

Long Term Impact of Adverse Childhood Experiences (ACEs) on Infants in the Foster Care System: How Both Stress and Positive Relationships Can Shape Our Genes

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Overview

- ▶ Provide an understanding of the ACES study.
- ▶ Explain the link between mental health, physical health outcomes and epigenetics.
- ▶ Discuss the impact of child abuse and the foster care system.
- ▶ Explain the link between racism, microaggressions, trauma and toxic stress on parents of African descent and their infants.
- ▶ Discuss protective factors to adverse childhood experiences.

What is ACES

- ▶ Study by Dr. Vincent Felitti in collaboration with Dr. Robert Anda of the Centers for Disease Control.
- ▶ Conducted in San Diego California using data gathered by Kaiser Permanente.
- ▶ Study identified 10 categories of risk experienced before the age of eighteen.
- ▶ Emotional Abuse, Physical Abuse, Sexual Abuse, Physical Neglect, Emotional Neglect, Substance Abuse in the household, Mental Illness in the household, Mother treated violently, Criminal behavior in the household, Divorce or Separation.

What you should know about ACES
 produced by KPJR Films, and edited by Jen Bradwell

The ACE (Adverse Childhood Experience) Study

17,000 Participants Surveyed

The Adverse Childhood Experiences (ACE) Study Pyramid

Female Participants
 13% Emotional Abuse
 27% Physical Abuse
 24.7% Sexual Abuse

Male Participants
 7.6% Emotional Abuse
 29.9% Physical Abuse
 16% Sexual Abuse

Source: www.acestudy.org, "About the Adverse Childhood Experiences Study".

Aces High?

The higher the number of identified ACES, the worse the outcomes

Mental Health Conditions including a higher risk for Depression, Anxiety, PTSD, Hallucinations and Suicide

Physical Health Conditions including Cardiovascular Disease, Diabetes, Emphysema, Cancer, Obesity, Autoimmune disease, Fetal death

Possible Risk Outcomes:

BEHAVIOR				
Use of cigarettes	Smoking	Alcohol	Drug use	Workless
PHYSICAL & MENTAL HEALTH				
Heart disease	Cancer	Stroke	Diabetes	Obesity
Depression	Anxiety	PTSD	Suicidal thoughts	Substance use

Source: <http://www.cdc.gov/aces/aware/aces.htm>

Relations between ACEs and Categories of Abuse

ACES DEFINITION

- ▶ Physical Neglect
- ▶ Emotional Neglect
- ▶ Physical Abuse
- ▶ Sexual Abuse
- ▶ Emotional Abuse
- ▶ Mother treated violently
- ▶ Substance by parent
- ▶ Incarcerated parent
- ▶ Household mental illness
- ▶ Parental separation or divorce

DCFS AREA OF CONCERN

- ▶ Physical Neglect
- ▶ Emotional Neglect
- ▶ Physical Abuse
- ▶ Sexual Abuse
- ▶ Emotional Abuse
- ▶ Intimate partner violence
- ▶ Substance by parent
- ▶ Incarcerated parent
- ▶ Parental mental illness

Statistics on Children in Foster Care by Race/Ethnicity

California

Los Angeles

California	Rate per 1,000	Los Angeles County	Rate per 1,000
African American/Black	23.7	African American/Black	29.1
American Indian/Alaska Native	21.3	American Indian/Alaska Native	15.6
Asian/Pacific Islander	1.1	Asian/Pacific Islander	1.1
Hispanic/Latino	5.7	Hispanic/Latino	7.2
White	4.3	White	4.5
Total Children in Foster Care	5.8	Total Children in Foster Care	7.6

Source: www.kiddata.org

Census Data of Californians by Race/Ethnicity

Race and Hispanic Origin	Percent
① White alone, percent	△ 72.4%
② Black or African American alone, percent (a)	△ 6.5%
③ American Indian and Alaska Native alone, percent (a)	△ 1.6%
④ Asian alone, percent (a)	△ 15.2%
⑤ Native Hawaiian and Other Pacific Islander alone, percent (a)	△ 0.5%
⑥ Two or More Races, percent	△ 3.9%
⑦ Hispanic or Latino, percent (b)	△ 39.1%
⑧ White alone, not Hispanic or Latino, percent	△ 37.2%

QuickFacts data are derived from Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

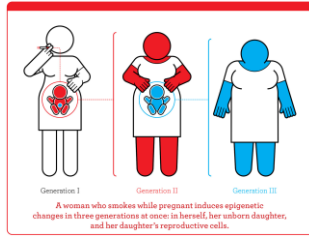
https://www.census.gov/hhes/educ/factProfile/cap/P044217#id=note-9

Generational Impact of Epigenetics

ACES experienced by one generation can impact the well-being of future generations

The Dutch Hunger Winter... more at risk for diabetes, obesity and schizophrenia.

