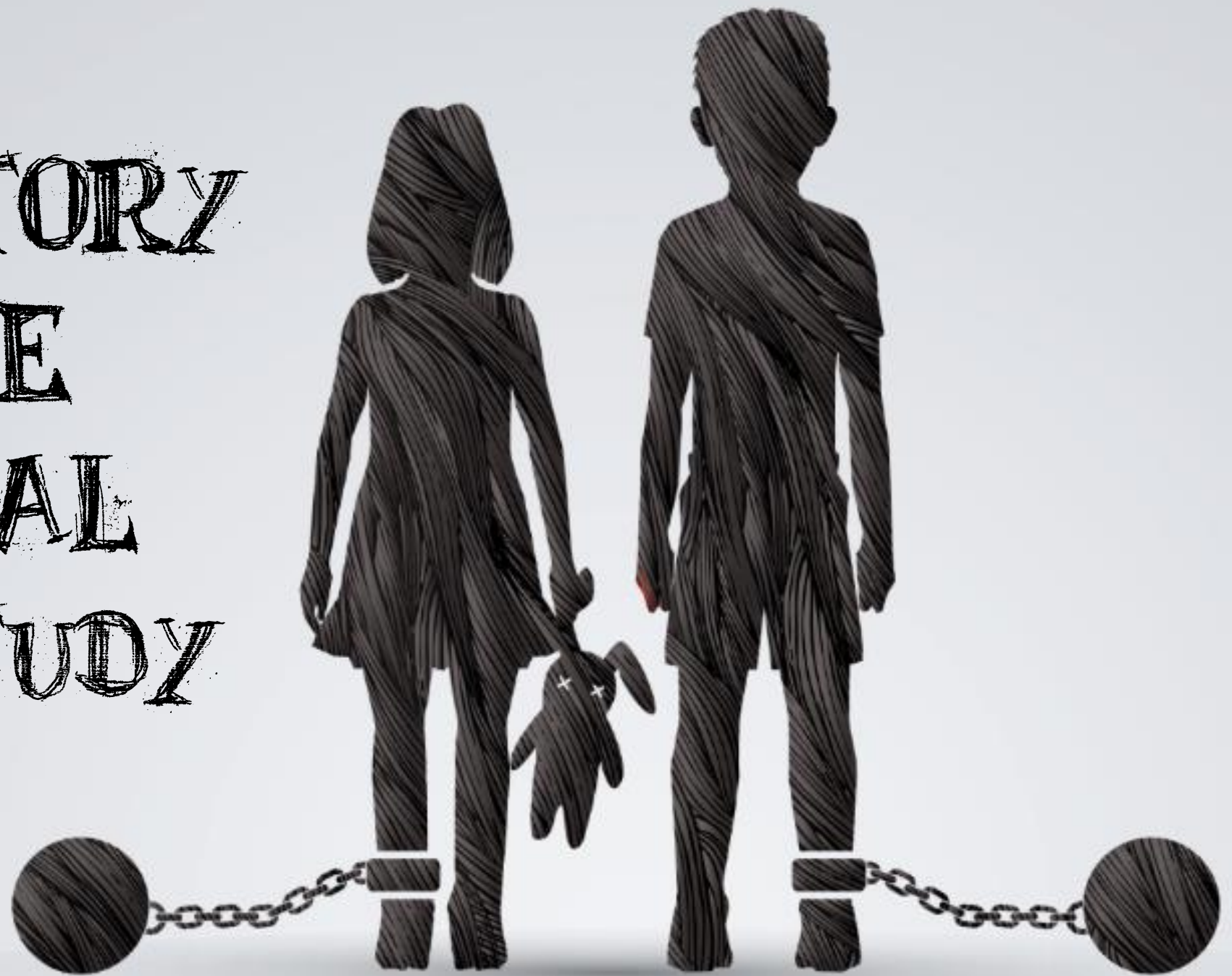


THE HISTORY
OF THE
ORIGINAL
ACES STUDY



On a quiet street in San Diego...

The ACE Study – probably the most important public health study many people do not know about – had its origins in an obesity clinic on a quiet street in San Diego.





A mystery begged to be solved

In 1985, Dr. Vincent Felitti, chief of Kaiser Permanente's revolutionary Department of Preventive Medicine in San Diego, CA, could not figure out why more than half of the people in his obesity clinic dropped out each year for five years straight.

