaluation indicates that three common categories of addiction are strongly related in a proportionate manner to several specific categories of adverse experiences during childhood. This, coupled with related information, suggests that the basic cause of addiction is predominantly experiencedependent during childhood and not substance-dependent. This challenge to the usual concept of the cause of addictions has significant implications for medical practice and for treatment programs.

Purpose:

My intent is to challenge the usual concept of addiction with new evidence from a population-based clinical study of over 17,000 adult, middle-class Americans. The usual concept of addiction essentially states that the compulsive use of 'addictive' substances is in some way caused by properties intrinsic to their molecular structure. This view confuses mechanism with cause. Because any accepted explanation of addiction has social, medical, therapeutic, and legal implications, the way one understands addiction is important. Confusing mechanism with basic cause quickly leads one down a path that is misleading. Here, new data is presented to stimulate rethinking the basis of addiction.

Background:

The information I present comes from the Adverse Childhood Experiences (ACE) Study.² The ACE Study deals with the basic causes underlying the 10 most common causes of death in America; addiction is only one of several outcomes studied.

In the mid-1980s, physicians in Kaiser Permanente's Department of Preventive Medicine in San Diego discovered that patients successfully losing weight in the Weight Program were the most likely to drop out. This unexpected observation led to our discovery that overeating and obesity were often being used unconsciously as protective solutions to unrecognized problems dating back to childhood.^{3, 4} Counterintuitively, obesity provided hidden benefits: it often was sexually, physically, or emotionally protective.

Felitti ACE-Addiction article, DE

Our discovery that public health problems like obesity could also be personal solutions, and our finding an unexpectedly high prevalence of adverse childhood experiences in our middle class adult population, led to collaboration with the Centers for Disease Control (CDC) to document their prevalence and to study the implications of these unexpected clinical observations. I am deeply indebted to my colleague, Robert F. Anda MD, who skillfully designed the Adverse Childhood Experiences (ACE) Study in an epidemiologically sound manner, and whose group at CDC analyzed several hundred thousand pages of patient data to produce the data we have published.

Many of our obese patients had previously been heavy drinkers, heavy smokers, or users of illicit drugs. Of what relevance are these observations; do they imply some unspecified innate tendency to addiction? Is addiction genetic, as some have proposed for alcoholism? Is addiction a biomedical disease, a personality disorder, or something different? Are diseases and personality disorders separable, or are they ultimately related? What does one make of the dramatic recent findings in neurobiology that seem to promise a neurochemical explanation for addiction? Why does only a small percent of persons exposed to addictive substances become compulsive users?

Although the problem of narcotic addiction has led to extensive legislative attempts at eradication, its prevalence has not abated over the past century. However, the distribution pattern of narcotic use within the population has radically changed, attracting significant political attention and governmental action.⁵ The inability to control addiction by these major, well-intended governmental efforts has drawn thoughtful and challenging commentary from a number of different viewpoints.^{6,7}

In our detailed study of over 17,000 middle-class American adults of diverse ethnicity, we found that the compulsive use of nicotine, alcohol, and injected street drugs increases proportionally in a strong, graded, dose-response manner that closely parallels the intensity of adverse life experiences during childhood. This of course supports old psychoanalytic views and is at odds with current concepts, including those of biological psychiatry, drug-treatment programs, and drug-eradication programs. Our findings are disturbing to some because they imply that the basic causes of addiction lie within *us* and the way we treat each other, not in drug dealers or dangerous chemicals. They suggest that billions of dollars have been spent everywhere except where the answer is to be found.

Study design:

Kaiser Permanente (KP) is the largest prepaid, non-profit, healthcare delivery system in the United States; there are 500,000 KP members in San Diego, approximately 30% of the greater metropolitan population. We invited 26,000 consecutive adults voluntarily seeking comprehensive medical evaluation in the Department of Preventive Medicine to help us understand how events in childhood might later affect health status in adult life. Seventy percent agreed, understanding the information obtained was anonymous and would not become part of their medical records. Our cohort population was 80% white including Hispanic, 10% black, and 10% Asian. Their average age was 57 years; 74% had been to college, 44% had graduated college; 49.5% were men. In any four-year period, 81% of all adult Kaiser Health Plan members seek such medical

page 3

Felitti ACE-Addiction article, DE

evaluation; there is no reason to believe that selection bias is a significant factor in the Study. The Study was carried out in two waves, to allow mid point correction if necessary. Further details of Study design are described in our initial publication.²

The ACE Study compares adverse childhood experiences against adult health status, on average a half-century later. The experiences studied were eight categories of adverse childhood experience commonly observed in the Weight Program. The prevalence of each category is stated in parentheses. The categories are:

- recurrent and severe physical abuse (11%)
- recurrent and severe emotional abuse (11%)
- contact sexual abuse (22%) growing up in a household with:
- an alcoholic or drug-user (25%)
- a member being imprisoned (3%)
- a mentally ill, chronically depressed, or institutionalized member (19%)
- the mother being treated violently (12%)
- both biological parents *not* being present (22%)

The scoring system is simple: exposure during childhood or adolescence to any <u>category</u> of ACE was scored as one point. Multiple exposures within a category were not scored: one alcoholic within a household counted the same as an alcoholic and a drug user; if anything, this tends to understate our findings. The ACE Score therefore can range from 0 to 8. Less than half of this middle-class population had an ACE Score of 0; one in fourteen had an ACE Score of 4 or more.

In retrospect, an initial design flaw was not scoring subtle issues like low-level neglect and lack of interest in a child who is otherwise the recipient of adequate physical care. This omission will not affect the interpretation of our First Wave findings, and may explain the presence of some unexpected outcomes in persons having ACE Score zero. Emotional neglect was studied in the Second Wave.

