

Understanding and Transforming Trauma

SMART Foundation

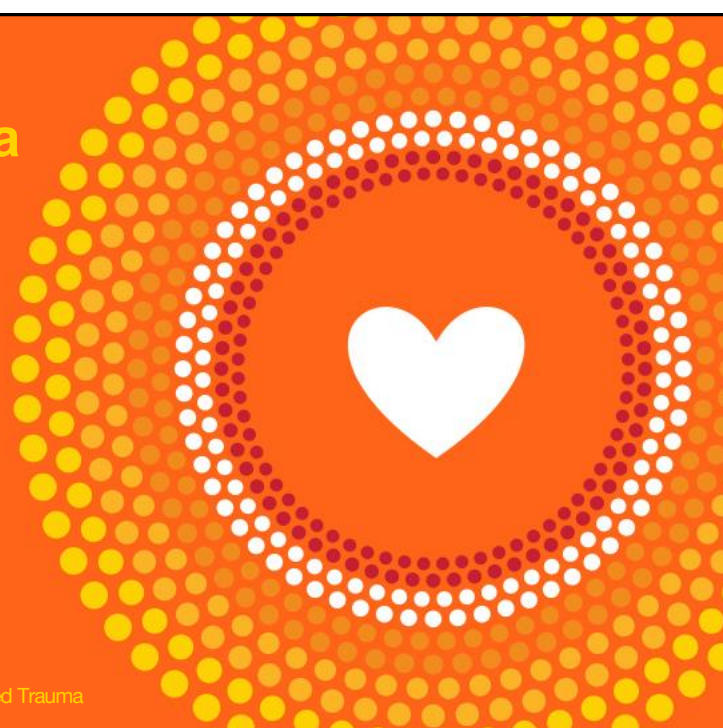
Riverbanks College
Virtual Learning
25th March 2022

Trainer: Carolyn Grace



Australian
Childhood
Foundation

SMART
Strategies for Managing Abuse Related Trauma



1

The Australian Childhood Foundation acknowledges Aboriginal and Torres Strait Islander peoples as the traditional custodians and owners of this land and waters. We pay our respects to their Elders past and present and to the children who are their leaders of tomorrow. We acknowledge their history and living culture and the many thousands of years in which they have raised their children to be safe and strong.



Australian
Childhood
Foundation

2

Welcome from the Riverbanks Leadership



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

childhood.org.au

3

Introductions

- Name
- Role

What are you passionate about in the work you are doing?



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

childhood.org.au

4

SMART Learning Pathway

- SMART Online Training – register through Plink - 8 hours
- SMART – 2 hour training – facilitated by a local SMART Trainer
- SMART – Day 1 – Foundation (*includes specialist packages ie Early Years, Refugees, Adolescents, Working with Aboriginal communities*)
- SMART – Day 2 – Strategies (*for the above as well*)
- SMART Train the Trainer program – 3 days
- Graduate Certificate in Developmental Trauma (F:F days, Virtual and Blended delivery available as well)
- Trauma Aware Schools Initiative



Australian
Childhood
Foundation

SMART
Strategies for Managing Abuse Related Trauma

5

Outline of our day



MORNING

- 9.00am Start



MIDDLE

- 11.00am – 11.30am Morning Tea



AFTERNOON

- 1.00pm – 2.00pm Lunch

- 3.00pm Finish

Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART
Strategies for Managing Abuse Related Trauma

6

Session outline

- **examine** brain development in children
- **define** complex abuse related trauma
- **understand** the impact of trauma on children's and young people's development and functioning
- **develop** strategies for working with traumatised children
- **discuss** whole school or service approaches to supporting traumatised children



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

7

Key learning outcomes – success criteria

- **develop** an enhanced understanding of complex abuse related trauma, with a particular focus on its effects on brain functioning.
- **apply** a framework for responding to children who have been impacted by trauma
- **build** on practice skills and interventions which promote recovery for children in education settings.



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

8

Riverbanks College

OUR PURPOSE

Through world-class teaching and learning practices we will create a vibrant and inclusive birth to 12 educational community that fosters kind and resilient life-long learners, who will thrive today and in tomorrow's world.

OUR VALUES



Our core values are the fundamental guiding principles of how students, staff and community will strive towards the motto of 'A thriving, inclusive community'.