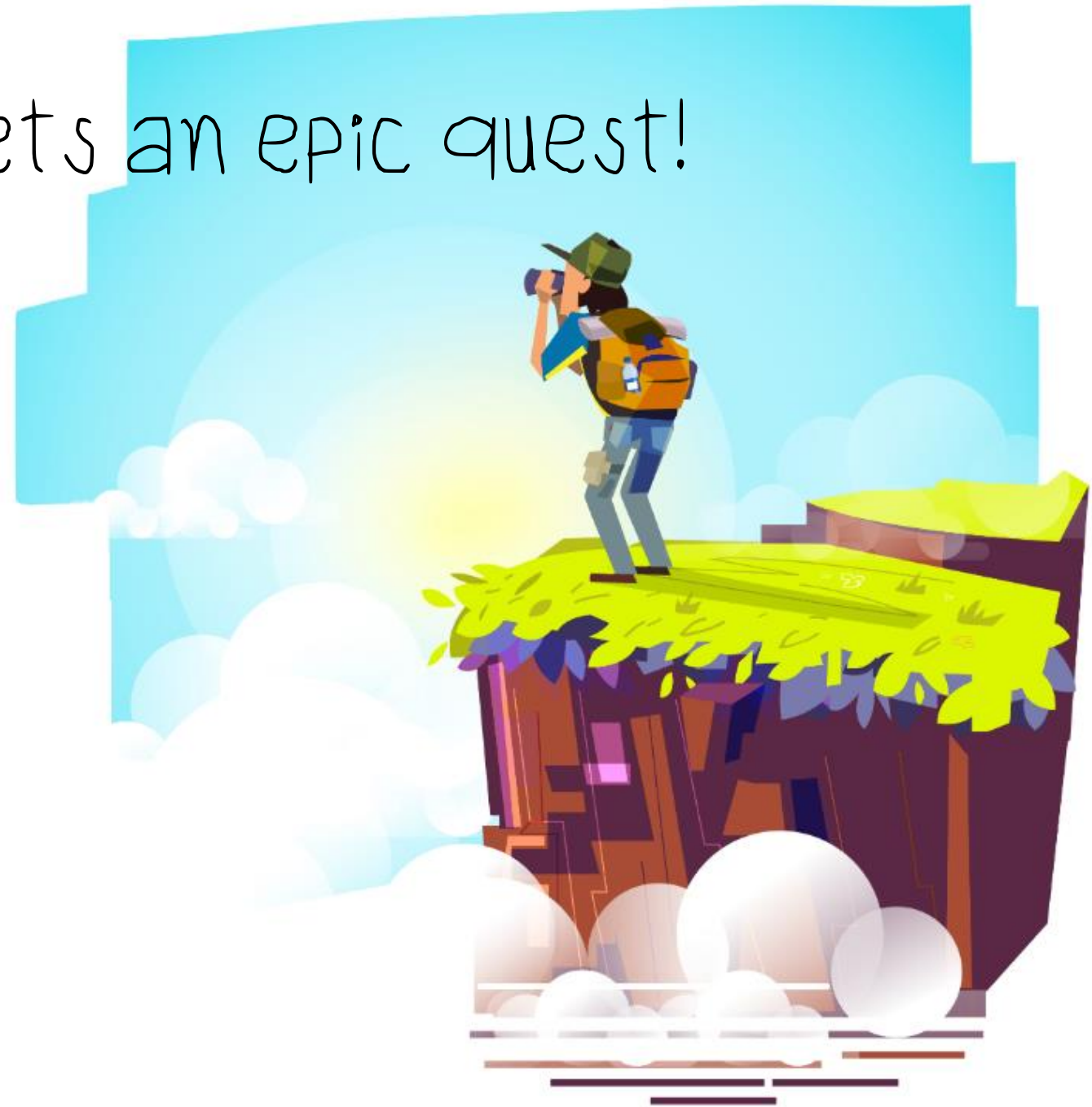


75% It didn't add up!

A cursory review of all the dropouts' records astonished him — each had been successfully losing weight when leaving the program. Why would people who were 300 pounds overweight lose 100 pounds, yet drop out even though they were on a roll?

A little mystery begets an epic quest!

Felitti's mystery turned into a 25-year quest involving researchers from the Centers for Disease Control and Prevention and more than 17,000 members of Kaiser Permanente's San Diego care program.





Shocking twists

It would reveal that adverse experiences in childhood were very common, even in the white middle-class, and that these experiences are linked to every major chronic illness and social problem with which the United States grapples and which cost billions of dollars each year.

Unexpected Results Add to the Mystery

Digging deep into medical records, they found that all of the dropouts had been born at a normal weight and did not gain weight slowly over several years

When they gained weight, it was abrupt and then they stabilized. If they lost weight, they regained all of it or more over a very short time.



At a loss

Felitti decided to do face-to-face interviews with a couple hundred of the dropouts. He used a standard set of questions for everyone. For weeks, nothing unusual came of the inquiries.

No revelations and no clues emerged.



An accidental discovery



The turning point in Felitti's quest came by accident while running through yet another series of questions with yet another obesity program patient, "I misspoke," he recalls, "Instead of asking, 'How old were you when you were first sexually active?' I asked, 'How much did you weigh when you were first sexually active?'"

A devastating answer

The patient, a woman, answered, ‘Forty pounds,’” burst into tears and added, “It was when I was four years old, with my father.”

Felitti suddenly realized what he had asked.



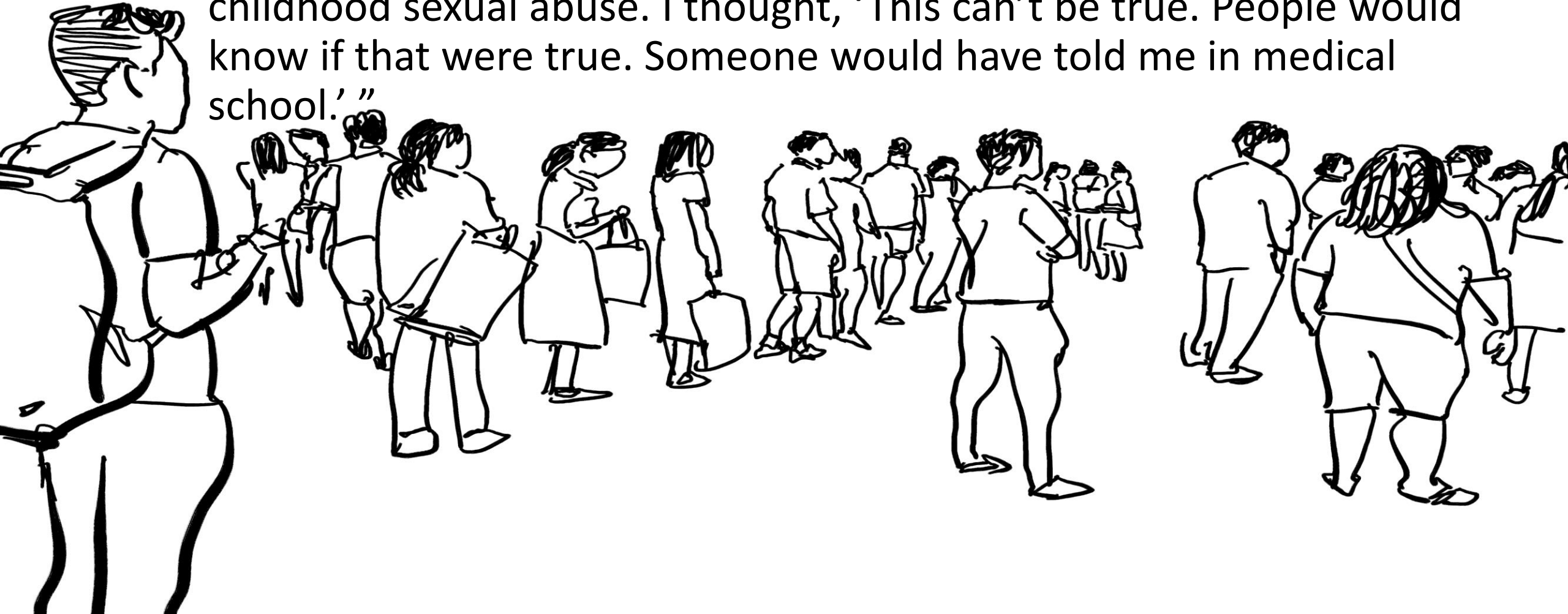
A fluke?