The ACE Study contains a prospective arm: the starting cohort is being followed forward in time to match adverse childhood experiences against current doctor office visits, emergency department visits, pharmacy costs, hospitalizations, and death. Publication of these analyses soon will begin.

Findings:

Our overall findings, presented extensively in the American literature, demonstrate that:

- Adverse childhood experiences are surprisingly common, although typically concealed and unrecognized.
- ACEs still have a profound effect 50 years later, although now transformed from psychosocial experience into organic disease, social malfunction, and mental illness.
- Adverse childhood experiences are the main determinant of the health and social well-being of the nation.

Our overall findings challenge conventional views, some of which are clearly defensive. They also provide opportunities for new approaches to some of our most difficult public health problems. Findings from the ACE Study provide insights into changes that are needed in pediatrics and adult medicine, which expectedly will have a significant impact on the cost and effectiveness of medical care.

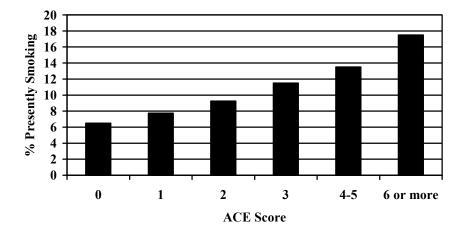
Our intent here is to present our findings only as they relate to the problem of addiction, using nicotine, alcohol, and injected illicit drugs as examples of substances that are commonly viewed as 'addicting'. If we know *why* things happen and *how*, then we may have a new basis for prevention.

Smoking:

Smoking tobacco has come under heavy opposition in the United States, particularly in southern California where the ACE Study was carried out. Whereas at one time most men and many women smoked, only a minority does so now; it is illegal to smoke in office buildings, public transportation, restaurants, bars, and in most areas of hotels.

When we studied current smokers, we found that smoking had a strong, graded relationship to adverse childhood experiences. Figure 1 illustrates this clearly. The p value for this and all other data displays is .001 or better.

This stepwise 250% increase in the likelihood of an ACE Score 6 child being a

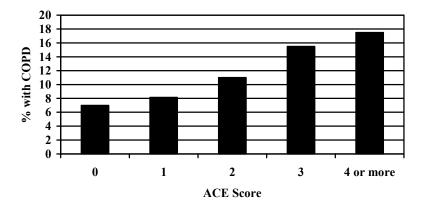


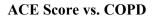
ACE Score vs. Smoking

current smoker, compared to an ACE Score 0 child, is generally not known.⁸ This simple observation has profound implications that illustrate the psychoactive *benefits* of nicotine⁹; this information has largely been lost in the public health onslaught against smoking, but is important in understanding the intractable nature of smoking in many people.^{10, 11, 12, 13}

Felitti ACE-Addiction article, DE

When we match the prevalence of adult chronic bronchitis and emphysema against ACEs, we again see a strong dose-response relationship. We thereby proceed from the relationship of adverse childhood experiences to a health-risk behavior to their relationship with an organic disease. In other words, Figure 2 illustrates the conversion of emotional stressors into an organic disease, through the intermediary mechanism of an emotionally beneficial (although medically unsafe) behavior.

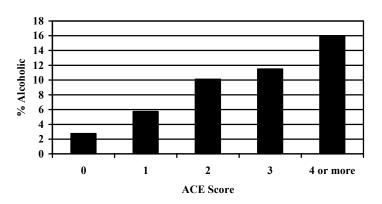




Alcoholism:

One's own alcoholism is not easily or comfortably acknowledged; therefore, when we asked our Study cohort if they had ever considered themselves to be alcoholic, we felt that *Yes* answers probably understated the truth, making the effect even stronger than is shown. The relationship of self-acknowledged alcoholism to adverse childhood experiences is depicted in Figure 3. Here we see that more than a 500% increase in adult alcoholism is related in a strong, graded manner to adverse childhood experiences.¹⁴

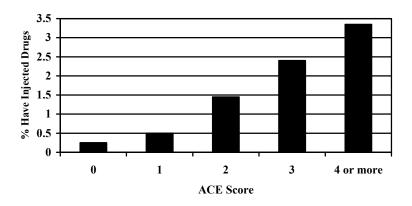




Felitti ACE-Addiction article, DE

Injection of illegal drugs:

In the United States, the most commonly injected street drugs are heroin and methamphetamine. Methamphetamine has the interesting property of being closely related to amphetamine, the first anti-depressant introduced by Ciba Pharmaceuticals in 1932. When we studied the relation of injecting illicit drugs to adverse childhood experiences, we again found a similar dose-response pattern; the likelihood of injection of street drugs increases strongly and in a graded fashion as the ACE Score increases. (Figure 4) At the extremes of ACE Score, the figures for injected drug use are even more powerful. For instance, a male child with an ACE Score of 6, when compared to a male child with an ACE Score of 0, has a 46-fold (4,600%) increase in the likelihood of becoming an injection drug user sometime later in life.



ACE Score vs. Injected Drug Use

Discussion:

Although awareness of the hazards of smoking is now near universal, and has caused a significant reduction in smoking, in recent years the prevalence of smoking has remained largely unchanged. In fact, the association between ACE Score and smoking is stronger in age cohorts born after the Surgeon General's Report on Smoking. Do current smokers now represent a core of individuals who have a more profound need for the psychoactive benefits of nicotine than those who have given up smoking? Our clinical experience¹² and data from the ACE Study suggest this as a likely possibility. Certainly, there is good evidence of the psychoactive benefits of nicotine for moderating anger, anxiety, and hunger.⁹⁻¹²

Alcohol is well accepted as a psychoactive agent. This obvious explanation of alcoholism is now sometimes rejected in favor of a proposed genetic causality. Certainly, alcoholism may be familial, as is language spoken. Our findings support an experiential and psychodynamic explanation for alcoholism, although this may well be moderated by genetic and metabolic differences between races and individuals.