OUR CULTURAL DRIVERS

At Riverbanks College B-12 we:

- are kind and relationship driven
- work hard, have fun and deliver on promises
- are evidence informed and experts in practice
- are relentless in the pursuit of equity and excellence
- are a collaborative professional learning community
- thrive through continuous feedback and improvement.



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

9

Principles guiding this session

Your emotional safety is paramount

Our learning is about shared wisdom

Curiosity and learning build our brains



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

10

SMART PRACTICE

- P** Predictable
- R** Responsive
- A** Attuned
- C** Connecting
- T** Translating
- i** Involving
- C** Calming
- E** Engaging



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART
Strategies for Managing Abuse Related Trauma

11

Safety and relationships are key

It is important to remember that safety – feeling and being safe and having safe, connected and attuned relationships are key to supporting a child or young person who has experienced trauma.



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART
Strategies for Managing Abuse Related Trauma

12

Trauma

How would you define trauma?

What have you noticed with your students?

Simple

Complex

Developmental

Intergenerational

Transgenerational

Historical/Collective

Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

13

Trauma is not what happens **to** you,
but what happens **inside** you.

(Gabor Mate 2018)



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

14

Brain development

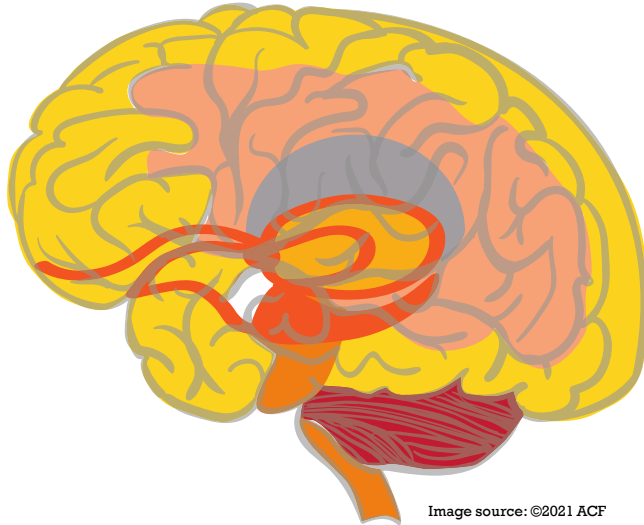


Image source: ©2021 ACF

Cortex
Reasoning/judging centre
3–6 years

Limbic System
Emotional centre
1–4 years

Cerebellum
Motor centre
Birth–2 years

Brain Stem
Basic survival functions
Pre-birth–8 months



Australian
Childhood
Foundation

SMART
Strategies for Managing Abuse Related Trauma

15

Neuronal connections

- The neural system has the ability for one neuron to communicate with up to 10,000 other neurons
- The newborn brain has approximately 100 billion neurons

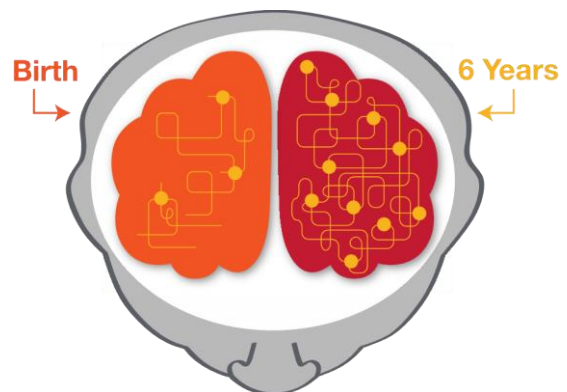


Image source: ©2018 ACF




Australian
Childhood
Foundation


SMART
Strategies for Managing Abuse Related Trauma

16


Three Core Concepts in Early Development

1 Experiences Build Brain Architecture

NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOPING CHILD
Center on the Developing Child  HARVARD UNIVERSITY



Australian Childhood Foundation



SMART
Strategies for Managing Abuse Related Trauma

17

Strengthening neuronal connections

Provide opportunities for repeated experiences

- ensure students have an opportunity to practice tasks over and over
- provide encouragement when tasks are achieved as this will connect to the brains' reward system
- include lots of physical activities that are repetitive – playing musical instruments, skipping, dancing etc
- model positive relational connections, emotion, fun and relational attunement



Image source: ©2021 ACF



Australian Childhood Foundation



SMART
Strategies for Managing Abuse Related Trauma

18

Brainstem – survival centre

- first part of our brain to develop & the most developed brain part at birth
- responsible for regulation of our
 - heart rate
 - breathing
 - sucking, swallowing chewing reflexes
 - temperature control
 - blood pressure
 - circadian (sleep) cycle
 - involuntary reflexes



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

19

What the child looks like in the classroom?