“I remembered thinking, ‘This is only the second incest case I’ve had in 23 years of practice. I didn’t know what to do with the information.’



Someone would have said...right?

“About 10 days later, I ran into the same thing. It was very disturbing. Every other person was providing information about childhood sexual abuse. I thought, ‘This can’t be true. People would know if that were true. Someone would have told me in medical school.’”

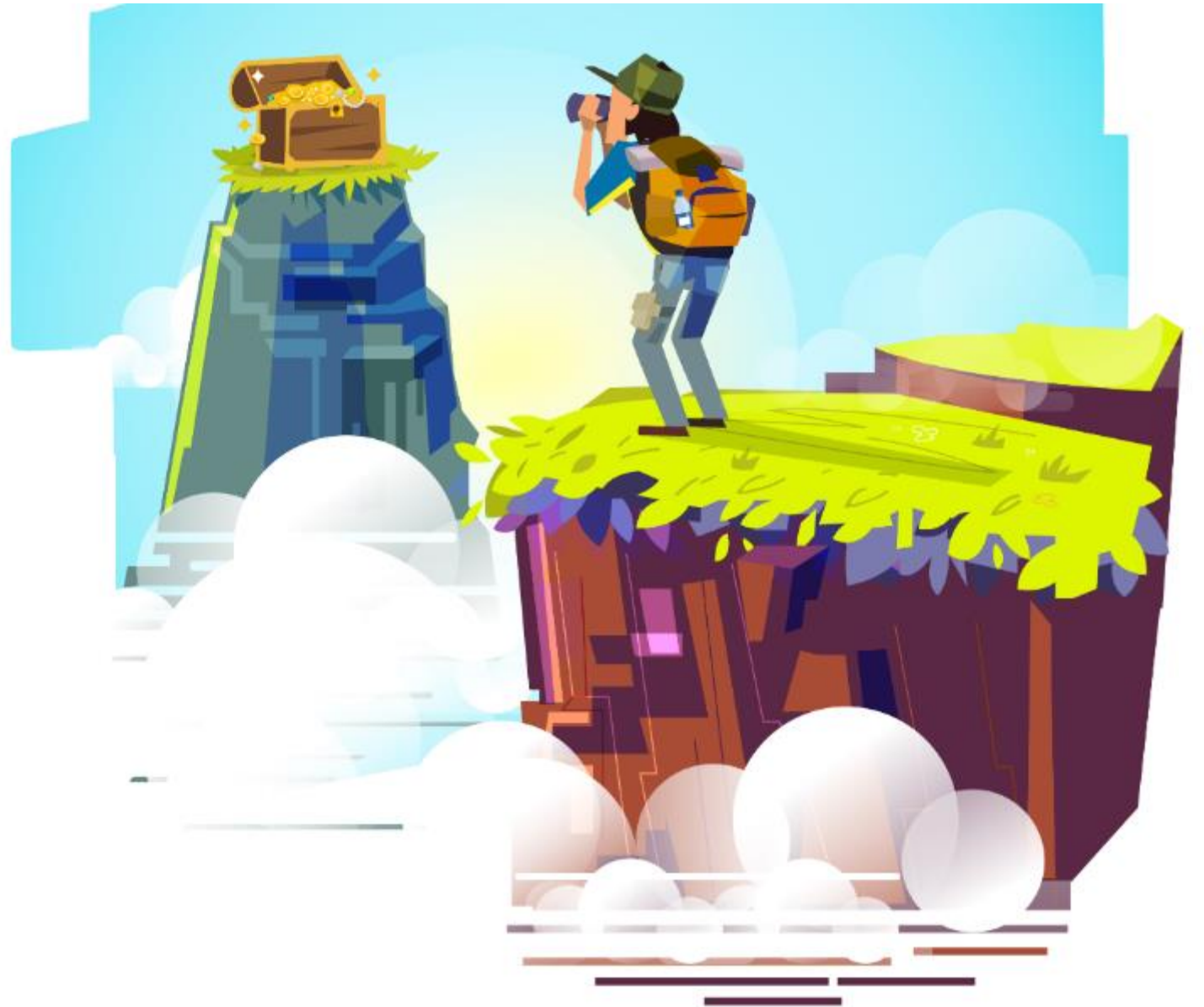


Is it me?

Worried that he was injecting some unconscious bias into the questioning, he asked five of his colleagues to interview the next 100 patients in the weight program. They turned up the same things.



