

# Early Adversity and Developmental Difference

2 May 2018

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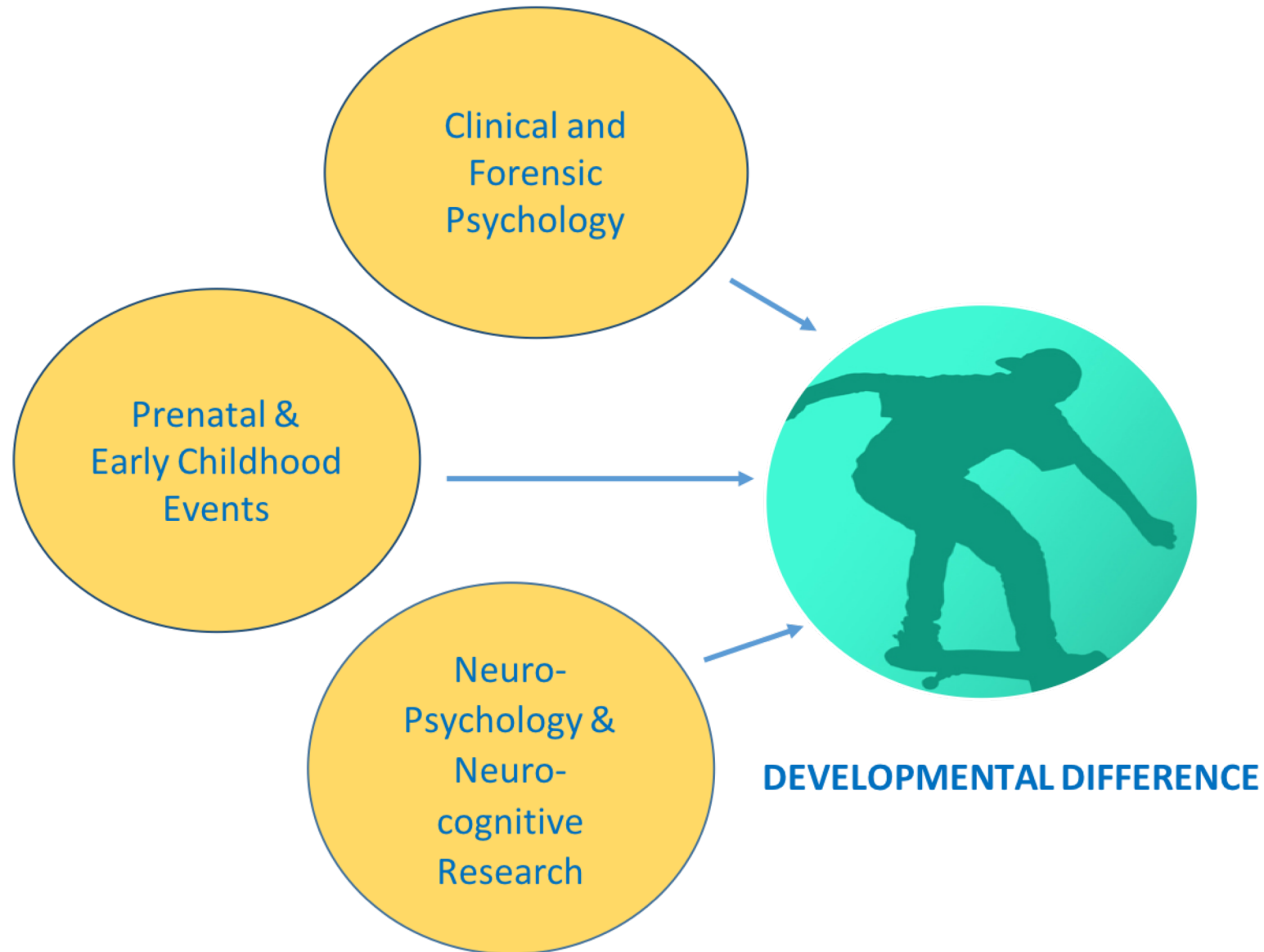
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# Early Adversity and Developmental Difference

- Introducing a program of 'research to practice' regarding Developmental Difference in out of home care.
- Consistent with international trend towards trans-diagnostic approaches and focus on domains of functioning.
- Integrating bodies of work from clinical and forensic Psychology; neuropsychology and neuro-cognitive research; and literature on impact of prenatal and early childhood events.

