

**Improving Parent-Child Relationships for Families
in the Shadow of Complex Trauma**

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under the supervision of:

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Certificate of Original Authorship

I, Jacqueline Kemmis-Riggs declare that this thesis, is submitted in fulfilment of the requirements for the award of Doctor of Philosophy (Clinical Psychology), in the Graduate School of Health at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

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At its core, this thesis is about strengthening family relationships to create safe, nurturing foundations for children to thrive. So a very special mention goes to my own family, my parents and sisters, who provided me with a strong foundation and continually surround me with love, care, and support. And most importantly, I would like to acknowledge my beautiful children, Isaac, Toby and Harriet, who are kind, compassionate, smart and funny. You are the reason I care so much about strengthening attachment relationships and I am absolutely crazy about you all. And finally, to my wonderful husband Andrew, I know neither of us anticipated I would be 'at university' for quite this long when I first started my undergraduate degree, yet your patience,

generous support, stability, care, encouragement and love has been never-ending. I am very thankful.

Statement of Thesis Format

The present work is in the format of thesis by compilation, including a mixture of published and unpublished works. The content of manuscripts of published papers is identical to the published versions.

List of Publications/Papers

Study 1 ([Chapter 2](#)) - Early Parenting Characteristics associated with Internalising Symptoms across Seven Waves of the Longitudinal Study of Australian Children

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Additional Publications

During the course of completing this PhD, two additional papers were published. While not included in the body of the thesis, they are relevant to this body of work as they demonstrate an ongoing commitment to the development and translation of an evidence base in the area of complex trauma and alternative care.

Dickes, A., Kemmis-Riggs, J., & McAloon, J. (2018). Methodological challenges to the evaluation of interventions for foster/kinship carers and children: A systematic review. *Clinical Child and Family Psychology Review*, 21(2), 109-145. <https://doi.org/10.1007/s10567-017-0248-z>

Kemmis-Riggs, J., & McAloon, J. (2020). A narrative review of the needs of children in foster and kinship care: Informing a research agenda. *Behaviour Change*, 1-10. <https://doi.org/10.1017/bec.2020.11>

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Study 1 ([Chapter 2](#)) – Published

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The conceptual design was developed by all authors. DB and RG were involved with statistical analyses and with the interpretation of data. JKR prepared the bulk of the manuscript, although all authors contributed and were involved in reviewing and editing the manuscript.

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manuscript, which was then revised by JKR throughout the research series. The manual was also reviewed by JM. JKR created the participant materials with input from AD.

Remaining Chapters ([Chapter 1](#), [Chapter 3](#), [Chapter 5](#), [Chapter 7](#) and [Chapter 10](#))

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All chapters were written by JKR and reviewed by JM, with some reviewed by DB.

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Definitions

Throughout this body of work, both complex trauma and child maltreatment are discussed in detail. These are defined below.

Complex Trauma

Complex trauma, also known as developmental trauma, is defined as:

The experience of multiple and/or chronic and prolonged, developmentally adverse traumatic events, most often of an interpersonal nature and early-life onset. These exposures often occur within the child's caregiving system and include physical, emotional, and educational neglect and child maltreatment beginning in early childhood (Van der Kolk, 2005, p.2)

A new diagnosis of complex post-traumatic stress disorder (CPTSD) will be recognised in the International Classification of Diseases, 11th Edition (ICD-11), consisting of six symptom clusters. This includes the three clusters included in PTSD (reexperiencing, avoidance, and hypervigilance) with the addition of three disturbances of self-organisation; affect dysregulation, negative self-concept and interpersonal problems. This thesis focusses on the impact of the experiences of complex trauma, with particular emphasis on parenting, rather than direct treatment of CPTSD.

Child Maltreatment: Abuse and Neglect

The World Health Organisation (2016) defines child maltreatment as:

The abuse and neglect that occurs to children under 18 years of age. It includes all types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence and commercial or other exploitation, which results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power.

Abstract

Children develop in an environment of caregiving relationships, which provide the foundation for ongoing development. In contrast to safe, secure and nurturing caregiving relationships, complex trauma is the experience of multiple or prolonged developmentally adverse traumatic events that occur within the child's caregiving system, such as child maltreatment and exposure to domestic violence. Complex trauma is recognised as a source of toxic stress, which potentially leads to disruptions in the developing brain and other systems. This thesis argues that, of all of the profound impacts that complex trauma has on wellbeing, the impact on child socio-emotional and relational development is the most critical. These impacts have consequences not only for the short-term, but in the longer term, when children who have experienced complex trauma become parents themselves. Young parents and their children are at particular risk of poor outcomes and have been identified as a highly vulnerable group with specific needs related to their developmental stage and socioeconomic disadvantage. To achieve improved outcomes for young parents and their children, effective and accessible parenting support must be provided. However, few parenting interventions have been developed specifically for young parents with these experiences. Thus, the overarching goal of this study series was to develop and pilot a parenting intervention that meets the complex needs of young parents who have experienced early adversity, to intervene in intergenerational cycles of trauma through a series of five studies. In order to understand these impacts, and improve support for parents and children who have experienced maltreatment and associated trauma, this thesis uses a biobehavioural and attachment framework. First, a longitudinal study in a normative population provides insight into the influence of parenting on one aspect of child socio-emotional development, while the second study systematically reviews parenting interventions in

alternative care to provide a broader picture of how to help biological parents meet the needs of their own children who have experienced complex trauma. The third study involves young parents in the development of our parenting intervention by eliciting their views and experiences through an online survey. The final two studies present the rationale, outline, implementation and preliminary evaluation of the intervention, *Holding Hands Young Parents (HHYP)*, through a series of single-case experimental designs. Promising preliminary findings demonstrate that HHYP benefited young parents and their toddlers and also reinforce the need for ongoing treatment based-research for young parents with a history of early adversity.

Keywords: Child maltreatment, adverse childhood experiences, teenage parents, intervention, parenting

Chapter 1: Introduction

1.1 Why Are the Impacts of Complex Trauma So Profound?

1.1.1 Early Experiences Provide the Foundation for Ongoing Development

Infants and young children develop in an environment of relationships, which influence almost all facets of their development (National Scientific Council on the Developing Child, 2004). While babies are born with most of their neurons, more than 100 billion of them, the process of brain development is far from complete at birth (O’Hare & Sowell, 2008) and continues throughout the lifespan (Nelson & Luciana, 2008). The neural process of organising the networks and systems that support all human capacities occurs sequentially, from the bottom up, beginning from the least complex (i.e., the brainstem) to the most complex (i.e., the cortex) (Perry, 2009). The brainstem areas regulate vital life-supporting functions such as respiratory and cardiovascular functions and therefore need to be organised in utero to be functional from birth. The more complex processes of abstract thought, language and emotional regulation are mediated by the cortex and take years to develop fully (Perry, 2009). Described as “nature dancing with nurture over time” (Shonkoff et al., 2012, p. 234), our genes provide the framework that underpins the development of the brain, yet the expression of genes is influenced by environmental input (Nelson & Luciana, 2008). Thus, the brain truly is an ‘experience-dependent organ’, as it changes in response to patterned, repetitive activity (Perry, 2009). Growth and development of each brain region depends on receiving stimulation, the more neural activation the more that part of the brain will change – this process is the foundation of learning and memory. So, every experience, no matter how small, changes the brain.

In the child’s first 4 years, healthy brain development is like a fast-paced, well-organised construction site, where higher levels of the building depend on a well-built

foundation. More than 80% of the structural changes in the brain occur from birth to 4 years of age (Ludy-Dobson & Perry, 2011). The organisation of the more complex parts of the brain (i.e. the cortex) are dependent on input from lower parts of the brain (Perry, 2009).

Although humans continue to learn and develop over the lifespan, there are sensitive periods of development where certain brain areas are especially malleable to both nurturing and traumatising experiences (Lupien et al., 2009). The malleability or *plasticity* of the fetal, infant and early childhood brain means that in-utero and early childhood experiences have an extraordinary influence on brain development (National Scientific Council on the Developing Child, 2014). The quality and stability of a child's caregiving relationships provides the foundation for a diverse range of later developmental outcomes, including mental health, motivation to learn, moral reasoning, self-regulation, ability to develop healthy, supportive relationships with others and ultimately, the capacity to be a successful parent (National Scientific Council on the Developing Child, 2004).

1.1.2 Complex Trauma Is a Source of Toxic Stress.

Acute, moderate and short-lived physiological responses are regarded as *positive stress* (Lupien et al., 2016). Biological responses such as increased heart rate and blood pressure, slight elevations in cortisol and cytokine levels serve to increase mobilisation and typically protect the individual from immediate harm. When cortisol is released quickly and then turned off quickly within the hypothalamic-pituitary-adrenocortical axis (HPA; Stratakis & Chrousos, 1995), it activates energy stores and immune responses, and magnifies particular memory types. After activation of the system, and when the stressor has subsided, feedback loops are stimulated throughout the system (including in the adrenal gland, hypothalamus, hippocampus and frontal cortex) to

return the HPA axis to baseline (Gunnar & Quevedo, 2007). This complex feedback loop also includes activation of and response to other major systems that respond to stress, including the parasympathetic nervous system, metabolic hormones and inflammatory cytokines (Lupien et al., 2009). When children experience positive stress in the presence of a supportive and stable caregiver, the caregiver provides a calming, regulating effect that helps the child cope with the stressor and their system returns to baseline (Lupien et al., 2009).

In contrast, *toxic stress* is a term that describes the intense and prolonged activation of the stress-response system in the absence of the buffering protection from safe and nurturing caregivers (Lupien et al., 2016). Child maltreatment, parental substance abuse, exposure to domestic violence – all types of complex trauma - have the potential to induce a toxic stress response. In these circumstances, excessive levels or extended activation of stress hormones and subsequent dysregulation of the physiological systems that respond to stress can result in chronic ‘wear and tear’ on numerous systems in the body, including the brain (Lupien et al., 2016). Because neural circuits that respond to stress are particularly sensitive during infancy and early childhood, early experiences set the foundation for how easily the stress-response system activates and shuts down (Lupien et al., 2009). As a result, toxic stress can lead to poorly controlled stress-response systems that are overly reactive or slow to switch off throughout the lifetime (Loman & Gunnar, 2010). In the context of repeated adversity during sensitive developmental periods, persistent over-activation of the stress-response system can lead to disruptions in the developing brain and other organ and metabolic systems (National Scientific Council on the Developing Child, 2014). These disruptions can include suppression of immune function, memory, and play a part in muscle atrophy, bone mineral loss and metabolic syndrome (Sapolsky et al., 2000).

Chronic stress can also potentially affect the expression of genes that regulate the stress response system over the lifetime (de Kloet, 1991). Receptors for glucocorticoids are expressed throughout the brain; activated receptors can regulate transcription of genes and change gene expression (de Kloet, 1991). This means that glucocorticoids can have long-lasting consequences on brain regions that regulate their release (Lupien et al., 2009). In simple terms, at certain times and in various locations in the brain, toxic stress turns some genes on and others off.

1.2 Why Is the Impact on Socio-Emotional and Relational Development So Critical?

Growing evidence from both animal and human studies demonstrate the relationship between child maltreatment and adverse alterations in structure and function of stress-susceptible brain regions. (National Scientific Council on the Developing Child, 2010; Teicher & Samson, 2016). In particular, sustained activation of the stress response system can lead to structural changes in the amygdala, hippocampus and prefrontal cortex - brain regions that are critical for learning, memory, planning, executive functioning and social interaction (McEwen & Gianaros, 2011). One example is when regions of the brain involved in fear, anxiety and impulse control overproduce neural connections, whereas regions necessary for planning, behavioural control and reasoning develop fewer neural connections (National Scientific Council on the Developing Child, 2014). Functional changes related to these structural changes include increased potential for fear conditioning and heightened anxiety, memory impairments, and reduced executive control, including working memory, attention, decision-making, behavioural regulation, and mood and impulse control (Shonkoff et al., 2012). For instance, persistent fear can change children's perception and response to threat, impacting their capacity to differentiate between threat and safety. This results in

frequently perceiving threat in familiar social situations, which has a detrimental impact on learning and may lead to anxiety disorders (National Scientific Council on the Developing Child, 2010). Other difficulties include problems identifying and responding appropriately to emotional expressions. Misinterpreting threat and difficulties responding to emotions in social situations can lead to challenges initiating and maintaining supportive relationships. The consequences of these structural and functional changes can have potentially permanent effects, disrupting children's social, emotional and cognitive development throughout their lifetime (Lupien et al., 2009; Shonkoff et al., 2012).

The impact of complex trauma on children's socio-emotional and relational development is so critical because socio-emotional capacities are fundamental to wellbeing (Tronick & Beeghly, 2011). The ability to understand, communicate and regulate one's emotions, and respond to others' social and emotional cues are central to executive functioning, and support the capacity to manage challenges, form successful relationships and adapt effectively to future adversity throughout the lifespan (Shonkoff et al., 2016). In contrast, when the acquisition of these capacities is limited through early childhood adversity, there are social and emotional consequences which contribute to vulnerability for longer term effects, such as the development of psychopathology (Rosen, 2016; Shonkoff et al., 2016; Trevarthen et al., 2006; Tronick & Beeghly, 2011; Zeanah, 2018), continuity of maltreatment (Assink et al., 2018; Ertem et al., 2000; Thornberry et al., 2012), and broader difficulties in parenting the next generation (Lomanowska et al., 2017).

1.3 Theoretical and Empirical Foundations of Socio-Emotional Development

1.3.1 Stress Regulation and Socio-Emotional Development: The Role of Attachment

The attachment relationship is considered to be the primary organising force of an infant's social and emotional development (Bowlby, 1973). The 'attachment system' is argued to be an inbuilt biologically adaptive motivational system that drives infants to seek proximity to their caregivers when they are under threat, which maximises chance of survival, provides safety, comfort, nurturance, and an opportunity to learn about the social environment (Bowlby, 1973, 1980). Because infants and young children first experience the world through their relationships with their caregivers, the repeated interactions that they have shape their 'internal working models' – an internalised model of how the world works, what to expect and how to interact with others (Bowlby, 1973). Thus, the infant's attachment system develops in response to the environment (Ainsworth et al., 1978; Main & Hesse, 1990). One vital aspect of parenting behaviour that is central for the development of secure attachment is sensitivity, defined as the capacity to perceive and interpret the meaning behind the child's signals, and to respond to them promptly and appropriately (Ainsworth et al., 1978). Attachment theory posits that responsive and sensitive parenting in infancy and early childhood helps children to develop mental representations that predict the parent will meet their needs and give them a sense that the world is predictable and manageable.

A critical role of attachment figures is to help infants regulate their physiological and behavioural responses to stressors during their early years (Gunnar & Quevedo, 2007). For an infant to learn to regulate their own feelings and behaviours effectively, those feelings first need to be managed and regulated by their primary caregiver, so a parent's capacity for self-regulation is integral for the development of the child's regulatory capacities (Schore, 1994, 2001). This impact on self-regulation can be long

lasting as research indicates that parents' self-regulation capacities are commonly impacted by their own childhood experience of abuse and neglect (Harel & Finzi-Dottan, 2018). So parents who have experienced disrupted attachment relationships with their own caregivers may need additional support to increase their self-regulation.

When children have developed secure attachments, they seek out the comfort of their caregivers when they are distressed, are easily comforted and seek to explore once distress is resolved (Ainsworth et al., 1978; Bowlby, 1980). Secure attachment relationships provide security to explore the world, as well as a sense of the self to be worthy of the caregiver's support, and the capacity to regulate his or her own distress in future (Ainsworth et al., 1978; Bowlby, 1973).

In contrast, insensitive caregiving can lead to insecure attachment, with working models that predict the caregiver is unavailable and unable to meet the child's needs, and that the self is unworthy of the caregiver's support (Bowlby, 1973). Infants who have experienced maltreatment and/or an accumulation of socioeconomic risk factors (i.e. low income, substance abuse, adolescent mother, low parental education, single mother) are more likely to demonstrate disorganised attachment (Cyr et al., 2010). Disorganised attachment is one type of insecure attachment. It is characterized by an inconsistent attachment strategy, where infants demonstrate disorientated or contradictory behaviours (e.g. approaching caregivers and then freezing) when faced with a stressful situation (Main & Hesse, 1990). When the parent is a regular source of stress or fear and triggers the child's threat-response, the child is unable to regulate arousal and is likely to develop the sense that the external environment is unable to help and may have trouble relying on others to help (Van der Kolk, 2005). This contradictory or disorganised pattern of attachment behaviour makes sense when understood as activation of conflicting brain circuits within the child: 1) attachment circuitry that

motivates proximity-seeking towards caregiver for protection, versus 2) survival circuitry that activates avoidance of the source of fear (Siegel, 2001). When the same person triggers both responses, it is not surprising that a child's ability to develop an organised response may be challenged (Sroufe & Siegel, 2011).

A wealth of supporting empirical evidence supports the seminal findings from both Bowlby (1973, 1980) and Ainsworth et al. (1978). Robust longitudinal research has found that secure attachment to caregivers fosters social skills, self-efficacy, compliance, self-esteem, effective emotion regulation and capacity to explore the environment competently, which in turn promotes mutually satisfying interpersonal relationships (Sroufe et al., 2009; Weinfield et al., 2008). A recent meta-analysis of 12 studies demonstrated that higher attachment quality in children aged 2 to 6 was associated with better theory of mind skills (Szpak & Białocka - Pikul, 2020). In contrast, insecure attachment to a caregiver during infancy is associated with poor peer relations, poor behavioural control and anger during early childhood and beyond (Sroufe et al., 2009). Thus, enhancing parenting behaviours provides children with an improved social environment that supports the development of secure attachment and socio-emotional capacities.

Meta-analyses of studies investigating adult attachment representations and their child's attachment behaviour have provided strong support for direct links between parents' internal working models of attachment and child attachment to them, as well as direct links between parents' internal working models and sensitive parenting behaviour, and also between sensitive parenting behaviour and child attachment (De Wolff & Van Ijzendoorn, 1997; Van Ijzendoorn, 1995). However, parents' own attachment security accounted for a relatively small amount of variance in parental sensitivity, indicating that sensitive parenting does not seem to be principal mediator of parents' internal

working models and child attachment (Van Ijzendoorn, 1995). This is referred to as the ‘transmission gap’ (Van Ijzendoorn, 1995). Studies examining the processes underlying the transmission of attachment have found that mentalising and insightfulness account for variance in attachment over and above variance accounted for by maternal sensitivity (Koren-Karie et al., 2002). Studies in high risk samples (e.g., mothers with a history of childhood trauma, low income, and/or teenage parents) indicate insensitivity/dysregulation (e.g., withdrawal, negative intrusiveness, role confusion, conflicting cues) mediates associations between maternal state of mind and infant attachment quality (Bailey et al., 2007; Lyons-Ruth et al., 2005; Madigan et al., 2006). These findings underscore the importance of improving mentalising (i.e. the capacity to understand behaviour in light of underlying mental states; Allen et al., 2008), and dysregulation, in addition to maternal sensitivity, to enhance child attachment security.

Strengthening stable and responsive relationships between parents/carers and their children can protect against excessive activation of the stress-response system, potentially mitigating detrimental effects of toxic stress (National Scientific Council on the Developing Child, 2014; Shonkoff et al., 2016). Even though the human brain has an amazing capacity to adapt and develop over the lifespan and recover from adversity, it is far more difficult to change behaviour and skills when early neural foundations have been compromised by toxic stress (Shonkoff et al., 2016). From both a societal and individual view, providing nurturing, supportive relationships and enriching learning environments in children’s early years is far more effective than providing clinical treatment and remedial education later on (Shonkoff et al., 2016).