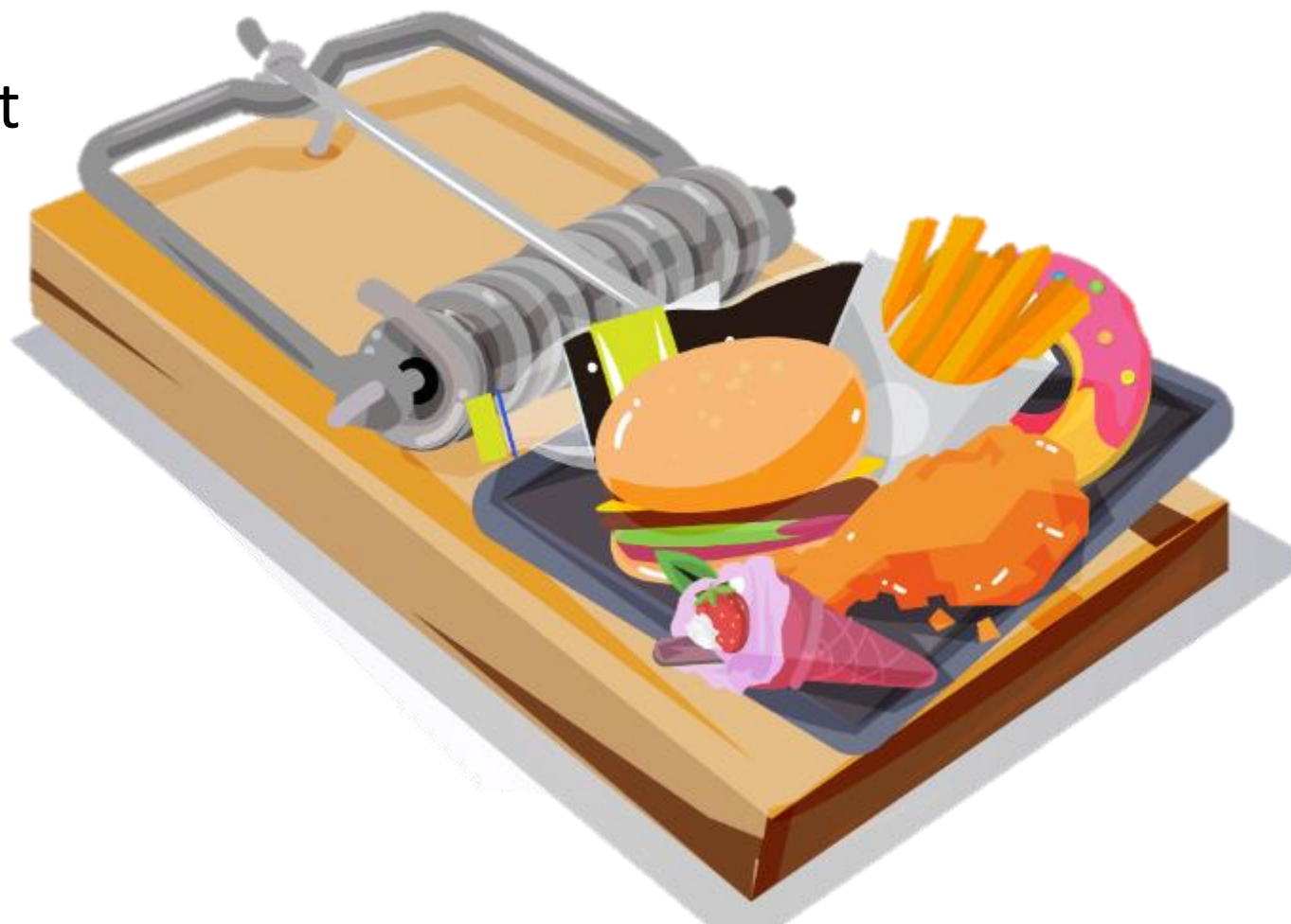
Of the 286 people whom Felitti and his colleagues interviewed, most had been sexually abused as children. As startling as discovery this was, it turned out to be less significant than another piece of the puzzle that dropped into place during an interview.



Food was the solution, not the problem.

Felitti realized the obese people he was interviewing were hundreds of pounds overweight, but they did not see their weight as a problem. For them, eating was a fix, a solution to the problem.

A significant detail that many physicians, psychologists, public health experts, and policymakers have not yet grasped.





Eating soothed the anxiety, fear, anger, or depression – it worked like alcohol or tobacco or methamphetamines.

Not eating increased their anxiety, depression, and fear to levels that were intolerable.

Safety blankets and coping methods

In addition, for many people just being obese solved a problem in relation to their past trauma. Being obese allowed them to feel safely invisible and ignored.

Losing weight increased their anxiety, depression, and fear to levels that were intolerable so they quit the program and re-gained the weight.



Simple discovery. Powerful insights.

This discovery was the more important result of Felitti's inquiry — the mind-shift that would provide more understanding about the lives of millions of people around the world who use biochemical coping methods — including alcohol, marijuana, food, sex, tobacco, violence, work, methamphetamines, thrill sports — to escape intense fear, anxiety, depression, and anger.



Addiction isn't the real problem

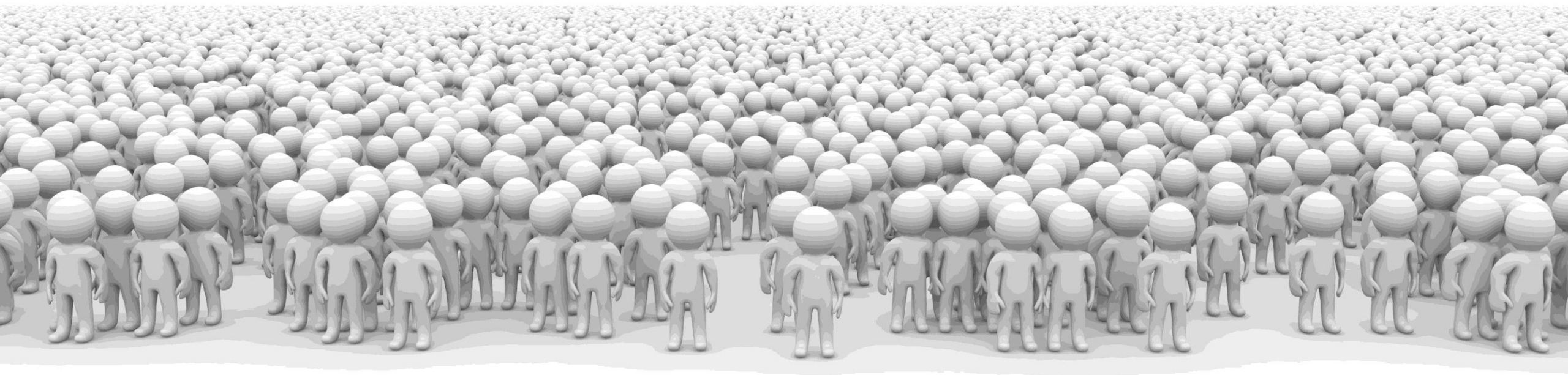
Public health experts, social service workers, educators, therapists, and policy makers commonly regard addiction as a problem. Some, however, are beginning to understand that turning to drugs is an expected response to serious childhood trauma, and that telling people who smoke or overeat or overwork that they should stop because these things are bad for them does not work when those behaviors provide a temporary, but gratifying, solution to a bigger problem.

