The Buffering Effect of Family Resilience on Adverse Childhood Experiences (ACEs): Examining the Role of Race and Culture on Traumatic Stress

March 12th, 2020
Community-Based Child Abuse Prevention Grantee Meeting

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Our Goal for Today:

Create a space to have a conversation, guided by evidence, about how race and racism intersects with ACEs, family resilience, and health.

*Focus on White and African-American families now, Latinx and American Indian/Alaska Native families during breakout session*
Outline

1. What does ACE exposure and family resilience have to do with health equity?

2. Are there racial disparities in ACE exposure in the US? Does family resilience buffer the effects of ACEs on children’s health?

3. What’s going on? What theoretical frameworks help us understand how ACEs and family resilience intersect with race?

4. What are the implications for policy and practice?
Keep in Mind

1. Group averages vs. individual experiences

2. Evidence-based practice must include: evidence, clinical expertise, and client preferences

3. Confronting racism and oppression can be challenging personally and professionally
Self-Reflection

1. Limits of your speakers and this presentation
2. What are your assumptions regarding ACEs among various race/ethnic groups?

Which race/ethnic group is most likely to experience each ACE?.....how large is the disparity?.......why?

Child poverty
Parental incarceration
Parental drug/alcohol abuse
Conceptual Framework

ACEs → Family Resilience → Health

Social-Political Context of Racism and Discrimination
Outline

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Social Determinant of Health (SDoH)

- “Conditions in the places where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.”

Figure 39-1. Five-domain Model of Social Determinants of Health
Employment grade and coronary heart disease in British civil servants

M. G. MARMOT, GEOFFREY ROSE, M. SHIPLEY, AND P. J. S. HAMILTON
From the Department of Medical Statistics and Epidemiology, London School of Hygiene and Tropical Medicine

Fig. 5 CHD mortality among total population by year of follow-up.
“Health equity means that everyone has a fair and just opportunity to be healthier. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.”

What is health equity?

What is the difference between equity and disparity?

Health equity is the ethical and human rights principle that motivates us to eliminate health disparities; health disparities—worse health in excluded or marginalized groups—are how we measure progress toward health equity.

Source: Robert Wood Johnson Foundation
“Not all health differences are health disparities.” (Braveman, 2014)

**Health Disparity:**

- Preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations. (CDC)

- A particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage (Healthy People 2020)
The CDC-Kaiser ACE Study

- Emotional
- Mother treated violently
- Incarcerated Relative
- Physical
- Mental Illness
- Emotional
- Divorce
- Sexual
- Physical
- Substance Abuse

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

Risk:
- 0 ACEs
- 1 ACE
- 2 ACEs
- 3 ACEs
- 4+ ACEs
Total annual costs attributable to ACEs were estimated to be US$581 billion in Europe and $748 billion in north America. More than 75% of these costs arose in individuals with two or more ACEs.

Interpretation Millions of adults across Europe and north America live with a legacy of ACEs. Our findings suggest that a 10% reduction in ACE prevalence could equate to annual savings of 3 million DALYs or $105 billion. Programmes to prevent ACEs and moderate their effects are available. Rebalancing expenditure towards ensuring safe and nurturing childhoods would be economically beneficial and relieve pressures on health-care systems.
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Current National Data Source for ACEs

1. NCANDS (National Child Abuse and Neglect Data System)

2. BRFSS (Behavioral Risk Factor Surveillance System, 2014)

NCANDS State-level Rate of Maltreatment (2018)

White  African-American

Maltreatment Victim Rate per 1,000 Children

0  5  10  15  20  25  30  35  40  45
<table>
<thead>
<tr>
<th>Survey Design and Sample Size</th>
<th>BRFSS</th>
<th>NSCH</th>
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<tbody>
<tr>
<td></td>
<td>Largest continuously conducted health survey system in the world</td>
<td>Nationally representative survey of children’s health and well-being</td>
</tr>
<tr>
<td></td>
<td>ACE module for 23 states = 249,000</td>
<td>2016-2018 n = 102,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target Population</th>
<th>Adults 18+</th>
<th>All non-institutionalized children ages 0 – 18 years</th>
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</thead>
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<table>
<thead>
<tr>
<th>Reporter</th>
<th>Self</th>
<th>Parent</th>
</tr>
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<tr>
<th>ACE Prompt</th>
<th>I’d like to ask you some questions about events that happened during your childhood...</th>
<th>The next questions are about events that may have happened during this child’s life....</th>
</tr>
</thead>
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<tr>
<th>ACE Items</th>
<th>0-8 items: Mental Health, Alcohol, Drug Use, Incarceration, Divorce, Witness Domestic Violence, Physical Abuse (not spanking), Verbal Abuse, Sexual Abuse,</th>
<th>0-8 items: Mental Health, Alcohol or Drugs, Incarceration, Divorce, Parent Died, Witness Domestic Violence, Witness Neighborhood Violence, Race/Ethnic Discrimination, Poverty</th>
</tr>
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</table>
Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System in 23 States