1.3.2 Biobehavioural Synchrony Model

An integral relational process in attachment relationships that shape social-emotional development is parent-child synchrony (Feldman, 2007a, 2007b; Kochanska,

1994). It has various terms in the literature - mutually responsive orientation, co-regulation, attunement, mutual-influence, or reciprocity - all of which refer to the process whereby the biobehavioural patterns of parent and child shape each other in reciprocal pattern. The *biobehavioural synchrony* model (Feldman, 2007b, 2012a) proposes a principal mechanism by which early environments impact social, emotional and cognitive development through the coordination of biological and social process during social contact between attachment partners. Feldman describes synchrony in the context of parent-child interactions as the “matching of behaviour, affective states and biological rhythms between parent and child that form a single relational unit” (Feldman, 2007b, p. 329). It has been defined as “the temporal coordination of microlevel relational behaviours into patterned configurations that become internalised and, over time and repeated experience, shape infant development” (Gordon & Feldman, 2008, p. 467). Often described as the give-and-take dance during short, playful social exchanges, synchrony illustrates the dynamic, reciprocal and temporal structure of highly aroused interpersonal moments that are distinct from the hustle and bustle of everyday life (Beebe, 1982; Fogel, 1993; Stern, 2009; Trevarthen, 1979; Tronick, 1989).

Tronick eloquently describes the importance of mismatch and repair in these synchronous moments, explaining that the dance is less like Fred and Ginger and more like the way most people dance – far from faultless and a little messy – with moments that progress from synchronous states through to mismatches and back to co-ordinated, matching and synchronous states again (Tronick, 2009; Tronick & Beeghly, 2011; Tronick et al., 1998). He highlights the importance of successful moments of repair between parent and child in promoting children’s healthy development. Chronic failure

to repair and protracted periods of negative affect can lead to maladaptive outcomes for the infant (Sroufe, 2009; Tronick, 1989).

Reciprocal interactions change over time from infancy through to adulthood, with early interactions requiring more parental attunement to meet the infant's bids for connection (Feldman, 2012a). In early infancy, reciprocal or synchronous interactions depend a great deal on parents' capacity to attend and adapt to the infant's pace, using vocal, touch, gaze and affect modalities to develop social interactions. As the child grows, these interactions become more mutually reciprocal. During toddler hood, verbal skills typically develop, allowing symbolic communication and dialogue. Pre-schoolers' capacities continue to mature to allow dyads to develop affect-laden narratives. By adolescence, with the development of conceptual thought, parents and their teens can discuss conflicts with perspective taking and empathy (Feldman, 2007a, 2015b; Feldman, Bamberger, et al., 2013).

This process of biobehavioural synchrony allows the parent's mature physiological system to externally regulate the infant's developing system, provides a means for the infant to become sensitised to threats in the environment and supports the development of the infant's self-regulation capacities (Feldman, 2012a, 2015a, 2015c; Stern, 2009). Put simply, reciprocity facilitates self-regulation through co-regulation with the parent (Feldman et al., 2003; Fogel, 1993; Tronick, 1989). It is through this process that the parent's physiology and representational world can begin to have an impact on the child's mind and behaviour and begin to provide the building blocks for the child's stable competencies, internal representations, well-being, and emotional growth (Feldman, 2012a). The model posits that the internal biological and psychological world of the parent and child are mediated and transmitted dynamically through their dyadic behaviour, within the context of their broader environment and

culture (Feldman, 2012b). Feldman's model is consistent with research discussed earlier indicating that parenting behaviour, such as sensitivity, reflective functioning and dysregulation, are mechanisms that impact the relationship between parents' internal working model of attachment and child attachment (e.g., Bailey et al., 2007; Koren-Karie et al., 2002; Lyons-Ruth et al., 2005; Van Ijzendoorn, 1995)

Longitudinal research demonstrates that synchrony experienced in the early stages of life has long-term benefits on children's overall adaptation and wellbeing (Leclere et al., 2014). Synchrony between mother-infant dyads is positively associated and/or predictive of mind-related comments and attachment security (Cerezo et al., 2008; Lundy, 2003), social competence and dialogical skills (Feldman, Bamberger, et al., 2013), higher social reciprocity with friends (Feldman, Gordon, et al., 2013), lower externalising problems (Feldman & Eidelman, 2004), self-regulation (Kochanska et al., 2009) mutual initiation and mutual compliance (Lindsey et al., 1997; Rocissano et al., 1987), and capacity for empathy in adolescence (Feldman, 2007a). Reciprocity has been shown to be a stable characteristic over time (Feldman, 2016); however, it can also be improved with intervention (Cohen et al., 2002).

1.3.3. Theory of Latent Vulnerability

McCrorry's theory of latent variability (McCrorry & Viding, 2015) provides a useful model that demonstrates how childhood experiences of abuse and neglect confer enduring vulnerability to psychiatric disorders by influencing diverse neurocognitive systems over the course of child development. As the section on toxic stress highlighted, neurocognitive systems can adapt following childhood abuse and neglect. Research in the field of developmental psychology has identified that diverse pathways lead individuals to the same outcome (i.e., equifinality) and also that individuals may reach different outcomes from similar beginnings (i.e., multifinality) (Cicchetti & Toth,

2009). The theory of latent vulnerability suggests that an individual's genotype in conjunction with an adverse environment influences a person's latent cognitive vulnerability phenotype, which includes an individual's reward, threat and memory processing capacities. In turn, this phenotype may be exposed to high stressors and low protective factors which confer greater risk of psychiatric disorder. In contrast, this same phenotype may be exposed to low stressors and higher protective factors which in turn may confer reduced risk of disorder. This theory highlights the dynamic nature of developmental pathways through childhood for maltreated children.

1.3.4 Ecological Systems Theory

Ecological systems theory proposes that complex transactional influences between the child's own biology and each widening circle of environmental contexts impact a child's development, from the immediate environment such as parent-child interactions that directly influence a child's development through to wider social and environmental influences such as social policy and cultural values that do not directly interact with the child but shape his or her experiences and development indirectly (Bronfenbrenner, 1979). In the context of child maltreatment, this model has been used to demonstrate that broader social factors such as poverty, disadvantage and community violence may interact with parents' individual characteristics to increase or decrease risks to child wellbeing. The focus of the present study series is on the microsystem of the child's environment, specifically focusing on parent-child interactions. However, it is acknowledged that this develops within the broader context of macro and exosystemic factors, which are integral to understanding child maltreatment and complex trauma and their effects on child wellbeing.

1.4 What Are the Long Term Effects of Complex Trauma?

1.4.1 *Mental and Physical Health Outcomes*

One of the earliest and largest epidemiological studies demonstrating that complex trauma has negative long-term effects on mental and physical health outcomes is the Adverse Childhood Experiences study (ACE; Felitti et al., 1998). The ACE study was impressively large. It was implemented by Kaiser Permanente's Health Appraisal Clinic, in conjunction with the Centers for Disease Control and Prevention in the late 1990s. Prompted by data gleaned from almost 200 detailed interviews with patients enrolled in an obesity program that demonstrated a positive relationship between obesity and childhood abuse, researchers wanted to investigate how childhood events may impact adult health status (Felitti, 2002). Over 17000 participants in the USA completed survey data by mail, in two waves, between 1995 and 1997 (Felitti et al., 1998). In Wave I, researchers grouped *adverse child experiences* (ACEs) into seven categories. Three were related to child abuse: 1) psychological abuse; 2) physical abuse; 3) sexual abuse. The remaining five ACE categories related to household dysfunction: 4) household member with substance abuse; 5) household member with mental illness; 6) exposure to domestic violence; 7) incarcerated household member 8) parents divorced or separated. Wave II of the study included additional questions on two further categories: emotional neglect and physical neglect, bringing the total number of ACE categories to ten (Dube et al., 2001). An ACE score was calculated for each participant based on how many of these experiences a person may have been exposed to (e.g., a person with a score of 3 indicated that they had been exposed to three of these adverse experiences).

Findings were startling at the time and demonstrated a robust relationship between early life experiences in childhood and adult mental health, physical health and

life expectancy. Almost two-thirds of study participants reported at least one ACE, and more than one in five reported three or more ACEs, highlighting the prevalence of childhood trauma, even in this sample of well-educated and employed participants (Felitti et al., 1998). Adult health risk behaviours that were significantly related to multiple ACEs included: current smoking, severe obesity, physical inactivity, depressed mood, suicide attempts, alcohol or drug abuse, high lifetime number of sexual partners, and history of sexually transmitted disease. Adult medical diseases that were significantly related to multiple ACEs included: ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease. Results showed a graded effect between the number of ACEs and adult health risk behaviours and diseases, indicating a cumulative effect of these adverse experiences. The higher number of ACEs reported, the more likely a person experienced mental health issues, such as depressed mood, alcoholism, drug use and suicide attempts. Likewise, for chronic health outcomes, there was a graded relationship between the number of ACEs reported and heart disease, cancer, stroke, diabetes, skeletal fractures, and liver disease. Compared to individuals who had not experienced any ACEs, those who had experienced four or more ACEs, had an adjusted odds ratio of 12.2 for suicide attempts, 10.3 for drug injection, 7.4 for alcoholism and 4.6 for depression. Using the same comparison (four ACEs vs none), adjusted odds ratios for health risk behaviours such as smoking, obesity and limited physical activity were 2.2, 1.6, and 1.3 respectively (Felitti et al., 1998).

Findings from this seminal study have since been supported and extended by more than 70 publications examining the impact of early childhood adversity, providing well-documented evidence for the detrimental enduring effects of complex trauma. While the initial results were based on a predominantly white, middle-class sample from Southern California, much of the recent research has been based on broader and more

representative samples in the USA (e.g., Gilbert et al., 2015). Follow-up ACE studies have found supporting evidence showing that adverse traumatic experiences in childhood increase the likelihood of suffering chronic diseases in adulthood, including autoimmune disease (Dube et al., 2009), cancer (Brown et al., 2010; Brown et al., 2013), ischemic heart disease (Dong et al., 2004), chronic obstructive pulmonary disease (Anda et al., 2008) and liver disease (Dong et al., 2003). Moreover, findings show graded dose-response relationships for adult mental health outcomes also, indicating the more ACEs, the higher risk of poorer long-term outcomes. This includes a higher risk of depression, anxiety and substance use (Anda et al., 2002; De Venter et al., 2013), and sleep disorders (Kajeeepeta et al., 2015). Moreover, children of parents who report higher ACEs have higher likelihood of behavioural and emotional problems compared to parents who report no ACEs (Schickedanz et al., 2018). Findings provide overwhelming evidence that ACEs have far-reaching effects. Felitti suggests that

...improving parenting skills across the nation might be the crucial issue here.

The number of adults is myriad—including physicians—who have had no firsthand experience of supportive parenting. How might we address that serious lack on a population basis? The impact of a successful approach here might be as great as that of a major vaccine. (Felitti, 2009, p. 131).

1.4.2 Intergenerational Cycles of Child Maltreatment

The importance of improving parenting skills is even more apparent when examining intergenerational impacts of child maltreatment. One of the most profound long term consequences of experiencing child maltreatment is the impact on parenting the next generation, and the potential for continuing cycles of maltreatment from one generation to the next. Many studies have shown that a parent's history of childhood maltreatment is key risk factor for the continuing cycles of maltreatment among his or

her own children (Berlin et al., 2011; Cort et al., 2011; Dixon, Browne, et al., 2005; Egeland et al., 1988; Heyman & Slep, 2002; Newcomb & Locke, 2001; Pears & Capaldi, 2001; Widom, 1989). However, findings are contentious as other studies have found limited evidence (Renner & Slack, 2006; Sidebotham et al., 2001; Zuravin et al., 1996). One of the most common criticisms of this research is the huge variation in methodology across studies, including how maltreatment is defined and measured in each generation, differences in samples and comparison groups, limited controls for potential confounding factors, and retrospective against prospective reports (Thornberry et al., 2012). A further criticism is that the lack of clarity in some studies that fail to differentiate between transmission (i.e., parents who were maltreated are identified as perpetrators of maltreatment to their own children) and continuity (i.e., children of maltreated parents experiencing maltreatment irrespective of whether the parents were the perpetrators) (Bartlett et al., 2017).

Four systematic reviews have tried to untangle these mixed findings by examining the evidence for the intergenerational transmission of maltreatment (Assink et al., 2018; Ertem et al., 2000; Madigan et al., 2019; Thornberry et al., 2012). The ‘intergenerational transmission’ hypothesis proposes that children who have experienced abuse and neglect (referred to as G1) have an increased risk of maltreating their own children (referred to as G2) when they become parents compared to parents who have not experienced maltreatment. Key findings from these reviews are discussed below.

Ertem et al. (2000) systematically reviewed peer-reviewed studies published between 1975 and 2000 that examined the relative risk of physical abuse in the children of parents who were physically abused in childhood compared to children whose parents were not. They identified a total of 10 studies that met criteria; four

longitudinal, one cross-sectional and five retrospective case-control studies. Given the inconsistent results that had been reported previously, Ertem et al. developed a list of criteria to assess the methodological standards of each study to determine the quality of the evidence. Study quality varied widely, with only one study meeting all eight methodological criteria (i.e., Egeland et al., 1988). Another met six criteria (i.e., Widom, 1989). Evidence for the intergenerational transmission of physical abuse varied greatly also. The relative risks of abuse in the children of parents who experienced childhood abuse (G2) were significant in four studies (relative risks ranged from 4.75 to 37.8), yet were less than 2 for three other studies. Of note, the relative risk of transmission for the two studies with the strongest methodology (i.e., Egeland et al., 1988; Widom, 1989) had contrasting results.

Egeland et al. (1988)'s prospective longitudinal study, the Minneapolis Maternal and Infant Care Project, met all eight of Ertem et al. (2000)'s methodological criteria. Researchers recruited 267 first-time mothers from low socioeconomic backgrounds with children up to the age of 2 years. At the time of delivery, 62% were single mothers, 86% pregnancies were unplanned and 40% of the G1 mothers had not completed high school. G1 maltreatment was reported retrospectively by mothers. To define abuse of G2, coders observed maternal behaviour towards their infant from multiple home and laboratory visits between the ages of 7 days and 24 months. These observations were later verified by child protection services (CPS) records. One of the methodological strengths of the study was that coders were blind to maltreatment history of mothers when coding maternal behaviour. Further, researchers controlled for maternal age, marital status, education, poverty, ethnicity and child age. Ertem et al. (2000) calculated the relative risk ratio from data reported in Egeland et al. They found that mothers who

reported clearly defined severe physical childhood abuse were 12.6 times more likely to abuse their children (G2) than mothers who had emotionally supportive parents.

In contrast to this high ratio, Ertem et al. (2000) reported that the relative risks of maltreatment of G2 in Widom's (1989) was 1.05, which did not support the intergenerational transmission hypothesis. Widom's prospective design compared cases of substantiated child maltreatment ($n = 908$) to a matched control group, using court records between the years of 1967 to 1971. At the time of the analysis, the age of range of maltreated group (G1) was between 16 and 32 years, with a mean age of 25 years. Researchers used department records to determine adult criminal records of G1, including violent crimes and child maltreatment. Maltreatment of G2 was defined by an arrest of G1 for child maltreatment. Although findings showed that the maltreated group had significantly higher rates of adult criminality and arrests for violent offenses than the matched control group, the frequencies of official arrests between the maltreated and control group were non-significant; 1.1% and 1% respectively.

Several differences between Egeland et al. (1988) and Widom (1989)'s studies may explain these large disparities in estimates of risk. In particular, definitions of maltreatment in G1 and G2 varied greatly. Widom defined child maltreatment in G1 by court records, whereas Egeland et al. used parents' retrospective reports. Similarly, Widom had more stringent criteria for defining maltreatment of G2 (i.e., arrests of G1 for child maltreatment). This study also did not determine whether the abuse was to the perpetrators own child (i.e. transmission) or to another child (i.e. continuity), which complicates the comparison of findings. It is feasible that Widom's study captured the very severe end of the maltreatment continuum, whereas Egeland may have identified a broader spectrum of maltreating behaviours, which may contribute to the differences in relative risks of maltreatment continuity. Understandably, Ertem et al. (2000) argued

that future studies need more robust methodology and clarity to shed more insight into the risk factors for continuity.

Building on Ertem et al. (2000)'s work, Thornberry et al. (2012) systematically reviewed 47 studies, examining whether a history of maltreatment was a significant risk factor for later perpetration. Studies were published between 1975 and 2011. Authors developed 11 methodological criteria extended from Ertem and colleagues' standards, to evaluate each study. They also included studies examining all types of maltreatment; physical, emotional and sexual abuse and neglect (not just physical abuse). These criteria included using a representative sample, having satisfactory participation and attrition rates, clearly defining maltreatment, using valid and reliable measures of maltreatment, using different reporters of maltreatment in each generation, verifying that control groups were not maltreated and collecting prospective data. Thornberry et al. criticised retrospective measures of maltreatment due to potential measurement error and argued that prospective data would be more likely to be accurate. Once again, reviewers found a wide range of methodological rigour across studies, with lower quality studies typically reporting stronger positive associations. While findings were generally consistent with the hypothesis of intergenerational transmission of maltreatment, the methodologically stronger studies demonstrated mixed support and therefore did not provide conclusive evidence. Once again, authors suggested that more robust and higher quality studies need to be conducted to advance our understanding and inform the development of intervention programs.

Two recent meta-analyses (Assink et al., 2018; Madigan et al., 2019) provide a quantitative analysis that elucidates the subject further. Assink et al. (2018) reviewed 84 studies that reported an association between parental experience of childhood maltreatment and maltreating practices towards their children. Reviewers found a

medium summary effect of $r = 0.289$, which represents an equivalent odds ratio of 2.99, indicating that parents who experienced maltreatment in their own childhood were almost three times more likely to continue this pattern with their own children compared to parents without a history of maltreatment. Assink et al. also found various moderator effects. These included maltreatment type experienced by G2 (smaller effects were found for physical abuse and neglect compared to studies measuring unspecified maltreatment), publication year (larger effects were found for earlier studies) and study quality (larger effects were found for lower quality studies). They also found indication of bias, with results suggesting a potential overestimation of effect due to publication year bias. Contrastingly, findings also indicated a potential underestimation of the true effect due to missing effects sizes that required imputation to restore symmetry to the funnel plot. Thus, authors cautioned against interpreting the summary effect as the 'true effect'. The Madigan et al. (2019) meta-analysis of 142 studies also found a modest association of intergenerational maltreatment. Consistent with Ertem et al. (2000) and Thornberry et al. (2012), results from these comprehensive meta-analyses demonstrate a clear need for an increase in higher quality primary research to continue increasing our understanding of the transmission of maltreatment.

Taken together, results indicate that children who have experienced abuse and neglect have an increased risk of maltreating their own children when they become parents compared to parents who have not experienced maltreatment. However, there are clearly opportunities to break this cycle, because the majority of parents who were maltreated as children do not become perpetrators of maltreatment (Berlin et al., 2011; Dixon, Browne, et al., 2005; Pears & Capaldi, 2001; Renner & Slack, 2006; Zuravin et al., 1996). Stemming from the need to understand intergenerational cycles, recent studies have focussed on more rigorous methods and examined moderators and

mediators that help to explain both risk and protective factors of the intergenerational relationships.

Protective factor for intergenerational cycles of maltreatment: Safe, stable, nurturing relationships. The U.S. Department of Health and Human Services describe safe, stable and nurturing relationships (SSNRs) as the ‘antithesis of maltreatment’ (2014). Safety has been defined as “extent to which a child is free from fear and secure from physical or psychological harm within their social and physical environment”. Stable refers to “the degree of predictability and consistency in a child’s environment”. Nurturing refers to “the extent to which a parent or caregiver is available and able to sensitively respond to and meet the needs of their child” (US Department of Health and Human Services, 2014, p. 3-4). Given all that is known about the fundamental importance of secure parent-child relationships for healthy child development, it makes sense that safe, stable, nurturing relationships (SSNRs) are an integral protective factor to interrupt the cycle of maltreatment.

