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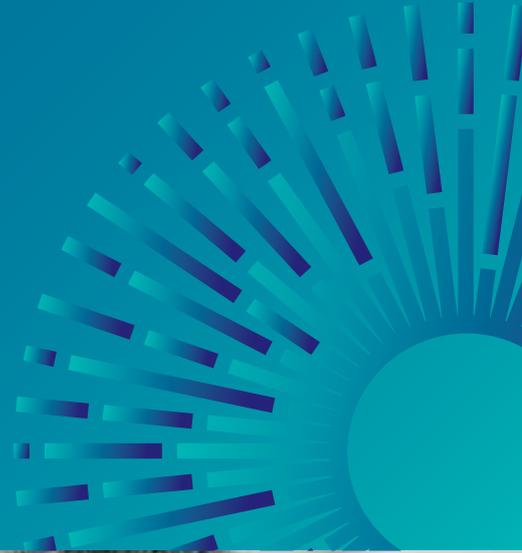
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# Developmental differences in children who have experienced adversity: *Emotional dysregulation*

**CFCA PRACTICE GUIDE**  
(DEVELOPMENTAL DIFFERENCES: 1 OF 4)

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## Overview

Childhood maltreatment is a powerful predictor of poor mental health later in life. We need to better understand the ways in which childhood maltreatment imparts this vulnerability; so that we can develop more effective support. Emerging research suggests that childhood maltreatment may be related to four areas of developmental difference; which increase vulnerability to developing mental health and behavioural concerns. This series of practitioner resources describes these four areas of developmental difference and outlines principles for supporting affected children.

### Key messages

- Childhood maltreatment may result in developmental differences in key areas of cognitive and social functioning.
- These developmental differences may carry latent vulnerability for the development of mental health concerns later on.
- These developmental differences include changes in the effectiveness of executive functioning and emotional regulation; and changes in the processing of social information related to social threat and social reward.
- There is a need to develop effective preventative approaches that can reduce the likelihood of mental health and behavioural concerns developing. Principles for supporting children are outlined in this resource.

## Introduction

Childhood adversity and maltreatment affects children's development and increases a child's vulnerability for mental health concerns later in life (Anda, Felitti, & Bremner, 2006; Green et al., 2010; McCrory, Gerin, & Viding, 2017; McLean, 2016; Price-Robertson, Higgins, & Vassallo, 2013; Vachon, Krueger, Rogosch, & Cicchetti, 2015). The range and complexity of adverse circumstances is well known to practitioners and includes trauma, maltreatment, exposure to violence, bullying or victimisation, loss and bereavement, and relocation (McLean, 2016; Young Minds, n.d.). It has been suggested that a third of adult mental health conditions can be directly linked to adverse experiences in childhood (Young Minds, n.d.).

Until recently, the pathways by which early adversity makes children more vulnerable to poor mental health outcomes haven't been well understood (McCrory & Viding, 2015; McLean, 2016; Pineau, Marchand, & Guay, 2014). Recent research approaches have focused on dynamic and "real-time" brain responses to social stimuli; and have helped us develop a better understanding of the way that a child's brain responds to everyday events. These types of studies, called functional brain imaging studies, explore in real time how a child's brain *reacts* to the social world; giving a more accurate picture of the cognitive processes that underlie children's reactions to social stimuli and what children's experience of the social world might be.

This approach has identified some of the key *developmental differences* that may make children who have experienced adversity more vulnerable to mental health concerns over time (McCrory et al., 2017). These are diminished social reward; emotional dysregulation; difficulty with executive functioning; and enhanced threat bias (see Box 1). This series of practitioner resources looks at these developmental differences and is intended for professionals (psychologists, mental-health social workers, therapeutic specialists) supporting vulnerable children and families. Each resource addresses one of the developmental differences and provides suggestions for supporting children who are school age or older.

The focus of this practitioner resource is emotional dysregulation; which may put a child at increased risk of social and emotional difficulties over time.

## Box 1: Childhood adversity and developmental differences



### Emotional dysregulation

Children exposed to early adversity may not process and regulate emotions in the same way as others; leading to suppressed or intensified emotional expression. This developmental difference could lay the neural foundation for the development of mood disorders in adolescence and later life.



### Diminished social reward

Children exposed to early adversity may not respond in the same way as non-abused peers to rewarding events or activities. This developmental difference could lay the neural foundation for the development of depression and addiction in adolescence and later life.