Average Number of ACEs

White: 1.52
Black: 1.69
Hispanic: 1.80
Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System in 23 States

% with ACE

- Emotional: White (35), Black (30)
- Physical: White (15), Black (12)
- Sexual: White (10), Black (8)
- IPV: White (20), Black (18)
- Drugs: White (25), Black (23)
- MH: White (20), Black (18)
- Divorce: White (30), Black (40)
- Jail: White (5), Black (10)

NS: Not Significant
W>B: White is greater than Black
2016-2018 National Survey of Children’s Health (NSCH)

- Nationally representative survey (n=102,057)
- Web or mail-based survey conducted by the Census Bureau
- Sponsored by US DHHS Maternal and Child Health Bureau
- ~1,000 surveys collected per state
- One child randomly selected per household
- Representative of non-institutionalized children ages 0-17

Your Data ... Your Story
www.childhealthdata.org

Data Resource Center for Child & Adolescent Health
A project of the Child and Adolescent Health Measurement Initiative
"The next questions are about events that may have happened during this child’s life. These things can happen in any family, but some people may feel uncomfortable with these questions. You may skip any questions you do not want to answer. To the best of your knowledge, has this child experienced....”

1. Extreme economic hardship (poverty)
2. Parental divorce/separation (divorce)
3. Parental incarceration (jail)
4. Witness to violence in the home (DV)
5. Victim/witness of neighborhood violence (NV)
6. Lived with anyone with a drug or alcohol problem (drugs)
7. Lived with anyone with a mental illness or was suicidal (mental health)
8. Parent/guardian death (death)
9. Treated unfairly due to race/ethnic group (discrimination)
NSCH vs. CDC-Kaiser ACEs

- Emotional
- Mother treated violently
- Incarcerated Relative
- Sexual
- Divorce
- Physical
- Mental Illness
- Emotional
- Substance Abuse
- Physical
NSCH vs. CDC-Kaiser ACEs

- Mental Illness
- Mother treated violently
- Incarcerated Relative
- Divorce
- Substance Abuse

- Poverty
- Neighborhood Violence
- Racial Discrimination
- Parental Death
% with ACE

Child Age

White
Black, non-Hispanic
Total
50% Black ACE Exposed
50% White ACE Exposed
Association Between ACEs and Overall Health

The chart shows the percentage of individuals reporting excellent or very good health stratified by the number of ACEs and race.

- **0 ACEs**: Approximately 95% of White individuals and 90% of Black individuals report excellent or very good health.
- **1 ACE**: Approximately 90% of White individuals and 85% of Black individuals report excellent or very good health.
- **2 or more ACEs**: Approximately 80% of White individuals and 75% of Black individuals report excellent or very good health.

This suggests a higher percentage of individuals with no ACEs report excellent or very good health compared to those with 1 or more ACEs, regardless of race.
<table>
<thead>
<tr>
<th>ACE</th>
<th>BRFSS</th>
<th>NSCH</th>
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</thead>
<tbody>
<tr>
<td>Mental Health</td>
<td>White &gt; Black</td>
<td>White &gt; Black</td>
</tr>
<tr>
<td>Household Substance Use</td>
<td>White &gt; Black</td>
<td>White &gt; Black</td>
</tr>
<tr>
<td>Incarceration</td>
<td>Black &gt; White</td>
<td>Black &gt; White</td>
</tr>
<tr>
<td>Divorce</td>
<td>Black &gt; White</td>
<td>Black &gt; White</td>
</tr>
<tr>
<td>Witness Domestic Violence</td>
<td>Black &gt; White</td>
<td>Black &gt; White</td>
</tr>
<tr>
<td>Physical Abuse (not spanking)</td>
<td>White &gt; Black</td>
<td>-</td>
</tr>
<tr>
<td>Emotional Abuse</td>
<td>White &gt; Black</td>
<td>-</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>Black &gt; White</td>
<td>-</td>
</tr>
<tr>
<td>Parent Died</td>
<td>-</td>
<td>Black &gt; White</td>
</tr>
<tr>
<td>Neighborhood Violence</td>
<td>-</td>
<td>Black &gt; White</td>
</tr>
<tr>
<td>Race/Ethnic Discrimination</td>
<td>-</td>
<td>Black &gt; White</td>
</tr>
<tr>
<td>Poverty</td>
<td>-</td>
<td>Black &gt; White</td>
</tr>
<tr>
<td>Total ACE Score (&gt;0)</td>
<td>Black &gt; White</td>
<td>Black &gt; White</td>
</tr>
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</table>
But, wait.....What about resilience?