Analysis of our Study data for injected drug use shows a powerful relation to ACEs. Population Attributable Risk* (PAR) analysis shows that 78% of drug injection by

women can be attributed to adverse childhood experiences. For men and women combined, the PAR is 67%. Moreover, this PAR has been constant in four age cohorts whose birth dates span a century; this indicates that the relation of adverse childhood experiences to illicit drug use has been constant in spite of major changes in drug availability and in social customs, and in the introduction of drug eradication programs.¹⁷

American soldiers in Vietnam provided an important although overlooked observation. Many enlisted men in Vietnam regularly used heroin. However, only 5% of those considered addicted were still using it 10 months after their return to the US.^{15, 16} Treatment did not account for this high recovery rate. Why does not everyone become addicted when they repeatedly inject a substance reputedly as addicting as heroin? If a substance like heroin is not inherently addicting to everyone, but only to a small minority of human users, what determines this selectivity? Is it the substance that is intrinsically addicting, or do life experiences actually determine its compulsive use? Surely its chemical structure remains constant. Our findings indicate that the major factor underlying addiction is adverse childhood experiences that have not healed with time and that are overwhelmingly concealed from awareness by shame, secrecy, and social taboo. The compulsive user appears to be one who, not having other resolutions available, unconsciously seeks relief by using materials with known psychoactive benefit, accepting the known long-term risk of injecting illicit, impure chemicals. The ACE Study provides population-based clinical evidence that unrecognized adverse childhood experiences are a major, if not the major, determinant of who turns to psychoactive materials and becomes 'addicted'.

Given that the conventional concept of addiction is seriously flawed, and that we have presented strong evidence for an alternative explanation, we propose giving up our old mechanistic explanation of addiction in favor of one that explains it in terms of its psychodynamics: unconscious although understandable decisions being made to seek chemical relief from the ongoing effects of old trauma, often at the cost of accepting future health risk. Expressions like 'self-destructive behavior' are misleading and should be dropped because, while describing the acceptance of long-term risk, they overlook the importance of the obvious short-term benefits that drive the use of these substances.

This revised concept of addiction suggests new approaches to primary prevention and treatment. The current public health approach of repeated cautionary warnings has demonstrated its limitations, perhaps because the cautions do not respect the individual when they exhort change without understanding. Adverse childhood experiences are widespread and typically unrecognized. These experiences produce neurodevelopmental and emotional damage, and impair social and school performance. By adolescence, children have a sufficient skill and independence to seek relief through a small number of mechanisms, many of which have been in use since biblical times: drinking alcohol, sexual promiscuity, smoking tobacco, using psychoactive materials, and overeating. These coping devices are manifestly effective for their users, presumably through their ability to modulate the activity of various neurotransmitters. Nicotine, for instance, is a

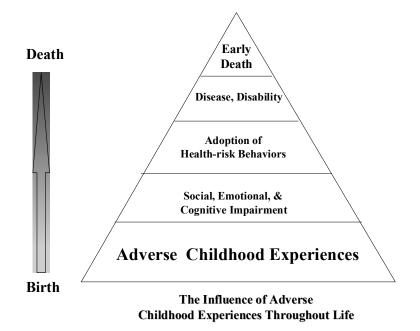
* Population Attributable Risk is a simple concept, although a complex calculation, that describes in a population that portion of a risk factor that can be attributed to a particular cause.

Felitti ACE-Addiction article, DE

powerful substitute for the neurotransmitter acetylcholine. Not surprisingly, the level of some neurotransmitters varies genetically between individuals¹⁸.

It is these coping devices, with their short-term emotional benefits, that often pose long-term risks leading to chronic disease; many lead to premature death. This sequence is depicted in the ACE Pyramid (Figure 5). The sequence is slow, often unstoppable, and is generally obscured by time, secrecy, and social taboo. Time does not heal in most of these instances. Because cause and effect usually lie within a family, it is understandably more comforting to demonize a chemical than to look within. We find that addiction overwhelmingly implies prior adverse life experiences.

The sequence in the ACE Pyramid supports psychoanalytic observations that addiction is primarily a consequence of adverse childhood experiences. Moreover, it does so by a population-based study, thereby escaping the potential selection bias of individual case reports. Addiction is not a brain disease, nor is it caused by chemical imbalance or genetics. Addiction is best viewed as an understandable, unconscious, compulsive use of psychoactive materials in response to abnormal prior life experiences, most of which are concealed by shame, secrecy, and social taboo.



Our findings show that childhood experiences profoundly and causally shape adult life. 'Chemical imbalances', whether genetically modulated or not, are the necessary intermediary mechanisms by which these causal life experiences are translated into manifest effect. It is important to distinguish between cause and mechanism. Uncertainty and confusion between the two will lead to needless polemics and misdirected efforts for preventing or treating addiction, whether on a social or an

Felitti ACE-Addiction article, DE

individual scale. Our findings also make it clear that studying any one category of adverse experience, be it domestic violence, childhood sexual abuse, or other forms of family dysfunction is a conceptual error. None occur *in vacuuo*; they are part of a complex systems failure: one does not grow up with an alcoholic where everything else in the household is fine.