Impact of Slavery on African-Americans

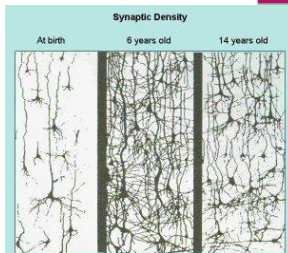


Source: <https://doi.org/10.1016/j.pbs.2017.05.004> epigenetics-inherited
Illustration by Julie Buflum

Synaptic Density Pruning

Children inherit 23,000 genes from their parents (Structural Genome)

The least experienced connections withdraws around the time of puberty. You use it or lose it!

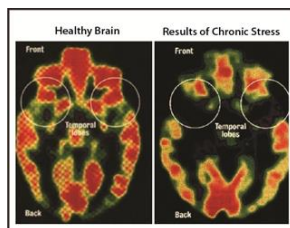


Source: Rethinking the Brain, Farber, and Rock Institute, 2010, Brook, 1997

Toxic Stress

Prolonged activation of stress response systems in the absence of protective relationships.

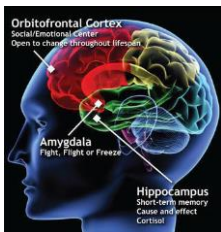
Toxic stress can disrupt typical development. Children who are exposed to toxic stress suffer severe emotional and cognitive delays and having difficulty developing and/or maintaining positive relationships. "Toxic Loop"



Source of image: <https://www.warhi.org/SEI/How-the-Do-it-Science-with-Compassion/Science.htm>

Immediate Impact of Trauma

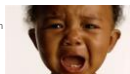
Can interfere with the child's normal healthy attachment to caregivers.
 Overwhelming sense of terror, helplessness, horror and a Bodily reaction: increased heart rate, shaking, dizzy, rapid breathing, release of stress hormones "fight or flight" response.



Source of Image: <http://www.br-lucasta.net/understanding-trauma-responses>

Is it TRAUMA or SOMETHING ELSE???

- ▶ Signs that your client has possibly experienced TRAUMA
- ▶ Anger/Destructive
- ▶ Disrespectful
- ▶ Yells
- ▶ Talks nonstop/multitask
- ▶ Non Compliant
- ▶ Cries/Calls out
- ▶ Can't sit still
- ▶ Runs
- ▶ Can't focus
- ▶ Developmental delays



Adapted from Shostard F.J. Outcomes of Traumatic Exposure. Child Adolescent Psychiatric Clin N Am 2014 April 23 (2): 243-256.
 Source Image 1: <http://www.medicalnewstoday.com/ce/2014/1/20/understanding-trauma-responses.html>
 Source Image 2: <http://www.sosfortrauma.com/2014/1/20/understanding-trauma-responses.html>

Philadelphia ACES Study

- ▶ 5 Newly Identified Urban ACE indicators: Experiencing racism, witnessing violence, living in an unsafe neighborhood, **living in foster care**, or experiencing bullying
- ▶ 42% White 44% Black, 3.5% Latino, 3.6% Asian, 3.8% Biracial
- ▶ Behavior and Health Outcomes: worse with higher ACE scores and more adverse if lower income as well.
 - ▶ More Sexual partners
 - ▶ More Substance Use
 - ▶ More Diabetes
 - ▶ More Obesity
 - ▶ More Asthma
 - ▶ More Mental Illness
 - ▶ More Suicide Attempts
 - ▶ More Smoking, More Cancer
 - ▶ 2 of 5 adults experienced violence
 - ▶ 1/3 experienced racism
 - ▶ 1/10 reported feeling unsafe

Perceived Discrimination

- ▶ **Racism:** a belief that race is the primary determinant of human traits and capacities and that racial differences produce an inherent superiority of a particular race
- ▶ **Implicit Bias:** Relatively unconscious attribution of particular qualities to a member of a certain social group
- ▶ **Microaggressions:** a comment or action that subtly and often unconsciously or unintentionally expresses a prejudiced attitude toward a member of a marginalized group (such as a racial minority)

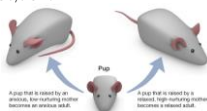
Perceived Discrimination decreases the quality of mother child relationships

Maternal perceived racial discrimination	Maternal Stress (life events, financial strain, job stress, etc)	Level of maternal psychological functioning (Rates of anxiety and depression)	Nurturing mother/child relationship
No	Low	Low	High
No	High	High	Low
Yes	High	Higher	Higher

Adapted from Murry et al., Journal of Marriage and Family 2001

How does this all relate to ACES

- ▶ Perceived discrimination, Epigenetics and Toxic stress in people of African descent have lead to an increased to exposure of our infants to adverse childhood experiences.
- ▶ Thus, leading to disproportionate interactions with DCFS and entry into in the foster care system.