Schofield et al. (2013) examined the moderating effect of safe, stable, nurturing relationships on intergenerational maltreatment continuity through meta-analysis. Five studies were included in the meta-analysis. This is a small sample for this type of analysis so authors calculated a fail-safe index, which provides an estimate of how many unpublished studies with null findings would need to be added to make the combined effect size non-significant. All of the studies in Schofield et al. (2013) meta-analysis were prospective, longitudinal studies that tested for intergenerational continuity of any form of maltreatment and included tests of moderating effects for SSNRs, measured after the birth of the G2 child. Consistent with prior reviews examining intergenerational continuity of maltreatment, (Assink et al., 2018; Ertem et al., 2000; Thornberry et al., 2012), Schofield and colleagues found that prior experience

of maltreatment was positively associated with child maltreatment in the next generation, with results indicating a moderate effect size (summary weighted mean effect size, $r = .34$). Overall meta-analytic findings of the five included studies indicated that maltreatment in G1 was less likely to be associated with maltreatment in G2 when SSNRs were present (summary weighted mean effect size for the moderating role, $r = .14$). While not all five studies showed moderating effects of SSNRs, authors stated that they did not find patterns that differentiated studies identifying moderation and those that did not. A range of SSNRs appeared to have protective, moderating effects on intergenerational continuity of maltreatment. For instance, a caring relationship with one's father was associated with significantly lower odds of harsh discipline in the next generation when those children became parents themselves (Herrenkohl et al., 2013). High maternal warmth, mothers' supportive intimate relationships (Jaffee et al., 2013) and better attachment to child (Thornberry et al., 2013) were associated with a significantly reduced risk of intergenerational continuity from G1 to G2. Stronger partner relationships also moderated the association between harsh parenting across generations (Conger et al., 2013) and lowered the odds of maltreatment perpetration (Thornberry et al., 2013) from G1 to G2. Taken together, findings present robust support for the importance of strong caregiver-child relationships and supportive intimate partner relationships in reducing the risk of maltreatment continuity.

Risk factors for intergenerational cycles of maltreatment. Multiple risk factors contribute to the intergenerational continuity of maltreatment. Within the population of mothers reported for maltreating children, mothers who were maltreated as children tend to be more socially isolated, respond more aggressively to ambiguous social cues (Berlin et al., 2011), have more mental health problems, become parents at a younger age, are more likely to live with a violent adult (Dixon, Browne, et al., 2005),

have more negative attributions and unrealistic expectations (Dixon, Hamilton-Giachritsis, et al., 2005), and have higher substance use problems (Appleyard et al., 2011) than mothers who were not maltreated as children. Mothers' sexual abuse history has been shown to confer significantly greater risk of child protection services investigation and pathways to victimisation have been shown to vary depending on type of maltreatment history (Martoccio et al., 2020). Interpersonal aggressive biases have been shown to mediate the path between parent's history of physical abuse and child reported victimisation, whereas substance use problems have been shown to mediate the path between parent's history of sexual abuse and child reported victimisation (Martoccio et al., 2020).

Domestic violence has been identified as another important risk factor for maltreatment continuity for mothers who have experienced their own childhood maltreatment. Findings from the Environmental Risk (E-risk) Longitudinal Twin study (Jaffee et al., 2013) in the UK ($N = 1116$ families) highlighted differences between cycle breakers (i.e., G1 experience maltreatment / G2 do not) and cycle maintainers (G1 and G2 both experience maltreatment). Jaffee et al. (2013) found that the odds of maintaining rather than breaking the cycle of maltreatment were over two times greater for families where domestic violence was present in the 2nd generation family rather than absent, after controlling for SES, history of depression, substance use, parental antisocial personality disorder, low social support, and low neighbourhood collective efficacy.

Problems with maternal self-regulation and mental health also increase the risk of maltreatment continuity. Smith et al. (2014) measured self-reported maternal emotion dysregulation and negative affect in a sample of 83 predominantly African American mothers from low income backgrounds. They found that the association between a

mother's experience of child maltreatment and her self-reported risk for perpetration of physical child abuse was mediated by the mother's emotion dysregulation and negative affect. Smith et al. (2014)'s findings demonstrate the need to support parents who have experienced maltreatment to improve their self-regulation and own mental health. This is an important consideration for the development of our intervention for young parents.

1.4.3 Intergenerational Parenting Difficulties

Maternal history of child maltreatment and associated trauma is also related to broader difficulties in parenting behaviours. Extensive research has established the powerful influence of child-rearing behaviours of one's own parents on parenting behaviours (Putallaz et al., 1998; Van Ijzendoorn, 1992). Given behavioural patterns early in life organise an infant's developing system, it is not surprising that these experience shape the capacity to parent the next generation (Feldman, 2017). For many parents who have experienced complex trauma, their attachment relationships with their own parents have been disrupted, which can impact their emotion regulation and capacity to develop secure attachments with their own children (Harel & Finzi-Dottan, 2018). Parents' own internal working models of attachment are argued to shape parenting behaviours by guiding the parents' interpretation and responses to child needs, which in turn affect the quality of child's attachment to that parent (Bowlby, 1980; Main & Hesse, 1990).

Compared to parents who have not experienced maltreatment, a history of childhood maltreatment is associated with more intrusiveness towards their own children (Moehler et al., 2007), punitive parenting style and harsher discipline practices (Banyard, 1997; Dixon, Browne, et al., 2005; Kim et al., 2010; Pears & Capaldi, 2001; Schwerdtfeger et al., 2013), decreased responsiveness and nurturance (Bert et al., 2009; Schwerdtfeger et al., 2013), lower emotional availability (Fuchs et al., 2015), lower

emotion regulation, higher insecure attachment styles with their own parents (Harel & Finzi-Dottan, 2018) and poorer mother-child interaction quality (Lang et al., 2010). Moreover, child sexual abuse has been positively associated with more negative views of self as a parent (Banyard, 1997), emotional overdependence on her child (Alexander et al., 2000; Burkett, 1991), difficulties establishing clear boundaries with the child and higher permissive parenting styles (DiLillo & Damashek, 2003). Adverse parenting behaviours, such as those listed above, are associated with higher risk of emotional and behavioural problems and adjustment difficulties in children (Lomanowska et al., 2017).

Wide-ranging reviews have also found positive associations between experiencing child abuse and subsequent perinatal depression (i.e., depression experienced in the antenatal or postnatal period; Alvarez-Segura et al., 2014; Choi & Sikkema, 2016; Hutchens et al., 2017; Wosu et al., 2015). Some estimates indicate that women with a history of abuse are 3.6 to 8.4 times more likely to experience postnatal depression than women who have not experienced abuse (Records & Rice, 2009). This increased risk of perinatal depression has clear implications for parenting behaviours and child outcomes. The negative relationship between maternal depression and child wellbeing is well established, with findings showing that maternal depression is associated with irritability, hostility, intrusiveness and lower sensitivity towards the child and disengagement from the child (Lovejoy et al., 2000; Vakrat et al., 2017). Maternal depression is also related to higher levels of internalising problems, externalising problems, and general psychopathology (Goodman et al., 2011). Further, maternal depression has a negative impact on developing executive functioning (Hughes et al., 2013). Encouraging results show that fathering behaviour can have a protective effect on the impact of maternal depression. Longitudinal research has shown that in families of depressed mothers, supportive relationships with the father of the

baby have been associated with lower depressive symptoms (Edwards et al., 2012), and fathers who display high sensitivity, low intrusiveness and offer children opportunities for social engagement can buffer the effect of maternal depression on negative family processes (Vakrat et al., 2017). These results demonstrate the importance of the fathering role, but also indicate that children of depressed mothers with a history of child maltreatment who do not have supportive partners are at higher risk of negative outcomes.

Using the theory of latent vulnerability (McCrary & Viding, 2015) as a framework, the evidence indicates that complex trauma can lead to adverse alterations in the structure and function of stress-susceptible brain regions, which can disrupt children's attachment mechanisms in infancy and increase children's vulnerability for problematic social, emotional and cognitive development, including reduced capacity for mentalising and theory of mind, difficulties with threat perception, increased potential for fear conditioning, memory impairments, and difficulties with behavioural and emotional regulation. The research demonstrates that these developmental experiences confer greater risk for later socially-determined mental health and personality difficulties, such as those highlighted above, that directly compromise parenting when maltreated children become parents themselves.

1.5 Teenage Pregnancy and Parenting

A particular group of parents and their children who are at risk of adverse outcomes are young parents. Consistent with the definition used by the Australian Bureau of Statistics, we define young parents as parents or guardians aged 15-24 years old (ABS, 2012). Young parents and their children have been identified as vulnerable to breaches of rights to health, education and care (Australian Human Rights Commission (ARC), 2017). Findings from the ACE study suggest a strong graded link between the

number of ACEs and increased risk of teenage pregnancy (Hillis et al., 2004). In particular, child sexual and physical abuse significantly increases the risk of adolescent pregnancy (Francisco et al., 2008; Madigan et al., 2014; Noll et al., 2009). Adverse early experiences may ‘speed up’ the reproductive cycle, including premature puberty, as an adaptive response to a stressful environment (Ellis & Garber, 2000; Moffitt et al., 1992). Noll et al. (2009)’s meta-analysis of 21 studies investigated the relationship between teenage pregnancy and child sexual abuse. They found that women who had experienced childhood sexual abuse were more than twice as likely to experience pregnancy in adolescence compared to women who had not experienced abuse. Madigan et al. (2014)’s meta-analysis of 38 studies examining the strength of the association between different types of maltreatment and adolescent pregnancy showed that sexual and physical abuse were associated with increased risk of teenage pregnancy. However, emotional abuse and neglect were not. Moreover, there was an increased risk when adolescents had experienced both sexual and physical abuse (e.g. OR, 3.83; [CI, 2.96–4.97]). In addition to adverse childhood events, a range of psychosocial, environmental and behavioural risks can contribute to early childbearing, many of which continue to contribute to impact an adolescents’ capacity to parent well (Beers & Hollo, 2009). For instance, higher rates of teenage pregnancy are also related to socioeconomic disadvantage and unstable housing (Marino et al., 2016; Penman-Aguilar et al., 2013). Adverse circumstances are further exacerbated by social, financial, medical, educational and employment challenges of raising a child (Australian Human Rights Commission (ARC), 2017).

While young women have the physiological capacity to give birth in their adolescence, it is a difficult task to manage their own developmental needs while concurrently juggling the multifaceted responsibilities and roles of parenthood (Devito,

2010). Adolescent pregnancy in higher income countries has been associated with a higher risk of negative outcomes for young mothers, including poorer physical and mental health, post-natal depression, school interruption, persistent poverty, difficulties gaining employment, loneliness, low self-esteem, separation from the child's father, and repeat pregnancies in adolescence (Bradbury, 2006; Goossens et al., 2015; Jeon et al., 2011; Kalb et al., 2015; Klein, 2005). Much like the effects of depression for parents in general, depression in adolescent mothers is related to lower parental confidence, lower social support and family conflict (Whiteley & Brown, 2010). Several large studies that report negative outcomes for adolescent mothers and their children date from the 1970s and 80s and have been criticised for not controlling for sociodemographic factors (Beers & Hollo, 2009; Hans & Thullen, 2019). One large study that did control for demographic variables was the Early Head Start Research and Evaluation Project (Berlin et al., 2002). This study investigated the relationship between maternal age and parenting behaviours among a large sample of mothers from low-income backgrounds ($N = 1,702$). They found that mothers who gave birth in their teens were significantly less supportive, detached and intrusive than older mothers in this sample (Berlin et al., 2002). These findings strongly suggest that young mothers may need additional supports to improve parenting practices.

Children born to teenage mothers also have an increased risk for detrimental outcomes in early childhood and beyond. Findings from the Rochester Youth Development study showed that girls and boys who were born to teenage mothers had higher risks of early parenthood, whereas, boys born to teenage mothers also had higher risk of drug use, gang membership and unemployment (Pogarsky et al., 2006). Other findings demonstrate that children of adolescent mothers have higher risk of prematurity, low birth weight, higher neonatal mortality rates and subsequent

developmental delays, behavioural problems, academic problems, early school leaving, unemployment, substance abuse, early sexual activity, violent offending and becoming teenage parents themselves (Chen et al., 2007; Furstenberg Jr et al., 1987; Goossens et al., 2015; Jaffee et al., 2001; Klein, 2005; Nord et al., 1992). Children of young parents are also more likely to be born into and continue to live in social and economic disadvantage (Australian Institute of Health and Welfare, 2018b), thus compounding their vulnerabilities. In the US, children of teenage parents are overrepresented in the welfare system, with some studies reporting that children of young teenage mothers are 2.2 times more likely to have a child removed and placed in alternative care compared to mothers who have their first child at the age of 20 to 21 years (Hoffman, 2006).

However, it is also clear that rather than being vulnerabilities solely due to maternal age, research indicates that within current Western culture, these vulnerabilities are compounded by the social and economic disadvantage and adverse childhood experiences that precede pregnancy (Sisson, 2012; SmithBattle, 2012). Early parenthood is not of itself developmentally inappropriate, as it is normative in many parts of the world and was historically normative in most parts of the world until fairly recently. Recent social changes including gender equality and feminism, birth control, and the extension of formal education have contributed to the increasing age of first childbirth. In areas where it is normative and parents have sufficient support, there is little evidence that early parenthood is associated with poorer outcomes.

1.5.1 Parenting Interventions for Young Parents

Factors associated with improved outcomes for adolescent mothers and their children include increased educational accomplishment, prevention of repeat pregnancy and positive mother-child interactions (Ruedinger & Cox, 2012). A recent umbrella review of meta-analyses of interventions aimed to improve outcomes for pregnant or

parenting adolescents demonstrated small but significant effect sizes for reduced low birth weight, repeat pregnancies, maternal education, maternal employment and parent-child teaching interactions post intervention (SmithBattle et al., 2017). Other meta-analytic findings based on eight randomised controlled trials (RCTs) of short-term parenting interventions delivered specifically to adolescent parents showed that parenting programs may be effective in improving maternal sensitivity, parent-child interactions, and infant responsiveness towards the mother (Barlow et al., 2011). The eight parenting interventions that were identified in this meta-analysis were predominantly standard group-based parenting programs or brief video-feedback interventions. However, findings from five of the nine meta-analyses were inconclusive, prompting authors to conclude that further, more rigorous research is needed in this area (Barlow et al., 2011).

Researchers have suggested that parenting interventions may have a limited role in supporting teenage parents and that they should potentially be used in conjunction with more intensive and comprehensive support that target broader outcomes related to social exclusion (Barlow et al., 2011). Others suggest that while behavioural interventions tailored to young mothers are needed, there are no ‘quick fixes’ that will repair childhood adversity and the social and economic disadvantage that contribute to teenage births and poorer maternal and infant outcomes (SmithBattle et al., 2017).

Comprehensive, multidisciplinary, culturally sensitive and developmentally appropriate services can potentially improve long term outcomes for adolescent parents and their children (Ruedinger & Cox, 2012). Comprehensive programs for young parents and other vulnerable populations that show promising results include mentoring (Barnet et al., 2010; Black et al., 2006), school-based (Key et al., 2008; Letourneau et al., 2004), home visiting (Barnet et al., 2007; Jacobs et al., 2016; McKelvey et al., 2012) and

integrated teenage/toddler medical clinics (Beers & Cheng, 2006; Cox et al., 2012; Lewin et al., 2016).

1.6 Why Develop Another Parenting Intervention?

Several multifaceted programs have been developed for young parents aged 13 to 25 in Australia that provide case management, home visiting, weekly parenting classes, education and vocational opportunities, life skills groups, child development services and playgroups. For example, The Australian Red Cross Young Parents Program, Raise Foundation, and Salvation Army Oasis Youth Support. Some services provide limited residential housing for mothers aged 13 to 18 with their children. However, they typically have limited resources to provide intensive, therapeutic support for individual parent-child dyads and often struggles to find therapy services that meet these needs. Thus, the purpose of developing and trialling the parent-child intervention in this study series was to help meet this need, by providing a clinical intervention for young parents who have experienced ACEs and are experiencing parenting difficulties.

There are, of course, an abundance of evidence-based parenting programs that currently exist (e.g., Dadds & Hawes, 2006; Dozier et al., 2002; Eyberg & Boggs, 1998; Juffer et al., 2008; Moss et al., 2018; Patterson, 2005; Sanders, 1999; Spieker et al., 2012; Webster-Stratton & Reid, 2012). So this begs the question, why develop another parenting intervention? Primarily, because young parents, particularly teenage parents with a history of complex trauma, are a highly vulnerable group with specific needs related to their developmental stage and social and economic disadvantage. As the research discussed highlights, the impacts of complex trauma are far-reaching and can include alterations in the architecture of the developing brain that potentially disrupt children's social, emotional and cognitive development. This impact is so profound because it contribute to vulnerabilities across the lifespan, including higher risk of

mental and physical health problems, continuity of maltreatment and broader difficulties in parenting the next generation. To achieve improved outcomes for young parents and their children there needs to be effective, accessible parenting support that caters for these needs (Parenting Research Centre & Murdoch Childrens Research Institute, 2017). While there are a range of existing parenting interventions for maltreating parents that take into account their ACEs, very few clinical parenting interventions have been developed specifically for young parents with these experiences with the specific goal of developing and maintaining a functional parenting relationship that is contrary to their experiences of being parented.

Given the increased risks for adverse outcomes for young parents and their children, the parenting qualities that buffer children from the impact of adversity, such as sensitivity, nurturance, and stability, are particularly important (Parenting Research Centre & Murdoch Childrens Research Institute, 2017). As mentioned earlier, parents' self-regulation capacities are commonly impacted by childhood abuse and neglect. While the foundation for self-regulation is laid in infancy and early childhood, self-regulation capacities continue to develop through adolescence and into early adulthood (Center on the Developing Child at Harvard University, 2011). So for young parents who have experienced complex trauma, learning to self-regulate in the context of parenting is arguably even more challenging as these capacities are still developing. Thus, young parents who have experienced disrupted attachment relationships with their own caregivers may need additional support to increase their self-regulation. Moreover, children of parents who report higher adverse childhood experiences have higher likelihood of behavioural and emotional problems compared to parents who report no early childhood adversity (Schickedanz et al., 2018). Helping young parents improve their capacity to manage challenging child behaviours is also highly important.

Considering the importance of secure attachment and strong parent-child relationships, and in particular, the role of reciprocity and parental sensitivity, for child socio-emotional development, we aimed to develop a parenting intervention for young parents that directly targeted these aspects and helped to support them in responding more effectively to child behavioural and emotional problems. The literature indicates that young parents need broader social support and comprehensive services; therefore, our clinical intervention was designed to be delivered in the context of multifaceted services for young parents, so that parents have access to case management, peer support, and other educational and vocational opportunities to support their ongoing wellbeing.

1.7 The Present Study Series

The literature reviewed so far demonstrates that infants and young children develop in the context of their caregiving relationships and these early experiences provide the foundation for ongoing development. In contrast to secure, nurturing caregiving relationships, complex trauma has the potential for far-reaching negative impacts including increased risk of mental and physical health problems, other poor health-related behaviours and the potential for continuing cycles of maltreatment and poor parenting from one generation to the next. As highlighted, young parents and their children are at particular risk of poor outcomes and may need additional support to improve parent-child relationships, parent self-regulation and young parents' capacity to manage challenging child behaviours. Strengthening stable and responsive caregiver relationships can quite literally protect children from adverse effects of complex trauma, helping them to develop their own capacities to cope with early life adversity. Taken together, the literature indicates that intervention and support is needed for children who have experienced maltreatment when they become parents themselves, particularly for young parents to interrupt cycles of disadvantage and adversity.

This research forms the background to this study series and provides the impetus for developing and piloting an intervention for young parents and their young children. In order to do so, the first study in [Chapter 2](#) examines parenting in a normative population to provide insight into the influence of parenting on one aspect of child emotional development. The series then examines current parenting intervention approaches to better understand what has been effective for maltreatment intervention and prevention in both biological ([Chapter 3](#)) and alternative care environments ([Chapter 4](#), Study 2). [Chapter 5](#) discusses the importance of the consumer perspective to introduce the context for the third study in [Chapter 6](#), which involves young parents themselves in the development of our parenting intervention by eliciting their views and experiences of parenting through an online survey. [Chapter 7](#) provides the theoretical and empirical rationale of our parenting intervention, *Holding Hands Young Parents (HHYP)*. The final two studies present the rationale, outline, implementation and preliminary evaluation of HHYP, through a series of single-case multiple baseline experimental designs (SCED). Study 4 ([Chapter 8](#)) presents the rationale and outline of the intervention and uses qualitative data to highlight intervention implementation. Study 5 ([Chapter 9](#)) presents quantitative data from the SCED. [Chapter 10](#) presents a final summary and conclusions.