- under or over dressed for weather conditions
- poor sensory processing
- may complain about lights, smells, how something feels, clothing or tags irritating them.
- too hot or too cold when others are not
- breathing abnormalities or difficulties



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

20

Growing and regulating the brainstem



Image source: ©2021 ACF

SMART PRACTICE Focus – Predictable and Calming



Australian
Childhood
Foundation

SMART
Strategies for Managing Abuse Related Trauma

21

Cerebellum – body and balance centre

- helps us with our posture and balance
- helps us with our coordination and to control our movements
- helps us to know where our body is in space
- helps us with our voluntary movements such as walking and writing



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART
Strategies for Managing Abuse Related Trauma

22

What you might see in the classroom and playground

- poor muscle tone
- bruising from bumping into things
- clumsy
- often falling over
- cannot catch a ball
- poor spatial awareness with:
 - objects around them
 - with other children/adults
- cannot hit a ball with a bat



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

23

Growing and regulating the cerebellum



Image source: ©2021 ACF

SMART PRACTICE Focus – Predictable and Calming



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

24

Diencephalon – sorting and sending centre

- develops mainly after birth
- sorts out “messages” coming into the brain and sends them out to other parts of the brain
- uses hormones to send signals to body
- hormonal signals tell your body what it needs, eg. food, water, love



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

25

The diencephalon under stress and trauma

- becomes overwhelmed and cannot sort the information
- is unable to send information to the memory and thinking parts of the brain – that pathway shuts down
- it alerts the amygdala which sets of a sensory information response sequence

What do you notice?



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

26

Sensory information response sequence



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

27

Strategies for transforming – diencephalon



Image source: ©2021 ACF

SMART PRACTICE Focus – Responsive and Translating



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

28

Limbic lobe - emotion and memory centre

- develops mainly after birth
- helps us attach an emotion to an experience or memory
- particularly involved with the emotions
- heavily involved in attachment processes
- two important brain parts – the amygdala and the hippocampus are in this part of the brain



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

29

Amygdala

Has three roles:

- Alarm centre - the 'smoke detector' of the brain
- Memory centre - processes & stores implicit memories
- Emotion centre – helps with emotional understanding and regulation



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

30

The amygdala under stress and trauma

- can be over active or under active
- can evoke reminders and flashbacks of the trauma (awakenings)
- may have difficulty in emotional regulation
- may have difficulty in reading facial expressions

What do you notice?



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

31

What you might see in the classroom and playground

- sensory processing concerns
- may feel overwhelmed and upset by loud noises, bright lights, being too hot or cold, changes in weather
- misunderstanding of others emotions
- difficulty in reading others facial expressions or body language
- unable to manage their own emotions – either may be big emotions expressed or may shut down
- may not understand why they have reacted in a certain way



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

32

Strategies for transforming – Amygdala – ALARM CENTRE, IMPLICIT MEMORIES, EMOTIONS



Image source: ©2021 ACF

SMART PRACTICE focus: Responsive, Attuned and Connecting



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

33

Growing and regulating the amygdala

Provide activities that support emotional and social connection, understand the implicit memory needs and that calm and connect

- explicit emotional literacy teaching
- calm, sensory supportive environments
- support the child, reassure
- stay present – provide safety



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

34

Hippocampus

- explicit memory centre
- provides context to memories
- provides consolidation of information from short term memory to long term memory
- memory puzzle sorting centre



Image source: ©2021 ACF



Australian
Childhood
Foundation

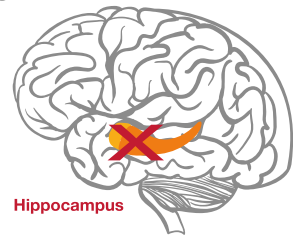
SMART

Strategies for Managing Abuse Related Trauma

35

The hippocampus under stress and trauma

- doesn't function properly - it feels as if the trauma hasn't ended.
- reduction of hippocampal volume up to 25% as a result of high levels of cortisol
- working memory, retention and recall (retrieval) capacity is severely impacted



Hippocampus

Image source: ©2021 ACF

What do you notice?



