

Behaviourism, attachment theory and unsettled babies

Project ECHO 3

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Developmental Origins of Disease

First 1000 Days

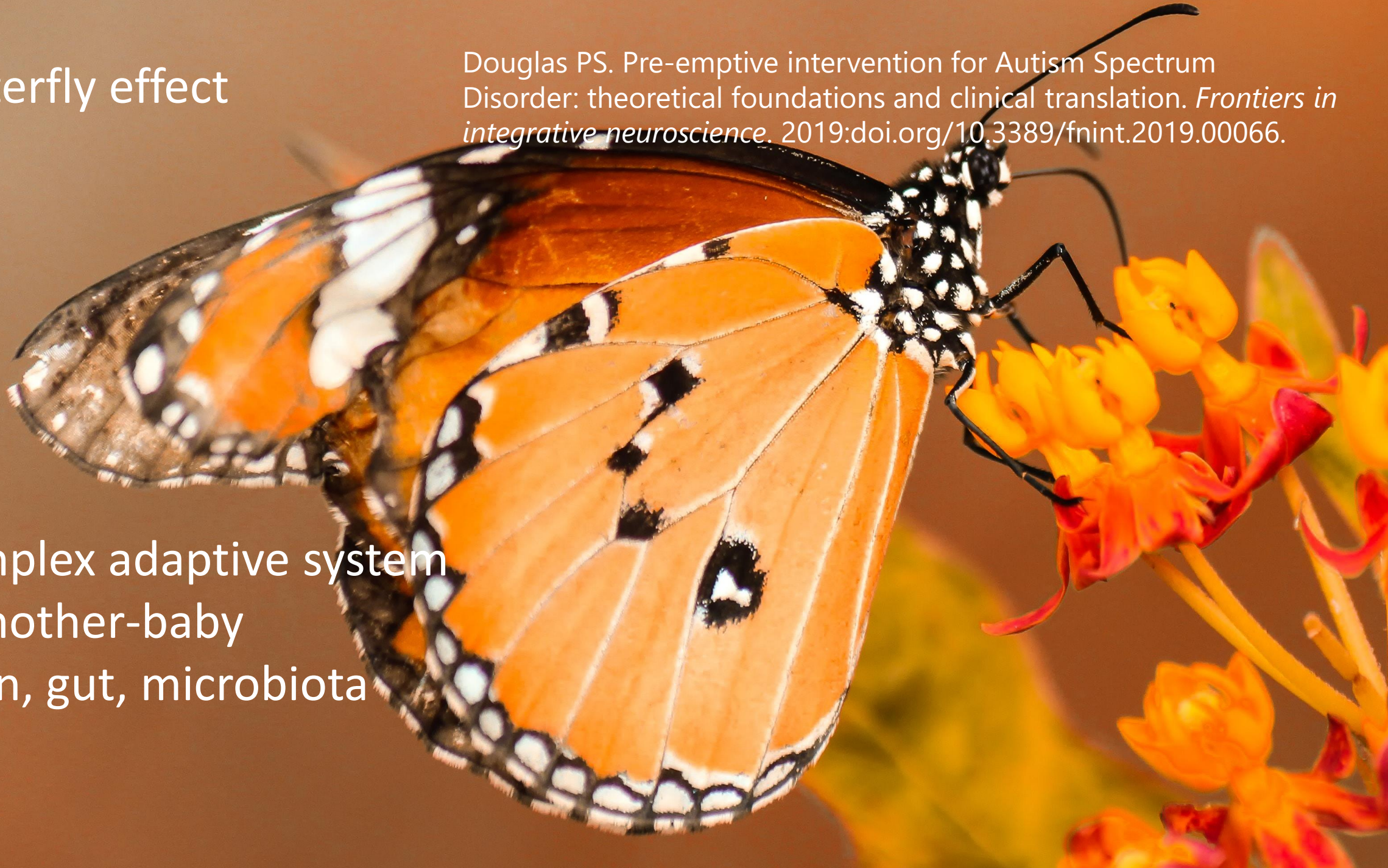
First 100 Days

First 300 Days

Butterfly effect

Douglas PS. Pre-emptive intervention for Autism Spectrum Disorder: theoretical foundations and clinical translation. *Frontiers in integrative neuroscience*. 2019;doi.org/10.3389/fnint.2019.00066.