Treatment:

If we are to improve the current unhappy situation, we must in medical settings routinely screen at the earliest possible point for adverse childhood experiences. It is feasible and acceptable to carry out mass screening for ACEs in the context of comprehensive medical evaluation. This identifies cases early and allows treatment of basic causes rather than vainly treating the symptom of the moment. We have screened over 450,000 adult members of Kaiser Health Plan for these eight categories of adverse childhood experiences. Our initial screening is by an expanded Review of Systems questionnaire; patients certainly do not spontaneously volunteer this information. 'Yes' answers then are pursued with conventional history taking: "I see that you were molested as a child. *Tell me how that has affected you later in your life.*"

Such screening has demonstrable value. Before we screened for adverse childhood experiences, our standardized comprehensive medical evaluation led to a 12% reduction in medical visits during the subsequent year. Later, in a pilot study, an on-site psychoanalyst conducted a one-time interview of depressed patients; this produced a 50% reduction in the utilization of this subset during the subsequent year. However, the reduction occurred only in those depressed patients who were high utilizers of medical care because of somatization disorders. Recently, we evaluated our current approach by a neural net analysis of the records of 135,000 patients who were screened for adverse childhood experiences as part of our redesigned comprehensive medical evaluation. This entire cohort showed an overall reduction of 35% in doctor office visits during the year subsequent to evaluation.

Our experience asking these questions indicates that the magnitude of the ACE problem is so great that primary prevention is ultimately the only realistic solution. Primary prevention requires the development of a beneficial and acceptable intrusion into the closed realm of personal and family experience. Techniques for accomplishing such change *en masse* are yet to be developed because each of us, fearing the new and unknown as a potential crisis in self-esteem, often adjusts to the status quo. However, one possible approach to primary prevention lies in the mass media: the story lines of movies and television serials present a major therapeutic opportunity, unexploited thus far, for contrasting desirable and undesirable parenting skills in various life situations.

Because addiction is experience-dependent and not substance-dependent, and because compulsive use of only one substance is actually uncommon, one also might restructure treatment programs to deal with underlying causes rather than to focus on substance withdrawal. We have begun using this approach with benefit in our Obesity Program, and plan to do so with some of the more conventionally accepted addictions.

Conclusion:

The current concept of addiction is ill founded. Our study of the relationship of adverse childhood experiences to adult health status in over 17,000 persons shows addiction to be a readily understandable although largely unconscious attempt to gain relief from well-concealed prior life traumas by using psychoactive materials. Because it is difficult to get enough of something that doesn't quite work, the attempt is ultimately unsuccessful, apart from its risks. What we have shown will not surprise most psychoanalysts, although the magnitude of our observations in new, and our conclusions are sometimes vigorously challenged by other disciplines.

The evidence supporting our conclusions about the basic cause of addiction is powerful and its implications are daunting. The prevalence of adverse childhood experiences and their long-term effects are clearly a major determinant of the health and social well being of the nation. This is true whether looked at from the standpoint of social costs, the economics of health care, the quality of human existence, the focus of medical treatment, or the effects of public policy. Adverse childhood experiences are difficult issues, made more so because they strike close to home for many of us. Taking them on will create an ordeal of change, but will also provide for many the opportunity to have a better life.

Footnote:

Abstracts of all past and future ACE Study articles may be found by searching under the author name (Felitti VJ) at the web site for the US National Library of Medicine: <u>http://www.ncbi.nlm.nih.gov/entrez/query.fcgi</u>

Free subscription is available to an electronic newsletter dealing with various aspects of the ACE Study. Contact: editor@acestudy.org

References:

- 1. Eliot, TS. Four Quartets. Harcourt, Brace, and World, New York, 1943.
- Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, Koss MP, et al. The relationship of adult health status to childhood abuse and household dysfunction. <u>American Journal of Preventive Medicine</u>. 1998; 14:245-258.
- 3. Felitti VJ. Long Term Medical Consequences of Incest, Rape, and Molestation. <u>Southern Medical Journal.</u> 1991; 84:328-331.
- 4. Felitti VJ. Childhood Sexual Abuse, Depression, and Family Dysfunction in Adult Obese Patients. <u>Southern Medical Journal.</u> 1993; 86:732-736.
- 5. Brecher EM. Licit and Illicit Drugs. Little Brown, Boston; 1972, p183-192
- 6. Friedman M, Szasz TS. On Liberty and Drugs: Essays on the free market and prohibition. Drug Policy Foundation Press, Washington DC, 1992.
- Gray JP. Why Our Drug Laws Have Failed and What We Can Do About It: A Judicial Indictment of the War on Drugs. Temple University Press, Philadelphia, 2001.
- 8. Anda RF, Croft JB, Felitti VJ, Nordenberg D, Giles WH, Williamson DF, Giovino GA. Adverse childhood experiences and smoking during adolescence and adulthood. Journal of the American Medical Association. 1999; 282:1652-1658.
- 9. Carmody TP. Affect regulation, nicotine addiction, and smoking cessation. J Psychoactive Drugs 1989; 24:111-122.
- 10. Larson PS, Silvette H. Tobacco: Experimental and Clinical Studies, Suppl. 3; Williams & Wilkins, Baltimore, 1975.
- 11. Jaffe JH, Jarvik M. In Lipton MA, DiMascio A, Killam K. Psychopharmacology: A Generation of Progress. Raven Press, NY, 1978. p1665-1676.
- 12. ACE Score 6: Psychoactive benefits of nicotine. Videotaped interview. Department of Preventive Medicine, Kaiser Permanente, San Diego, 1997.
- Anda RF, Williamson DF, Escobedo LG, Mast EE, Giovino GA, Remingtom PL. Depression and the dynamics of smoking. A national perspective. JAMA. 1990 Sep 26;264(12):1541-5.