### Difficulty with executive functioning

Children exposed to early adversity may not be able to plan, organise, execute and monitor their activities and their behavioural responses as easily as same age peers who have not experienced abuse. This developmental difference could lay the neural foundation for the development of learning and behaviour disorders in adolescence and later life.



### Enhanced threat bias

Children exposed to early adversity can over-react to everyday events and stimuli; triggering an automatic “threat” bias. This developmental difference could lay the neural foundation for the development of anxiety disorders in adolescence and later life.

Source: McCrory et al., 2017

- \* Children who have experienced adversity may benefit from professional psychological treatment. If you're concerned about a child, consider referring them to a general practitioner who can determine if the child should be referred to a psychologist.

## What is emotional dysregulation?

Emotional dysregulation is when a child experiences difficulty with registering emotions, responding with emotions appropriate to context and regulating emotional responses in social situations (i.e., suppressing emotions or presenting with overly dramatic and excessive emotional responses).

## Emerging research on emotional dysregulation

In a recent comprehensive review of functional brain imaging studies published in the *Journal of Child Psychology and Psychiatry* that summarised the emerging evidence for *developmental differences* in brain development and their significance, McCrory et al. (2017, p. 352) cautioned that:

*There is almost no provision for those children who have experienced maltreatment but who do not present with a manifest psychiatric disorder; indeed, such children have generally not been viewed as the concern of mental health professionals at all despite a compelling evidence documenting the significantly elevated risk of future disorder that characterise these children.*

Collectively, the research on brain development suggests that predictable developmental differences in brain functioning precede the development of mental health and behavioural concerns. This argues for the provision of evidence-based *preventative* mental health protocols for all children who have experienced maltreatment.

McCrory and colleagues (2017) concluded that children who experience childhood maltreatment demonstrate increased neural activity during emotional regulation tasks, suggesting these tasks were more effortful for these children compared to non-maltreated children (McCrory et al., 2017). As a whole, studies in this area have been taken as support for the idea that the processing and regulation of emotions require more cognitive effort for maltreated children compared with other children (McCrory et al., 2017; McLaughlin, Sheridan, & Lambert, 2014). This inefficiency in emotional control may increase the risk for future social and emotional concerns (e.g., anxiety disorders) (McCrory et al., 2017; Suveg & Zeman, 2004).

## The significance of emotional dysregulation for children

Children who freely express a range of emotions and can regulate their emotions well tend to have better peer relationships, stronger social connections and better educational outcomes. Children who have these skills also tend to have better relationships, more satisfying employment and better mental health throughout their later life. Children who are able to recognise and respond well to their feelings, and the feelings of others, and express their emotions in healthy and socially acceptable ways are better able to make and keep friends. Good emotional intelligence is associated with better life satisfaction and better educational and vocational outcomes (Salovey & Grewel, 2005).

Poor emotional regulation is a core difficulty in many childhood disorders that are associated with challenging behaviour. Supporting a child to tolerate and manage strong emotions can help them to relinquish challenging behaviour (Essau, LeBlanc, & Ollendick, 2017; Hertz, McLaughlin, & Hatzenbuehler, 2012). Children who have experienced maltreatment may have few socially acceptable ways of self-calming, commonly relying on emotional over-control (e.g., not crying when hurt) or emotional under-control (e.g., disproportionate reactions to minor events). They need support to build more adaptive self-regulation activities into their daily lives (Essau et al., 2017).

## Supporting children with emotional dysregulation

Although conceptual models of efficient emotional regulation are still developing (Weems & Pina, 2010), it appears that adaptive emotional regulation is founded on at least three components:

1. the recognition and naming of emotions;
2. the association between bodily sensation and emotions; and
3. appropriate and safe emotional expression/regulation.

Children who have experienced maltreatment can have difficulty in each of these areas. Taken as a whole, this research suggests the importance of putting strategies in place to support maltreated children to develop emotional literacy (accurately recognising and naming emotions) and appropriate regulation and expression of emotions. If you are a professional offering support for vulnerable children and families, it can be helpful to incorporate strategies for supporting children's emotional regulation as part of a family intervention.

Research suggests that it is most effective to support children with each of the areas listed above in sequence; as this is the order in which these skills are developed naturally (Calkins & Perry, 2016; Fox & Calkins, 2003; Thompson & Calkins, 1996). Children need to be able to recognise and name feelings before they can understand how emotions affect them; or understand how to safely and appropriately express their feelings (McLean, 2017). It is only then that children will have a sufficient foundation in language from which they can learn more complex skills such as connecting their feelings to bodily sensations. Once this connection is made, it is easier for children to begin to practise strategies for self-regulation and calming (Blaustein & Kinniburgh, 2010).