Complex adaptive system
of mother-baby
brain, gut, microbiota





The NDC or Possums 5 domain approach to crying babies

- Focusses on clinical strategies which **empower** parents
- To **experiment** with new **behaviours**
- As they inhabit the **present moment** with their baby.



In time-constrained consultations an **NDC practitioner**

- De-emphasizes past histories of “ghosts in the nursery”, intergenerational trauma, or psychosocial contexts which aren’t amenable to change
- Offers tools for **changing the parent’s relationship with their challenging thoughts and feelings** (Acceptance and Commitment Therapy).



The NDC or Possums five domain approach helps parents

- Experiment with **new behavioural responses** to **infant cues** or communications
- To discover what **turns down the dial** on baby's sympathetic nervous system.

In the infant's critically neuroplastic first 100 days we aim to lay down neural templates of

- **A downregulated stress response**
- **Secure psychological attachment**

First 300 days post-birth
(crying tendency = biobehavioural marker)

Later childhood and adulthood

Secure psychological
attachment style



Optimal mental health



Attachment theory

John Bowlby 1960s + (1907-1990)

Mary Ainsworth 1960s + (1913-1999)

Styles of attachment

Secure

Insecure

- *Ambivalent*
- *Avoidant*
- *Disorganised*

Attachment behaviour

Any behaviour which functions to achieve or maintain proximity to attachment figure

Parental sensitivity

Identifies infant's communications

Alert to context of infant's communications

Responds promptly and appropriately to reinforce infant's bids for caregiving attention

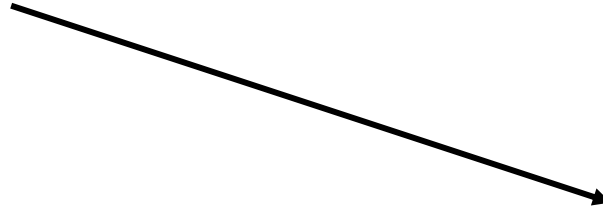
Caregiving behaviour

Parental nurturing and soothing behaviours

First 300 days post-birth
(crying tendency = biobehavioural
marker)

Later childhood and adulthood

Secure psychological
attachment style



Optimal mental health

Behavioural interventions
for Infant sleep and feeds

- Sleep training
- Feed spacing



First 300 days post-birth

Secure psychological attachment style



Behavioural interventions for Infant sleep and feeds

- Sleep training
- Feed spacing

Later childhood and adulthood

Optimal mental health

?

First wave behavioural approaches ('sleep training') - hypothesis



Behavioural approaches to infantcare

Operant theory
Applied behavioural analysis
Social learning theory
Relational frame theory (ACT)

Cordova & Mansfield 2007;
Whittingham & Coyne 2019.