- Dube SR, Anda RF, Felitti VJ, Edwards VJ, Croft JB. Adverse Childhood Experiences and personal alcohol abuse as an adult. <u>Addictive Behaviors</u>. 2002; 27(5): 713-725.
- Robins LN, Helzer JE, Davis DH. Arch Gen Psychiatry 1975 Aug;32(8):955-61 Narcotic use in southeast Asia and afterward. An interview study of 898 Vietnam returnees.
- 16. Robins LN. Vietnam Veterans' rapid recovery from heroin addiction: a fluke or normal expectation? Addiction 1993; 88:1041-1054.
- Dube SR, Felitti VJ, Dong M, Chapman DP, Giles WH, and Anda RF. Childhood Abuse, Neglect, and Household Dysfunction and the Risk of Illicit Drug Use: The Adverse Childhood Experiences Study. Pediatrics. 2003; 111(3): 564-572.
- Du L, Faludi G, Palkovits M, Sotoni P, et al. High activity-related allele of MAO-A gene associated with depressed suicide in males. Neuroreport 2002; 13(9): 1195-98.
- 19. Felitti VJ. Unpublished data, Kaiser Permanente Medical Care Program, San Diego, 1978, 1980, 1998.

END



Traumatic Stress Network



NCTSN BENCH CARD FOR THE TRAUMA-INFORMED JUDGE

Research has conclusively demonstrated that court-involved children and adolescents present with extremely high rates of traumatic stress caused by their adverse life experiences. In the court setting, we may perceive these youth as inherently disrespectful, defiant, or antisocial, when, in fact, their disruptive behavior may be better understood in the context of traumatic stress disorders. These two Bench Cards provide judges with useful questions and guidelines to help them make decisions based on the emerging scientific findings in the traumatic stress field. These cards are part of a larger packet of materials about child and adolescent trauma available and downloadable from the NCTSN Trauma-Informed Juvenile Justice System Resource Site* and are best used with reference to those materials.

1. Asking trauma-informed questions can help judges identify children who need or could benefit from trauma-informed services from a mental health professional. A judge can begin by asking, "Have I considered whether or not trauma has played a role in the child's¹ behavior?" Use the questions listed below to assess whether trauma-informed services are warranted.

TRAUMA EXPOSURE: Has this child experienced a traumatic event? These are events that involve actual or threatened exposure of the child to death, severe injury, or sexual abuse, and may include domestic violence, community violence, assault, severe bullying or harassment, natural or man-made disasters, such as fires, floods, and explosions, severe accidents, serious or terminal illness, or sudden homelessness.

MULTIPLE OR PROLONGED EXPOSURES: Has the child been exposed to traumatic events on more than one occasion or for a prolonged period? Repeated or prolonged exposure increases the likelihood that the child will be adversely affected.

OUTCOMES OF PREVIOUS SANCTIONS OR INTERVENTIONS: Has a schedule of increasingly restrictive sanctions or higher levels of care proven ineffective in this case? Traumatized children may be operating in "survival mode," trying to cope by behaving in a defiant or superficially indifferent manner. As a result, they might respond poorly to traditional sanctions, treatments, and placements.

CAREGIVERS' ROLES: How are the child's caregivers or other significant people helping this child feel safe or preventing (either intentionally or unintentionally) this child from feeling safe? Has the caregiver been a consistent presence in the child's life? Does the caregiver acknowledge and protect the child? Are caregivers themselves operating in survival mode due to their own history of exposure to trauma?

SAFETY ISSUES FOR THE CHILD: Where, when and with whom does this child feel safest? Where, when and with whom does he or she feel unsafe and distrustful? Is the home chaotic or dangerous? Does a caregiver in the household have a restraining order against another person? Is school a safe or unsafe place? Is the child being bullied at school or does the child believe that he or she is being bullied?

TRAUMA TRIGGERS IN CURRENT PLACEMENT: Is the child currently in a home, out-of-home placement, school, or institution where the child is being re-exposed to danger or being "triggered" by reminders of traumatic experiences?

UNUSUAL COURTROOM BEHAVIORS: Is this child behaving in a highly anxious or hypervigilant manner that suggests an inability to effectively participate in court proceedings? (Such behaviors include inappropriate smiling or laughter, extreme passivity, quickness to anger, and non-responsiveness to simple questions.) Is there anything I, as a judge, can do to lower anxiety, increase trust, and enhance participation?

2. It is crucial to have complete information from all the systems that are working with the child and family. Asking the questions referenced below can help develop a clearer picture of the child's trauma and assess needs for additional information.

COMPLETENESS OF DATA FOR DECISIONS: Has all the relevant information about this child's history been made available to the court, including child welfare and out-of-jurisdiction or out-of-state juvenile justice information?

INTER-PROFESSIONAL COOPERATION: Who are the professionals who work with this child and family? Are they communicating with each other and working as a team?

UNUSUAL BEHAVIORS IN THE COMMUNITY: Does this child's behavior make sense in light of currently available information about the child's life? Has the child exhibited extreme or paradoxical reactions to previous assistance or sanctions? Could those reactions be the result of trauma?

DEVELOPMENT: Is this child experiencing or suffering from emotional or psychological delays? Does the child need to be assessed developmentally?

PREVIOUS COURT CONTACTS: Has this child been the subject of other court proceedings? (Dependency/ Neglect/Abuse; Divorce/Custody; Juvenile Court; Criminal; Other)

OUT-OF-HOME PLACEMENT HISTORY: How many placements has this child experienced? Have previous placements been disrupted? Were the disruptions caused by reactions related to the child's trauma history? How did child welfare and other relevant professionals manage these disruptions?

BEHAVIORAL HEALTH HISTORY: Has this child ever received trauma-informed, evidence-based evaluation and treatment? (Well-intentioned psychiatric, psychological, or substance abuse interventions are sometimes ineffective because they overlook the impact of traumatic stress on youth and families.)

3. Am I sufficiently considering trauma as I decide where this child is going to live and with whom?

PLACEMENT OUTCOMES: How might the various placement options affect this child? Will they help the child feel safe and secure and to successfully recover from traumatic stress or loss?