1.8 Study 1

Considering that emotional development is central to models of relational, regulatory, physical and intergenerational development, the first study ([Chapter 2](#)) in this series examines the influence of parenting behaviours on child emotional development across time using longitudinal methodology. One particular aspect of emotional development is internalising symptoms (i.e., anxiety and depressive symptoms). There is abundant research that shows that children who are at risk of

maltreatment or have experienced maltreatment are at increased risk of both internalising and externalising problems (Burns et al., 2004; Keyes et al., 2012; Plant et al., 2017). Research demonstrates hostile and coercive parenting increases the risk of child and adolescent externalising problems (Patterson, 1982, 2002). Yet less research has examined the relationship between parenting characteristics and the development of internalising problems across time. In order to gain a broader picture of the influence of parenting behaviours on internalising symptoms across time in a normative sample, study 1 steps back from complex trauma to investigate the association between parenting characteristics in early childhood and trajectories of internalising symptoms in a large population-based sample of Australian children. This study focusses on the importance of child socio-emotional capacities for wellbeing and highlights the foundational role that the parent-child relationship plays in this development. Specifically, study 1 examines internalising problems of children from age 4 to age 12 to identify longitudinal trajectory classes and identify parenting behaviours present in infancy/toddlerhood that discriminated among the trajectory classes. This study uses data from primary parents ($N = 4494$) participating in Growing up in Australia: the Longitudinal Study of Australian Children (LSAC). Findings from the study add to current understanding about variation in the trajectories of children's emotional development across time and provide further information about parenting characteristics that are associated with different developmental paths. A better understanding of the trajectories of internalising problems and how they relate to parenting behaviours in a normative sample is useful to inform parenting intervention approaches for children at risk of poorer socio-emotional outcomes, such as children experiencing early adversity.

The study was published online in 2020 in the *Journal of Abnormal Child Psychology*. The content remains the same as published and has been presented using

the APA referencing style. Spelling has been reverted from U.S. English (for publication) to U.K. English, for consistency.

1.9 Chapter 1 References

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Chapter 2: Study 1 - Early Parenting Characteristics associated with Internalising Symptoms across Seven Waves of the Longitudinal Study of Australian Children

Kemmis-Riggs, J., Grove, R., McAloon, J., & Berle, D. (2020). Early parenting characteristics associated with internalizing symptoms across seven waves of the longitudinal study of Australian children. *Journal of Abnormal Child Psychology*, 48(12), 1603-1615. <https://doi.org/10.1007/s10802-020-00700-0>

2.1 Abstract

The aim of this study was to identify whether parenting style during a child's toddler years predicts the course of the child's internalising symptoms throughout early to middle childhood. The current study uses data from waves 1 to 7 (acquired biennially) of the infant cohort ($N = 4494$) of Growing up in Australia: the Longitudinal Study of Australian Children (LSAC), a population-based longitudinal study. Latent class growth analysis identified four distinct longitudinal trajectories of internalising symptoms: Low stable (66% of the children), High increasing (7%), Low increasing (17%) and High decreasing (10%). Multinomial logistic regression indicated that low self-efficacy and socioeconomic disadvantage during the toddler years were significant predictors of unfavourable (i.e., increasing) trajectories of internalizing symptoms across later childhood. Parenting hostility was a significant predictor of the low increasing trajectory. Additionally, male children were more likely than females to follow unfavourable trajectories. However, low parenting warmth was not predictive of increasing symptoms across time. Our findings highlight the importance of parenting factors in a child's early years, particularly the potentially detrimental outcomes associated with parental hostility and low self-efficacy.

Keywords: internalising, parenting, longitudinal, childhood development, trajectories

2.2 Introduction

The parent-child bond is posited to be the foundation of child socio-emotional development (e.g., Bowlby, 1973, 1980; Schore, 1994, 2003; Tronick, 2007). An abundance of empirical research demonstrates that higher quality parent-child relationships are positively related to children's socio-emotional development (Cyr et al., 2010; Harrist & Waugh, 2002; Saint-Georges et al., 2013; Stack et al., 2010). Early parenting behaviours provide the foundation of the parent-child relationship (Feldman, 2012b) and are especially important in a child's early years (Kochanska, 1997). Infants and toddlers are particularly receptive to, and dependent on, sensitive parenting care for their neurophysiological development and the development of social and emotional capacities (Kochanska, 1997, 2002; National Scientific Council on the Developing Child, 2014).

Diverse parenting characteristics have demonstrated robust associations with child outcomes, and particularly, with the risk of internalising disorders (Feldman, 2012b; Lomanowska et al., 2017; Pinquart, 2017a, 2017b; Yap & Jorm, 2015; Yap et al., 2014). Two particular dimensions, hostile parenting and warm parenting have been identified as significant predictors of child socio-emotional developmental outcomes (Caron et al., 2006; McKee et al., 2008; Pinquart, 2017b; Yap & Jorm, 2015). Hostile parenting has been conceptualised as a range of parenting behaviours that express hostility, aggression, irritability, negative affect, harsh criticism and anger towards children. In contrast, behavioural indicators of warm parenting include acceptance, positive affect, affectionate touch, caring, positive support, emotional closeness (McKee et al., 2008). Early conceptualisations of hostility and warmth suggested that they were opposite ends of the same continuum (e.g., Schaefer, 1965). However, current understanding typically conceptualises them as two separate dimensions, which

provides a much more nuanced and in-depth understanding of parenting behaviours (McKee et al., 2008). Importantly, each of these has implications so far as the risk of internalising disorders is concerned because existing evidence is clear that experiences within the family environment play a vital role in increasing or ameliorating children's risk of anxiety and depressive disorders (Bögels & Brechman-Toussaint, 2006; McLeod, Weisz, et al., 2007; McLeod, Wood, et al., 2007; Rapee et al., 2009; Restifo & Bögels, 2009; Van Voorhees et al., 2008).

Maternal warmth has been positively associated with infant and toddlers' ability to regulate positive affect (Davidov & Grusec, 2006), as well as their overall socioemotional competence (Landry et al., 2006; Zimmer-Gembeck & Thomas, 2010). It is also negatively related to child internalising problems and depression (Bayer et al., 2006; Garber et al., 1997; McKee et al., 2008; Suchman et al., 2007). Meta-analytic results show that higher parental warmth is significantly associated with lower internalising and depressive symptoms in both concurrent and longitudinal relationships (McLeod, Weisz, et al., 2007; McLeod, Wood, et al., 2007; Piquart, 2017b; Yap & Jorm, 2015).

In contrast, hostile parenting has been related to poorer socio-emotional adjustment (Sanson et al., 2011). Accumulating evidence suggests that hostile parenting is not only associated with externalising problems, but may also increase the risk for internalising problems. A range of meta-analyses of cross-sectional and longitudinal studies have reported small to medium effects of hostile parenting on childhood depression, anxiety and internalising problems (McLeod, Weisz, et al., 2007; McLeod, Wood, et al., 2007; Piquart, 2017b; Yap & Jorm, 2015). One large cross-sectional study in a community sample demonstrated that mothers' harsh verbal discipline was associated with child internalising problems and harsh verbal and physical discipline

related to externalising problems (McKee et al., 2007). In this study, maternal warmth buffered the association between harsh paternal discipline and child externalising and internalising problems.

Tronick and Gianino (1986) proposed that children of parents who display lower warmth and unresponsive parenting behaviours, experience dysregulated arousal and learn to manage this by withdrawing. Given withdrawal is posited to lower the arousal system, they suggest that this internalising or disengaging response becomes the child's preferred means of coping. Biobehavioural research indicates that parents and infants mutually adapt their physiological and social cues during moments of social contact, which allows the parent to externally regulate the infant's system and provides an adaptive mechanism to sensitise infants to environmental challenges (Feldman, 2007b, 2012a). These reciprocal processes shape infant's brain structure and functions, laying the foundation for neural pathways for ongoing development (Feldman, 2012a; Shonkoff et al., 2016). At the severe end of the spectrum in cases where parents are consistently insensitive and unresponsive to infant's needs, and instead respond with hostility, unpredictability or lack of engagement and warmth during early childhood, this can set up reciprocal patterns that, over time, lead to substantial deficits in learning and behaviour (Shonkoff et al., 2016).

Feelings of parental competence and efficacy also play an important role in children's socio-emotional competence, both directly and indirectly through parenting behaviours (Albanese et al., 2019; Jones & Prinz, 2005). Parental self-efficacy has been conceptualised as a particular subtype of self-efficacy (Bandura, 1977, 1986), defined as "parents' belief about their ability to influence their child in a health and success-promoting manner" (Eccles & Harold, 1996). Results of three comprehensive reviews converge to indicate that PSE predicts or contributes to beneficial outcomes for the

parent-child relationship, parenting competence and child socio-emotional development, and is negatively related to parental depression and anxiety (Albanese et al., 2019; Coleman & Karraker, 1998; Jones & Prinz, 2005). Albanese et al. (2019) reported that parental self-efficacy was positively related to more effective parenting behaviours, including more responsive and sensitive parenting and less coercive parenting styles. Further benefits of parental self-efficacy include positive relationships between parental self-efficacy and maternal and paternal involvement, open communication in the home, and more positive parent-child relationships (Albanese et al., 2019). In terms of child socio-emotional development, findings show that higher parental self-efficacy was generally related to better behavioural outcomes, academic and school related outcomes and lower mental health outcomes, including internalising problems, negative emotionality, lower feelings of self-worth and child self-efficacy (Albanese et al., 2019; Jones & Prinz, 2005).

Most prospective studies which have investigated the associations between parenting warmth, hostility and parental self-efficacy and child internalising problems or broader socio-emotional adjustment have analysed average patterns of change, or differences between predetermined subgroups (e.g. ethnicity, gender). Broadly described as variable-centred approaches, these methodologies have been fundamental to our understanding of child socio-emotional development. However, these approaches do not provide insight about different patterns or trajectories of development that may exist within homogenous subgroups of heterogeneous populations. Developmental psychopathology emphasises the importance of identifying individual differences in development (Rutter & Sroufe, 2000). Yet, less research has focussed on patterns or trajectories of development at an individual or person-centred level. This is important because the potential to identify distinct trajectory groups may assist in identifying

unique risk factors that can inform interventions specifically in response to those factors. This limitation can, to some extent, be addressed by using growth modelling approaches such as latent class growth analysis (LCGA; Muthén & Muthén, 2000). The potential for different trajectories of internalising problems across childhood raises the question as to whether there are specific parenting factors associated with these trajectories.

A limited number of recent studies using growth modelling approaches have examined trajectories of internalising behaviours over time, and identified factors that predict membership in differing classes. In an Australian community sample, Letcher et al. (2009) found that higher levels of mother-child relationship problems during infancy were associated with high and increasing internalising trajectories, compared with low internalising trajectories between the ages of 3 and 15 years. Furthermore, less warmth and greater levels of harsh parenting in early adolescence were related to trajectory groups characterised by high levels of internalising symptoms. Davis et al. (2015) identified four trajectory classes of internalising symptoms in a USA sample of children from predominantly white, middle income families. Higher maternal depressive symptoms and child externalizing scores were associated with problematic internalising trajectories compared to the trajectory showing low stable internalising patterns from the age of 4.5 to the age of 15. While these studies provide some insight into trajectories of internalising problems and how they relate to parenting behaviours and other factors, research in this area using person-centred approaches is scarce and further studies are warranted. Socioeconomic disadvantage has been associated with higher levels of behavioural and emotional problems from early childhood to early adolescence (Goldfeld et al., 2018; Keiley et al., 2000; Lansford et al., 2006). Child gender has also been associated with differing trajectories of internalising problems from early

childhood to early adolescence (Letcher et al., 2009; Mesman et al., 2001). Thus, it is important to control for both child gender and socioeconomic disadvantage. A better understanding of developmental trajectories of internalising problems and how they relate to parenting behaviours can inform parenting intervention approaches for children at risk of poorer socio-emotional outcomes.

The overall aim of this study was to examine internalising symptoms for children from preschool to early adolescence to identify longitudinal trajectory classes using data from primary parents participating in Growing up in Australia: the Longitudinal Study of Australian Children (LSAC). It also aimed to identify parenting factors present in infancy/toddlerhood that discriminate among these trajectory classes. Specifically, we aimed to a) identify the number and nature of classes of parent-reported internalising problems in a broadly representative sample of Australian children using latent class growth analysis (LCGA; Nagin, 2005), and b) identify early parenting behaviours associated with the different trajectories. Based on existing research, it was hypothesised that there would be between three and five longitudinal trajectory classes of internalising problems, with at least one class demonstrating low stable patterns and one class with persistently high problems. Given the established relationships between parenting behaviours and child internalising problems, it was hypothesised that parenting characteristics, specifically, parental hostility, warmth and self-efficacy, would uniquely discriminate a low stable class from the other classes, controlling for socio-economic disadvantage and child gender.

2.3 Method

This report has been prepared according to the STROBE statement guidelines (Von Elm et al., 2014) for cohort study findings. Ethics approval for the LSAC was granted by the Australian Institute of Family Studies Ethics Committee, which is a

Human Research Ethics Committee endorsed by the National Health and Medical Research Council (NHMRC). Ethics approval for the current study was obtained by the University of Technology Sydney Human Research Ethics Committee (ETH18-3100).

2.3.1 Study Population and Design

This study uses data from the Longitudinal Study of Australian Children (LSAC), a national longitudinal study of children and families in Australia. The LSAC commenced in 2004, with data collection from two cohorts, 5107 infants under 1 year of age (B-cohort) and 4983 children, aged about 4 years (K-cohort). Subsequent waves of data were collected every two years, with the 7th wave collected in 2016. Initial response rates, calculated as the proportion of families recruited to the study out of those who were selected to participate, were 64.2% for the B-cohort and 59.4% for the K-cohort. The study design and sampling methodology are explained in detail elsewhere (Soloff et al., 2005; Soloff et al., 2006; Usback et al., 2018). In brief, the sample was designed to be representative of Australian children and families, using a clustered design based on postcodes. It was selected from the Medicare database, the most comprehensive database of Australia's population (Soloff et al., 2005). The initial sample in 2004 was broadly representative when compared with the 2001 Australian Census data, however, children with highly educated parents were over-represented and participants who were single parents, non-English speaking or living in rental properties were underrepresented (Soloff et al., 2006). These same variables were associated with sample attrition over time (Australian Institute of Family Studies, 2015).

This study uses data from the primary parents and their children in the B-cohort, which included infants who were born between March 2003 and February 2004. Almost all of the primary parents were female (see Table 1). For the present paper, we included

participants who were primary parents (i.e., primary caregivers at wave 1), and who had provided SDQ data for at least one of the 5 waves of assessment.

2.3.2 Procedure

Children were selected from the Medicare enrolment database held by the Health Insurance Commission (HIC). Written informed consent was obtained from the caregiver on behalf of each of the study children. Data collection consisted of three parts: face to face interview, an in-person questionnaire, and a further questionnaire left behind to complete and return later via post. Data collection procedures have changed over time and vary according to respondent. Computer Assisted Self Interviewing was introduced from 2010. More detailed information is available at <https://growingupinaustralia.gov.au/>

2.3.3 Measures

All items included in the study formed part of the questionnaire completed by the primary parent during the home visit and interview.

2.3.3.1 Outcome variables to establish trajectories over time.

Internalising symptoms, were measured at wave 3, 4, 5, 6 and 7 using the Emotional Problems subscale of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). The SDQ is a 25-item scale comprising of 5 subscales: emotional problems, peer relationship problems, conduct problems, hyperactivity, and pro-social behaviour. The emotional problem subscale (SDQ-Emotional) measures internalising symptoms such as somatic symptoms, worries, low mood, anxiety/nervousness and fearfulness. Types of questions for the emotional subscale include ‘nervous or clingy in new situations, easily loses confidence’ and ‘often unhappy, depressed or tearful’. It has 5 items, rated on a 3-point Likert-type scale from 0 (*not true*) to 2 (*certainly true*). Higher scores indicate greater levels of internalising difficulties. The SDQ has

demonstrated satisfactory psychometric properties (Goodman, 2001). Cronbach's alpha values were .57, .69, .72, .72, and .78, from wave 3 to wave 7 respectively on the SDQ-Emotional subscale. This range of internal reliability is consistent with the broader SDQ literature using the emotional problems subscale, particularly in Australian samples (Hawes & Dadds, 2004). SDQ-Emotional continuous scores were included in the LCGA at five time points from waves 3 to 7.

2.3.3.2 Parenting predictors of trajectory class membership.

Because parenting characteristics are particularly important in the early years, parenting variables assessed at Wave 2 (i.e., child aged 2-3 years) were used to predict membership in the latent trajectory classes.

Parenting warmth was measured using a 6-item scale based on the Child Rearing Questionnaire (Paterson & Sanson, 1999). It asks parents how often in the past 6 months they express affection by hugging, kissing or holding this child, hug or hold this child for no particular reason, tell this child how happy he/she makes you, have warm, close times together with this child, enjoy doing things with this child, and feel close to this child both when he/she is happy and when he/she is upset. Primary parents rated items on a 5-point Likert-type scale from 1 (*never*) to 5 (*almost always*). Scores were summed over the 5 items, with higher scores indicating warmer parenting behaviours. This scale has demonstrated good psychometric properties in previous research (Zubrick et al., 2014). Internal consistency at Wave 2 was Cronbach's $\alpha = .84$.

Parenting hostility was measured using 4 items from the Early Childhood Longitudinal Study of Children—Birth Cohort (US Department of Education, 2001). It asks parents how often in the past 6 months have you been angry with this child, raised your voice, lost your temper and felt that when this child cries, he/she gets on your nerves. Primary parents rated items on a 10-point scale ranging from 1 (*not at all*) to 10

(*all the time*). Items were averaged so that higher scores indicated higher hostility.

Internal consistency at Wave 2 was Cronbach's $\alpha = .86$.

Parental self-efficacy, defined as parents' perceptions of their confidence in and mastery of parenting skills. This was measured using 6 items from the Early Childhood Longitudinal Study of Children—Birth Cohort scale (US Department of Education, 2001). It asks parents if this child behaves in a manner different from the way you want him/her to, behaviour is more than you can handle, feel that you are good at getting this child to do what you want him/her to do, and feel that you are in control and on top of things when you are caring for this child. Primary parents rated items on a 5-point scale ranging from 1 (*never/almost never*) to 5 (*always/almost always*). Items were averaged so that higher scores indicated higher self-efficacy. Internal consistency at Wave 2 was Cronbach's $\alpha = .76$.

2.3.3.3 Covariates.

Socioeconomic Position (SEP), defined as a relative position of families regarding social and economic resources available to family members, including children. SEP was rated using a composite measure of family disadvantage, based on parents' educational attainment, annual household income and occupational prestige (Blakemore et al., 2009). The measure was standardised to have a mean of 0 and a standard deviation of 1. Higher scores represent higher relative socio-economic advantage. If there were two parents in the home, SEP included data related to both parents. If there was a single parent in the home, data related to the resident parent (Blakemore et al., 2009).

Child Gender was also included in the model as a covariate.

2.3.4 Statistical Analysis

Analyses were conducted in two stages to address the aims of the study.