<https://learn.genetics.utah.edu/content/epigenetics/rats/>

How do we stop the cycle?

- ▶ Protective factors
 - ▶ Parental resilience
 - ▶ Social connections
 - ▶ Knowledge of parenting and child development
 - ▶ Concrete supports in times of need
 - ▶ Extended Family Caring
- ▶ Access to adequate medical care/informed health professionals
- ▶ Ethnic/cultural pride
- ▶ Children's social and emotional health
- ▶ Communities and social systems that support health and development, nurture human capital
- ▶ Spirituality/Religiosity

Protective Factors Cont.

- ▶ Home Visiting with pregnant Women and Families of Newborns
- ▶ Parent Training Programs such as PCIT, PPP, etc.
- ▶ Intimate Partner Violence Prevention
- ▶ Access to treatment for Mental health and Substance Abuse
- ▶ Adequate Income to support lower income families
- ▶ Responsive, Supportive Professionals
- ▶ Trauma Informed Systems
- ▶ High Quality Childcare

InBrief: The Science of Resilience

Center on the Developing Child at Harvard University

InBrief: How Resilience is Built

Center on the Developing Child at Harvard University

There is always hope!

Even the negative consequences of ACEs, perceived discrimination, epigenetics and toxic stress can be ameliorated by nurturing/supportive, competent adults who are able to intervene and provide support.



QUESTIONS?

References

- ▶ Anderson, A. (2015). Racial Socialization and Health: The Child Advocate's role. https://www.oop.org/en-us/Documents/cocp_racism_child_health.pdf [PDF].
- ▶ Burke-Harris, N. (2019). DEEPEST WELL: Healing the long-term effects of childhood adversity. Place of publication not identified: MAXNER Books.
- ▶ Burke-Harris, N. (2018, January 30). How Trauma, Abuse and Neglect in Childhood Connect to Serious Diseases in Adults. Retrieved from <https://www.kqed.org/mindshift/49894/how-trauma-abuse-and-neglect-in-childhood-connect-to-serious-diseases-in-adulthood>
- ▶ Children in Foster Care, by Race/Ethnicity. (2018). Retrieved from <http://www.kidsdata.org/topic/22/fostercare-race/table>
- ▶ Felitti, V. J., Anda, R. F., et al (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. *American Journal of Preventive Medicine*, 14(4), 245-258. doi:10.1016/s0749-3797(98)00017-8
- ▶ Garie, K. (2018, September 19). Epigenetics: Can stress really change your genes? Retrieved from <http://theconversation.com/epigenetics-can-stress-really-change-your-genes-55879>

References Cont.

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- ▶ Jones, B. (2017). Legacy of Trauma: Context of the African American Existence [PowerPoint slides] Retrieved from www.health.state.mn.us/communities/equity/projects/infantmortality/session2.2.pdf
- ▶ Martinez, A. (2018, November 07). The five protective factors: A community approach to preventing ACEs. Retrieved from <https://www.esdc.org/2018/11/07/the-five-protective-factors-a-community-approach-to-preventing-aces/>
- ▶ National Scientific Council on the Developing Child (2010). *Early Experiences Can Alter Gene Expression and Affect Long-Term Development: Working Paper No. 10*. Retrieved from www.developingchild.harvard.edu
- ▶ Racial Disproportionality and Disparity in Child Welfare. (2016, November). Retrieved February 12, 2019, from <https://www.childwelfare.gov/pubs/issue-briefs/racial-disproportionality/>
- ▶ Resilience - Adverse Childhood Experience (ACE) in Minnesota. (2019). Retrieved February 12, 2019, from <https://www.health.state.mn.us/communities/ace/resilience.html>

References Cont.

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- ▶ Stambaugh, L.F., Ringelsen, H., et al. (2013). Adverse childhood experiences in NSCAW. OPRE Report #2013-26. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. Retrieved from <http://www.acf.hhs.gov/programs/opre/resource/national-survey-of-child-and-adolescent-well-being-nscaw-no-20-adverse-child>
- ▶ Wade, R., & Anderson, A. (2015). Racism and Its impact on children's health. https://www.oop.org/en-us/Documents/cocp_racism_child_health.pdf [PDF].
- ▶ Wade, R. (2015). Childhood Stress and Urban Poverty: The Impact of ACEs on Health [PowerPoint slides] Retrieved from http://www.hmp.org/wp-content/themes/HMPRG/backup/PDFs/2015/ACEs/MidwestACEs_Boy%20Wade%40presentation.pdf
- ▶ Webster, D., et al. (2014). Child Welfare Services Reports for California. U.C. Berkeley Center for Social Service Research; Annie E. Casey Foundation, Kids Count. Retrieved from www.kidsdata.org
- ▶ Weinhold, B. (2006). Epigenetics: The Science of Change - PubMed Central (PMC). Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1392256/>
