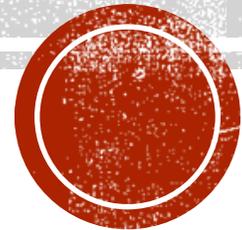


RESPONDING TO TRAUMA AND ADVERSITY — THE ACE PILOT

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South Eastern Health
and Social Care Trust



**QUEEN'S
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STRUCTURE

- Defining Trauma and Adversity
- The Prevalence and Impact of Multiple Adversities
- How adversity causes poor outcomes
- Trauma informed care
- About the SEHSCT ACE pilot
- Evaluation findings and case studies
- Next steps



DEFINING TRAUMA AND CHILDHOOD ADVERSITY

Childhood Trauma

- Trauma is defined as:
- exposure to actual or threatened death, serious injury, or sexual violence, either by directly
- experiencing or witnessing such events or by learning of such events occurring to a close
- relative or friend (American Psychiatric Association, 2013).

Childhood adversities

- “Childhood adversities include events ranging from severe potentially traumatic experiences such as child abuse and neglect, to difficult events not often considered to be clinically traumatic such as parent mental illness, parent divorce, chronic health conditions and school bullying” (Jacobs et al., 2012: p103)



TYPES OF TRAUMA AND CLINICAL DIAGNOSIS

Type I: Single-Incident Trauma, e.g., an event “out of the blue” and thus unexpected, such as accident, natural disaster, single episode of abuse or assault, witnessing violence.

Type II: Complex or Repetitive Trauma, e.g., ongoing abuse, domestic violence, betrayal, community violence, war, chronic pain, addiction, attachment shock, chronic disease, etc. often involving being trapped emotionally and/or physically

Current PTSD diagnosis often does not capture the severe psychological harm that occurs with such prolonged, repeated trauma.

For example, ordinary, healthy people who experience chronic trauma can experience changes in their self-concept and the way they adapt to stressful events.

The term Complex PTSD has been proposed as a diagnosis to describe the symptoms of long-term trauma. Another name sometimes used to describe this cluster of symptoms is: Disorders of Extreme Stress Not Otherwise Specified (DESNOS).

Symptoms - Re-experiencing, Avoidance and emotional numbing, Hyperarousal (feeling 'on edge')



ACE RESEARCH IN THE UK

| | England (n=4000) National Population Survey | Wales (n=2000) National Population Survey | NI (n=795) QUB undergraduate students |
|------------------------------|---|---|---|
| Verbal Abuse/Emotional abuse | 18 | 23 | 4.5 |
| Physical Abuse | 15 | 17 | 2.6 |
| Sexual Abuse | 6 | 10 | 1.2 |
| Emotional Neglect | - | - | 4.8 |
| Physical Neglect | - | - | 1.8 |
| Parental Separation | 24 | 20 | 5.9 |
| Domestic Violence | 13 | 16 | 2.1 |
| Mental Illness | 12 | 14 | 6.2 |
| Alcohol Abuse | 10 | 14 | 3.4 |
| Drug Use | 4 | 5 | |
| Incarceration | 4 | 5 | 0.8 |
| 4 or more ACEs | 9 | 14 | 12 |



IMPACT OF ACE

ACEs increase individuals' risks of developing health-harming behaviours

Compared with people with no ACEs, those with 4+ ACEs are:

- 4** times more likely to be a high-risk drinker
- 6** times more likely to have had or caused unintended teenage pregnancy
- 6** times more likely to smoke e-cigarettes or tobacco
- 6** times more likely to have had sex under the age of 16 years
- 11** times more likely to have smoked cannabis
- 14** times more likely to have been a victim of violence over the last 12 months
- 15** times more likely to have committed violence against another person in the last 12 months
- 16** times more likely to have used crack cocaine or heroin
- 20** times more likely to have been incarcerated at any point in their lifetime

IMPACT OF ACES CONT.