Attachment based parenting

Emotional availability
Attachment theory
Meta-emotion theory



First wave

Classical conditioning (Pavlov)
Operant conditioning (Skinner) – hungry rats

Second wave

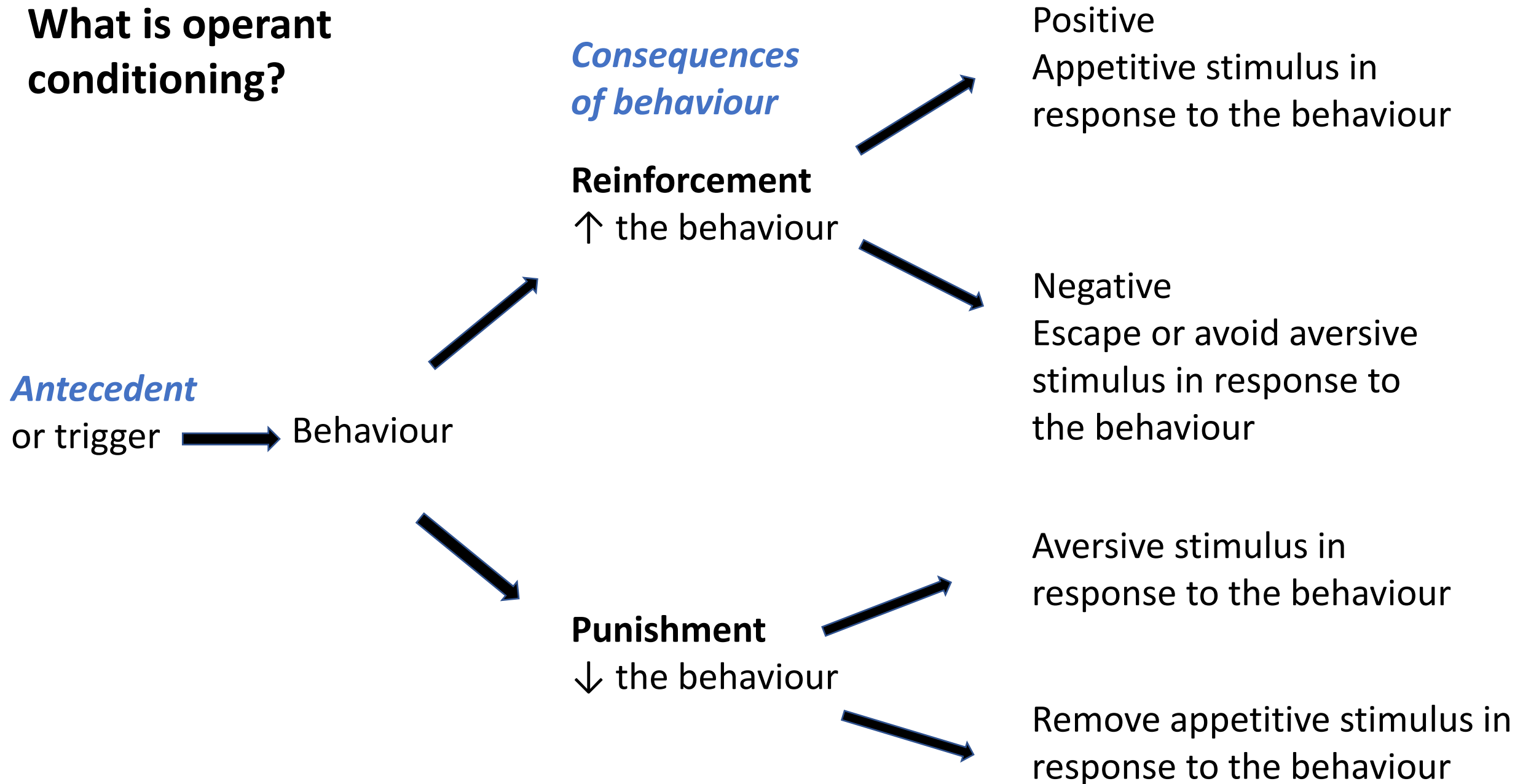
Cognitive Behavioural Therapy
Family Systems Therapy
Rational Emotive Behaviour Therapy
Eye Movement Desensitisation and Reprocessing
Rational Emotive Behaviour Therapy

Third wave

Mindfulness Based Cognitive Therapy
Dialectical Behaviour Therapy
Behaviour Analysis
Applied Functional Contextualism (or ACT)

The waves of behaviourism

What is operant conditioning?



NDC: sleep training misunderstands behaviourism

	<i>Stimulus or trigger</i>	<i>Concept of infant sleep</i>
Sleep training = first wave behaviourism	Sleep associations	Behaviour that is under conscious control
Possums Baby and Toddler Sleep Program (NDC sleep domain)	Sleep pressure	Biological process like secretion of gastric acid not under conscious control

First 300 days post-birth

Later childhood and adulthood

Secure psychological attachment style

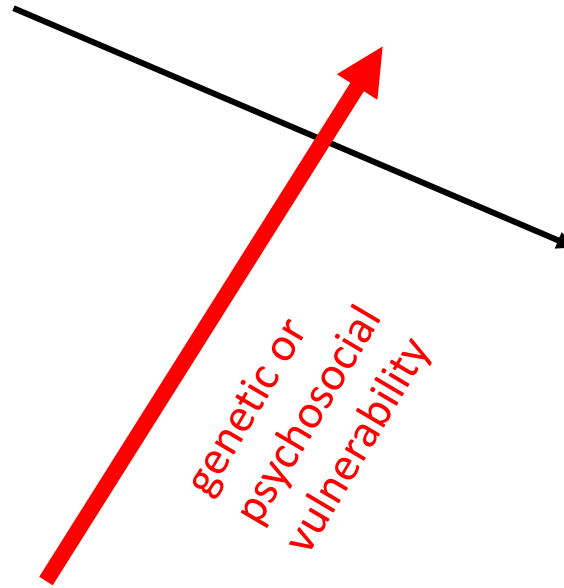
Behavioural interventions for Infant sleep and feeds