PLACEMENT RISKS: Is an out-of-home placement or detention truly necessary? Does the benefit outweigh the potential harm of exposing the child to peers who encourage aggression, substance use, and criminal behavior that may possibly lead to further trauma?

PREVENTION: If placement, detention or hospitalization is required, what can be done to ensure that the child's traumatic stress responses will not be "triggered?" (For example, if placed in isolation or physical restraints, the child may be reminded of previous traumatic experiences.)

DISCLOSURE: Are there reasons for not informing caregivers or staff at the proposed placement about the child's trauma history? (Will this enhance care or create stigma and re-victimization?)

TRAUMA-INFORMED APPROACHES: How does the programming at the planned placement employ traumainformed approaches to monitoring, rehabilitation and treatment? Are staff knowledgeable about recognizing and managing traumatic stress reactions? Are they trained to help children cope with their traumatic reactions?

POSITIVE RELATIONSHIPS: How does the planned placement enable the child to maintain continuous relationships with supportive adults, siblings or peers?

4. If you do not have enough information, it may be useful to have a trauma assessment done by a trauma-informed professional. Utilizing the NCTSN BENCH CARD FOR COURT-ORDERED TRAUMA-INFORMED MENTAL HEALTH EVALUATION OF CHILD, you can request information that will assist you in making trauma-informed decisions.

¹ The use of "child" on this bench card refers to any youth who comes under jurisdiction of the juvenile court. *http://learn.nctsn.org/course/view.php?id=74 NCTSN The National Child Traumatic Stress Ne

Traumatic Stress Network

NCTSN BENCH CARD

FOR COURT-ORDERED TRAUMA-INFORMED MENTAL HEALTH EVALUATION OF CHILD: SAMPLE ADDENDUM

This Court has referred this child¹ for mental health assessment. Your report will assist the judge in making important decisions. Please be sure the Court is aware of your professional training and credentials. In addition to your standard psychosocial report, we are seeking trauma-specific information. Please include your opinion regarding the child's current level of danger and risk of harm. The Court is also interested in information about the child's history of prescribed psychiatric medications. We realize that you may be unable to address every issue raised below, but the domains listed below are provided as an evidence-based approach to trauma-informed assessment.

1. SCREENING AND ASSESSMENT OF THE CHILD AND CAREGIVERS

Please describe the interview approaches (structured as well as unstructured) used for the evaluation. Describe the evidence supporting the validity, reliability, and accuracy of these methods for children or adolescents. For screens or tests, please report their validity and reliability, and if they were designed for the population to which this child belongs. If feasible, please report standardized norms.

Discuss any other data that contributed to your picture of this child. Please describe how the perspectives of key adults have been obtained. Are the child's caregivers or other significant adults intentionally or unintentionally preventing this child from feeling safe, worthy of respect, and effective? Are caregivers capable of protecting and fostering the healthy development of the child? Are caregivers operating in "survival mode" (such as interacting with the child in a generally anxious, indifferent, hopeless, or angry way) due to their own history of exposure to trauma? What additional support/resources might help these adults help this child?

2. STRENGTHS, COPING APPROACHES, AND RESILIENCE FACTORS

Please discuss the child's existing strengths and coping approaches that can be reinforced to assist in the recovery or rehabilitation process. Strengths might include perseverance, patience, assertiveness, organization, creativity, and empathy, but coping might take distorted forms. Consider how the child's inherent strengths might have been converted into "survival strategies" that present as non-cooperative or even antisocial behaviors that have brought this child to the attention of the Court.

Please report perspectives voiced by the child, as well as by caregivers and other significant adults, that highlight areas of hope and recovery.

3. DIAGNOSIS (POST TRAUMATIC STRESS DISORDER [PTSD])

Acknowledging that child and adolescent presentations of PTSD symptoms will differ from adult presentations, please "rule-in" or "rule-out" specific DSM-V criteria for PTSD for adolescents and children older than six years, which include the following criteria:

- Exposure to actual or threatened death, serious injury, or sexual violence, either experienced directly, witnessed, or learning that the event occurred to a close family member or friend (Criteria A)
- Presence of intrusion symptoms such as intrusive memories, distressing dreams, flashbacks, physical reactions, trauma-specific re-enactment through play, psychological distress at exposure to cues (Criteria B)
- Avoidance of stimuli or reminders associated with the traumatic event, including avoidance of internal thoughts and feelings related to the event, as well as external activities, places, people, or situations that arouse recollections of the event (Criteria C)

JUVENILE AND FAMILY COURT JUDGES

This project was funded by the Substance Abuse and Mental Health Services Administration (SAMHSA), US Department of Health and Human Services (HHS). The views, policies, and opinions expressed are those of the authors and do not necessarily reflect those of SAMHSA or HHS. Trauma Informed Courts 038

- Negative changes in cognition, mood, and expectations; diminished interest in, detachment, and estrangement from others; guilt and shame; socially withdrawn behavior; reduction in positive emotions (Criteria D)
- Alterations in arousal and reactivity, including irritable or aggressive behavior, angry outbursts, reckless or self-destructive behavior, hypervigilance, exaggerated startle response, concentration problems, and sleep disturbance (Criteria E)
- Exhibiting these disturbances in behavior, thoughts and mood for over a month (Criteria F)
- Significant distress or impairment in relationships with parents, siblings, peers, or other caregivers or with school behavior (Criteria G)
- The disturbed behavior and mood cannot be attributed to the effects of a medication, street drug, or other medical condition (Criteria H)

PTSD can also be present for children ages six and younger. Criteria include exposure; intrusive symptoms, including distressing memories or play re-enactment and physiological reactions to reminders; avoidance of people, conversations or situations; negative emotional states such as fear, sadness, or confusion, sometimes resulting in constriction of play; irritable behavior and hypervigilance; and impairment in relationships with parents, siblings, peers or other caregivers.