- ❑ ACEs associated with array of physical, mental and emotional difficulties and social problems in adulthood
- ❑ People with six or more ACEs died nearly 20 years earlier [60.6 years] on average than those without ACEs [79.1 years]
- ❑ ACEs are related to deprivation- 4.3% in the least deprived quintile experience 4 or more ACEs than 12.7% in the most deprived quintile.
- ❑ Children in 10 most deprived areas in NI 6 times more likely to be placed on the CPR and 4 times more likely to become LAC.



HOW ADVERSITIES IMPACT - BIOLOGICAL AND NEUROSCIENTIFIC MODELS

Positive

Brief increases in heart rate, mild elevations in stress hormone levels.

Tolerable

Serious, temporary stress responses, buffered by supportive relationships.

Toxic

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

- infant brain development is continuously shaping and being shaped by, the external world
- Exposure to trauma and adversity (toxic stress) cause developmental damage



BRAIN DEVELOPMENT – INFANCY AND CHILDHOOD

- **Neurons are the basic unit of the brain and CNS, acting like wires sending signals to other cells**
- **At birth, a baby has almost all the neurons, or brain cells it will ever have - billions, but few connections**
- **By age 2 a child's brain is 80% of its adult size**
- **By age three, the brain has formed 1,000 trillion connections — twice as many as is found in adulthood.**
- **Around age 7 the brain begins a process call synaptic pruning- removing unused or little used connections**
- **Use it or lose it - repeated experiences create strong connections, little used connections are pruned**



It is this network that serves as the biological platform for a child's emerging social, emotional, linguistic and cognitive skills



IMPACT OF STRESS AND ABUSE ON CHILD DEVELOPMENT

- Stress response - the body's alarm system - is not harmful itself - helps us survive
- Strong, frequent, or prolonged activation of the body's stress response systems in the absence of the buffering protection of a supportive, adult relationship is harmful
- Brain imaging studies - Childhood abuse has been repeatedly found to be associated with alterations in brain structure and function, leading to
 - changes the size and neuronal architecture of the brain
 - functional differences in learning, memory, and aspects of executive function

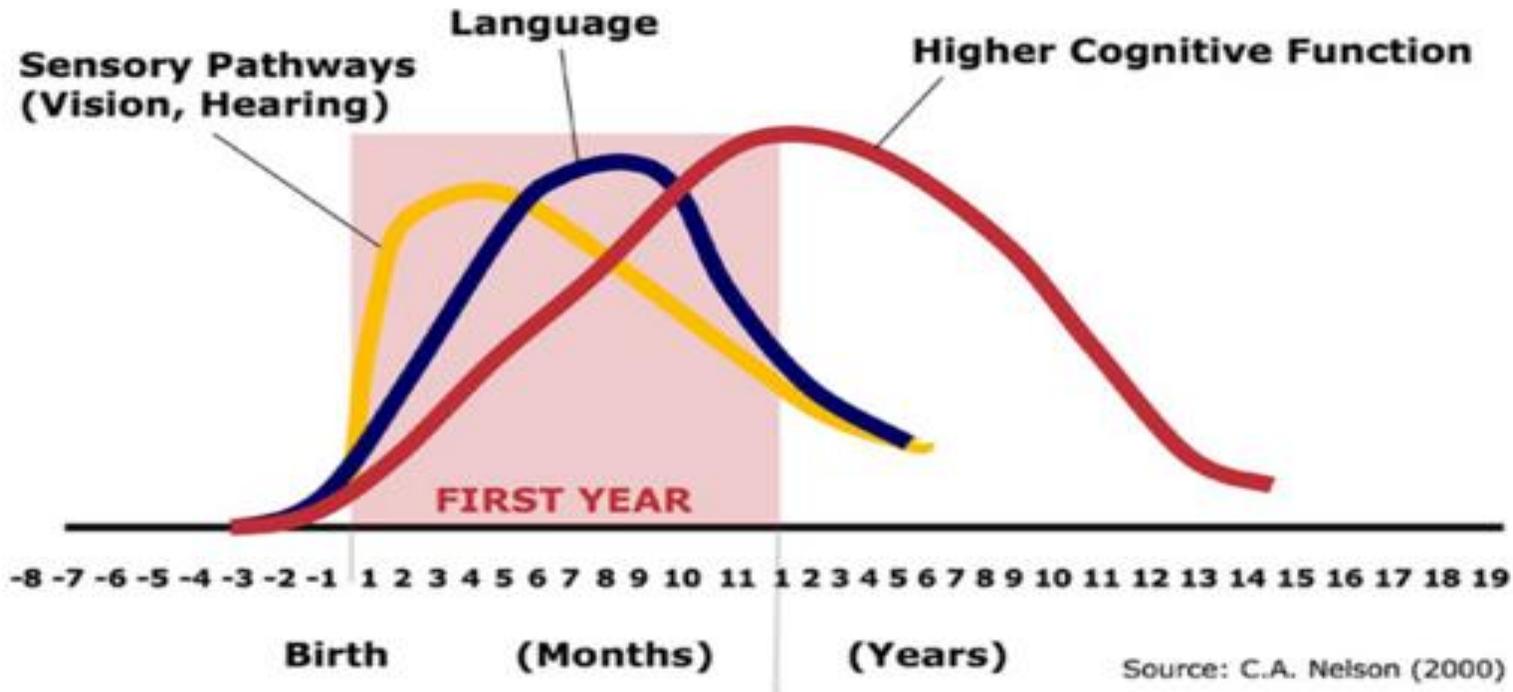
https://www.childwelfare.gov/pubPDFs/brain_development.pdf