- Sleep training
- Feed spacing

Optimal mental health

genetic or
psychosocial
vulnerability

NDC hypothesis



2013 Neurobiological model of infant crying: theoretical frames¹

Evolutionary medicine¹

Breastfeeding = evolutionary norm: primary site of maternal-infant responsivity and neural regulation

- Optimises infant development (physical and mental health)
- Optimises maternal mental health and well-being
- Downregulates infant SNS (crying ↑ risk of predation)

Homo sapiens infant highly adaptive across diverse cultures

Multiple serious disruptors to breastfeeding in advanced economies ↑ crying

Complexity science²

Breastfeeding disruption is foundationally disruptive across other interacting domains of sleep, parent mental health, gut, environmental enrichment

Behaviourism – NDC lens

1. Conditioned dialling up at breast or bottle: negative association
2. Conditioned association between triggers (some known some unknown) and stress response³ results in conditioned SNS hyperarousal in neurologically sensitive first 16 weeks⁴
 - ↓ threshold for crying
 - Crying loops



¹Douglas & Hill 2013; ²Ball 2017; ³Douglas et al 2011; ⁴Douglas 2019

2007

Chapter 14

A Behavioral Perspective on Adult Attachment Style, Intimacy, and Relationship Health

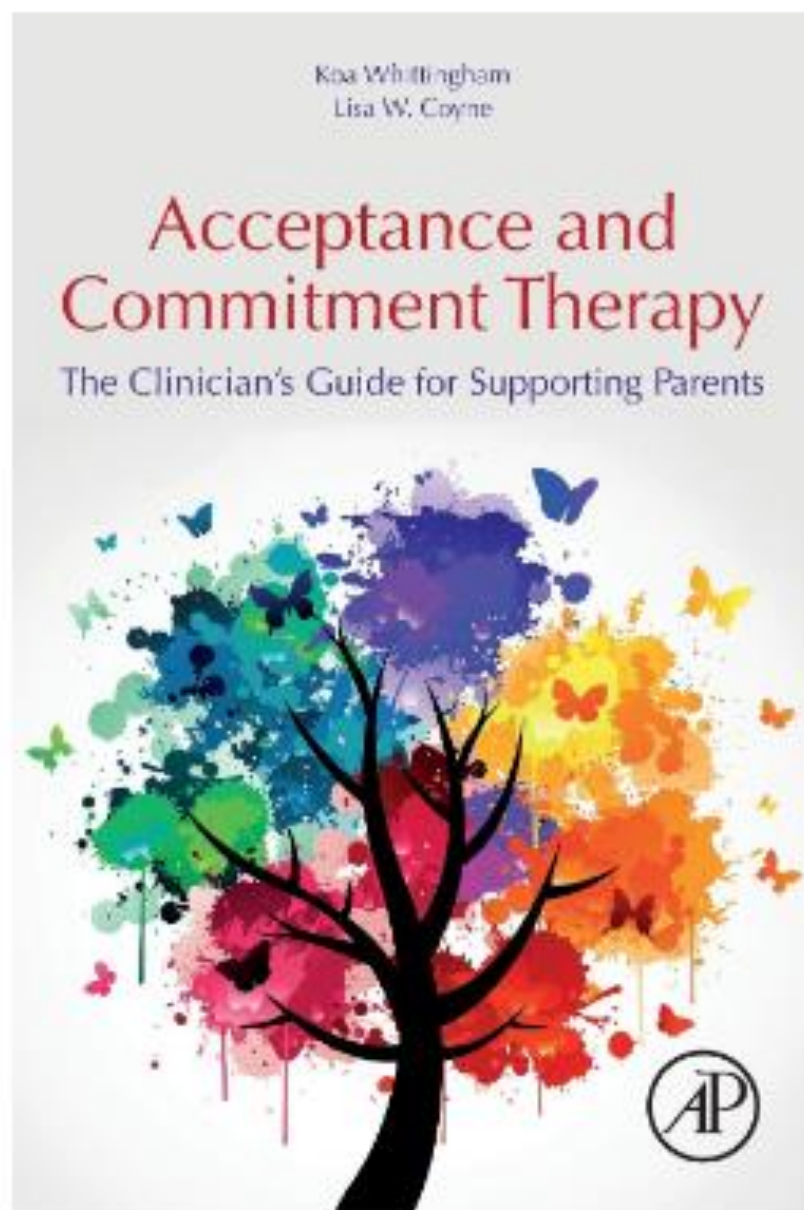
Abigail K. Mansfield & James V. Cordova
Clark University