2.3.4.1 Latent class growth analysis (LCGA).

We used a latent growth modelling approach in Mplus version 8.3 (Muthén & Muthén, 2017) to identify distinct subgroups of longitudinal trajectories of internalising symptoms from preschool through to early adolescence. We used the 3-step approach, as outlined in Asparouhov and Muthén (2014). The SDQ emotional problem scores measured at five time points, from Wave 3 (4-5 years) through to Wave 7 (12-13 years) were input into the model. Internalising trajectories that included all participants who had SDQ emotional problem scores for at least one wave were estimated. This made maximum use of data from children with partially incomplete data and increased statistical power for identifying and distinguishing between developmental trajectories (Croudace et al., 2003). We employed full information maximum likelihood (FIML) in *Mplus*, which allows for the inclusion of participants with partial data.

A combination of criteria were used to guide the decision on the number of classes, including a range of statistical information criteria (IC); Akaike's Information Criterion (AIC; Akaike, 1987), Bayesian Information Criterion (BIC; Schwarz, 1978), consistent Akaike information criterion (CAIC) and sample-size adjusted Bayesian information criterion (SABIC; Sclove, 1987). Lower values for these IC indicate better fit. We also considered the The Lo-Mendell-Rubin adjusted likelihood ratio test (LMR LRT; Lo et al., 2001) and Vuong-Lo-Mendell-Rubin adjusted likelihood ratio test (VLMR LRT), which compare improvement in fit between adjacent class models (e.g. comparing the fit between a 2-class and 3-class model). These indices produce a *p*-value that can be used to determine whether there is a statistically significant improvement from one model to the next (Nylund et al., 2007). Additionally, we examined the bootstrap likelihood ratio tests (BLRT; McLachlan & Peel, 2004) to compare model fit between two subsequent models. A significant BLRT result indicates that the model

with k classes (e.g., three latent classes) provides an improvement in model fit compared to a model with $k - 1$ classes (e.g. two classes). We also considered the entropy value, which reflects the degree of discrimination between classes and the size of the latent classes (Jung & Wickrama, 2008). Entropy values closer to 1 indicate more precise classification accuracy (Geiser, 2012).

2.3.4.1 Multinomial logistic regression.

For the multinomial stage of the 3-step process, parenting factors as predictor variables included warmth, hostility and parental self-efficacy. Given socio-economic status and gender have also been associated with differing trajectories of behavioural and emotional problems, these were entered as covariates in the model. Results are presented as odds ratios.

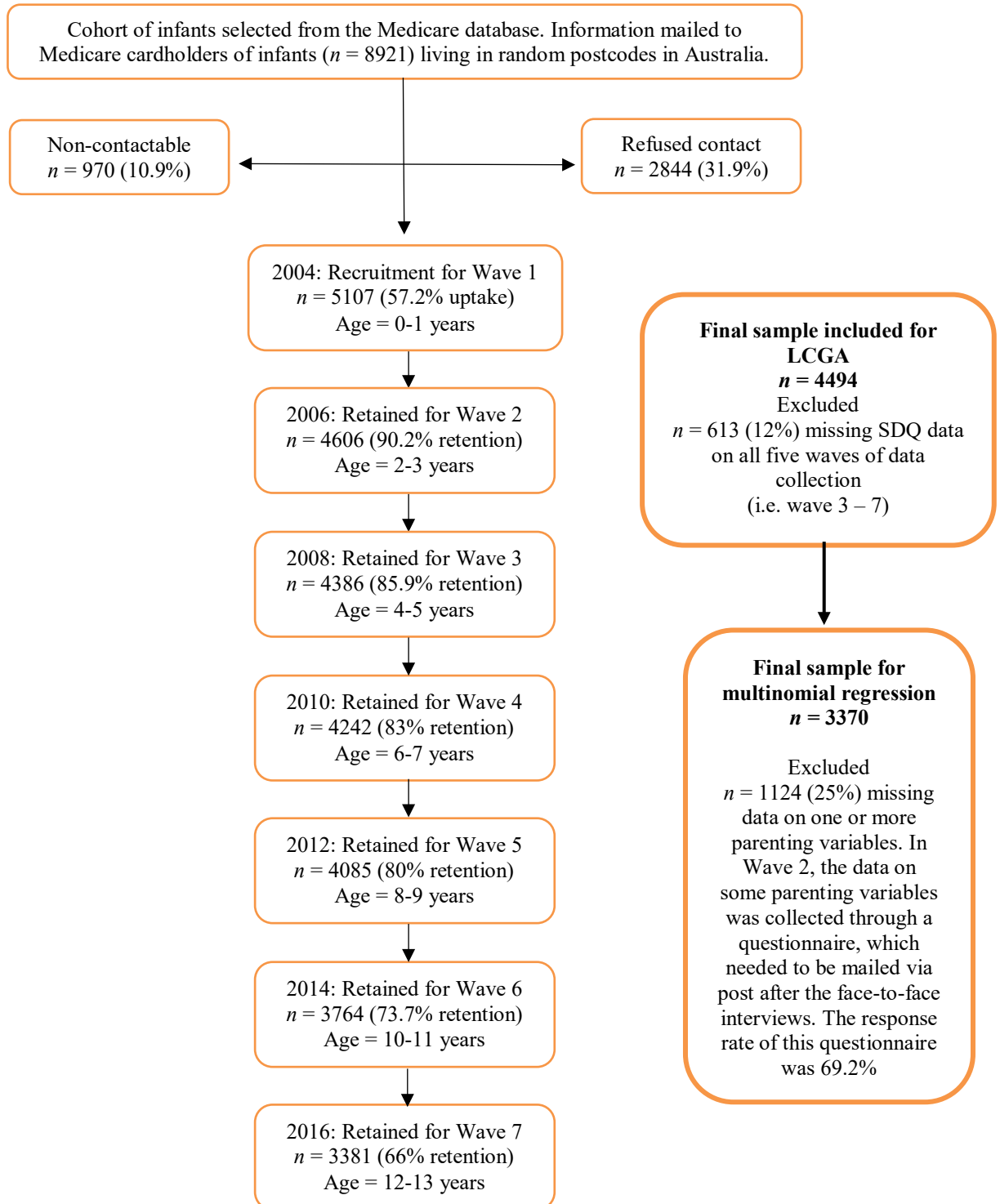
2.4 Results

2.4.1 Sample Characteristics

Of the 5107 families recruited into the study at Wave 1 in the B-cohort, the LCGA was conducted on 4494 parents, due to 12% missing SDQ data at all 5 waves. The multinomial regression analyses included 3370 parents with complete data on the variables of interest at Wave 2. Figure 1 shows recruitment and retention over time for the full LSAC study, and available data included in the current study. Regression analyses were used to predict missing data across the waves: parent age, parental secondary school completion, parent Indigenous status and English as primary language were significant predictors of missing data and were thus included in the LCGA analyses as covariates. Table 1 presents the demographic characteristics for the original 5107 participants and those included in the analyses.

2.4.1.1 Figure 1

Flow Chart of Recruitment, Retention over Time and Explanation of Data Used in This Study



2.4.1.2 Table 1

Demographic Characteristics

	Wave 1 <i>N</i> = 5107	LCGA sample <i>n</i> = 4494	Multinomial regression <i>n</i> = 3370
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
Parent demographics			
Parent age ^a	31.01 (5.51)	31.27 (5.33) ^b	31.81 (5.04) ^c
Parent age range	15 - 63 years	15 - 55 years	15-55 years
Parent gender, female	5033 (98.6%)	4431 (98.6%)	3326 (98.7%)
Born in Australia	3996 (78.2%)	3580 (79.7%) ^b	2701 (80.1%) ^c
Indigenous Australian or Torres Strait Islander	164 (3.2%)	113 (2.5%) ^b	49 (1.5%) ^c
English as main language at home	4370 (85.6%)	3925 (87.3%) ^b	2996 (88.9%) ^c
Education level - Year 12 and above	3404 (66.7%)	3107 (69.1%) ^b	2472 (73.4%) ^c
Employment status - Parent 1			
Employed	2531 (49.6%)	2322 (51.7%) ^b	1824 (54.1%) ^c
Unemployed and looking for work	165 (3.2%)	134 (3.0%)	81 (2.4%)
Not in labour force	2400 (47%)	2030 (45.2%)	1457 (43.2%)
Employment status - Parent 2			
Employed	4322 (84.6%)	3900 (86.8%) ^b	3011 (89.3%) ^c
Unemployed and looking for work	127 (2.5%)	98 (2.2%)	63 (1.9%)
Not in labour force	176 (3.4%)	143 (3.2%)	94 (2.8%)
Child demographics (Wave 1)			
Male	2608 (51.1%)	2301 (51.2%)	1726 (51.2%)
Age in months ^a	8.78 (2.57)	8.80 (2.57)	8.79 (2.55)
Age range	3 - 23 months	3 - 23 months	3 - 23 months
Children between 3 and 13 months	4959 (97.1%)	4364 (97.1%)	3280 (97.3%)
Aboriginal Australians or Torres Strait Islander	230 (4.5%)	166 (3.7%) ^b	81 (2.3%) ^c
0-1 sibling in household	3895 (76.2%)	3443 (76.6%)	2637 (78.2%) ^c
Family structure - two parent family	4630 (90.7%)	4144 (92.2%) ^b	3170 (94.1%) ^c
Socio economic position ^a	0 (1.0)	.06 (.98) ^b	.17 (.96) ^c
Parenting behaviours (Wave 2)			
Parenting Hostility ^a	3.20 (1.37)	3.21 (1.36)	3.20 (1.36)
Parenting Warmth ^a	4.60 (.43)	4.61 (.42) ^b	4.61 (.42)
Parental self-efficacy ^a	3.92 (.60)	3.92 (.60)	3.92 (.59) ^c

Note. ^a M (SD). ^b Significant difference between those included in the LCGA compared to the original sample at Wave 1 (at $\alpha = .05$). ^c Significant difference between those included in the regression compared to the original sample at Wave 1 (at $\alpha = .05$)

The majority of parents were born in Australia, spoke English as their primary language, had an educational level of Year 12 or above, and had two parents in the household. Infants at Wave 1 were aged between 3 and 23 months, with the majority (97%) ranging from 3 to 13 months. Missing data patterns were consistent with previous LSAC reports of attrition over time (e.g., Soloff et al., 2006), demonstrating that those retained in the study were slightly more advantaged than those who were not. For example, when those included in the final sample for the LCGA were compared to those that were not (at $\alpha = .05$), parents retained in the study were slightly older, $t(5104) = 9.40$, and were more likely to have been born in Australia, $\chi^2(1) = 44.12$, to have completed Year 12, $\chi^2(1) = 103.85$, describe themselves as non-indigenous $\chi^2(1) = 57.09$, speak English at home, $\chi^2(1) = 94.97$, be employed $\chi^2(2) = 67.44$, and to have reported slightly warmer parenting at Wave 2, $t(4493) = 3.38$. Families retained had a higher proportion of two parents in the home $\chi^2(1) = 106.50$ and higher socioeconomic position $t(5090) = 12.17$. There were no significant differences between parent gender $\chi^2(1) = .58$, child age $t(5105) = 1.09$, child gender $\chi^2(1) = 2.33$, number of siblings $t(5105) = -.98$, parenting hostility at Wave 2 $t(3512) = .67$, or parental self-efficacy at Wave 2 $t(3515) = 1.45$.

2.4.2 Latent Class Growth Analysis

There was significant variability in individual SDQ emotional-score trajectories across the overall sample with mean scores gradually increasing across waves (see Supplementary Material, Figure 1). An initial latent growth mixture modelling (LGMM) approach demonstrated convergence problems, so we proceeded to constrain the variance and covariance estimates for each of the within-group growth factors to be zero and conduct a Latent Class Growth Analysis (LCGA). To identify the optimal number of trajectories for internalising symptoms, models with one to five classes were

estimated. Table 2 shows the fit indices for the LCGA with one through five classes. All of the IC values were lower for the four-class compared to the two and three-class model. The IC values continued to decrease with additional classes. The likelihood ratio tests (LMR LRT and VLMR LRT) suggested that a four-class model showed a significantly better fit compared to a 3-class model ($p < .05$), whereas the five-class model did not provide a significantly better fit than the four-class model ($p > .05$). In addition, the entropy value for the five-class value was lower than .80, suggesting poorer discrimination between classes. The size of one of the classes in the five-class model was $< 4\%$, which may have not been a statistically robust category. The BLRT remained significant for the all of the estimated class models, however, for the four-class and five-class model, Mplus reported that the p values might not be trustworthy because of local optima. Grimm et al. (2016) caution against making model choice decisions based on the BLRT when this message is reported. Given this, the four-class model was selected.

2.4.2.1 Table 2*Latent Class Growth Analysis Fit Indices for SDQ Internalizing Symptoms (N = 4494)*

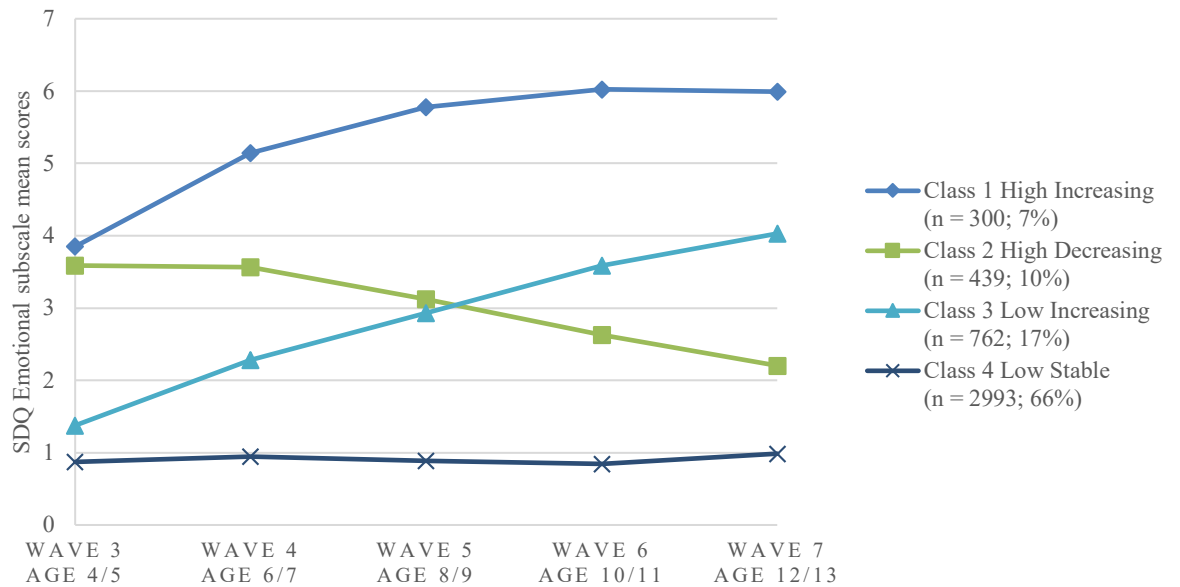
Fit Index	1-Class Model	2-Class Model	3-Class Model	4-Class Model	5-Class Model
LL	-54635.79	-35407.62	-34703.21	-34427.11	-34211.51
AIC	109301.59	70843.23	69448.42	68910.21	68493.02
BIC	109397.74	70932.98	69583.04	69089.71	68717.39
SABIC	109350.08	70888.49	69516.31	69000.73	68606.17
CAIC	109412.74	70946.98	69604.04	69117.70	68752.39
LMR LRT	-	5812.21	1385.28	542.99	423.99
LMR LRT <i>p</i> value	-	<.001	<.001	0.01	0.07
VLMR LRT	-	5910.93	1408.81	552.21	431.19
VLMR LRT <i>p</i> value	-	<.001	<.001	0.009	0.07
BLRT <i>p</i> value	-	<.001	<.001 ^a	<.001 ^a	<.001 ^a
Entropy	-	0.86	0.82	0.81	0.78

Note. AIC = Akaike information criterion; BIC = Bayesian information criterion; CAIC = consistent Akaike information criterion; SABIC = sample-size adjusted Bayesian information criterion; LL = Log likelihood; LMR = Lo-Mendell-Rubin Adjusted likelihood ratio test; VLMR-LRT = Vuong-Lo-Mendell-Rubin adjusted likelihood ratio test. ^a *p* value might not be trustworthy due to local optima. Grimm et al. (2017) caution against making model choice decisions based on the BLRT when this message is reported.

The four-class model shown in Figure 2 includes the following trajectory subgroups: 1) High Increasing group (7%), who began with moderate scores at Wave 3, but gradually increased over time ; 2) High Decreasing group (10%), who like Class 1, began with moderate scores in Wave 3 but descended into much lower scores by Wave 7; 3) Low Increasing group (17%), with children beginning with low scores that and increased over time; and 4) Low Stable group (66%), with children demonstrating consistently low scores across 5 time points.

2.4.2.2 Figure 2

Internalising Symptom Trajectories: 4-Class LCGA Model



2.4.3 Parenting Behaviours Predicting Membership in Trajectory Classes

Table 3 shows the regression results.

Compared to the low stable group, children with high increasing problems had significantly greater odds of low parental self-efficacy ($p < .001$) and low family SEP ($p = .001$). Females had significantly lower odds of being in the high increasing group compared to males ($p < .001$).

Compared to the low stable group, children with low increasing problems had significantly greater odds of experiencing hostile parenting ($p < .001$), low parental self-efficacy ($p = .02$), and low family SEP ($p = .003$). Females had significantly lower odds of being in the low increasing group compared to males ($p < .001$).

Compared to the high decreasing group, children with high increasing problems had significantly greater odds of low parental self-efficacy ($p = .006$), yet had significantly lower odds of experiencing low parenting warmth ($p = .04$). SEP was not a

significant predictor of membership in the high increasing class compared to the high decreasing group. Females had significantly lower odds of being in the high increasing group compared to males ($p = .005$).

2.4.3.1 Table 3

Results of Multinomial Logistic Regression Identifying Significant Predictors of Internalising Symptoms Trajectory Group Membership (n = 3370)

Parent Variable	B (SE)	Odds Ratio	p-value
<i>High increasing class vs low stable class</i>			
Low Parenting Warmth	-.17 (.20)	.84	$p = .39$
Hostile Parenting	.10 (.07)	1.10	$p = .14$
Low Parental Self-Efficacy	1.07 (.17)	2.91	$p < .001$
Low Family SEP	.31 (.10)	1.36	$p = .001$
Child Gender Female	-.68 (.18)	.51	$p < .001$
<i>Low increasing class vs low stable class</i>			
Low Parenting Warmth	.06 (.16)	1.06	$p = .69$
Hostile Parenting	.18 (.05)	1.20	$p < .001$
Low Parental Self-Efficacy	.27 (.12)	1.32	$p = .02$
Low Family SEP	.20 (.07)	1.23	$p = .003$
Child Gender Female	-.46 (.13)	.63	$p < .001$
<i>High increasing class vs high decreasing class</i>			
Low Parenting Warmth	-.55 (.27)	.58	$p = .04$
Hostile Parenting	-.10 (.09)	.90	$p = .26$
Low Parental Self-Efficacy	.64 (.23)	1.89	$p = .006$
Low Family SEP	.08 (.12)	1.09	$p = .50$
Child Gender Female	-.65 (.23)	.52	$p = .005$

Note. Results in bold represent statistically significant odds ratios. Family SEP = Family socioeconomic position. An odds ratio of less than 1 corresponds to decreased odds of being in the unfavourable trajectory, whereas an odds ratio of greater than 1 corresponds to a greater odds of being in the unfavourable trajectory. Results for all other regression analysis comparisons are available in the Supplementary Materials (Supplementary Table 2).

2.5 Discussion

This study investigated the trajectories of internalising symptoms across eight years in a large population-based infant cohort of Australian children. Subgroups of children with differing symptom trajectories from preschool to early adolescence were identified, and we examined whether early parenting characteristics were associated with each trajectory, controlling for socioeconomic factors and child gender. As expected, the current study identified four distinct longitudinal trajectories of internalising symptoms, differentiating children with problematic trajectories from those following a relatively normal developmental pathway. Analyses indicated that lower parental self-efficacy assessed in toddlerhood was significantly associated with increasing internalising trajectories, when compared with resilient courses of symptoms. Higher hostile parenting was significantly associated with an emerging trajectory of de novo internalising symptoms when compared with a low stable trajectory.