THE TIMING OF DEVELOPMENT

Human Brain Development

Neural Connections for Different Functions Develop Sequentially

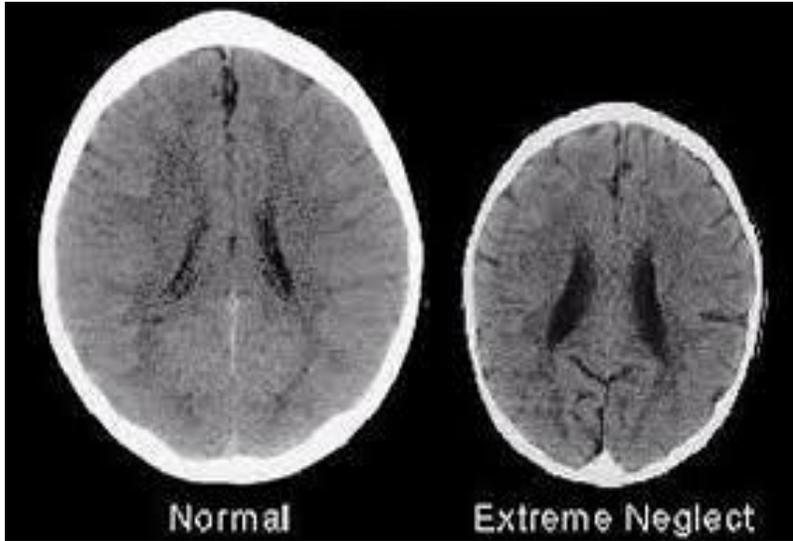


Are there critical/sensitive periods of development

0-3 years – unique period of motor, linguistic, cognitive and social development



THINKING CRITICALLY ABOUT NEUROSCIENCE

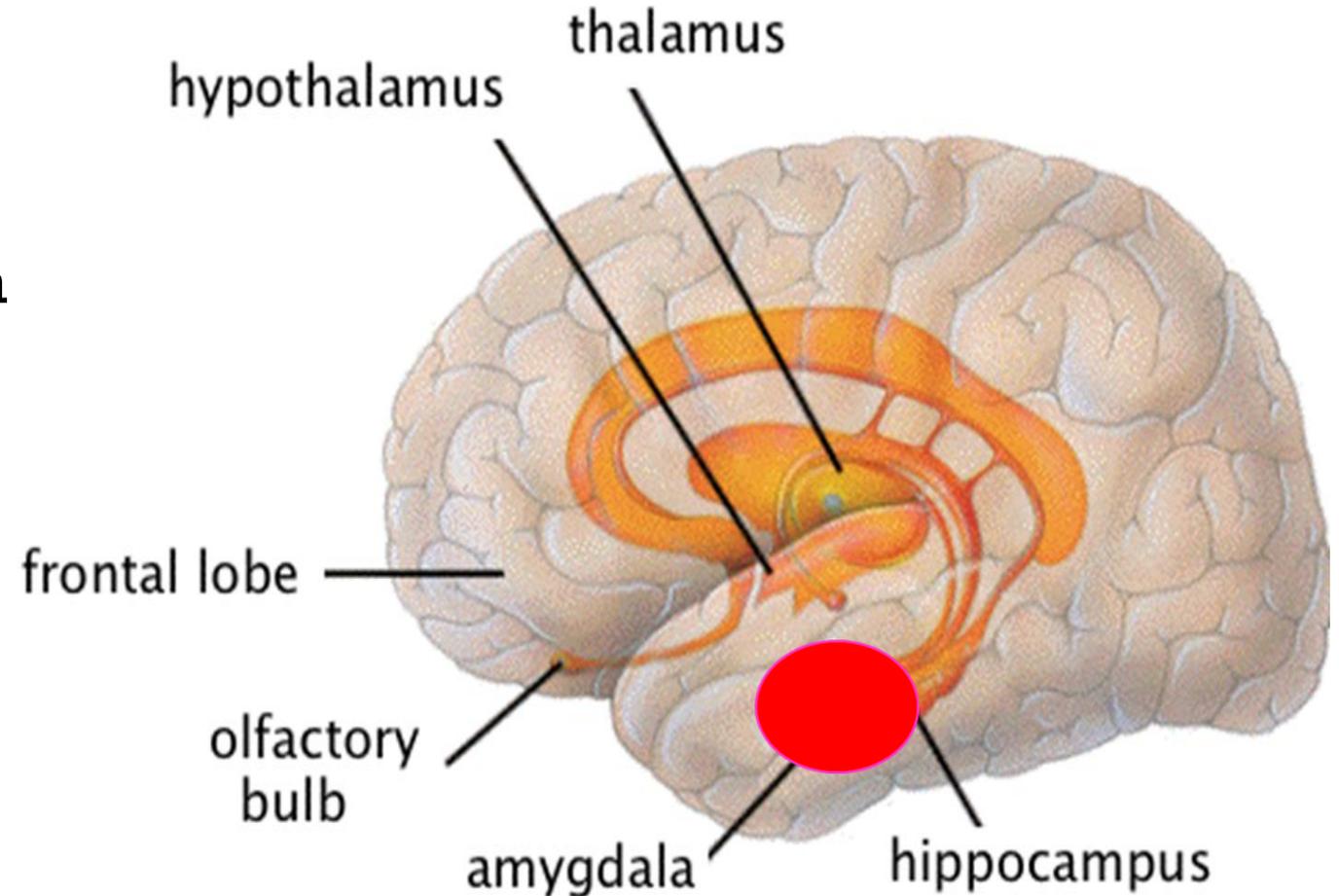


- Physical structure of the brain is physically shaped by the environment we experience...
- Critical V sensitive periods
- **Brain plasticity** –brain’s ability to change in response to repeated stimulation – decreases with age but we learn throughout our lives.
- fMRI does not measure neuronal electrical activity as such, it measures the increased blood flow associated with neuronal activity.....
- statistical techniques to produce an “average” image
- How abuse/neglect was defined



AFFECTIVE NEUROSCIENCE

- The study of the neural mechanisms of emotion
- A biological basis for emotion – what is an emotion?
- There is still debate about what an emotion “is”, but agreed that it involves interactions between physiology, feeling, and context.