Could this really be true?

Some experts were reluctant to believe Felitti's data. "He told me I was naïve to believe my patients, that it was commonly understood by those more familiar with such matters that these patient statements were fabrications to provide a cover explanation for failed lives!"



People could always find fault with a study of a couple of hundred people in a specific subset, but what if there were thousands, and from a general population?



A 'mega-study' was born

Kaiser Permanente in San Diego was a perfect place to do a mega-study. More than 50,000 members came through the department each year. Every single one filled out a detailed medical questionnaire prior to undergoing a complete physical examination and extensive laboratory tests.

It would be easy to simply add another set of questions.



Check Yes or No

26,000 people who came through the department were asked if they would be interested in helping researchers understand how childhood events might affect adult health. 17,421 people said yes.





Are we asking the right questions?

Before they added the new trauma-oriented questions, they spent a year pouring through the research literature to learn about childhood trauma.

They focused on the eight major types that patients had mentioned so often in Felitti's original study and whose individual consequences had been studied by other researchers ; and they later added emotional and physical neglect for a total of 10 types of adverse childhood experiences (ACEs).

ABUSE



Physical



Emotional



Sexual

NEGLECT



Physical



Emotional

HOUSEHOLD DYSFUNCTION



Mental Illness



Mother treated violently



Divorce



Incarcerated Relative



Substance Abuse

“This was the first time that researchers had looked at the effects of several types of trauma, rather than the consequences of just one. What the data revealed was mind-boggling.

“I wept. I saw how much people had suffered and I wept.”

–Robert F. Anda, MD, MS

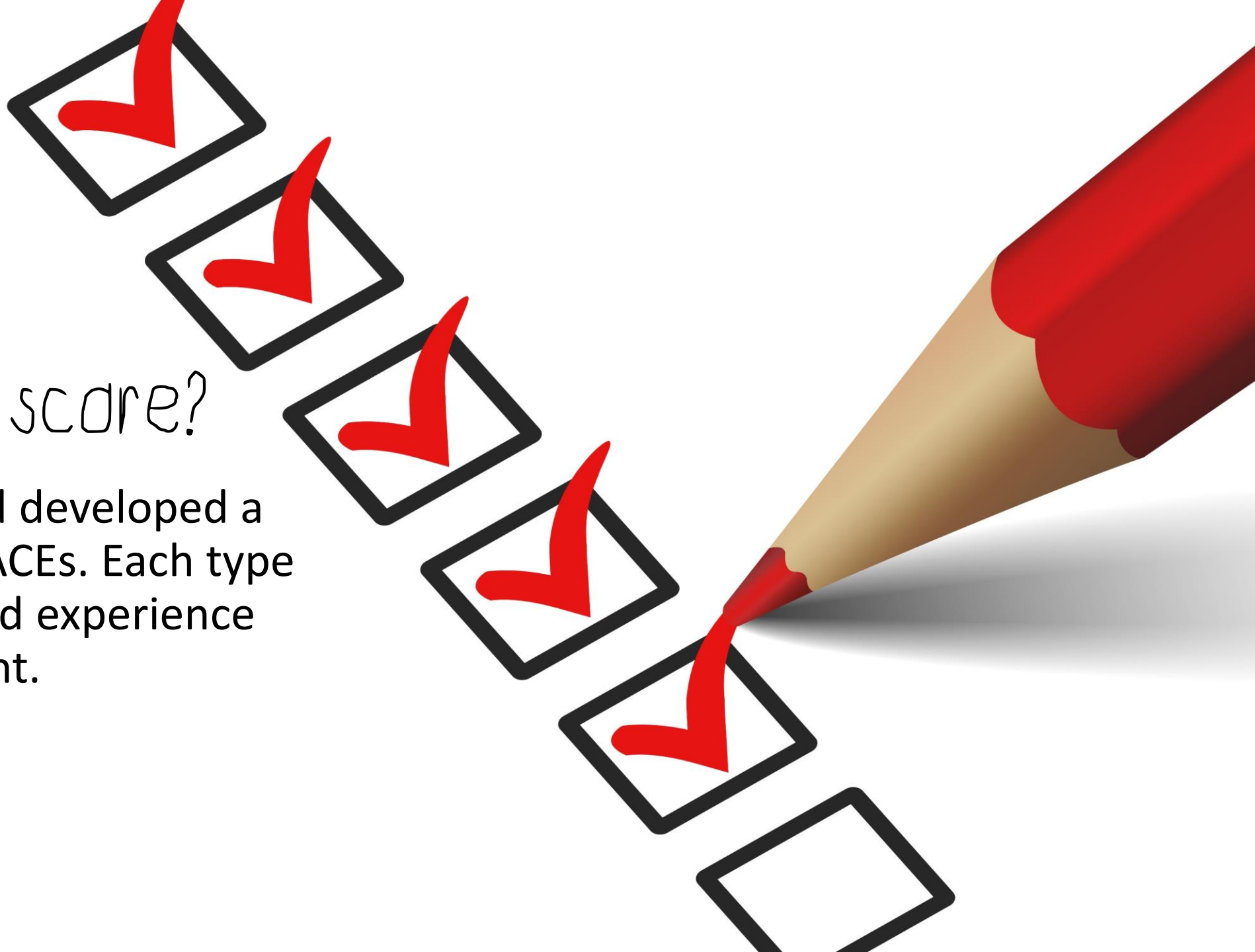
We'll see you around


The initial surveys began in 1995 and continued through 1997, with the participants followed subsequently for more than 15 years.