### 1. Support children to recognise and name emotions

Children who have difficulty in *recognising and naming emotions* will need support to learn to accurately identify and name feelings. This is important—having a vocabulary of feelings words, and therefore being able to name emotions, is a prerequisite for talking to children about strategies for managing emotions. In most cases this will mean supporting children to learn to recognise and name basic emotions. Children who have experienced maltreatment may have an emotional vocabulary that is limited in range, restricted to only negative emotions or they may consistently “mis-recognise” emotions (e.g., mis-labelling “surprise” as “fear”).

Emotional literacy can be built in preschool-aged children through guided play techniques that provide opportunities to name emotions (e.g., “scary” animals such as spiders and snakes; “angry” animals such as lions; and “loving” animals such as bunnies or cats). In building emotional literacy, it is important to start with simple feelings words such as sad, happy, angry, scared; gradually building and extending a child's feelings vocabulary by using more complex feelings words. Photo books, cartoon characters and feelings cards are also useful tools in developing a child's emotional literacy. For a caregiver resource on managing emotions, see McLean (2017).

### 2. Support children to understand how emotions are expressed in the body

Children can have difficulty in fully experiencing feelings and in making the connection between feelings and sensations in their body. Children can have trouble connecting feelings with bodily sensations (i.e., understanding how emotions are experienced in their body). They are likely to need support to understand how feelings affect their bodies; both in ways that are similar to others and in ways that are unique to them.

For example, while many children's bodies become hypersensitive to emotional stimuli; some may not register emotions in their bodies as well as others; for example if they have “cut off” from strong feelings that have previously been experienced as overwhelming. Children are likely to need assistance in connecting what they are feeling in their bodies with the emotions that they are experiencing. As part of family support work, professionals (psychologists, mental-health social workers and therapeutic specialists) working with children can use the following approaches (Blaustein & Kinniburgh, 2010).

#### Psycho-education

Provide psycho-education about the bodily signs and symptoms of distress. A child with poor emotional literacy and self-reflection may not make the connection between a dry mouth, racing heartbeat and wobbly tummy and

feelings of anxiety, fear or apprehension. Teaching a child about their own unique body signals is an important way to normalise their experiences and build emotional regulation. When significant adults model or “talk aloud” about their own body signs of fear or anger; it can normalise the link between emotions and bodily sensations.

## Structured exercises to teach children body–mind connection

Structured exercises such as “Emotions Face” and “Body Paint” activities can help primary and secondary school-aged children to build their knowledge of how emotions are experienced in their bodies. These activities use face or body templates to help children record how feelings look on their face and body; and how their face or body changes in response to feelings. It can be used in a feelings-focused discussion; for example “What does this feeling do to your face?” or “What do angry eyes look like?” These activities can also be useful in discussing emotive events (e.g., a time when the child felt angry; and asking questions such as “What did your tummy feel like then?”). Have children colour and keep their “happy”, “sad” and “angry” faces; these can be used as prompts for later discussion. These activities can also be useful in normalising the connection that everyone feels between strong emotions and bodily clues.

## Teach children how their body communicates to them

Some children are extremely disconnected from their feelings, and experience frequent somatic symptoms such as headaches or stomach aches. Somatic symptoms such as headaches or stomach aches are common in children who do not feel able to recognise, name and express emotions safely. It can be useful to support these children to view their somatic symptoms as important pieces of information that tell them whether or not they feel safe. Over time, thinking of their physical pain as an important and valuable safety communication helps children to accept these symptoms, and can help ease these symptoms. It is important not to dismiss somatic symptoms but to accept them as real manifestations of emotional pain.

For more suggestions on talking to children about emotions see:

- the publication by Blaustein and Kinniburgh (2010) *Treating traumatic stress in children and adolescents*;
- resources from The Center on the Social and Emotional Foundations for Early Learning (Vanderbilt University) at <[csefel.vanderbilt.edu/resources/family.html](http://csefel.vanderbilt.edu/resources/family.html)>; or
- resources from KidsMatter at <[kidsmatter.edu.au/families/resources/about-emotions/childrens-emotions](http://kidsmatter.edu.au/families/resources/about-emotions/childrens-emotions)>.