Couples come to therapy in distress and seeking help for a variety of problems in their relationships. Most of the problems couples encounter cannot be classified in terms of DSM IV disorders. Instead, the symptoms of marital ill-health include chronic relationship distress, thoughts of divorce, frequent bitter arguing or withdrawal, and a sense of being either chronically at war with each other or completely emotionally numb. From the perspective of adult attachment theory, these problems can result from the complex interplay between individual partners' attachment histories and bids for nurturance and closeness within the current relationship that have gone awry.

Given that the purpose of the current volume is to explore contemporary behavioral perspectives on behavior disorders, this chapter will focus on disorders of attachment and intimacy in couple relationships. The goal of this chapter is to explore the potential contributions to attachment theory that might be derived from application of contemporary behavioral theory and research. Although early attachment researchers clearly understood and identified the key role played by a mother's responsiveness to a child's signals in the development of different attachment styles, we argue that these researchers did not take full advantage of behavioral theory and research to aid their understanding of attachment as a developmental phenomenon. Drawing principally on evolutionary-ethological and psychodynamic theories, and more recently on cognitive and cognitive-behavioral theories, attachment researchers have missed a potentially rich source of information about the shaping of behavior provided by decades of basic operant research.

A behavior analytic (BA) perspective on attachment focuses on the development of the person in the context of her learning history and the lawful development of attachment repertoires shaped by that learning history. In contrast, traditional attachment theory, while acknowledging individual history, focuses on internal mechanisms as causal agents (i.e., cognitive maps and working models). We will not wage the standard partisan battle here between contextualists and mechanists, because in the case of the attachment literature, that debate is unlikely to be fruitful.

2019





Secure
Insecure
■ Ambivalent
■ Avoidant
■ Disorganised

First wave behaviourism

Operant theory

- Triggers
- Consequences
(reinforcing or punishing)

Third wave behaviourism

Context - ACT

Attachment-based parenting

- Identify behaviours by infant which aim to promote closeness to parent
- Respond to these behaviours with aim of nurturing baby and downregulating baby's SNS

Cordova & Mansfield 2007;
Whittingham & Coyne 2019.



Evolutionary biology

Infant attachment behaviours and parental behavioural responses to those triggers promote nurturance, survival, and enjoyment: that is, continuity of *homosapiens*

NDC integrates contextual behavioural science + attachment theory + evolutionary biology + complexity science

**Cordova & Mansfield 2007;
Whittingham & Coyne 2019.**

Attachment theory analysed from behavioural perspective: NDC or the Possums programs

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Parental sensitivity

Identifies infant's communications (*antecedents*)

Alert to *context* of infant's communications (*antecedents and consequences*)

Responds promptly and appropriately to *reinforce infant's bids* for caregiving attention

Caregiving behaviour

Parental nurturing and *soothing behaviours*

Experimentation

Cordova & Mansfield 2007;
Whittingham & Coyne 2019.



The NDC or Possums 5 domain approach to crying babies
focusses on clinical strategies which help change **parent behaviours**
in the present moment.



A **primary care practitioner** aims to empower parents by skillfully encouraging **experimentation** with **behavioural** change in time-constrained consultations.

This approach de-emphasizes past histories of “ghosts in the nursery”, intergenerational trauma, or psychosocial contexts which aren’t amenable to change.



The NDC or Possums five domain approach

aims to help parents experiment with **new behavioural responses**
to **infant cues** or communications

to find what **turns down the dial** on baby's SNS.

This aims to promote **neural templates of secure psychological attachment**
in the critically neuroplastic first 100 days.

NDC Masterclasses

Masterclasses 1: Breastfeeding

Masterclasses 2: Unsettled baby and parent mood

NDC Accreditation

July 2023 ongoing – Wednesday evenings AEST

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