What's your score?

Anda and Felitti had developed a scoring system for ACEs. Each type of adverse childhood experience counted as one point.





What's your score?

If a person had none of the events in her or his background, the ACE score was zero. If someone was verbally abused thousands of times during his or her childhood, but no other types of childhood trauma occurred, this counted as one point in the ACE score.

Add 'em up

If a person experienced verbal abuse, lived with a mentally ill mother and an alcoholic father, his ACE score was three.



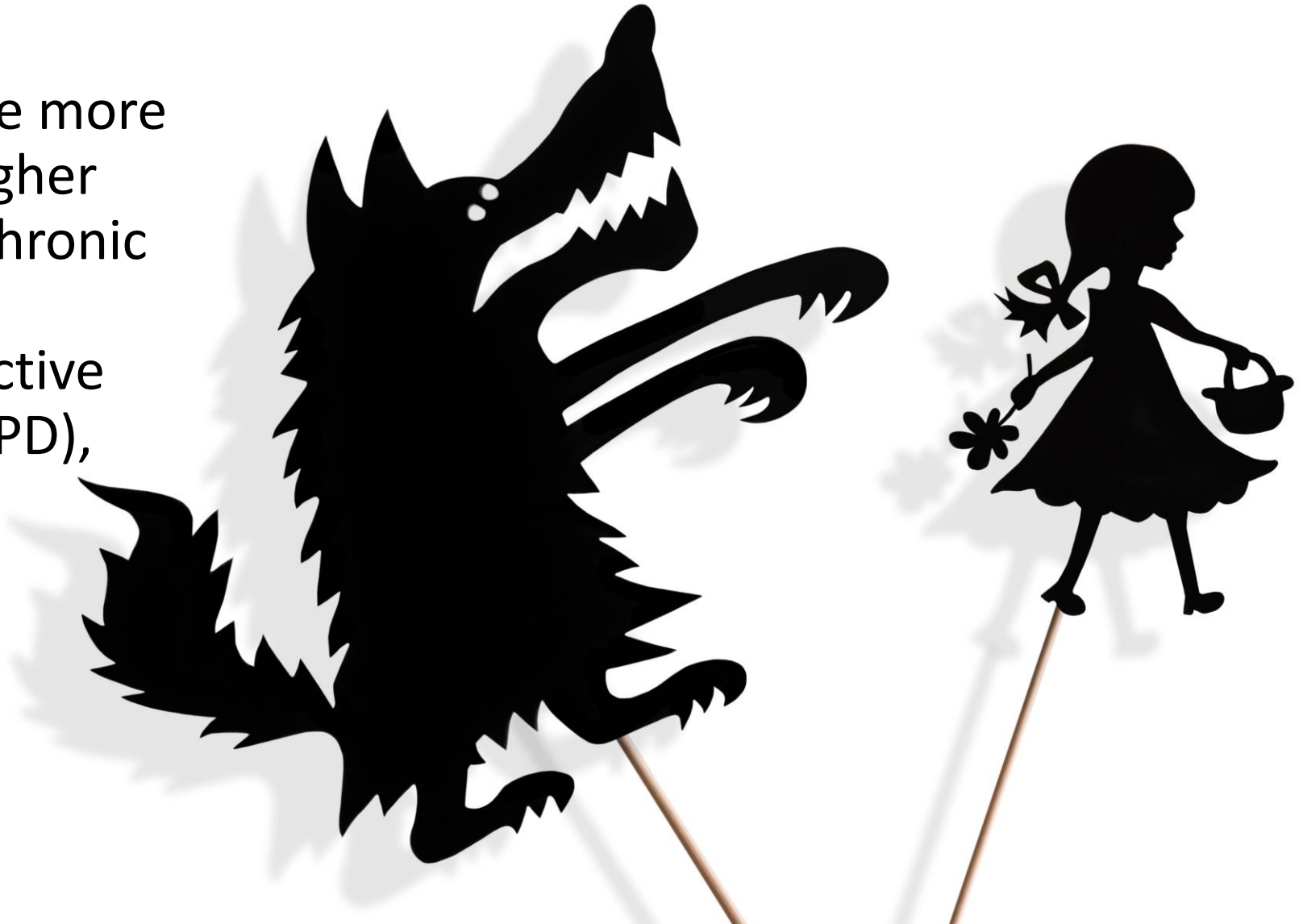
Are ACEs really that common?

ACEs are incredibly common—two out of three people (67%) of the study population had at least one ACE, more than one in five (20%) reported three or more ACEs and one out of eight people (13%) of the population had four or more ACEs.



Another key finding

They also found that the more ACEs a child has, the higher the risk of developing chronic illnesses such as heart disease, chronic obstructive pulmonary disease (COPD), depression and cancer.



ACE Score of Four

Things start getting really serious around an ACE score of four.

Compared with people with zero ACEs, those with four categories of ACEs had a 240% greater risk of hepatitis, were 390% more likely to have chronic obstructive pulmonary disease (emphysema or chronic bronchitis), and a 240% higher risk of a sexually-transmitted disease.



High Scorer

They were twice as likely to be smokers, 12 times more likely to have attempted suicide, 7 times more likely to be alcoholic, and 10 times more likely to have injected street drugs.



People with high ACE scores are more likely to be violent, to have more marriages, more broken bones, more drug prescriptions, more depression, more autoimmune diseases, and more work absences.

Persons with multiple categories of childhood exposure were likely to have multiple health risk factors later in life, including those for several of the leading causes of death in adults.

SICKNESS



The ACEs inquiry, “changed the landscape. It changed the landscape because of the pervasiveness of ACEs in the huge number of public health problems, expensive public health problems — depression, substance abuse, STDs, cancer, heart disease, chronic lung disease, diabetes.”

- Dr. Frank Putnam, Director of the Mayerson Center for Safe and Healthy Children at Cincinnati Children’s Hospital Medical Center and professor at the University of Cincinnati Department of Pediatrics.