Even if an official DSM-V diagnosis of PTSD is not warranted, traumatic stress reactions can definitely or potentially contribute to the child's behavioral, emotional, interpersonal, or attitudinal problems. Traumatic stress reactions may contribute to problems with aggression, defiance, avoidance, impulsivity, rule-breaking, school failure or truancy, running away, substance abuse, and an inability to trust or maintain cooperative and respectful relationships with peers or adults.

4. TRAUMA-INFORMED SERVICES

Has this child ever received Trauma-Focused, Evidence-Based Treatment?*** Sometimes well-intentioned psychiatric, psychological, social work, or substance abuse evaluations and treatment are incomplete and of limited effectiveness because they do not systematically address the impact of children's traumatic stress reactions.

The Court is interested in potential sources of trauma-informed services in your area and your thoughts about the likelihood that the child can receive those services.

In the meantime, what can be done immediately for and with the family, school, and community to enhance safety, build on the child's strengths, and to provide support and guidance? How can this child best develop alternative coping skills that will help with emotional and behavioral self-regulation?

5. SUGGESTIONS FOR STRUCTURING PROBATION, COMMUNITY SUPERVISION AND/OR PLACEMENT OPTIONS.

Structured case plans for probation, community supervision, and/or placement should consider the ability of the setting and the people involved to assist the child in feeling safe, valued, and respected. This is especially important for traumatized children. Similarly, the plan for returning home, for continuing school and education, and for additional court or probationary monitoring should also clearly address each child's unique concerns about safety, personal effectiveness, self-worth, and respect. Please consider where, when, and with whom this child feels most safe, effective, valued and respected. Where, when, and with whom does the child feel unsafe, ineffective, or not respected? What out-of-home placements are available that can better provide for this child's health and safety, as well as for the community's safety? What placements might encourage success in school, relationships, and personal development?

¹ The use of "child" on this bench card refers to any youth who comes under jurisdiction of the juvenile court.

*** Trauma-Focused, Evidence-Based (TI-EB) Treatment is science-based, often requires training in a specific protocol with careful clinical supervision, and emphasizes the treatment relationship, personal/psychological safety, emotional and behavioral self-regulation, development of coping skills, specific treatment of child traumatic experiences, and development of self-enhancing/pro-social thinking, feeling, decision-making, and behaving. TI-EB treatments include: Trauma-Focused Cognitive Behavioral Therapy, Parent-Child Interaction Therapy, Trauma Affect Regulation: Guidelines for Education and Therapy, Child Parent Psychotherapy and more. See website: http://www.nctsn.org/resources/topics/treatments-that-work/promising-practices









National Child Traumatic Stress Network Resources

Birth Parents with Trauma Histories in the Child Welfare System

https://www.nctsn.org/resources/birth-parents-trauma-histories-and-child-welfare-system-guide-resource-parents

Resilience and Child Traumatic Stress

https://www.nctsn.org/resources/resilience-and-child-traumatic-stress

Secondary Trauma and Child Welfare Staff: Guidance for Supervisors and Administrators https://www.nctsn.org/resources/secondary-trauma-and-child-welfare-staff-guidancesupervisors-and-administrators

Testifying in Court About Trauma: The Court Hearing https://www.nctsn.org/resources/testifying-court-about-trauma-court-hearing

Trauma: What Child Welfare Attorneys Should Know https://www.nctsn.org/resources/trauma-what-child-welfare-attorneys-should-know

The 12 Core Concepts: Concepts for Understanding Traumatic Stress Responses in Children and Families

https://www.nctsn.org/resources/12-core-concepts-concepts-understanding-traumatic-stressresponses-children-and-families

TRAUMA-RESPONSIVE PRACTICES

ATTORNEYS

Adapted from:

Establishing a Trauma-Informed Lawyer-Client Relationship by Talia Kraemer and Eliza Patten, ABA Child Law Practice, October 2014

Using Trauma-Informed Practices to Enhance Safety and Security in Women's Correctional Facilities by Alyssa Benedict, National Resource Center on Justice Involved Women

Essential Components of Trauma-Informed Judicial Practice, Substance Abuse and Mental Health Services Administration

Safeguards Against Bias, National Court Appointed Special Advocate Association

Pasco County Circuit Court Trauma Audit, National Council of Juvenile and Family Court Judges

Prior to meeting with your clients, review the case file and circle trauma events/adverse childhood experiences.

Take time at the beginning of the case to establish rapport with your clients.

Determine if there are other open or closed family court cases involving the family. File a notice of related cases and attempt to have one judge hear all matters. Follow the local administrative orders regarding the coordination of related cases.

Clearly define, in non-technical terms what your role is – what services you provide and do not provide, what you can and cannot accomplish for the client.

Clearly explain confidentiality.

Be fully transparent with the client about her legal case, in age-appropriate terms for child clients and lay-person terms for adult clients.

Repeatedly review with the client what is to come, both in the attorney-client relationship and in the broader legal process. Discuss upcoming case milestones, decisions the client will have to make, and events the client will need to attend, such as court hearings or meetings.

Make clear to the client that missing hearings will have adverse consequences.

Create routines with the client. Hold meetings on the same day or in the same place. Explain your availability and how you can be contacted.

Explain to the client the decisions that are in his or her control. Strive to give clients a voice in decisions that affect them, in a way that is purposeful.

Be reliable, always following through on responsibilities, commitments, and appointments. Never make a promise that you might break.

Return phone calls in a timely fashion.

Anticipate issues that may arise during your representation and in the legal case that may be distressing or destabilizing for your client.