Shouldn’t we also consider protective factors!?
Figure 2.1. Interplay of protective and stress processes and their influence on individual competence across the life span.
The Pair of ACEs

Adverse Childhood Experiences

Maternal Depression
Emotional & Sexual Abuse
Substance Abuse
Domestic Violence

Physical & Emotional Neglect
Divorce
Mental Illness
Incarceration

Homelessness

Adverse Community Environments

Poverty
Discrimination
Community Disruption
Lack of Opportunity, Economic Mobility & Social Capital

Violence
Poor Housing Quality & Affordability

Ecological Resilience

- Each child/family is a unique ecosystem

- “The capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks.”

  - Panarchy: the resilience of a system at a particular focal scale will depend on the influences from states and dynamics at scales above and below.

Ecological Resilience

- **Adaptability**
  - The capacity of actors in a system to influence resilience
  - Adaptability of the system is mainly a function of the social component—the individuals and groups acting to manage the system

- **Transformability**
  - The capacity to create a fundamentally new system when ecological, economic, or social (including political) conditions make the existing system untenable

- **We want families/children to be resilient. But, are our prevention programs and systems adaptable and transformable?**

What does it mean to be “Resilient” or display “Resilience” from Child Maltreatment?

- Resilience = successful in 6 out of 8 domains:
  1. Education
  2. Psychiatric disorder
  3. Substance abuse
  4. Arrests
  5. Violent behavior
  6. Employment
  7. Homelessness
  8. Social activity

- 50% resilient in adolescence, 30% in young adulthood

- Key predictors of resilience:
  - African-American race
  - Female gender
  - Fewer stressful life events
  - High relationship support
The complex neurobiology of resilient functioning after childhood maltreatment

Konstantinos Ioannidis, Adrian Dahl Askelund, Rogier A. Kievit and Anne-Laura van Harmelen
ENVIROMENTAL INFLUENCES
i.e. caring parents, friendships, intimate relationships

COGNITION
i.e. self-esteem, positive self schemas, happiness

BRAIN FUNCTION
i.e. mPFC, limbic activity, fronto-limbic connectivity

BRAIN STRUCTURE
i.e. mPFC, limbic areas

NEUROENDOCRINE/INFLAMMATORY
i.e. Cortisol, CRP, IL-6, IL-1β

(POLY)GENETIC
i.e. 5-HTTLPR, FKBP5, BDNF, NPY
A composite measure based on responses to the following 4 survey items: “When your family faces problems, how often are you likely to do each of the following?”

1. Talk together about what to do.
2. Work together to solve our problems.
3. Know we have strengths to draw on.
4. Stay hopeful even in difficult times.
Family Resilience by Race

- **Hopeful**
  - White: 50%
  - Black: 60%

- **Strengths**
  - White: 50%
  - Black: 60%

- **Work to Solve**
  - White: 40%
  - Black: 50%

- **Talk About**
  - White: 40%
  - Black: 50%
Association Between Family Resilience and Child Health by Race

% Excellent/Very Good Health

- White
- Black

Family Resilience Indicator

Low

High
Does Family Resilience Moderate the Association Between ACEs and Child Health by Race?
Does Family Resilience Moderate the Association Between ACEs and Child Health by Race?

- **White - 0 ACEs**
- **White - 2 or more ACEs**
- **Black - 0 ACEs**
- **Black - 2 or more ACEs**

% Excellent/Very Good Health

- **26% Gap**
- **16% Gap**
Does Family Resilience Buffer the Effects of Discrimination on Child Health for Black Children?

![Graph showing the relationship between Family Resilience Indicator and % Excellent / Very Good Health for children experiencing Yes Discrimination vs. No Discrimination. The graph demonstrates that higher Family Resilience is associated with better health outcomes, regardless of discrimination.](image-url)
Does Family Resilience Buffer the Effects of Discrimination on Child Health for Black Children?

![Graph showing the relationship between family resilience and child health for Black children, with a 12% gap for low resilience and a 1% gap for high resilience between those who experience discrimination and those who do not.](chart.png)
Conclusions

• Black children experience greater cumulative exposure to ACEs compared to white children in the United States

• Exposure to ACEs is associated with worse overall child health, contributing to racial health disparities

• Family resilience is equal, if not greater, among black families compared to white families

• Family resilience buffers the relationship between ACEs and child health, reducing racial health disparities
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Why is family involvement so impactful for health outcomes?

Why does it moderate the impact ACEs has on these outcomes?