EMOTIONAL REGULATION

The capacity to identify feelings, empathise with others and manage strong emotions



A child who receives inconsistent or harsh caregiving has difficulty predicting the consequences of his/her behaviour - this can cause deficits in processing emotional information – affect dysregulation/hyperarousal

- Emotional reactivity - refers to the tendency to experience frequent and intense emotional arousal.
- Control and inhibitory processes – suppressing or restraining an action, feeling, sensation or desire
- Empathy, the social-emotional response that is induced by the perception of another person's affective state is a fundamental component of the emotional experience.



ATTACHMENT AND EMOTIONAL REGULATION

- Primary purpose of attachment is to help regulate the negative emotions of fear, distress and anxiety triggered when a child feels insecure
- Provide basis of future behavioural and emotional interactions – internal working model
- This guides infant's/children's interactions with caregivers and other people in infancy and at older ages



Allen Schore



Jack Shonkoff



COGNITIVE PATTERNS

- Schemas (or schemata) are cognitive structures (mental templates or frames) that represent a person's knowledge about objects, people or situations.
- Schemas are derived from prior experience and knowledge. They simplify reality, setting up expectations about what is probable in relation to particular social and textual contexts.

A SIMPLE EXAMPLE



So_p
_p



So_p
_p



COGNITIONS AND DEPRESSION

- those with depression suffered from **errors or biases** in their representation of the world which were directly related to their condition - **cognitive distortions**
- Low Self-Regard, Self-Criticisms and Self-Blame, Overwhelming Problems and Duties, Self-Commands and Injunctions, Escape and Suicidal Wishes
- stimulus situations/ruminations



BELIEFS OF MALTREATED CHILDREN

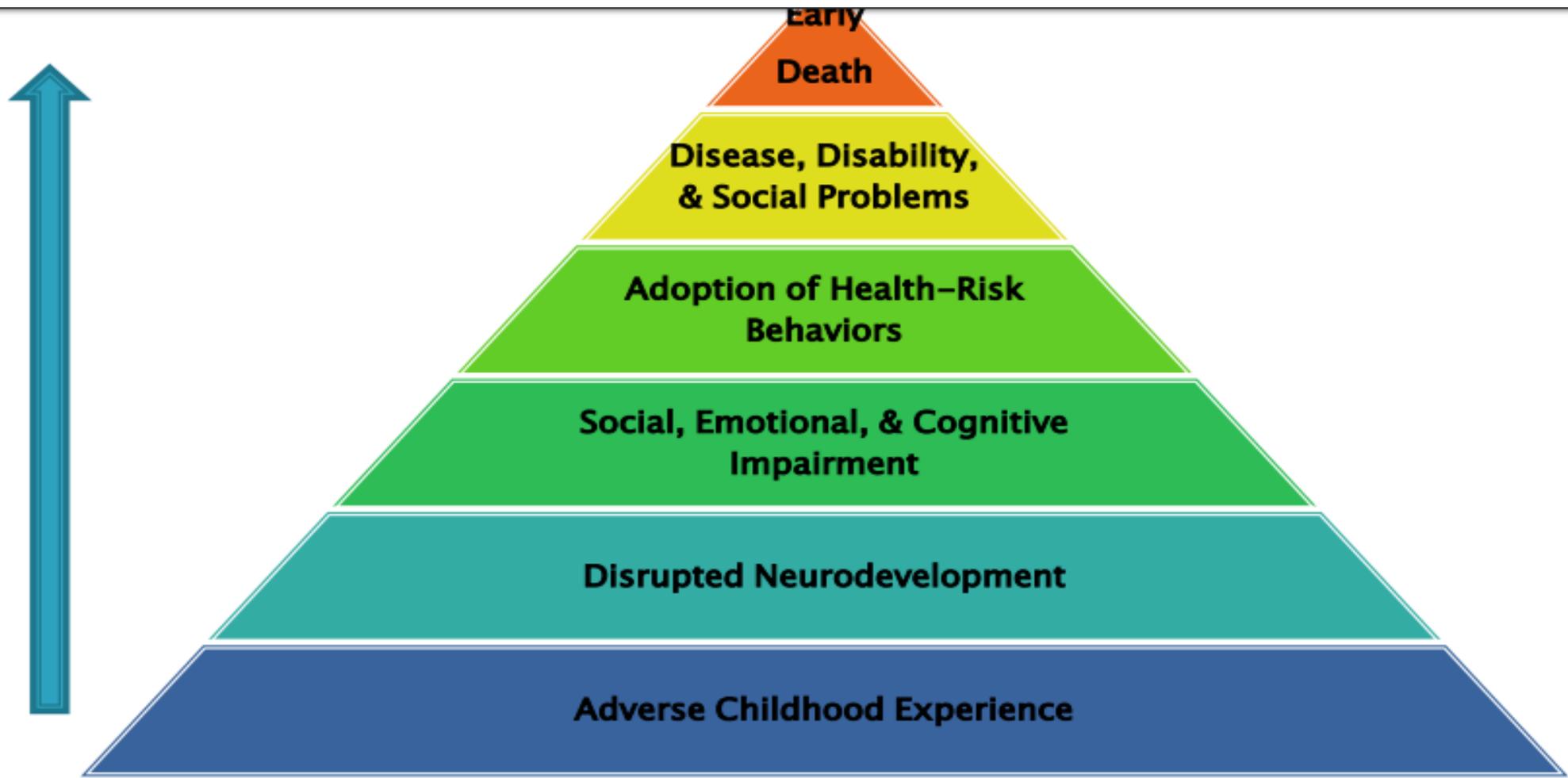
- Repeated clinical observations of, and conversations with, maltreated children suggest that most maintain at least some of the following beliefs:
- -“The world is threatening and bewildering.” -“The world is punitive, judgmental, humiliating, and blaming.”
- -“Control is external, not internal.” Therefore, “I don’t have control over my life.”
- -“People are unpredictable. Very few are to be trusted.”
- -“When challenged, I must defend myself – my honor, and my self-respect. Above all else, I must defend my honor – at any price.”
- -“If I admit a mistake, things will be worse than if I don’t.”