Remain calm, even if your client is "triggered." Remind the client that he or she is safe and that you will wait for him or her until she is ready.

Work with local social service partners and multidisciplinary groups to expand capacity for evidence-based trauma screening, assessment, and treatment.

7	What hurts?	What helps?
COMMUNICATION	Interactions	SHOW RESPECT. Interactions that express respect, kindness, patience, reassurance, and
CAT	that are	acceptance.
ĭ	humiliating,	 Instead of talking at the person by saying "Let me give you some advice," talk with the
Ŋ	harsh,	person by saying "What do you think?" or "What can we do to solve the problem?"
ξ	impersonal,	 Use "please" and "thank you" frequently.
8	disrespectful,	 Use the name of the people before you, addressing them by their surnames proceeded
	critical,	by "Mr." or "Ms."
	demanding and	 Ask the person before you if he or she has any questions.
	judgmental.	 Use short encouraging statements such as: "Your commitment really shows;" "It's clear
	,,	you are trying to change;" "Despite what happened in court last time, you have been able
		to"
		 Provide praise that is concrete, specific and delivered with a neutral tone. "I heard that
		you earned a one month token in AA. I know you worked hard for that." "I read in the
		court report that you followed last month's visitation schedule without any problems.
		This will help your child."
		• Instead of "I'm sending you for a mental health evaluation," try "I'd like to refer you to a
		doctor who can help us better understand how to support you."
		• Instead of "You are going to a commitment program; we are done with you. There is
		nothing more we can do," try "Maybe what we've been doing isn't the best way for use
		to support you. I'm going to ask you not to give up. We're not going to give up on you."
	Distracted	LISTEN. Use active listening.
	listening.	Maintain eye contact.
		Listen without judgment.
		• Examine your body language. Are you conveying attention?
		• Also, pay attention to the speaker's body language. This is a facet of true listening.
		• While listening, do not plan what you will say next. Think only about what the person is
		saying.
		• Provide regular feedback by reflecting and paraphrasing the content. For example, "I can
		see you are confused" or "Sounds like you are saying"
		• Refrain from looking at the computer or reading the case file while the person is
		speaking.
	Thinking	UNDERSTAND. Think and ask "What has happened to you?"
	and/or asking	Recognize that some behaviors (hypervigilance, dissociation, avoidance) can be self-
	"what's wrong	protective coping strategies; the trauma "symptoms" may be adaptations.
	with you?"	Instead of discussing sensitive issues related to trauma in open court ask the attorneys
		and parties to approach the bench and conduct a sidebar conversation. Or, if rule and
statute permits, and the		statute permits, and the attorneys agree, clear the courtroom.
	Becoming	REMAIN CALM. Use a quiet tone of voice and a slow pace of speaking that encourages
	aggressive and	stability and physiological regulation.
	hostile when	Recognize that the displayed anger could be increased activation of the arousal systems
	confronted	associated with survival, that the behavior could be self-protective, and that victims of
	with aggression	trauma can often overexaggerate the "threat." This doesn't justify the behavior but it can
	and hostility.	provide insight; insight leads to compassion and problem-solving.
		• Gently name the person's behavior in a nonjudgmental way. For example, say "I can hear
		how upset you are."
		• Ask questions to clarify the issue. This shows a willingness to understand. However, avoid
		"why" questions and use "what" or "how." Use active listening as mentioned above.

		 If necessary, call a recess to allow the person an opportunity to self-regulate.
		Do not threaten; inform of consequences.
	Allowing court	BE TRANSPARENT. Use clear, simple language to let people know what is happening and why.
	processes to be	• Explain the purpose of each hearing and who is in the courtroom.
	unknown and	Use non-technical language.
	unexpected.	• For example, instead of conducting sidebar conversations without explanation, tell the
		person that a sidebar conversation will occur and why – saying "We have to discuss some
		issues related to your case. We just need a minute to do it on the side."
SS	Personal bias.	Be vigilant in your awareness of your own personal biases as it can alter your perception of
NES		the impact of trauma.
REI		• Take note of any "baggage" you hold from your own traumatic experiences or trauma
۸A		events experienced by loved ones.
SELF-AWARENESS		• Identify your potential biases and how they might color your interpretations without your
ELF		even being aware of it.
S		• Understand and appreciate the culture, race, ethnicity, economic situation, religion, and
		place of residence of court-involved families.
		• Ask whether proposed case plans/probation sanctions/visitation orders are reasonably
		tailored to the specific needs of the child and family. Research has shown that many
		parents need practical help, but this kind of assistance is not always a priority.
		• Be open to and encourage appropriate connections to religious, community, and cultural
		institutions.
		• If you are working with a youth or adults whose sexual orientation differs from yours, get
		training to understand their needs and how the system might affect them.

Communicating in a trauma-informed tone and manner: a quick refresher

"What has happened to you?"

"What do you think?"

"What can we do to solve the problem?"

"Please."

"Thank you."

"Your commitment really shows."

"It's clear you are trying to change."

"Despite what happened in court last time, you have been able to..."

"I heard that you earned a one month token in AA. I know you worked hard for that."

"I read in the court report that you followed last month's visitation schedule without any problems. This will help your child."

"I'd like to refer you to a doctor who can help us better understand how to support you."

"Maybe what we've been doing isn't the best way for us to support you. I'm going to ask you not to give up on recovery. We're not going to give up on you."

"I can see you are confused"

"I can hear you are frustrated."

"Sounds like you are saying..."

"Sometimes bad things happen to children when they're younger. Those are crimes. That shouldn't have happened. It's not your fault. There is nothing you could have done to stop it. You deserve to be happy. You can heal from bad things in the past. I can get you someone to talk to who could help. Do you think that might help?"