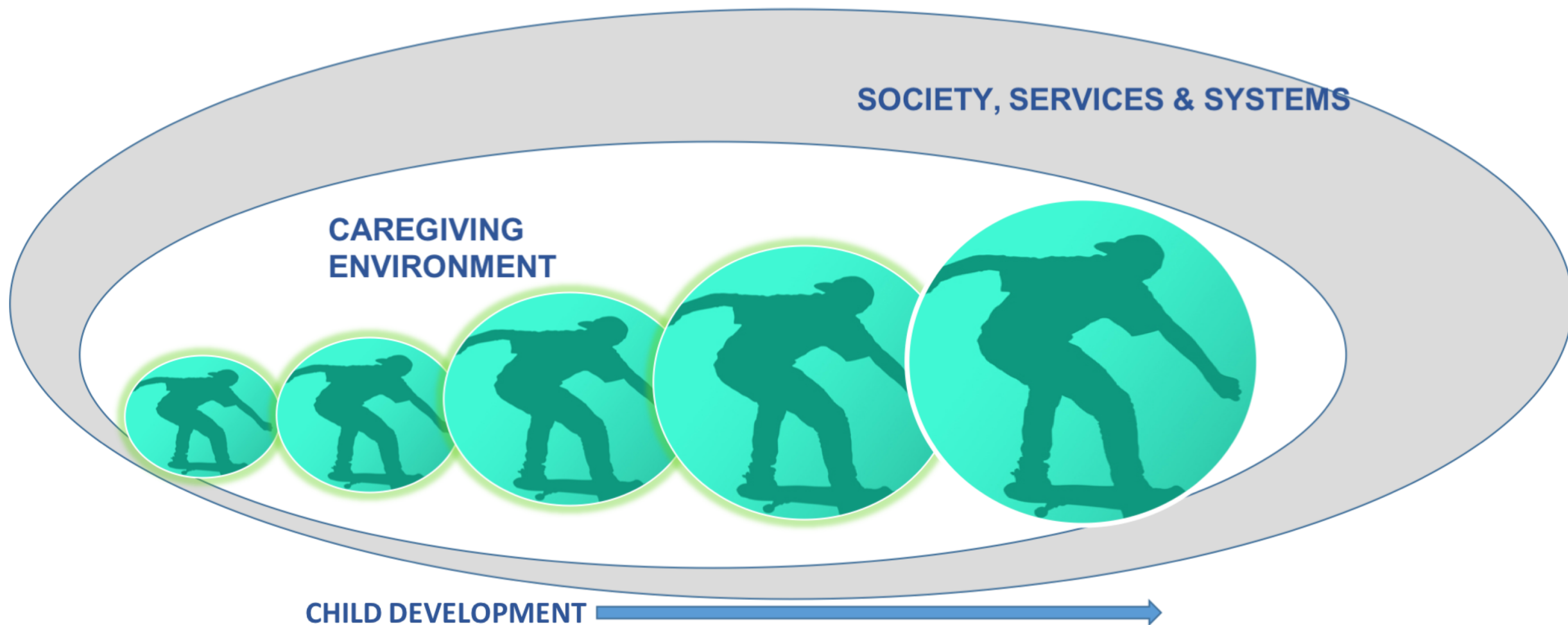


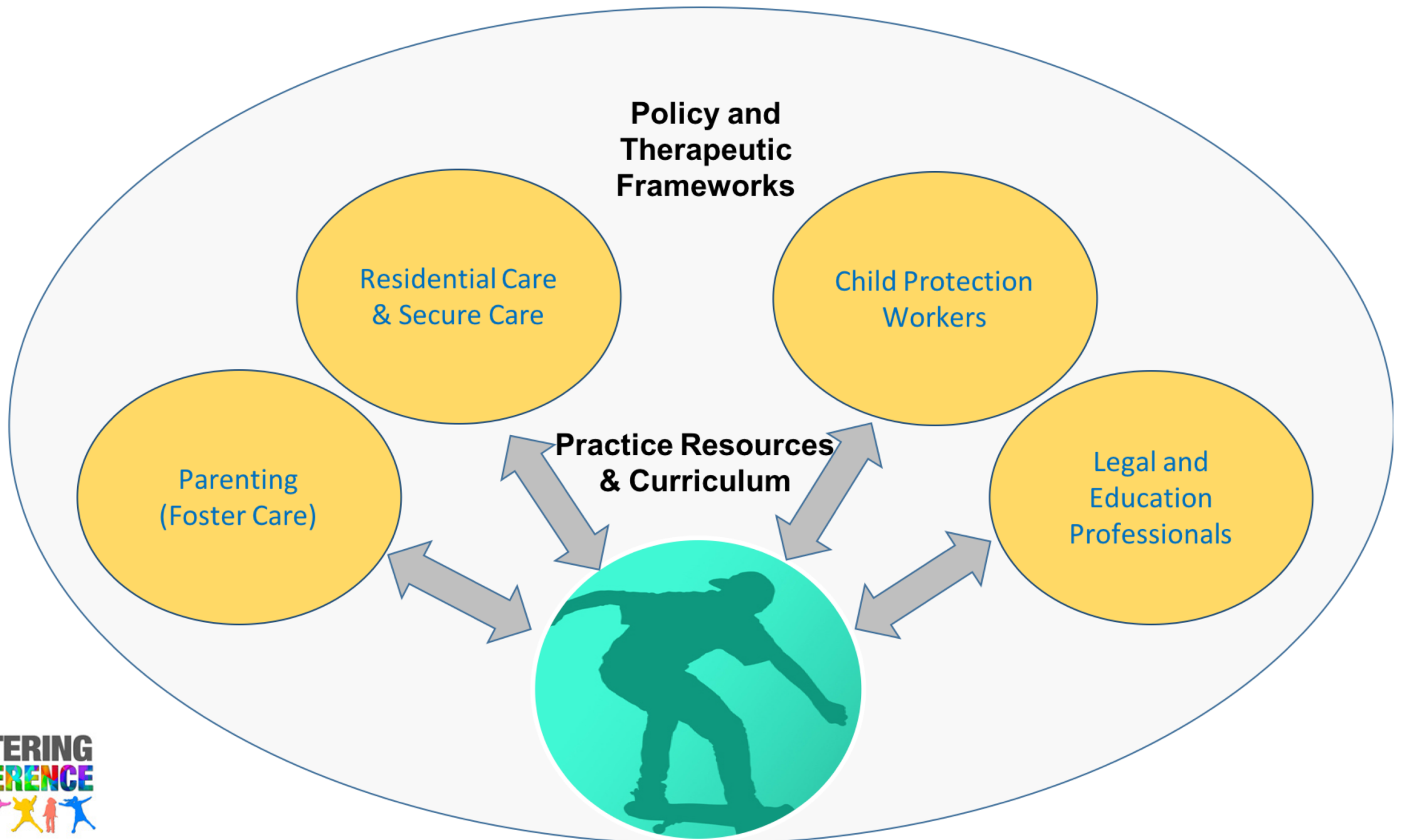


# Early Adversity and Developmental Difference

- This approach is not a substitute for ‘attachment based’ or ‘trauma-informed’ approaches.
- Better captures the broad range of influences on children’s development in vulnerable populations; especially young people in care.
- May be likely to result in targeted interventions, tailored to underlying needs.
- Difficulties can be viewed in terms of chronic mis-match between young person’s experience and social systems.