## 3. Support children to regulate and express emotions safely

Children who have experienced adversity may also need support with regulating and expressing their emotions in an appropriate, safe and socially acceptable way (Brumariu, 2015). The following principles may be useful:

### Determine the child’s style of emotional expression

Children who are emotionally over-controlled can have trouble expressing feelings—they present as internalised and emotionally restricted (have difficulty in expressing emotions or only express a limited range of emotions). Emotionally over-reactive children have the opposite problem; they regularly react to minor frustrations with explosive and extreme emotional outbursts. Each of these emotional coping patterns causes problems for children, although the over-reactive style is much more likely to lead to school suspensions and placement instability. Understanding a child’s predominant emotional style is an important step to understanding a child’s emotional needs. An under-expressive child is likely to need support with the co-regulation and safe expression of emotions. An emotionally reactive child is likely to need support in identifying emotional triggers and learning independent self-regulation skills.

### Teach self-regulation and coping skills

It is useful to explicitly teach calming and regulation skills. Children may vary in their preference for calming strategies. Some like to listen to music, talk to a friend or spend time alone in an agreed “chill out” zone. Others like to do something active to release body tension. For these children, engaging them in physical activity that uses large muscle groups can be helpful. Examples might include trampolining, running up stairs, push-ups, tug of war, or “squat and throw” ball activities (e.g., shooting hoops). For more information on coping skills, see: <[kidsmatter.edu.au/families/enewsletter/five-ways-help-children-learn-coping-skills](http://kidsmatter.edu.au/families/enewsletter/five-ways-help-children-learn-coping-skills)>.

## Communicate coping strategies using positive language

It can also be helpful to support parents or carers to manage children's emotional expression. Support parents to practise using positive language when a child is dys-regulated. Parents should use short, simple and action-oriented language and focus on acknowledging the child's emotion and communicating a positive solution. For example, "I can see you're angry ... Go for a run." Remind parents to praise a child's efforts towards safe expression.

It can be helpful to ask parents to practise calming strategies with children ahead of time, while they are feeling calm, so that it becomes a more automatic behaviour under stress (see <[copingskillsforkids.com/calming-anxiety/](http://copingskillsforkids.com/calming-anxiety/)>). It can also be useful to ask families to practise tracking daily emotions; using feelings thermometers, feeling faces or colour cards. These activities help both children and parents to understand each other's feelings. See:

- <[childmind.org/article/can-help-kids-self-regulation/](http://childmind.org/article/can-help-kids-self-regulation/)>;
- <[csefel.vanderbilt.edu/modules/2006/feelingchart.pdf](http://csefel.vanderbilt.edu/modules/2006/feelingchart.pdf)> (feelings chart); and
- <[imagineeducation.com.au/files/CHECE017/11.pdf](http://imagineeducation.com.au/files/CHECE017/11.pdf)> (instructions for the feelings chart).

## Encourage positive role models for emotional tolerance and emotional regulation

Positive role modelling is also an important means by which children can learn socially acceptable ways to experience emotions, including emotions that have felt unsafe. If caregivers can demonstrate that they can tolerate a full range of emotions, then children can learn that it is safe to express these emotions over time.

## 4. Consider referring the child for professional psychological treatment

In cases where children demonstrate extreme fluctuations of mood and emotions, professional support may be warranted. In this case, a general practitioner can organise a referral to a psychologist for targeted support. Interventions such as mindfulness training, acceptance and commitment focused therapy; trauma focused CBT and dialectical behaviour therapy can all be used by psychologists to support children and adolescents to problem solve and to tolerate strong emotions. These interventions have been demonstrated to improve children's emotional stability and capacity for emotional self-control over time (Bohus et al., 2009; Matulis, Resick, Rosner, & Steil, 2013; Steil, Dyer, Priebe, Kleindienst, & Bohus, 2011).

## Conclusion

Emerging research suggests that children who have experienced early life adversity can experience persistent difficulties with emotional regulation; and their interpersonal relationships can be characterised by over, or under, emotional reactivity. This may lay the foundation for the development of later social, emotional and behavioural disorders. Children who have experienced early adversity and maltreatment may benefit from professional psychological treatment. These children can also benefit from a range of caregiver or professionally delivered strategies to address emotional regulation including building emotional literacy, modelling emotional expression, teaching mindfulness and other coping strategies; structured thought-challenging exercises; and activities to build tolerance for strong emotions in the context of safe interpersonal relationships.

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