As hypothesised, there was a class characterized by a stable trajectory of internalising symptoms. The majority of children (66%) were in this “Low Stable” group, and this is broadly consistent with findings that approximately two-thirds to three quarters of children do not have anxiety or internalising disorders (Cartwright-Hatton et al., 2006). However, another class demonstrated persistently high problems that increased over time (7%). For this class, at age 4/5 years, internalising symptoms were moderate but continued to increase until they stabilized at age 10/11 years. A third class demonstrated low symptoms in preschool but progressively worsened over time (17%). Finally, there was also a subgroup of children who appeared resilient and improved over time (10%). This four-class solution is broadly consistent with previous studies that have examined internalising symptom (e.g., Davis et al., 2015).

In order to inform parenting intervention approaches for children at risk of poorer socio-emotional outcomes, we identified early parenting characteristics in the toddler years that are associated with membership in these internalising trajectories. Parents who reported low levels of self-efficacy had particularly elevated odds of a child following an unfavourable trajectory of internalising symptoms. Strikingly, children of parents with low parental self-efficacy had 2.91 greater odds of having high increasing internalising symptoms than low internalising symptoms across time. Our findings are consistent with Ahun et al. (2018), who found that low parental self-efficacy was associated with higher likelihood of membership in elevated internalising trajectories of children between the ages of 6 and 12 years.

Robust findings demonstrate that parental self-efficacy is related to parental competence (Albanese et al., 2019; Jones & Prinz, 2005). It has been posited that parents with higher self-efficacy are more likely to engage in effective parenting behaviours, which in turn promote positive socio-emotional development in their children (Ardelt & Eccles, 2001; Bandura, 1977). Moreover, social learning theory would suggest that parental self-efficacy may have a direct impact on child outcomes through modelling of beliefs and efficacious behaviour (Bandura, 1977). For example, as the parent models positive attitudes towards challenges and belief about their own ability to cope in the face of adversity, the child learns that he or she is able to manage challenges, which helps the child engage with others and be less likely to internalise their difficulties (Ardelt & Eccles, 2001). This potentially may help to mitigate other vulnerabilities.

It was noteworthy that the trajectories of children of hostile parents who demonstrated low symptoms in early childhood were more likely to be characterised by increasing internalising problems than low stable symptoms. In fact, even very low

levels of parental irritability, anger and rejection were associated with unfavourable trajectories of internalising symptoms. Given these children started off with relatively low levels of internalising symptoms, this suggests that hostile parenting is a particularly noxious factor for children who are otherwise well-adjusted in early childhood. Our findings converge with prior research showing that hostile parenting is related to child depression, anxiety and internalising problems (McLeod, Weisz, et al., 2007; McLeod, Wood, et al., 2007; Piquart, 2017b; Yap & Jorm, 2015). Hostile parenting has been suggested as regular stressor that serves to increase psychological distress, reduce a child's sense of self-worth and increase feelings of hopelessness (see McKee et al., 2008).

We note that parental hostility did not appear to distinguish between the high increasing and the high but decreasing trajectory classes. This lack of association may have been due to limited variability among participants in responses to the parental hostility items. Additionally, while parental hostility may be associated with worsening trajectories among children with otherwise low levels of internalising symptoms, that other factors may play a part in determining whether children with already high levels of internalising symptoms remain at high levels or otherwise improve, such as parental warmth, parental self-efficacy and child gender.

A surprising finding was that low parenting warmth was not predictive of increasing symptoms across time compared to the low stable internalising trajectory. This contrasts with a wealth of data demonstrating positive associations between warm parenting and better socio-emotional outcomes (McLeod, Weisz, et al., 2007; McLeod, Wood, et al., 2007; Piquart, 2017b; Yap & Jorm, 2015). Nonetheless, we note that (low) parenting warmth was associated with elevated internalising symptoms at wave 3. However, early parental warmth was not predictive of the trajectories of internalising

symptoms across subsequent years. Future studies should aim to investigate parental warmth throughout childhood as it is possible that parental tendencies to display warmth are variable across time, or that other indices related to warmth, such as parental sensitivity (i.e., capacity to correctly interpret and respond appropriately to child cues), are better predictors of internalising trajectories.

We acknowledge several limitations of this study. Selective attrition may have biased the results and limited the generalizability of findings, as those retained in the current study were generally more advantaged than those excluded due to attrition. Thus, given socioeconomic disadvantage typically increases the risk of poorer socio-emotional outcomes (Goldfeld et al., 2018), it is possible that our findings are a conservative estimate of the impact of parenting hostility and parenting self-efficacy on internalising symptoms compared with a clinical or much less advantaged sample. Also, while brief parent-report measures are commonly utilised in large epidemiological studies, a limitation of this study was that it relied solely on parent report measures and as noted, the SDQ Emotional Problems subscale had relatively low internal consistency at some waves of assessment. Moreover, the internalising trajectories were based on parent-reported symptoms not clinical diagnoses. Furthermore, the convergence issues associated with our initial LGMM analyses required the use of an LCGA approach which carries the assumption that all participants within each given class had the identical growth trajectories. This study also accounts for a limited number of parenting and family risk factors that influence the development of internalising symptoms across time, such as child temperament and parental mental health. It is likely that there are complex additive and bidirectional relationships between the child's own biology and a range of other environmental contexts that may affect these trajectories (Bronfenbrenner, 1979). These are important areas to investigate in future research.

Overall, parenting hostility, low self-efficacy and socioeconomic disadvantage during the toddler years were predictive of unfavourable trajectories of internalising symptoms across later childhood. Additionally, male children were more likely than females to follow unfavourable trajectories. Interestingly, in both trajectories that showed deteriorating pathways, these predictors demonstrated similar patterns of risk. So even for children who did not show elevated internalising symptoms during the preschool years, hostile parenting, low self-efficacy and family socioeconomic disadvantage were predictive of elevated internalising symptoms over time. This information is helpful for early identification of risk and may be used to inform clinical decisions. Increasing internalising symptom trajectories in childhood have been shown to predict depression in adolescence (Toumbourou et al., 2011), highlighting the importance of early intervention. Furthermore, many researchers in the field of child development advocate for the benefits of early intervention compared to intervention later in life (Shonkoff et al., 2016). While parenting hostility demonstrated relatively small effects, considering the potentially enduring consequences of parenting behaviours, and the various interactions and indirect effects parenting has on child developmental outcomes, even small increased odds of being in unfavourable trajectory groups can have large costs and consequences for service provision at the population level. Moreover, evidence from preventative parenting programs for depressed or anxious parents focusing on increasing parenting warmth and positive parenting and decreasing hostility have a positive influence on child internalising problems, depression and anxiety (Beardslee et al., 2003; Pella et al., 2017). Together these findings provide converging evidence for the importance of equipping parents to provide nurturing care that supports young children's development, particularly for children who may start life with early socioeconomic disadvantage.

2.6 Chapter 2 References

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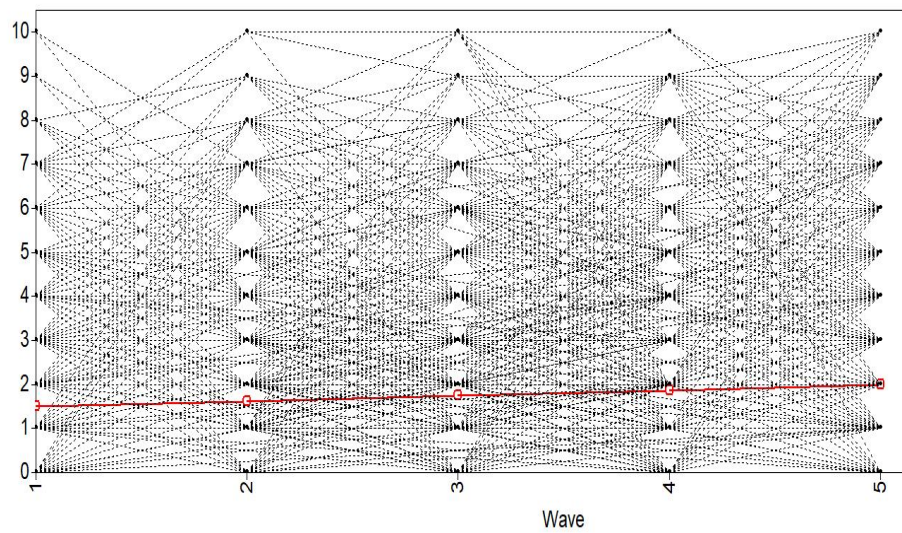
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2.7 Chapter 2 Appendix: Supplementary Figures and Tables

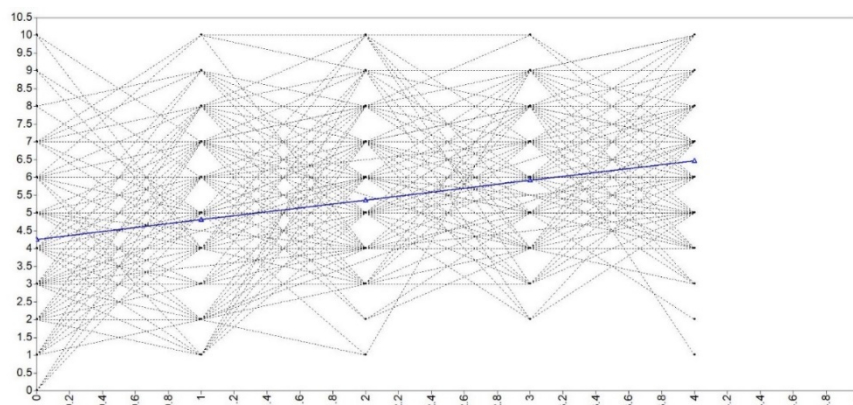
Supplementary Figure 1

Graph Illustrating the Estimated Means and Observed Individual Scores for Each Participant in the Overall Sample



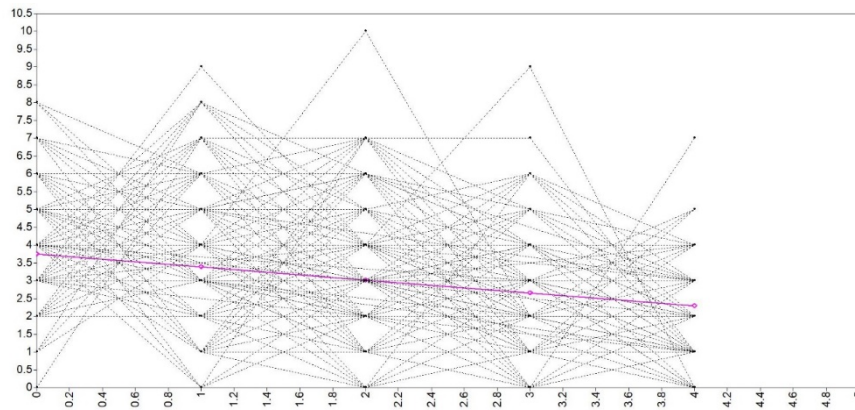
Supplementary Figure 2

Graph Illustrating the Observed Individual Participant Trajectories and the Mean Trajectory for Class 1, High Increasing, of the 4-Class Solution

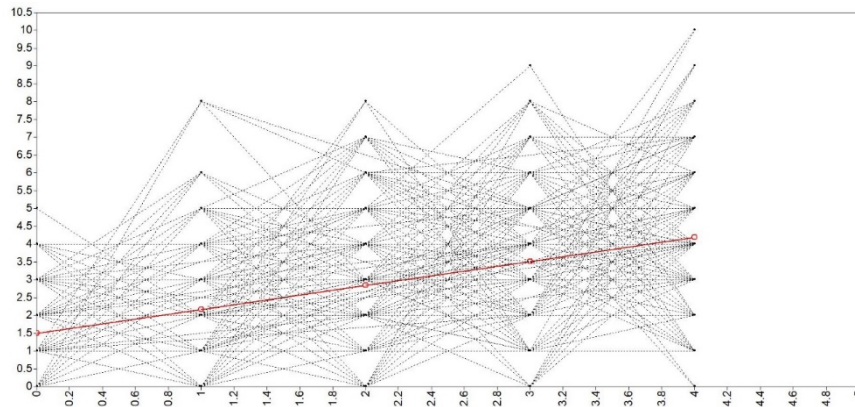


Supplementary Figure 3

Graph Illustrating the Observed Individual Participant Trajectories and the Mean Trajectory for Class 2, High Decreasing, of the 4-Class Solution

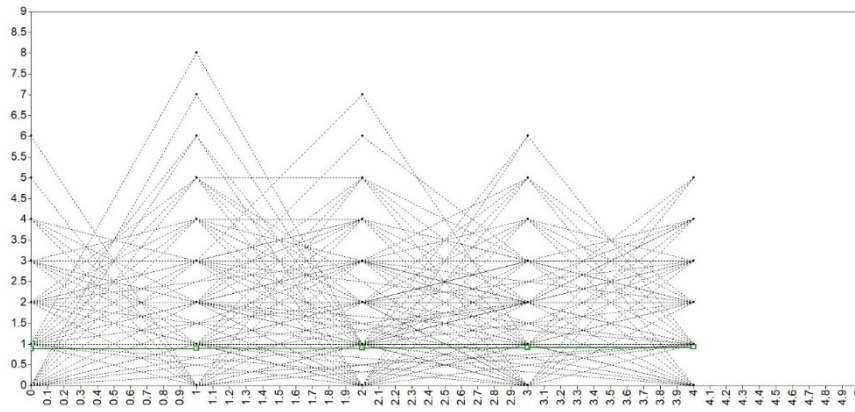
**Supplementary Figure 4**

Graph Illustrating the Observed Individual Participant Trajectories and the Mean Trajectory for Class 3, Low Increasing, of the 4-Class Solution



Supplementary Figure 5

Graph Illustrating the Observed Individual Participant Trajectories and the Mean Trajectory for Class 4, Low Stable, of the 4-class Solution



Supplementary Table 2

Results of multinomial logistic regression identifying significant predictors of internalizing symptoms trajectory group membership (n = 3370)

Parent Variable	B (SE)	Odds Ratio	p-value
<i>High decreasing class vs low stable class</i>			
Low Parenting Warmth	.38 (.19)	1.47	p = .04
Hostile Parenting	.20 (.07)	1.22	p = .002
Low Parental Self-Efficacy	.43 (.16)	1.54	p = .006
Low Family SEP	.22 (.08)	1.25	p = .005
Child Gender Female	.03 (.16)	.97	p = .84
<i>Low increasing class vs high decreasing class</i>			
Low Parenting Warmth	-.32 (.25)	.73	p = .20
Hostile Parenting	-.02 (.08)	.98	p = .83
Low Parental Self-Efficacy	.16 (.20)	.86	p = .43
Low Family SEP	-.02 (.10)	.98	p = .85
Child Gender Female	-.43 (.21)	.65	p = .04
<i>High increasing class vs low increasing class</i>			
Low Parenting Warmth	-.23 (.23)	.79	p = .32
Hostile Parenting	-.08 (.08)	.92	p = .27
Low Parental Self-Efficacy	.79 (.20)	2.21	p < .001
Low Family SEP	.10 (.11)	1.11	p = .35
Child Gender Female	-.22 (.21)	.80	p = .28

Note. Results in bold represent statistically significant odds ratios. Family SEP = Family socioeconomic position. An odds ratio of less than 1 corresponds to decreased odds of being in the unfavourable trajectory, whereas an odds ratio of greater than 1 corresponds to a greater odds of being in the unfavourable trajectory.

Chapter 3: Parenting Intervention for Child Maltreatment – Lessons from the Literature

3.1 Results from the Preceding Study

The first study (Kemmis-Riggs, Grove, et al., 2020) investigated the influence of parenting behaviours on internalising symptoms, one particular aspect of child socio-emotional development, across eight years in a large population-based infant cohort of Australian children. A better understanding of developmental trajectories of internalising problems and how they relate to parenting behaviours is useful to inform parenting intervention approaches for children at risk of poorer socio-emotional outcomes, such as children experiencing early adversity. The previous study identified subgroups of children with differing symptom trajectories from preschool to early adolescence, and examined whether early parenting characteristics were associated with each trajectory, controlling for socioeconomic factors and child gender. Importantly, findings indicated that low parenting self-efficacy during the toddler years were significant predictors of unfavourable trajectories of internalising symptoms across later childhood. Additionally, parenting hostility was a significant predictor of increasing trajectories of internalising symptoms for toddlers who initially demonstrated low internalising symptoms. These results add support for the value of a treatment approach that targets these parent characteristics; if low parenting self-efficacy and parenting hostility contribute to increasing internalising problems, then improving parenting self-efficacy and reducing hostility are obvious targets to include in treatment that aims to support child socio-emotional development. Further, if these parenting characteristics are important factors in a population-based sample, it is feasible to suggest that they are equally, if not more, critical for children with an identified history of complex trauma,

considering they are already at higher risk of internalising and externalising problems (Burns et al., 2004; Keyes et al., 2012; Plant et al., 2017).

Typically, internalising symptoms in young children in normative populations are addressed using family-based interventions that target anxious and depressive symptoms directly, by reducing avoidance of feared situations and improving coping skills. Interventions based on cognitive behavioral principles have the most robust evidence for improving child internalising symptoms (Australian Psychological Society, 2018; National Institute for Health and Care Excellence (NICE), 2013b). However, these are likely not sufficient for children who have experienced complex trauma, because as discussed in [Chapter 1](#), they are facing substantial additional challenges, such as disrupted attachment, increased potential for fear conditioning, difficulties identifying and responding appropriately to emotional expressions, memory impairments, and reduced executive control, including working memory, attention, decision-making, behavioural regulation, and mood and impulse control (National Scientific Council on the Developing Child, 2010, 2014; Shonkoff et al., 2012).

While the results from the first study are useful to inform the parenting program we develop for young parents, we acknowledge that they contribute to one piece of the picture. In order to develop effective parenting interventions to support young parents and their children who have experienced trauma, the next logical step for the study series is to investigate existing psychosocial strategies targeted at the family level that aim to reduce the risks associated with child maltreatment and related adversity. Given parenting behaviours are considered less than optimal and in some cases, harmful, a wide range of parenting interventions aimed at strengthening parenting skills and reducing associated risks have been developed for parents considered to be at risk of maltreatment. Thus, the next section synthesises existing literature examining the

efficacy of parenting programs for maltreatment prevention and intervention, highlighting the important intervention components that contribute to improved outcomes.

3.2 Parenting Programs for Maltreatment Prevention and Intervention

The World Health Organisation estimates that 22.6% of adults have suffered childhood physical abuse, 36.3% suffered child emotional abuse and 16.3% experienced physical neglect (Butchart & Mikton, 2014). This estimate is based on data from 133 countries, including 6.1 billion people, which represents 88% of the world population (Butchart & Mikton, 2014). This report found no significant differences between boys and girls who experience abuse and neglect, however, the lifetime prevalence rates for childhood sexual abuse demonstrate larger differences, with 18% prevalence rates for girls compared to 7.6% for boys (Butchart & Mikton, 2014). A recent series of meta-analyses indicated that overall estimated prevalence rates of child abuse and neglect were between 0.3% for studies based on professional informants and 36.3% for studies based on self-report (Stoltenborgh et al., 2015). In Australia in 2017-2018, 159,000 children received child protection services, representing a rate of 1 in 35 children aged 0–17 in the general population (Australian Institute of Health and Welfare, 2019). Aboriginal and Torres Strait Islander children were 8 times as likely as non-Indigenous children to have received child protection services. Thus, there is no doubt that child maltreatment is a significant problem worldwide.