BEHAVIOURAL PATTERNS

- **Classical Conditioning** - At the time of a traumatic event, certain cues/stimuli present in the environment get conditioned to produce the same response that occurred at the time of trauma
- E.g Fireworks, car back firing, other loud noises may trigger an extreme fear response in veterans
- In Complex Trauma there are many possible triggers which activate fear/anxiety response (e.g.?)
- Secondary effects can be attributed to operant conditioning developed through efforts to avoid traumatic memories, alleviate anxiety (e.g.?)





ACEs Conceptual Framework



TRAUMA INFORMED PRACTICE/CARE

- **Trauma informed care** is an approach that aims to recognize the presence of trauma symptoms and role this has played in service user lives
- Views presenting problems as maladaptive coping
- Regards trauma not as a distinct event but as a framework for understanding experiences that can define and deeply affect a person's identity
- Differs from **trauma specific interventions** in that it is not specifically designed to treat symptoms or syndromes related to trauma.



KEY ASSUMPTIONS OF TRAUMA INFORMED PRACTICE/CARE

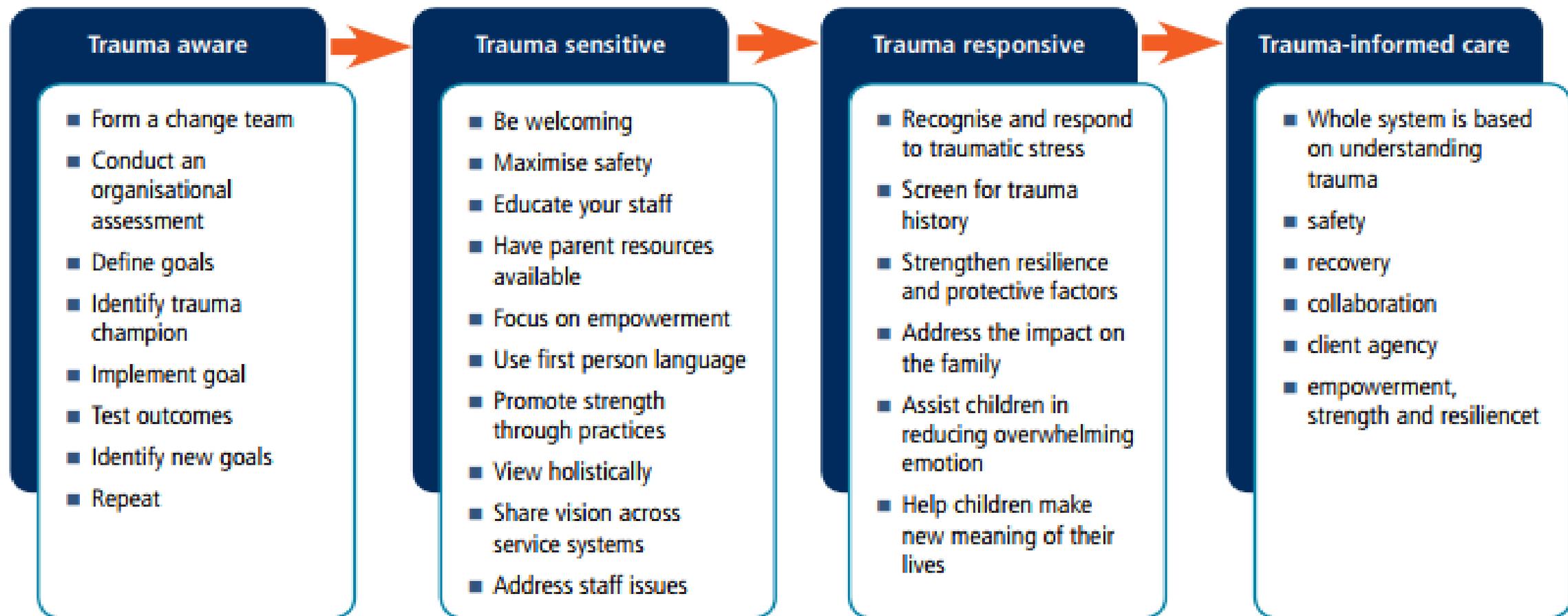
- Realizes the widespread impact of trauma and understands potential paths for recovery;
- Recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system;
- Responds by fully integrating knowledge about trauma into policies, procedures, and practices; and
- Seeks to actively resist re-traumatization.



TIC BASIC PRINCIPLES:

- **Safety** – Begin with recognizing the likely existence of a traumatic history in the lives of service users. In essence, safe relationships are consistent, predictable, and non-shaming
- **Trust** - is earned and demonstrated over time - eliminate ambiguity and vagueness, assist clients to clearly anticipate what is expected of them and what they can expect from you - diminish the anxiety that comes with uncertainty and unpredictability
- **Choice** – embolden client decision making and a sense of control over recovery - As clients develop repertoire of coping strategies, begin to recognize that they cannot always control others or the environment, but they can control their own responses. Facilitating choice about service delivery preferences, options and alternatives
- **Collaboration** – shared power between worker and client, using the helping relationship as a therapeutic tool
- **Empowerment** - strengths-based approach that reframes symptoms as adaptation and highlights resilience instead of pathology. Moving from “What’s wrong with you?” to asking “What happened to you?”





Source: Adapted by Antonia Quadara from Mieseler & Myers (2013)

Figure 1: Practical steps to get from trauma aware to trauma informed

WHERE WOULD YOU PLACE YOUR AGENCY ON THIS CONTINUUM?



KEY QUESTIONS

- **How ACE aware are we?**
- **Do we have the right configuration of support services?**
- **Do children/parents/carers have access to trauma informed therapeutic interventions?**
- **Do parents/carers have access to training/support re trauma informed approaches and strategies?**

