

# The Relationship of Adverse Childhood Experiences to Adult Health Status

A Collaborative Effort of Kaiser Permanente and the Centers for Disease Control

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# The Adverse Childhood Experiences Study (ACE Study)

- In 1998, largest study of its kind ever (17,000+ participants)
- Examined the health and social effects of adverse childhood experiences over the lifespan
- First 10 years largely ignored
- Last 10 years embraced

# ACE Study (Adverse Childhood Experiences)

## **Before age 18:**

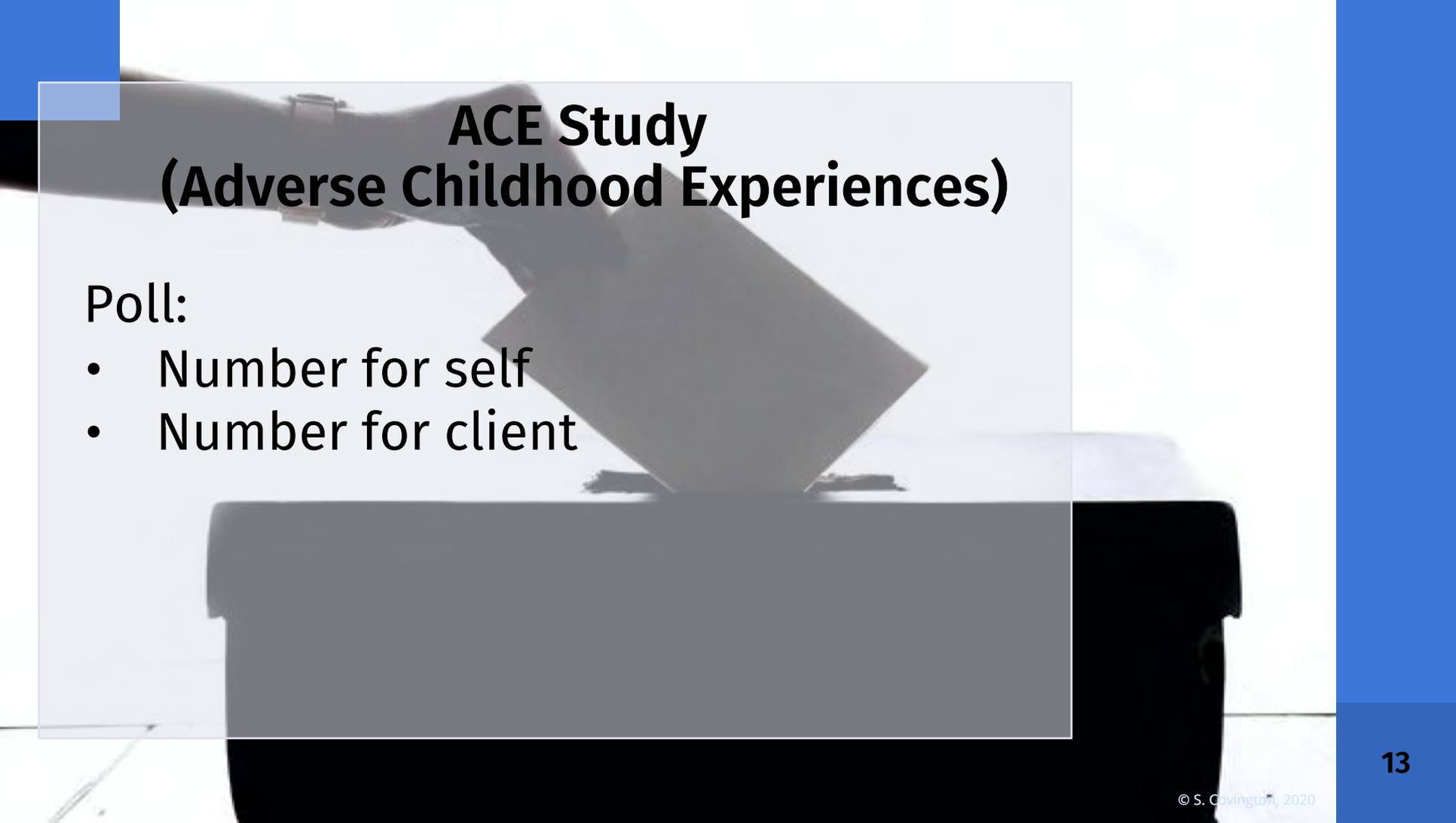
- Recurrent and severe emotional abuse
- Recurrent and severe physical abuse
- Contact sexual abuse
- Emotional neglect
- Physical neglect

# ACE Study (Adverse Childhood Experiences)

## Growing up in a household with:

- Both biological parents not being present
- Your mother being treated violently
- An alcoholic or drug-user
- A mentally ill, chronically depressed, or family member attempting suicide
- A family member being imprisoned

(N = 17,000+)

The background of the slide features a grayscale image of two hands shaking over a document, symbolizing an agreement or partnership. The image is partially obscured by a semi-transparent white box containing the text.

# ACE Study (Adverse Childhood Experiences)

Poll:

- Number for self
- Number for client

# ACE Study (Adverse Childhood Experiences)

## Results

ACEs still have a profound effect 50 years later, although now transformed from psychosocial experience into organic disease, social malfunction, and mental illness.

- Smoking
- Alcoholism
- Injection of illegal drugs
- Obesity

# Higher ACE Score Chronic Health Conditions

- Heart disease
- Autoimmune diseases
- Lung cancer
- Pulmonary disease
- Liver disease
- Skeletal fractures
- Sexually transmitted infections
- HIV/AIDS



Women 50% more likely  
than men to have a  
score of 5 or more.

# ACE Study

(cont.)

“I see that you have...

Tell me how this has  
affected you later in your  
life.”

# ACE Study (cont)

A review of over 2,000 studies of ACEs from all over the world found that individuals experiencing 4 or more ACEs have higher risk of multiple concerns, including the following:

- 3.7 times more likely to have anxiety;
- 4.4 times more likely to have depression;
- 5.62 times more likely to engage in illicit drug use;
- 5.84 times more likely to have problematic alcohol use;
- 7.51 times more likely to experience violence victimization in adulthood;
- 10.22 times more likely to have problematic drug use; and
- 30.15 times more likely to attempt suicide as an adult than individuals with less than 4 ACEs

# Process of Trauma

## Traumatic Event

Overwhelms the physical and psychological coping skills

## Response to Trauma

Fight, Flight or Freeze  
Altered state of consciousness, Body sensations, Numbing, Hypervigilance, Hyper-arousal, Collapse

## Sensitized Nervous System

Changes in the Brain  
Brain–Body Connection

## Psychological and Physical Distress

Current stressors, Reminders of trauma (triggers)  
Sensations, Images, Behavior, Emotions, Memory

## Emotional and/or Physical Responses

### Retreat

Isolation  
Dissociation  
Depression  
Anxiety

### Harmful Behavior to Self

Substance use disorders  
Eating disorders  
Deliberate self-harm  
Suicidal actions

### Harmful Behavior to Others

Aggression  
Violence  
Rages  
Threats

### Physical Health Issues

Lung disease  
Heart disease  
Autoimmune disorders  
Obesity



# Addiction

# Addiction: A Holistic Health Model

- Physiological
- Emotional
- Social
- Spiritual
- Environmental
- Political