Why is this so impactful for Black families in particular?
In the context of culture

- We don’t exist in a vacuum.

- What is systemic racism?
  - Racial ingroup bias that has been made a part of legal, social, and cultural operations.
  - Often masks itself in structures that are supposed to be nonracial or race-neutral in ideology.
Racial Equity Institute: The Groundwater Approach

“We live in a racially structured society, and that is what causes racial inequity.”

A Groundwater Approach is based on several key observations about racial inequity:

- Racial inequity looks the same across systems
- Socio-economic differences does not explain racial inequity
- Systems contribute significantly to disparities, regardless of people’s culture or behavior

Source: The Groundwater Approach: Building a practical understanding of structural racism, Racial Equity Institute
Racial disparities exist in every system in the US without exception.

Source: Racial Equity Institute
White Supremacist Propaganda At 'Record-Setting' Levels, ADL Report Finds

Silent Sam may be gone, but North Carolina decided three other Confederate monuments can stay.

New Jersey Man Arrested With Stockpile Of Assault Weapons, Nazi Paraphernalia

Joseph Rubino’s house contained clothing with white supremacist symbols and a purported “instruction manual for owning a slave,” federal authorities said.

Horror in El Paso: 20 dead, 26 wounded in mass shooting at Walmart

4 White Supremacists Face Federal Charges In California Attacks

White Supremacy Is A Worldwide Crisis – And The U.S. Can Learn From Abroad

Former East Pittsburgh officer found not guilty in fatal shooting of unarmed teenager
Race-Based Stress

The stress reaction experienced by people of color when they encounter direct or indirect forms of racism.

Linked to a number of negative outcomes:

- Depression
- Substance Use
- Trauma-like symptoms
- Worry
- Feelings of poor health
Some researchers have theorized that there is a connection between the persistent health disparities experienced by African Americans, and their chronic exposure to racism.
Race Based Traumatic Stress Injury

Unpacking Racism - Individual Cultural Institutional

Racial Discrimination
Avoidant: barring access, exclusion, withholding information and use of deception.

Event experienced as:
- Negative (emotional pain)
- Memorable
- Sudden
- Uncontrollable

Racial Harassment
Hostile: physical, interpersonal and verbal assaults, treatment as stereotype, assumptions as criminal or dangerous

Discriminatory Harassment
Aversive-hostility: “White light”, isolation at work, denial of promotion, question of qualifications

Reactions Signs/Symptom Cluster
- Flashbacks/Nightmares
- Memory loss
- Inability to concentrate
- Hyperactive
- Depression
- Poor relationships
- Withdrawal
- Guilt

Critical Signs:
- Avoidance
- Intrusion
- Arousal

Increased vigilance
- Spiritual
- Activism
- Commitment to being strong
How are stressors (like racism) received and interpreted by families?
• Individuals and families do not live in a vacuum

• 5 dimensions of external context that families CAN’T control:
  – Culture, history, economy, development, and heredity.

• 3 dimensions of internal context that they CAN control:
  – Structural, psychological, and philosophical.
Sociocultural Family Stress Model

- Applies CMFS specifically to African American families

- Incorporates MEES (mundane extreme environmental stress)
  - “…the multiple forms of continuous, chronic, subtle and overt...oppressions (e.g., racism, classism, sexism, heterosexism, colorism) in the lives of African Americans and their families.”
  - The stress that African Americans experience as a result of the constant, daily exposure to racism, and their relegation to a racially stratified social system.
  - MEES can make individuals and families physically sick
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Racial socialization

• Process through which direct and indirect messages regarding the attitudes, beliefs, values, expectations, behaviors, meanings, and importance related to race and racial group membership are transmitted to youth.

• Prominent feature in many Black families, and frequently a central component of parenting for African Americans.
Racial socialization - benefits

- Improved sense of self and ability to cope with racialized environments.
- Preparation for bias and discrimination
- Reduced likelihood of depression
- Lower levels of depression
- Weakened relationship between race-based stress and trauma-related symptomology
Racial Socialization and Racial Identity: African American Parents’ Messages About Race as Precursors to Identity

Enrique W. Neblett Jr. · Ciara P. Smalls · Khalil R. Ford · Hòa X. Nguyên · Robert M. Sellers
Cultural Humility in Practice

- Our systems of care, including assessment, treatment, and intervention delivery are monocultural.
  - Who decides what is “normal” vs. “abnormal”?

- Cultural Humility
  - Be aware of your biases and how that may impact people you serve
  - Recognize the limits of your knowledge
  - Don’t be “color blind”
  - Recognize cultural wealth
Discussion:

How will screening differentially impact families or color given what we know about disparities?

What else do we need to know/do to screen and deliver services with cultural competence?
References