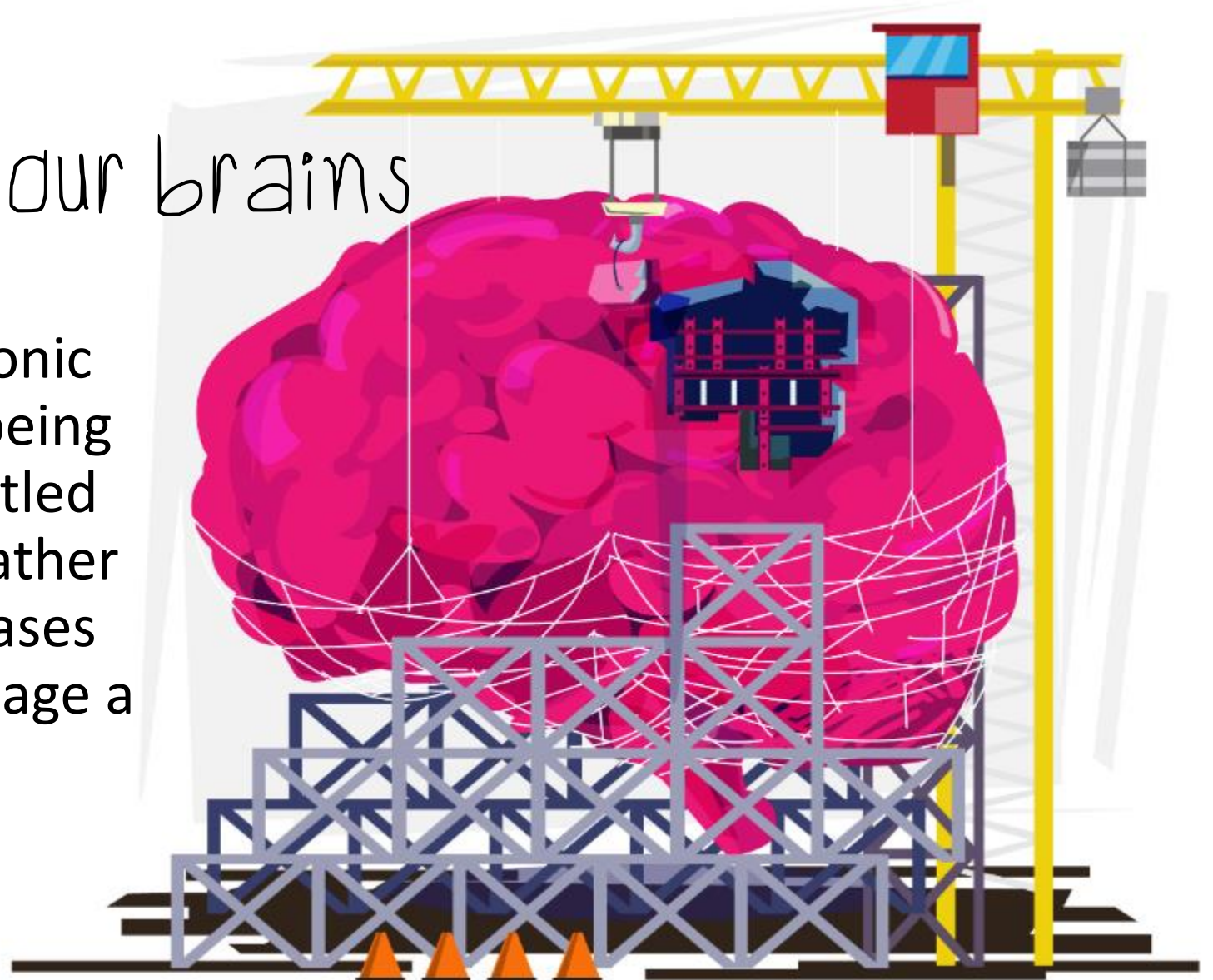
Cumulative Impact

Findings suggest that the impact of these adverse childhood experiences on adult health status is strong and cumulative. Something that happened to you when you were a child could land you in the hospital at age 50.



Experiences shape our brains

The stress of severe and chronic childhood trauma – such as being regularly hit, constantly belittled and berated, watching your father often hit your mother – releases hormones that physically damage a child's developing brain.





An ounce of prevention?

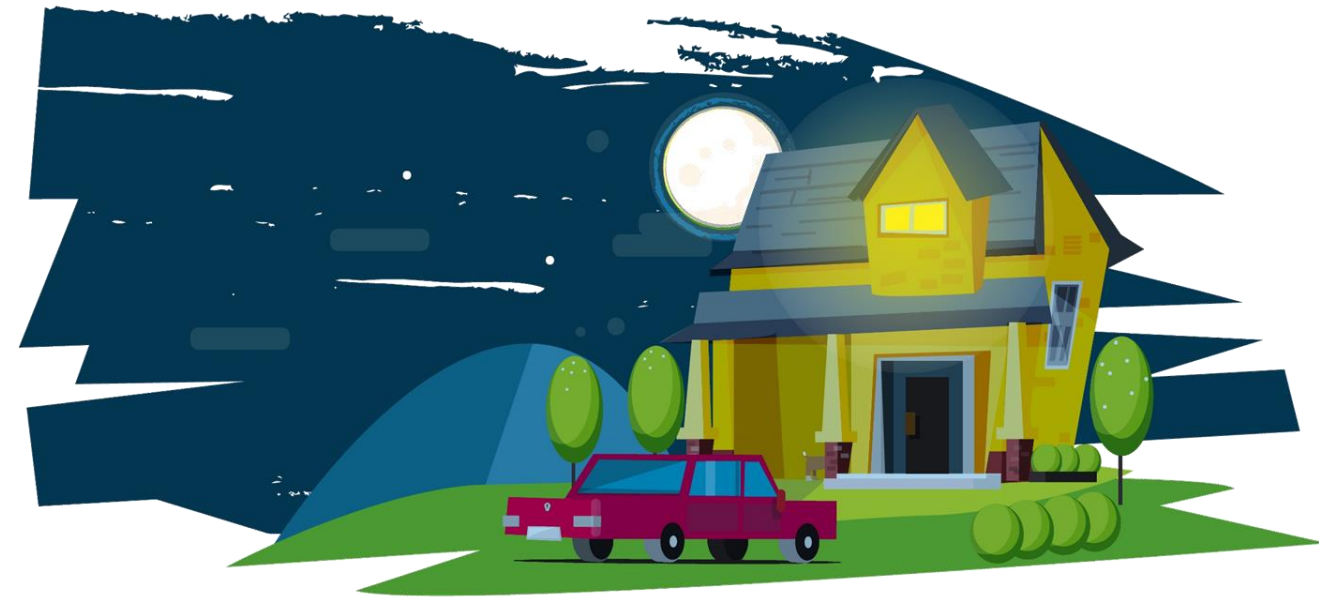
Exposure to ACEs may put our children at higher risk for learning difficulties, emotional problems, developmental issues and long-term health problems.