As discussed in [Chapter 1](#), child maltreatment has profound impacts on children's short and long-term socio-emotional development, physical and mental health, and parenting practices across generations (Alink et al., 2012; Assink et al., 2018; Shonkoff et al., 2012). Because of these substantial costs to individuals, families and society as a whole, multiple intervention policies and practices have been developed

and implemented. Parenting practices are considered a proximal risk factor for child maltreatment, so a wide range of parenting interventions aimed at strengthening parenting skills and reducing associated risks have been developed for parents considered to be at risk of maltreatment. Identified parent-child risk factors for child physical abuse include parent anger/hyperactivity, family conflict, limited family cohesion (Stith et al., 2009), negative and coercive parent-child interactions (Cicchetti & Valentino, 2006), and a lack of knowledge or inappropriate use of effective discipline strategies (Kolko, 2002). Maltreating parents are also more likely to be stressed (Sprang et al., 2005), display less sensitivity to their child's needs (Lindhiem et al., 2011), make negative and internal attributions about their child's externalising behaviour (Dadds et al., 2003), and display more hostile intent and use harsher disciplinary strategies (Montes et al., 2001) than non-maltreating parents. Particular risk factors have been identified for child neglect, including poor parent-child relationship quality, negative parental attributions about their child, parent stress, parent anger/hyper-reactivity and low parent self-esteem (Stith et al., 2009). Given these parenting behaviours and interaction patterns are less than optimal, they are often the target of interventions aiming to reduce or prevent maltreatment.

Several high quality systematic reviews and meta-analyses have examined the effectiveness of these parenting interventions. Typically, programs are aimed at either prevention (i.e., prevent occurrence of maltreatment in families with multiple risk factors for maltreatment) or reduction of maltreatment (i.e., reduce re-occurrence in families who have been reported for maltreatment). Some programs, however, are universal and available for the general population (e.g., Oveisi et al., 2010; Sanders, 1999). The outcomes of parenting programs have been mixed and at times demonstrate

minimal efficacy (Chen & Chan, 2015; Euser et al., 2015; Levey et al., 2017; MacMillan et al., 2009).

Home visitation programs are one common type of parenting intervention. They typically aim to prevent maltreatment for mothers identified as high risk (based on factors such as age, poverty, history of abuse, mental illness or substance abuse) and begin either prenatally or soon after the infant is born. RCTs of home visitation programs have shown inconsistent results (Levey et al., 2017; MacMillan et al., 2009). However, two programs in particular have shown significant benefits. These are The Nurse Family Partnership, developed in the USA (Olds, 2006) and the Early Start program in New Zealand (Fergusson et al., 2005). The Nurse Family Partnership (NFP), which has been evaluated in three rigorous RCTs across a range of samples in the USA, has demonstrated reduction in child abuse and neglect (assessed with official child protection reports), child injuries and improvements in long term social, emotional and health related outcomes for mother and baby (Eckenrode et al., 2000; Kitzman et al., 1997; Olds et al., 1997; Olds et al., 1998; Olds et al., 2007). NFP is a program that typically begins before babies are born and is staffed by public health nurses. Olds and colleagues suggest that the establishment of supportive relationships between with the mother and nurse in the prenatal period is integral for effective outcomes. NFP draws on theories of human ecology, attachment and self-efficacy. Key elements of the program include the emphasis on promoting mothers' sensitive, empathic care of their children, parents' reflection on their own childrearing history and making informed decisions about how they want to parent their own children (MacMillan et al., 2009). Early Start has been shown to reduce child injuries and hospital admissions which are associated outcomes of physical abuse and neglect (Fergusson et al., 2005). Early Start is based on a social learning approach and its fundamental components include a tailored approach

based on family needs and resources, development of strong therapeutic relationships between support worker and parent, collaborative problem-solving, and provision of support and guidance to encourage family strengths (MacMillan et al., 2009). A recent systematic review of eight RCTs evaluating prevention programs for high risk mothers found that home visitation interventions were also effective in reducing maternal depression, repeat pregnancy, and improving mother-infant interactions, maternal employment, child cognitive development and child externalising behaviours (Levey et al., 2017). This review identified factors related to higher efficacy: interventions starting in the prenatal period, longer follow-up post intervention, and explicitly defined intervention content.

Euser et al. (2015)'s meta-analysis evaluated 20 parenting programs aimed to prevent or reduce child maltreatment. Types of programs included home visitation, parent training and parent support (or a combination of these). While they did not find an overall significant combined effect of intervention programs on the reduction or prevention of maltreatment in either the general population, high risk samples or maltreating samples, they found several moderating variables that impacted outcomes. Findings indicated that programs that provided parent training were effective in reducing child abuse (E.g. Parent-Child Interaction Therapy and Multisystemic therapy for child abuse and neglect); however programs that solely provided support (e.g. promoting healthy behaviour during pregnancy, or developing social support networks) were not effective. Programs that were a moderate length (e.g. 6-12 months) or had a moderate number of sessions (e.g. 16-30) demonstrated larger effect sizes. Their analysis also indicated that there were significant effects in maltreating samples, rather than at risk samples, which led authors to conclude that parenting programs were

effective in reducing re-occurrence of maltreatment but less effective in the prevention of child maltreatment.

The most recent review in this area found that four studies for parents who maltreat their children reported a statistically significant difference between intervention and control group, indicating that two interventions were effective in reducing the incidence of further maltreatment – Parent-Child Interaction Therapy and SafeCare (Whitcombe-Dobbs & Tarren-Sweeney, 2019). However, reviewers noted that several methodological limitations compromised prior research and that none of the reviewed interventions had been found to be effective for all types of maltreatment through a high quality RCT. Findings from these reviews suggest the need for the continued focus on development and piloting for preventative programs for families at risk of maltreatment (Euser et al., 2015; Whitcombe-Dobbs & Tarren-Sweeney, 2019).

3.3 Effective Components of Parenting Programs for Maltreatment Prevention

In order to advance understanding about the effectiveness of child maltreatment interventions, van der Put et al. (2018) examined whether certain components, such as delivery variables or intervention content, impacted intervention effectiveness. Their meta-analysis included 130 RCTs or quasi-RCTs, with 121 non-overlapping samples, published between 1977 and 2017. They examined the effect of structural factors (e.g. type of worker, duration of intervention), contextual factors (e.g. aim of intervention, target families, type of intervention), content (e.g. parenting skills, relationship between parent and child), delivery method (e.g., modelling, role-play, psychoeducation), sample characteristics (e.g. parent age, sample size), study design (e.g. RCT, quasi-RCT) and outcome characteristics (e.g. follow-up, duration of study). They included both preventative interventions (aimed at either the general population or high risk samples)

and interventions aimed to reduce maltreatment, which authors termed *curative* interventions.

Their meta-analysis found a significant small overall effect size for both preventative (Cohen's $d = 0.263$; 95% CI [0.197; 0.239]) and curative interventions (Cohen's $d = 0.364$; 95% CI [0.227; 0.]). A range of interventions were effective in preventing maltreatment, including home visitation, parent training, family-based/multisystemic, substance abuse and combined interventions. However, before-school interventions, general prevention interventions and crisis interventions did not show significant effects on prevention of maltreatment. The effect of parent training interventions and substance abuse interventions was significantly higher than home visitation interventions. For curative interventions, parent training interventions, family-based/multisystemic and cognitive behaviour therapy had a significant effect on reducing maltreatment.

Higher effect sizes were found for preventative interventions that were delivered by professionals and were shorter in duration (e.g. 0-6 months). None of the structural components (e.g. delivery by professional, duration) were significantly related to effect size for curative interventions. Interestingly, the effect sizes of preventative interventions increased as follow-up periods increased. Authors suggest that this indicates a potential sleeper effect, suggesting it takes some time for parents to implement skills and improve practices after cessation of the intervention before a positive effect emerges. Larger effect sizes were found for preventative interventions that focussed on improving parenting self-confidence, whereas for curative interventions larger effect sizes were found for interventions that focussed on improving parenting skills and providing social and/or emotional support.

Overall, results indicate that parenting programs offer promising opportunities for both the prevention and reduction of maltreatment. Programs that have demonstrated effective outcomes include the following elements: the establishment of therapeutic relationships between clinician and parent, the promotion of sensitive, empathic parenting, parental reflection on their own childrearing history, a tailored approach based on family needs and resources, collaborative problem-solving, improving parenting skills, providing social and emotional support and increasing parenting self-confidence (Fergusson et al., 2005; Olds, 2006; van der Put et al., 2018). This indicates that these are particularly useful components to integrate into existing or newly developing interventions that target prevention and/or reduction of maltreatment and will be used to inform the development of Holding Hands Young Parents.

3.4 What Happens When Risk Cannot Be Addressed Within Families?

In Australia and in the majority of developed countries around the world, when risk cannot be addressed, children are removed from their birth families and placed in alternative care. The most common form of alternative care is foster care or kinship care (i.e., placement with family members). Alternative care provides a kind of naturalistic experiment, in which the cause of childhood trauma is removed from the picture and the child is placed in a new relational context. If parenting characteristics alone were sufficient to address and remediate the effects of childhood trauma, we could expect that removal from risk and placement with a safe caregiver would lead to improved outcomes. Research has shown, however, that this is not the case. Findings in the alternative care field demonstrate that simply removing children from a harmful environment does not automatically reverse negative impacts of trauma (Shonkoff et al., 2016).

This ‘alternative care experiment’ shows that both children who have experienced childhood trauma and their carers have extra needs. Research discussed in [Chapter 1](#) shows that once a child experiences chronic toxic stress this can lead to problems in social and emotional development, increasing challenging behaviours and children’s overall capacity to seek help when under threat, elicit nurturing caregiving and engage in supportive relationships. This ‘experiment’ shows that carers need to ‘supercharge’ their parenting abilities to meet the extra relational needs of children with childhood trauma. This includes both helping carers meet the extra needs of children with complex trauma and cope with the many challenges of meeting these extra demands.

Therefore, alternative care research provides vital information about how to help foster/kinship carers meet the needs of children with trauma, and it is also extremely useful to inform interventions for parents at risk as well. This is because foster care research shows that children with childhood trauma need more than the ‘normal’ or ‘good enough’ parenting that would be sufficient for children without those experiences. Biological parents at-risk share with foster/kinship carers in their experience of caring for children with complex trauma. They are also caring for children in an environment of disrupted attachment and have their own needs in meeting the challenges of providing such care. For this reason, this research shows that, in order to help biological parents caring for these children, helping them to parent ‘normal’ children will not be enough. They will need to understand, address and cope with the consequences of the maltreatment in which they may have played a part. Examining interventions that have been helpful to foster/kinship carers to remediate the effects of childhood trauma provides a broader picture of how to help biological parents meet the needs of their own children who have the same experiences, and thus similar needs. Hence, the second

study in this series extends findings presented in this chapter by investigating parenting interventions for foster and kinship care. The purpose of this study was to identify gaps in current intervention research and provide suggestions for future intervention development

3.5 Study 2

The second study is a systematic literature review that examines the comparative effectiveness of foster and kinship care interventions and provides a fine-grained analysis of the components in current psychosocial interventions that contribute to improved outcomes for children in alternative care. The study was published online in 2017 and in print in 2018 in *Clinical child family psychology review*. The content remains the same as published and is presented using the APA referencing style. Spelling has been reverted from U.S. English (for publication) to U.K. English, for consistency.

3.6 Chapter 3 References

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Chapter 4: Study 2 - Program Components of Psychosocial Interventions in Foster and Kinship Care: A Systematic Review

Kemmis-Riggs, J., Dickes, A., & McAloon, J. (2018). Program Components of Psychosocial Interventions in Foster and Kinship Care: A Systematic Review. *Clinical child family psychology review*, 21(1), 13-40.

4.1 Abstract

Background: Foster children frequently experience early trauma that significantly impacts their neurobiological, psychological and social development. This systematic review examines the comparative effectiveness of foster and kinship care interventions. It examines the components within each intervention, exploring their potential to benefit child and carer wellbeing, particularly focussing on child behaviour problems, and relational functioning.

Methods: Systematic searches of electronic databases included PsycINFO, MEDLINE, Web of Science Core Collection, the Cochrane Collaborations Register of Controlled Trials (CENTRAL), and Scopus to identify randomised or quasi-randomised trials of psychosocial foster/kinship care interventions, published between 1990 and 2016.

Results: Seventeen studies describing 14 interventions were included. Eleven studies reported comparative benefit compared to control. Overall, effective interventions had clearly defined aims, targeted specific domains and developmental stages, provided coaching or role-play, and were developed to ameliorate the effects of maltreatment and relationship disruption. Interventions effective in reducing behaviour problems included consistent discipline and positive reinforcement components, trauma psychoeducation, problem solving and parent-related components. Interventions effective in improving parent-child relationships included components focussed on developing empathic, sensitive and attuned parental responses to children's needs.

Conclusion: Given the prevalence of both behaviour problems and relational difficulties in foster families, targeting these needs is essential. However, interventions have tended to measure outcomes in either behavioural or relational terms. A more coordinated and collaborative research approach would provide a better understanding of the association between parent-child relationships and child behaviour problems. This would allow us to develop, deliver and evaluate programs that combine these components more effectively.

Protocol Registration Number: PROSPERO CRD42016048411

Keywords: Interventions; Foster care; Kinship care; Systematic review; Looked after children; Maltreatment

4.2 Introduction

The number of children in foster or kinship care placements varies between regions, with an estimated 51,850 in England (as of March 2016; UK Department of Education, 2015), 43,009 in Australia (as of 30 June 2014; Australian Institute of Health and Welfare, 2015), and 415,129 in the USA (as of September 30 2014; US Department of Health and Human Services, 2015). This represents between 0.4% and 1% of child populations in these countries (Australian Institute of Family Studies, 2016; ONS, 2015; US Federal Interagency Forum on Child and Family Statistics, 2016). The majority of children taken into alternative care have experienced complex trauma, which includes maltreatment (physical, emotional or sexual abuse and/or neglect), traumatic loss, and/or related experiences of maltreatment such as prenatal exposure to drug and alcohol use and disrupted attachment with their primary caregiver (Cicchetti & Valentino, 2006; Perry, 2009). This early and multi-faceted trauma has a vast impact on the neurobiological, psychological and social development of foster children and is a significant risk factor for poor outcomes throughout childhood and adulthood (Fisher, 2015; Van der Kolk, 2005).

Compared to the general population, children in care have an increased risk of executive functioning deficits (Bruce et al., 2013; Bruce, McDermott, et al., 2009; Pears et al., 2008), alterations in neuroendocrine stress-response functioning (Dozier et al., 2006; Fisher & Stoolmiller, 2008), behavioural and emotional problems such as conduct problems, anxiety disorders, depression and post-traumatic stress disorder (Burns et al., 2004; Ford et al., 2007; Landsverk et al., 2002; Lawrence et al., 2006; McMillen et al., 2005; Nathanson & Tzioumi, 2007; Osborn et al., 2008; Sawyer et al., 2007) and difficulties in social/relational domains (Bruce, Tarullo, et al., 2009; Dozier et al., 2001; Stovall & Dozier, 1998). The large number of children in foster/kinship care and the

extent of their identified vulnerabilities indicate a clear need for effective interventions that ameliorate the consequences of complex trauma in foster children.

Foster/kinship carers are in a unique position to be able to offer reparative care to children who have been removed from their birth parents due to maltreatment. By providing stable, safe and consistent environments, in which children may learn to develop trust in relationships and regulate their emotions and behaviour, foster parents have the potential to help alleviate the sequelae of complex trauma. However, given the challenges of parenting children with complex needs, placement disruption is a common problem within the child welfare system (Fisher et al., 2013). Foster children who experience placement instability are at a much higher risk for problems in developmental, social, emotional, behavioural and cognitive domains than children who do not experience that instability (Harden, 2004; Rubin et al., 2007; Ryan & Testa, 2005). While a higher number of placement changes is associated with poorer child outcomes and may inhibit the development of these domains, the causal link is not well established. Fisher (2015) suggests that causation may be bi-directional, with higher behavioural problems and deficits in cognitive domains contributing to disrupted placements.

Training that enhances carers' capacity to meet these demands and mitigate risk of placement breakdown has long been argued a necessity for foster/kinship carers (Fisher et al., 2013; Turner et al., 2007). Multiple interventions for foster care families have been developed, with several reviews published examining the evidence of their efficacy (Craven & Lee, 2006; Dorsey et al., 2008; Goldman Fraser et al., 2013; Kerr & Cossar, 2014; Kinsey & Schlosser, 2013; Leve et al., 2012; Rork & McNeil, 2011; Turner et al., 2007). Findings from these reviews suggest that, while there are promising indications that some interventions improve foster child well-being, not all interventions

are equally effective in doing so. Reviews have highlighted significant heterogeneity in research designs, outcomes measured, populations and types of interventions, with varying effect sizes, which has not yet been sufficiently explained by program dosage, theoretical basis or delivery mode (Dorsey et al., 2008; Festinger & Baker, 2013; Kerr & Cossar, 2014). Sandler et al. (2011) recently highlighted the lack of research investigating mediating processes of family based prevention programs.

While existing reviews have evaluated the efficacy of foster interventions as a whole, they have not yet examined different intervention components or investigated whether there is any evidence that certain content or delivery variables are associated with more effective outcomes for foster children and their carers. This type of analysis would provide integral information about which program components may be more effective for specific foster populations or needs. Given the huge individual, social, and financial implications that foster care carries, it is immensely important that the evidence base relating to treatments and their components is adequately researched and that this research is translated into beneficial treatment outcomes.

Kaminski et al. (2008) analysed program components in their meta-analysis of 77 published evaluations of parent training programs for parents of children aged 0 to 7 years with behavioural problems, examining which characteristics of program content and delivery method predicted larger effect sizes on parent and child behaviour measures. Their analysis provided useful information for parenting programs targeting behaviour problems; however, findings were not specific to either foster/kinship care or children exposed to maltreatment, with only one included program involving foster and kinship carers (i.e., Lee & Holland, 1991). This is important because traditional cognitive behavioural parent training programs, despite success in other populations, have not been found to be effective in foster populations (Turner et al., 2007).

Given the established knowledge of the impact of maltreatment and ensuing neurobiological, behavioural and relational vulnerabilities that contribute to unique challenges for foster families, interventions for the foster population likely require additional or adapted components to target specific needs. Thus, a systematic review of foster family-based interventions focused on synthesising common intervention components and investigating if there is evidence that some content or delivery variables are more effective in this population has the potential to inform both clinical practice and future intervention development for foster families.

4.2.1 Aims/Objectives

This review aimed to provide a systematic analysis of randomised or quasi-randomised trials of foster family interventions and their different therapeutic components. Specifically, this review aimed to answer four key questions: (1) what psychosocial interventions have been delivered to improve the wellbeing of foster children and their carers? (2) what are the different components in these interventions? (3) what is the comparative effectiveness of the identified interventions? (4) is there any evidence that certain components are associated with more effective outcomes in the target population? Finally, the review aimed to provide recommendations for future research and program development.

4.3 Method

4.3.1 Protocol and Registration

This review was conducted in accordance with the PRISMA guidelines (Moher et al., 2009; Moher et al., 2015). The review protocol was registered with PROSPERO [CRD42016048411] and developed based on the recommendations outlined in the Cochrane Handbook for systematic reviews (Higgins & Green, 2011).

4.3.2 Inclusion/eligibility criteria

Types of Participants. Foster and/or kinship carers and foster children (aged 0 – 18) in their care with a history of maltreatment and/or who have had involvement with Child Protection Services and have been placed in foster or kinship care because their needs were not being adequately met by their birth parents. Maltreatment is defined as any non-accidental behaviour by parents, caregivers, other adults or older adolescents that is outside the norms of conduct and entails a substantial risk of causing physical, emotional or psychological harm to a child or young person. Such behaviours may be intentional or unintentional and can include acts of omission (i.e., neglect) and commission (i.e., abuse; Australian Institute of Family Studies, 2012).

Types of interventions. Psychosocial interventions involving foster and kinship carers that aimed at improving child and parent well-being during the period of foster care in areas of child behaviour, child mental health, child interpersonal skills, child biomarkers, foster parent-child relationships, foster parent wellbeing, parenting skills and placement stability.

Types of comparisons. Active control (e.g., other treatment) or inactive control (e.g., wait-list, treatment as usual).

Types of outcomes. This review considered studies that included at least one of the following outcomes of child and/or carer wellbeing: child behaviour problems, child mental health, child interpersonal skills, child biomarkers, placement stability and permanency, parent stress/mental health, parenting skills and foster carer-child relationship.