# Developmental Differences

Disrupted sleep and circadian rhythms

Difficulty in regulating the sensory world

Difficulty in understanding and communicating

***Selected references:*** Cascio, 2016; Cermak & Groza, 1998; De Bellis et al., 2009; Franklin et al., 2008; Grant & Gravestock, 2003; Hart & Rubia, 2012; Hilyard & Wolfe, 2002; Koenen, et al., 2003; McLaughlin et al., 2014; Prasad, Kramer, & Ewing Cobbs, 2005; Pollak et al., 2010; Sylvestre et al 2016; Wyper & Rasmussen, 2011.



Supporting Young People with Developmental Difference



# Developmental Differences

Difficulty with emotional regulation

Difficulty with executive control; memory & organisation

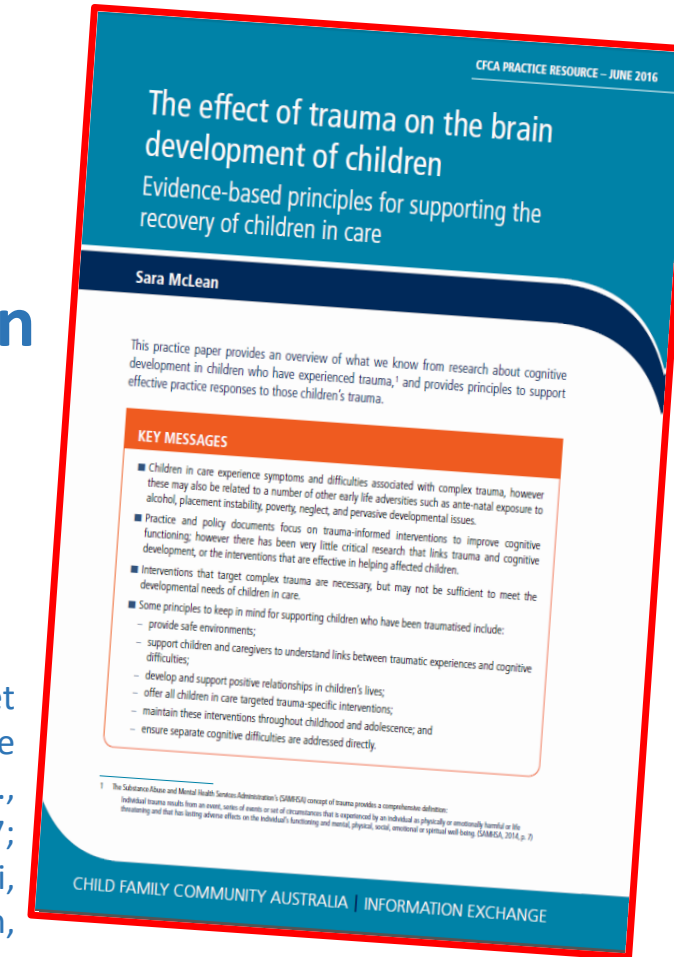
Differences (bias) in social information processing:

– Threat and reward processing

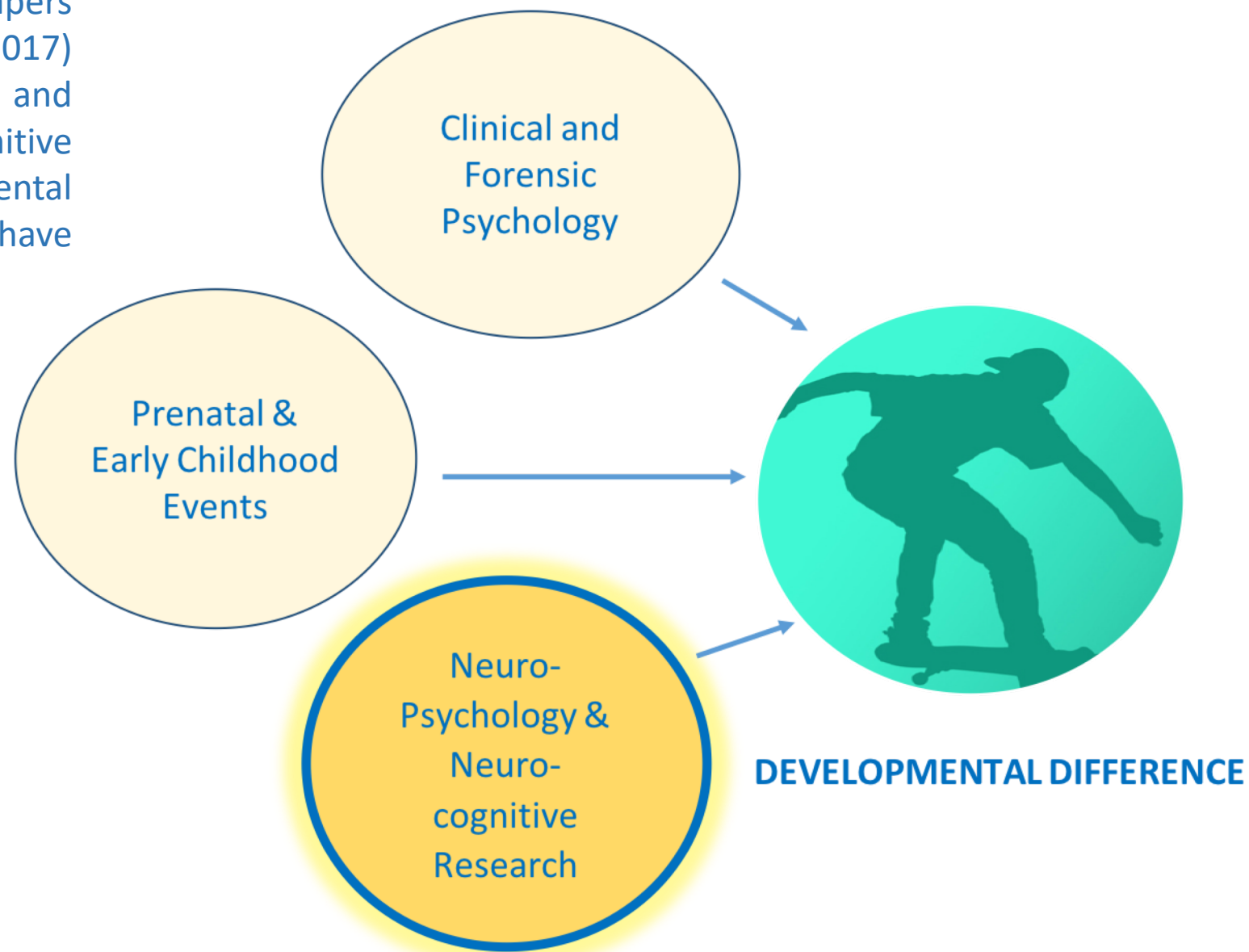
**Selected references:** Carrion et al., 2010; ; Cicchetti, Rogosch, Gunnar, & Toth, 2010; Cook et al., 2005; DeBellis, et al., 2002; De Brito et al., 2013; De Lisi & Vaughn, 2011; DePrince Weinzierl, & Combs, 2009; Dvir et al., 2014; Hart & Rubia, 2012; Kelly et al., 2013; Kuo et al., 2015; Lansdown, Burnell, & Allen, 2007; Mc Crory et al., 2010; McCrory et al., 2017; McLaughlin, et al., 2014; McLean, 2016; McLean & McDougall, 2014; Moradi, Doost, Taghavi, Yule, & Dalgeish, 1999; Nolin & Ethier, 2007; Noll et al., 2006; Ogilvie, Stewart, Chan, & Shum, 2011; Pollak & Sinha, 2002; Perry & Dobson, 2013; Teicher et al., 2012.