And research over the last two decades confirms that children carry the effects of childhood experiences into adulthood.





Clearly, comprehensive strategies are needed to identify and intervene with children and families who are at risk for these adverse experiences and their related outcomes.



It is essential to treat young children's mental health problems within the context of their families, homes, and communities. The emotional well-being of young children is directly tied to the functioning of their caregivers and the families in which they live.

When these relationships are abusive, threatening, chronically neglectful, or otherwise psychologically harmful, they are a potent risk factor for the development of early mental health problems.





You Lift Me Up!

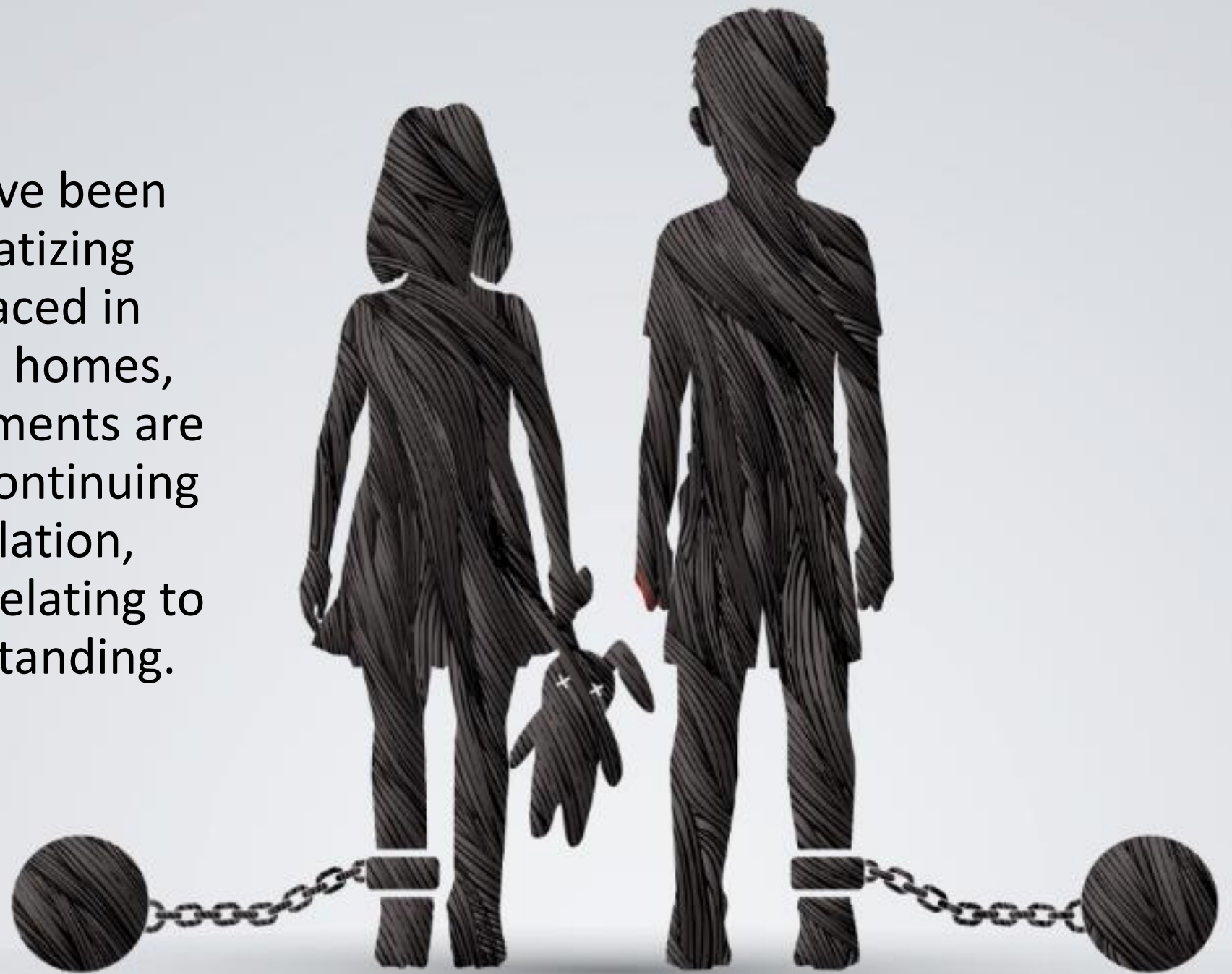
In contrast, when relationships are reliably responsive and supportive, they can actually buffer young children from the adverse effects of other stressors.

Therefore, reducing the stressors affecting children requires addressing the stresses on their families.

Some individuals demonstrate remarkable capacities to overcome the severe challenges of early, persistent maltreatment, trauma, and emotional harm, yet there are limits to the ability of young children to recover psychologically from adversity.



Even when children have been removed from traumatizing circumstances and placed in exceptionally nurturing homes, developmental improvements are often accompanied by continuing problems in self-regulation, emotional adaptability, relating to others, and self-understanding.



What's the key?

When children overcome these burdens, they have typically been the beneficiaries of exceptional efforts on the part of supportive adults. These findings underscore the importance of prevention and timely intervention in circumstances that put young children at serious psychological risk.