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

36

What you might see in the classroom and playground

- forgetfulness – student may not remember what to do in a task, or what was asked of them
- they may struggle with remembering how to do basic tasks – ie adding up or how to spell a word
- they may not remember to bring back items such as homework tasks, library books or excursion/camp forms



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

37

Strategies for transforming – hippocampus – EXPLICIT MEMORIES



Image source: ©2021 ACF

SMART PRACTICE Focus – Responsive and Translating



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

38

Cerebral cortex – thinking centre

- the largest part of the brain
- associated with higher brain function such as thought and action
- examples of functions:
 - reasoning
 - logic
 - judgement
 - voluntary movement



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

39

Cortical areas under stress and trauma

Unable to:

- use foresight and anticipation, focus or sustain attention
- plan, organise or prioritise or make decisions well
- reflect or have self-awareness
- be enthusiastic, motivated or persist with activities
- use impulse control

What do you notice?



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

40

The Prefrontal Cortex- executive function centre

Final part of the brain to reach maturity in one's mid to late twenties

- self awareness
- reasoning and judgement
- foresight and anticipation
- focusing and sustaining attention
- planning organising and prioritising
- decision making
- reflecting
- enthusiasm, motivation and persistence
- impulse control
- working memory



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

41

Strategies for transforming – cortex and PFC



Image source: ©2021 ACF

SMART PRACTICE Focus – Translating and Involving



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

42

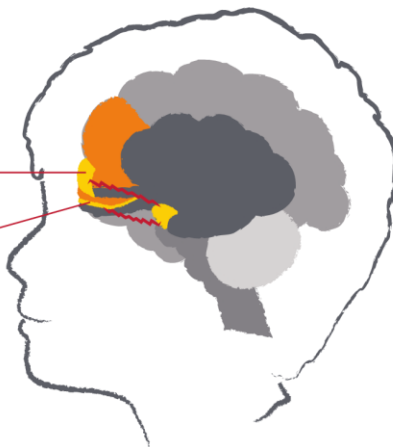
Medial Pre-frontal Cortex and the Right Orbito-frontal Cortex

Medial Pre-Frontal Cortex

(the centre of Mindfulness/ Self awareness)

Right Orbitofrontal Cortex

(Regulation of Arousal)



- Mindful awareness/ meditation de-activates the amygdala
- Quality co-regulation de-activates the amygdala

Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

43

Strategies for transforming – prefrontal cortex/MPFC



Image source: ©2021 ACF

SMART PRACTICE Focus - Attuning and Connecting



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

44

Adolescents - The remodelling brain: Pruning & myelination in the teenage brain



Image source: ©ACF 2021



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

45

Young people and the importance of sleep

- adolescents need more sleep than adults or children - optimal time being about nine and a half hours
- pruning and myelination occur during sleep
- sleep strengthens learning and memories
- later starting times for schools show statistically significant impact on academic achievement

What do you think?



