Understanding ACES
(Adverse Childhood Experiences)

The Impact of Early Life Experiences on Our Health & Adult Life and Society
Ask Questions
God’s Perfect Design For Us

Body

Soul

Spirit
Perfection Meets Imperfection
(Original Sin)

- **Body**
  - Medical Disorders & Sicknesses

- **Soul & Mind**
  - Psychiatric/Mental Disorders

- **Spirit**
  - Disorders of the Spirit/Heart

Nothing happens in isolation!
A Little Brain Science
The Effects of Toxic Stress in Childhood

3 Key Factors Determine the Impact:

- Age
- Gender
- Type of Stress/Maltreatment
Persistent Stress Changes Brain Architecture

Normal

Toxic Stress

The Concept of Neuroplasticity

“The beauty of epigenetics is that it’s reversible, and the beauty of the brain is that it’s plastic.”

Dr. Margaret McCarthy
the ACE study
Unhealthy Behaviors

How Are they Developed?
How Do they Come About?
Could Major Health Problems Be Rooted in Early Life Adversity?
Mechanisms By Which Adverse Childhood Experiences Influence Adult Health Status
the ACE study
Adverse Childhood Experiences Are Common

**Household dysfunction:**
- Substance abuse: 27%
- Parental sep/divorce: 23%
- Mental illness: 17%
- Battered mother: 13%
- Criminal behavior: 6%

**Abuse:**
- Psychological: 11%
- Physical: 28%
- Sexual: 21%

**Neglect:**
- Emotional: 15%
- Physical: 10%
MORE ACEs = MORE HEALTH PROBLEMS

Dose-response is a direct measure of cause & effect. The “response”—in this case the occurrence of the health condition—is caused directly by the size of the “dose”—in this case, the number of ACE categories.
Adverse Childhood Experiences vs. >1 ppd Smoking as an Adult

ACE Score

p < .001
Connecting the Dots….

in Your Own Life

What *Happened* to You?
Depression:

Most people say depression is a disease. Many say depression is genetic. Some say it is due to a chemical imbalance.
What if depression were *not* a disease, but a *normal response* to abnormal life experiences?
Well-being

Childhood Experiences Underlie Chronic Depression

**

![Bar graph showing the percentage of people with a lifetime history of depression based on ACE score. The graph compares women (red bars) and men (yellow bars).](image-url)
The ACE Score and the Prevalence of Severe Obesity (BMI $\geq$35)

Percent obese (%)

ACE Score

0 1 2 3 $\geq$4
Obesity and Trauma

“We have come to recognize that **overeating is not the basic problem.** It is an attempted solution, and people are not eager to give up their solutions, particularly at the behest of those who have no idea of what is going on.

**Nor is obesity the problem.** Obesity is the consequence, the marker for the problem, much in the way that smoke is the marker for a house fire.

Often enough, **obesity is even the solution** - to problems that are buried in time and further protected by shame, by secrecy, and by social taboos against exploring certain areas of human experience.”

Vincent Felitti, M.D.
ACE Study Author
ACE Score and Impaired Memory of Childhood

ACE Score

0 1 2 3 >= 4

% 40 35 30 25 20 15 10 5 0

ACE Score

1 2 3 4 5
ACES in South Carolina Surveys 2014-2016

YORK COUNTY

64% report ACEs

Top ACEs Reported

- Emotional abuse - 34%
- Parental divorce/separation - 31%
- Household substance use - 29%

79% of current smokers report ACEs

60% of adults with heart disease report ACEs

76% of binge drinkers report ACEs
Examples of ACE-Attributable Problems

As # of ACE Categories Increases, Risk for these Health & Social Issues Increase

- Alcoholism and alcohol abuse
- Chronic obstructive pulmonary disease (COPD)
- Fetal death
- Illicit drug use
- Heart disease
- Liver disease
- Intimate partner violence
- Other violence
- Multiple sexual partners

- Sexually transmitted diseases (STDs)
- Early initiation of smoking
- Smoking (currently)
- Obesity
- Early initiation of sexual activity
- Unintended pregnancies
- Workplace problems
- Depression
- Suicide attempts
- Other mental health problems
Lifetime Effects from ACEs

Critical & Sensitive Developmental Periods

Adverse Childhood Experience
MORE CATEGORIES – GREATER IMPACT
Physical Abuse, Sexual Abuse
Emotional Abuse, Neglect
Witnessing Domestic Violence
Depression/Mental Illness in Home
Incarcerated Family Member
Substance Abuse in Home
Loss of a Parent

Genetics
Experience triggers gene expression (Epigenetics)

Brain Development
Electrical, Chemical, Cellular Mass

Adaptation
Hard-Wired Into Biology

Chronic Disease
Psychiatric Disorders
Impaired Cognition
Work/School Attendance, Behavior, Performance
Obesity
Alcohol, Tobacco, Drugs
Risky Sex
Crime
Poverty

Intergenerational Transmission, Disparity

Source: Family Policy Council, 2012
Many chronic diseases of adults are determined decades earlier, in childhood.

Not by childhood *diseases*, but by life experiences.
The risk factors underlying these adult diseases are often helpful short-term *coping* devices for what has gone before.
Spiritual Risk Factors (Issues of the Heart) stemming from Early Life Trauma that can affect Our Behavior & Health

- Abandonment
- Rejection
- Fear/Anxiety/Worry
- Lack of Life Purpose
- Despair/Loss of Hope

- Guilt
- Shame
- Bitterness & Anger
- Unforgiving Spirit
- Low Sense of Worth
“For out of the heart come evil thoughts, murder, adultery, sexual immorality, theft, false witness, slander.”

Matthew 15:19

“Above everything else guard your heart, because from it flow the springs of life.”

Proverbs 4:23
Our Deep Spiritual Needs

We often respond to ACES and other stressors of life to meet *our deepest spiritual needs on our own, apart from God* and often in unhealthy and addictive ways.

- Love
- Acceptance
- Worth/Value
- Security/Control
- Sense of Purpose/Meaning
- Hope
- Peace
- Forgiveness (Receive & Extend)
- Connection to & Knowing Our Creator
- Salvation (today and eternally)
- Jesus (Luke 10:28 & 42)
Your Personal ACES History

Awareness of the Past and Present Impact:

- Temperament/Personality
- Behaviors/Habits/Addictions
- How You Tend to Respond to Life’s Stressors
- How You Attempt to Meet Your Deepest Spiritual Needs
- Physical Health Conditions
- Mental Health Conditions
- Ongoing Relationship Issues
- Workplace or School Challenges
- Other Social Difficulties
- Poverty/Homelessness

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*** Need or Opportunity for Healing, Counseling or Increased Resilience? ***
Spiritual Needs & Issues Require Spiritual Solutions
“My son, pay attention to what I say; listen closely to my words. Do not let them out of your sight, keep them within your heart; for they are life to those who find them and health to a man's whole body.”

Proverbs 4:20-22

“Resilience God-style allows us to be the overcomers which God intended us to be.”

Robert F. Dees
Retired US Army Major General

“In the world you will have tribulation, but take courage, I have overcome the world.”

Jesus in John 16:33
Part 2 – A Follow Up Series

Thursday Evenings

November 14th
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<th>Spiritual Risk Factor</th>
<th>Biblical Principle</th>
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Closing Prayer

SEE WHAT GREAT LOVE
THE FATHER HAS LAVISHED
ON US,
THAT WE SHOULD BE CALLED
CHILDREN OF GOD!
AND THAT IS WHAT WE ARE!...

1 JOHN 3:1