Supporting Young People with Developmental Difference



This series of four practice papers drawing on McCrory et al (2017) program of literature reviews and research on the neuro-cognitive vulnerabilities and developmental pathways of young people who have experienced early adversity.



# Early Adversity and Developmental Differences

- Eamon McCrory and colleagues have a program of research integrating neural, neuropsychological, structural and functional brain imaging research (Traditional areas of neurocognitive functioning).
- 4 areas of **developmental difference**; which they describe as **latent vulnerabilities**, as they convey developmental risk for socio- emotional and mental health difficulties in later life.
- Developmental differences in:
  - Threat processing
  - Reward processing
  - Emotional control
  - Executive control



# Developmental Difference

- **Developmental Differences** in information processing that:
  - Exist without overt mental health symptoms.
  - Similar to adults with mental health concerns.
  - Originally adaptive; but may convey vulnerability later in life.
  - May reduce potential for corrective experiences and social exploration, reduce motivation and other learning opportunities.
  - Need for preventative interventions- even in the absence of overt symptoms- specifically addressing developmental differences in social and information processing and regulation.



# Developmental Difference: Threat & Reward Processing

- **Altered reactivity to ‘threat’:** Hyper- but also hypo-reactivity. Both vigilance and avoidance; characteristic of anxiety disorders. Generally consistent with theory of complex trauma.
- **Blunted response to ‘reward’:** areas of the brain associated with resilience. ‘Calibration’ of brain in response to inconsistent and scarce reward contingencies in early environment (McCrory et al., 2017).
- ‘Perfect Storm’ of risk: anxiety, depression- ‘reinforcing’ spiral of reduced exploration and mastery.



# Implications: Supporting children and families

- **Implications for practice:**
  - Strengths-based narrative.
  - ‘Stress Inoculation’: Distress tolerance, active coping skills & attention ‘training’/planning (positive psychology), mindfulness.
  - Alternative experiences: opportunity for mastery.
  - Cognitive coaching techniques: thought detectives.



# Developmental Difference: Emotional Regulation

- **Emotional regulation:**-capacity to produce changes in activated emotions. Involves attention modulation; suppression; and cognitive re-appraisal.
- Greater effortful control required. Structural differences; connectivity and activity findings mixed; suggesting pattern of management by avoidance or effortful control.

# Implications: Building emotional regulation skills

- Implications for practice:
  - Emotional vocabulary
  - Body- mind connection
  - Safe emotional expression and regulation; coping skills
  - Positive role models



# Developmental Difference: Executive Functioning

- **Executive control:** planning, flexible thinking, working memory and predicting outcomes. Updating (working memory= control of sustained attention); inhibiting (controlling behaviour inconsistent with goal) and task shifting (switching back and forth between tasks, mental states or concepts). Air traffic controller.
- Differences in functional imagery activity in those exposed to maltreatment. Likely contribution of pre-existing cognitive impairment and socio-economic factors.

# Implications: Building executive control

- Implications for practice:
  - Structure and predictability
  - Simplify and support transitions
  - Scaffolding strategies and skills
    - Getting started and keeping on track
    - Working memory
    - Flexible thinking



# Implications for Practice

- Physical safety does not equate to experience of safety; and social interaction may not be rewarding. Stress inoculation important.
- Emotions may be diminished, delayed or distorted and foundations of emotional literacy need to be taught.
- Building executive control (organisation, memory and planning) requires structure, predictability and skill development.

# Summary

- Trend in functional imagery research suggesting (at least 4) **developmental differences** in candidate brain systems/circuits that may convey latent vulnerability for later social and mental health difficulties; *even when no difficulties are currently apparent.*
- Polarisation of services child welfare/ family support and child mental health is not helpful. Need for 'stress inoculation' training; and a structured, preventative approach to skill development in all vulnerable young people and families.



# Practice Reflections....

- How does information about Developmental Differences align with your current practice and your experience of young people and families?
- How can stress inoculation strategies and skills be made more accessible to young people and families?



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# Continue the conversation...

Do you have any further questions?

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