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

46

Lateral brain development

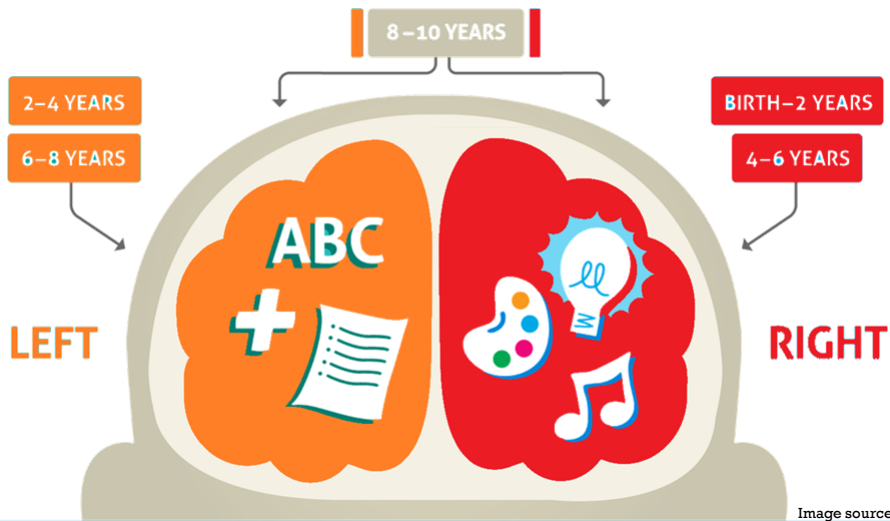


Image source: ©2021 ACF



SMART
Strategies for Managing Abuse Related Trauma

47

Broca's and Wernicke's areas

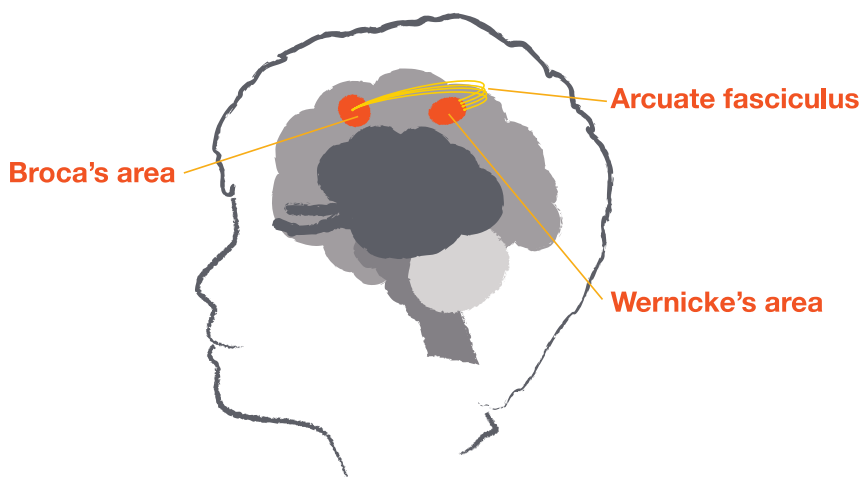


Image source: ©ACF2021



SMART
Strategies for Managing Abuse Related Trauma

48

Under stress and trauma....

Traumatized children are often stuck in their right hemisphere.

It could be hard for the child to:

- Understand what we say
(a left hemisphere task)
- Speak (a left hemisphere task)



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

49

Hemispheres under stress and trauma

- will struggle to process the content of our words
- may not be able to speak or articulate
- will be tuned into the tone of voice, not the content difficulties with understanding and knowing feelings and articulating them
- difficulties with tuning into, understanding and responding to social cues in communication
- will be acutely aware of facial expressions, posture, gestures, intensity of movements and eye contact and searching for signs of disapproval, rejection & danger



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

50

Strategies for transforming – building RH/LH connection and the Corpus Callosum



Image source: ©2021 ACF

SMART PRACTICE Focus – Involving, Connecting, and Engaging



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

51

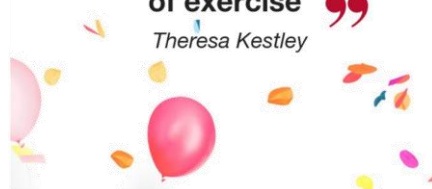
Attachment and the right brain and the importance of play

A secure attachment relationship facilitates right brain development and promotes efficient affect regulation.



Image source: ©2021 ACF

“ Play is a neural exercise and I have never met a child who is able to resist being part of this type of exercise ”
Theresa Kestley



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

52

Summary

Trauma has impaired children's cortical capacity to regulate subcortical functioning. In order to return cortical capacity (which is essential for learning) we must restore calm.

- Be predictable
- Be connected
- Be present
- Promote understanding
- Equip the child with calming and engaging strategies they can use and help co-regulate



Image source: ©ACF 2021



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

53

Neuroplasticity



Image source: ©2021 ACF



Australian
Childhood
Foundation

SMART

Strategies for Managing Abuse Related Trauma

54

Holding hope



Image source: ©ACF 2021

What are your hopes
for the children
you work with?

What are your hopes
for your school?



Australian
Childhood
Foundation

SMART
Strategies for Managing Abuse Related Trauma

55

Further areas to explore as part of your TASI journey

- Be introduced to the Polyvagal Theory and the concept of the Window of Tolerance.
- Explore the different arousal levels and consider supportive strategies for each.
- Explore further the meaning of the behaviours we see in our students.
- Build a toolkit of strategies, focusing on the SMART Audit Tool



Australian
Childhood
Foundation

SMART
Strategies for Managing Abuse Related Trauma

56

Thank you for your participation...



Image source: ©ACF 2021



Australian
Childhood
Foundation

SMART
Strategies for Managing Abuse Related Trauma