Types of study design. Randomised or quasi-randomised trials (e.g. randomised by birthday, case number, alphabetical order), with sample size greater than 20 participants.

4.3.3 Exclusion Criteria

Foster and kinship carers' have the potential to be the most consistently present therapeutic influence in the lives of the children they look after. For this reason, the focus of this work is on the foster care family system, so interventions for children living in residential/group care, targeted solely towards biological or adoptive parents were excluded. We excluded work that focused on comparisons between children institutionalised since birth who were randomly assigned to continue living in an institutional setting or to be placed in foster care, such as Romanian orphanages (e.g., the Bucharest Early Intervention Project). Additionally, interventions targeted towards children referred to foster care from the juvenile justice system were excluded.

Because the scope of the review was constrained to interventions delivered during the period of foster care we excluded interventions aimed at improving foster youth transition to independence/exit from care or with the primary aim of reuniting the child with his/her family of origin. We also excluded interventions directed towards professionals or in-service delivery in order to focus on interventions delivered at the family level. Given the focus was to evaluate intervention components, we also excluded 'wrap around' interventions (e.g. interventions that included comprehensive mental health and/or substance use services, case management, social support, educational assistance, and/or psychiatric referral) because it was not possible to determine all additional supports provided and analyse their specific contribution to the effectiveness of the intervention meaningfully. This criterion excluded Treatment Foster Care Oregon (TFCO), formerly known as Multidimensional Treatment Foster Care for adolescents (Chamberlain et al., 2007; Leve & Chamberlain, 2005, 2007) and TFCO-P, for preschoolers (Fisher et al., 2005; Fisher & Kim, 2007; Fisher et al., 2007; Fisher et al., 2011).

4.3.4. Identification and Selection of Studies

To identify studies for possible inclusion, we conducted systematic searches of electronic databases including PsycINFO, MEDLINE, Web of Science Core Collection, the Cochrane Collaborations Register of Controlled Trials (CENTRAL), and Scopus. The search strategy was restricted to studies published in peer-reviewed journals, in the English language, from 1 January 1990 to 30 September 2016. Search terms were modified to meet the requirements of individual databases. Search terms included all word variations of (foster care or kinship care or foster child* or foster parent* or foster carer* or foster mother or foster father or foster family or out of home care or looked after children) AND (intervention or therap* or counsel?ing or cognitive behavior?ral therapy or psychotherapy or family therapy or treatment or training). See Appendix A for the electronic search strategy for each database.

4.3.5 Study Selection

The first author initially screened all of the titles for all of the studies to determine their relevance to this review. Studies that could be immediately excluded on the basis of title were discarded. For the remaining references, two authors (JK and AD) independently reviewed abstracts to assess compliance of studies with eligibility criteria. Full text manuscripts were then retrieved and evaluated independently against the inclusion criteria. Disagreements were resolved through discussion. Authors of primary studies were contacted to obtain or clarify any missing data or uncertainties regarding its interpretation. Secondary sources cited in selected studies as providing additional information about the intervention were also retrieved (e.g., “see <xx> for more information on intervention A) and used to provide additional information specifically referenced in the original report.

4.3.6 Data Extraction and Management

We developed a data extraction template that was piloted with five randomly selected studies and modified accordingly. The following information was extracted from each study: authors, year of publication, design, country, setting (community or home-based), participant characteristics (child and/or carer; total number, mean age, gender [proportion female], no. prior placements), type of intervention, theoretical basis, intervention aim, delivery format (group/individual/dyad), duration of intervention, timing of intervention relative to length of time in care, attrition rates, outcomes and time points for outcomes, and results.

In order to examine specific program aspects that might be associated with more effective outcomes, we analysed programs and coded for key components that were addressed by program curricula to meet the identified needs of foster children and their carers (shown in Table 1). Adaptations to traditional parenting programs for maltreatment populations include content focused on parental factors, such as parental self-control, emotion management and attributions (e.g., Chaffin & Friedrich, 2004; Chaffin et al., 2009), so these were also encoded. We also coded programs for key delivery variables that have been shown to predict larger effect sizes on parent and child outcomes in general parenting programs, such as in-session practice (e.g., role role-play and direct coaching with child; Kaminski et al., 2008), as well as delivery variables designed to maintain participation and engagement in foster populations, such as provision of child care during sessions, reimbursement for travel, credit towards foster training requirements, and opportunities to catch up on missed sessions (shown in Table 2). This information was extracted by JK and reviewed independently by AD. Multiple reports of the same study were combined and considered as one study.

4.3.6.1 Table 1*Program Content Variables (Coded as Present or Absent)*

Code	Description
Trauma Psychoeducation	Information about the impact of trauma on child development and implication of how this may affect child responses to foster parents and others, including problem behaviour, dysregulation and attachment difficulties
Positive Parenting Skills	Training to help parents increase child-centred play, following child's interests, unconditional positive regard, and build emotion coaching and active listening skills
Relational Skills	Training to develop parental skills to provide empathic, sensitive and attuned responses to child need and provide nurturing care (including physical touch), even when child does not elicit nurturance
Behaviour Management Skills	Coded specifically: <ol style="list-style-type: none"> 1. Training that develops specific consistent discipline strategies for misbehaviour (time out, selective ignoring) 2. Training to increase specific positive reinforcement strategies (contingent reinforcement)
Problem solving skills	Training that assists parents and children with resolving on-going problems and sources of conflict, including conflict with birth parents
Cognitive/academic skills	Information, training, activities to assist with cognitive or academic domains
Social skills	Information, training, activities to increase child social skills with peers and others
Parent-related factors	Coded specifically: <ol style="list-style-type: none"> 1. Skills taught to assist with parental self-regulation and stress management 2. Self-reflection and discussion of parental attributions about children and training to manage these effectively

4.3.6.2 Table 2

Program Delivery Variables (Coded as Present or Absent)

Code	Description
In-session practice	Opportunities to practice skills in session and receive feedback on skill development via <ol style="list-style-type: none"> 1. role-play or 2. direct coaching with own child
Strategies to maintain participation in program	Coded specifically where possible: <ol style="list-style-type: none"> 1. Provision of child care during sessions 2. Reimbursement for travel 3. Credit towards foster training requirements 4. Opportunity to catch up on missed sessions

4.3.7 Risk of Bias in Individual Studies

Risk of bias for the included studies was assessed using the ‘Risk of Bias’ tool developed by the Cochrane Collaboration (Higgins & Green, 2011). This tool allowed assessment of potential sources of bias in each study, including (1) random allocation; (2) allocation concealment; (3) blinding of participants (4) blinding of outcome assessors; (5) incomplete outcome data (assessment of completeness of outcome data for each main outcome, including attrition and exclusions from the analysis) and (6) reporting bias. Each category was coded as low, high or unclear. The assessment of study quality was undertaken independently by JK and AD. Interrater reliability was estimated with Cohen’s kappa, with an average kappa of 0.70. Disagreements were resolved through discussion.

4.3.8 Data Synthesis

There was substantial clinical, methodological and statistical heterogeneity in the identified foster care interventions, so the use of pooled statistical analysis was not suitable. (For further discussion, see Dickes et al., 2018). For example, the I^2 index was

calculated for a subsample of trials deemed relatively clinically and methodologically homogenous, to gauge the amount of variability in the intervention effects (Higgins & Green, 2011). This included five studies of multi-session interventions delivered to foster carers only (without their children), within a social learning theoretical framework, with child behaviour problems as the outcome of interest (Bywater et al., 2011; Chamberlain et al., 2008; Gavita et al., 2012; Maaskant et al., 2016; Price et al., 2015). However, even with this subsample of trials, statistical heterogeneity was high ($I^2 = 60.40\%$). Thus, we did not conduct any meta-analysis and report a qualitative synthesis of results. We report magnitude of effect sizes as reported by study authors, where they report statistically significant comparative benefit of the intervention compared to control condition ($p < .05$). Calculation of effect sizes was not part of this analysis.

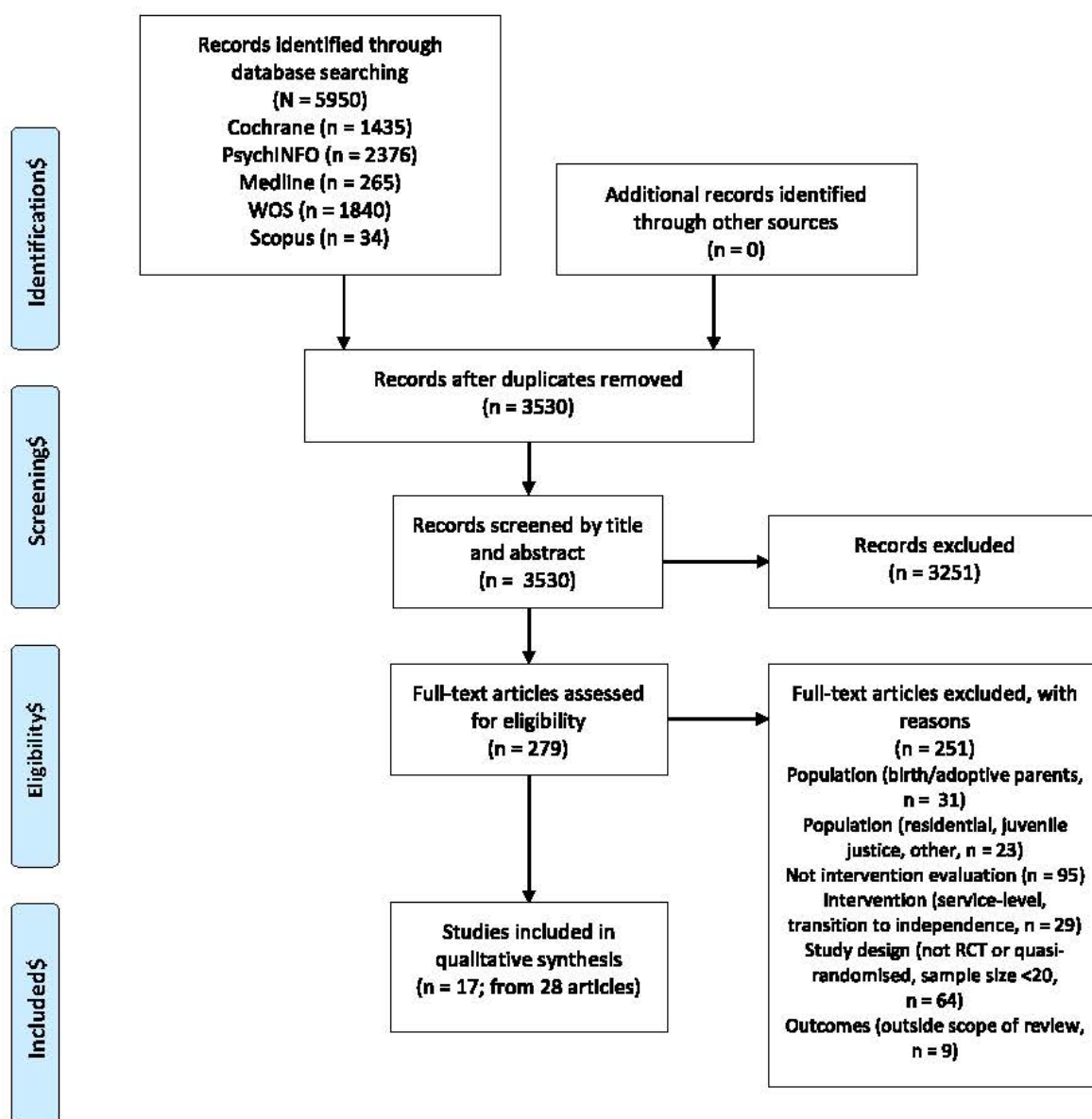
4.4 Results

4.4.1 Study Selection

Figure 1 presents the flow chart of included studies. A total of 3530 records were examined (excluding duplicates). 3251 were rejected at title and abstract, with a further 251 articles rejected after the full article had been reviewed. This resulted in 17 studies (from 28 articles) that were included in the final analysis.

4.4.4.1 Figure 1

PRISMA Flow Chart of Selection of Studies for Inclusion in Systematic Review



4.4.2 Study Characteristics

Characteristics of the included studies, grouped by intervention, are presented in Table 3. Intervention names and abbreviations are provided in Table 4. Multiple foster interventions were identified; the 17 studies included reported on 14 different

interventions, aimed at a wide range of participants with diverse characteristics and needs. The majority of studies were conducted in the USA ($n = 12$), with a much smaller number in the UK ($n = 3$), Romania ($n = 1$), and The Netherlands ($n = 1$).

Research design. All included studies were randomised controlled trials (RCTs). Twelve of the fourteen interventions were evaluated in a single RCT. The remaining two interventions were evaluated in two (ABC1 & ABC2) or three (KEEP1, KEEP2, & KEEP3) RCTs (See Table 3). Of the 17 studies, only two compared the intervention with an active control: ABC1 and PFR.

Sample characteristics. Sample sizes per study ranged from 22 to 700 participants. Half of the interventions reviewed were delivered to carers only; the balance included carers and their foster child. The vast majority of the studies (78%) did not specify when interventions were delivered relative to when the child was placed in care with the participating foster families. Three interventions targeted children recently entering or changing placements, to help establish new parent-child relationships (FFI, PFR, KEEP2; see Table 3).

Eight studies reported including both foster and kinship carers; whereas, two studies reported excluding kinship/relative carers. The remaining 41% of studies did not clearly report whether they included foster or kinship carers or both. None of the interventions were developed for or delivered solely to kinship carers and children in their care.

Target children ranged in age from infancy through to adolescence; however, the majority of interventions were delivered to children whose average ages were between 4 and 11 years. Only three studies included younger children in their infancy or toddler years. Macdonald and Turner (2005) did not specify the child age for inclusion in their

CBT-based parent training intervention (CBT-PT) or report on any child demographic variables.

The number of prior placements ranged from 1 to 20, however, this was only partially reported, making it difficult to provide an accurate estimate of this characteristic. Child maltreatment history and age at first placement were rarely reported. Only three of the 17 studies specified clinical diagnostic criteria for inclusion, namely, clinically significant externalising problems, based on clinical cut-offs on three different parent-report measures. The PCIT trial (Mersky et al., 2016; Mersky et al., 2015) used the Eyberg Child-Behavior Inventory (ECBI; Eyberg and Pincus 1999). The PMTO trial, (Maaskant et al., 2016) used the Strengths and Difficulties Questionnaire (SDQ; Goodman, 2001). The CEBPT trial, (Gavita et al., 2012) used the Child Behaviour Checklist (CBCL; Achenbach & Rescorla, 2001). One study, ABC2 (Sprang, 2009), reported that all included children had been diagnosed with an attachment-based disorder, but did not report how these disorders had been determined or what the specific problems were, other than being substantial enough to threaten placement disruption.

Only 70% the studies reported on foster carer characteristics. This information was generally limited to gender, ethnicity, kinship status and years of experience. Of the studies that reported carer characteristics, carers were typically female, with estimates ranging from 70-100% of the sample.

4.4.2.1 Table 3

Characteristics of Included Studies

Study ID & Country	Author (year)	Design, intervention/ comparison	Intervention: setting / format / duration	Sample size, population, inclusion criteria	Child characteristics	Carer characteristics	Quality
ABC1* USA	Dozier et al. (2006b); Dozier et al. (2008); Dozier et al. (2009); Bick and Dozier (2013)	RCT ABC: 46 DEF: 47	ABC: In home/Dyad ABC: 10 x 1hr sessions DEF: 10 x 1hr sessions	<i>N</i> = 93 Foster Carer & Child <i>Inclusion</i> : Infants and toddlers in foster care	ABC: M_{age} 20.0 months, range 15-24 months, 59% female, DEF: M_{age} 19.5 months, 43% female # placement: NR	NR	? - - - ? +
ABC1* <i>Follow up of ABC1</i>	Lewis-Morrarty et al. (2012)	RCT ABC: 17 Control: 29	As above	<i>N</i> = 37 Carer and Child (carer included birth, foster and adopted parents) <i>Inclusion</i> : foster children; previously completed ABC1	M_{age} 60.3 months, range 4-6 years, 49.2% female No. Prior placement: 1 st placement: 54.1%, 2 nd placement: 27% 3 rd placement: 18.9%	M_{age} NR, 100% female	? - - - ? +
ABC2 USA	Sprang (2009)	RCT ABC: 29 WLC: 29	ABC: In home/Dyad 10 x 1hr sessions, weekly + biweekly carer support group WLC: biweekly carer support group	<i>N</i> = 58 Carer and Child <i>Inclusion</i> : foster or adoptive parents of children aged 0-6, maltreated; risk of placement breakdown, attachment problems	M_{age} 3.5 years, 49% female # placement: NR	M_{age} 40 years, 85% female	- ? + + - ?
CBT-PT UK	Macdonald and Turner (2005)	RCT CBT-PT: 67 WLC: 50	Community/Group CBT-PT: 4 x 5hr sessions, weekly	<i>N</i> = 117 Foster Carer <i>Inclusion</i> : long-term foster children	NR	M_{age} 45 years, range 32-65, 92% female	- - + + + ?
CEBPT Romania	Gavita et al. (2012)	RCT CEBPT: 56 WLC: 41	Community/Group CEBPT: 4 x 4hr sessions, weekly + 1 x 4hr follow up session (3 months later)	<i>N</i> = 97 Foster parent <i>Inclusion</i> : Foster children aged 5-18, with externalising disorders	M_{age} 9.5 years, gender NR # placement: NR	NR	- ? + + - ?
FCCT UK	Minnis et al. (2001)	RCT FCCT: 80 TAU: 80	Community/Group FCCT: 3 x 6hr sessions, (2 consecutive days + 1 follow up, 1 week later)	<i>N</i> = 160 Foster parent <i>Inclusion</i> : Foster carers of children aged 5-16, likely to be in care for >1 yr	FCCT: M_{age} 10.9 years, 42% female, TAU: M_{age} 11.6 years, 44% female # placement: NR	M_{age} 46 years, 97% female	- - ? - ? -
FFI The Netherlands	Van Andel et al. (2016)	RCT FFI: 65 TAU: 58	In home/Dyad FFI: 6 x 90min sessions, fortnightly (maximum 3 months)	<i>N</i> = 123 Foster/kinship parent and child <i>Inclusion</i> : Foster & kinship carers of children aged 0-5, recently placed in care	M_{age} 18.8 months, 36% younger than 9 months, gender 50% female # placement: 1 st OR 2 nd placement: FFI: 77%; TAU: 88%	NR	- - + + - ?
IY UK	Bywater et al. (2011)	RCT IY: 49 TAU: 45	Community/Group IY: 12 x 2hr sessions, weekly	<i>N</i> = 46 Foster parent <i>Inclusion</i> : Foster carers of children aged 2-17	IY: M_{age} 8.9 years, range, 48% female; TAU: M_{age} 10.5 years, 47% female # placement: NR	M_{age} 47 years, gender NR	- - + + + ?
IY+CP USA	Linares et al. (2006)	RCT IY+CP: 40 TAU: 24	Community/Group + dyad IY+CP: Parenting group: 12 x 2hr sessions, weekly + Co-parenting dyad: 12 x 1hr sessions, weekly	<i>N</i> = 64 Foster parent + biological parent dyads <i>Inclusion</i> : Nonkinship foster carers of child with history of maltreatment; goal of family reunification.	M_{age} 6.2 years, range 3-10 years, gender NR # placement: NR	<i>Foster Carer</i> : M_{age} 46 years, female 99% <i>Biological parent</i> : M_{age} 32 years, female 89%	? ? + ? - ?
KEEP1 USA	Chamberlain et al. (1992)	RCT KEEP + \$: 31 \$ only: 14 TAU: 27	Community/Group KEEP: 2hr sessions, weekly + \$70 \$ only: \$70 weekly stipend	<i>N</i> = 72 Foster parent <i>Inclusion</i> : Foster child in care for at least 3 months	M_{age} 10.8 years, range 4-18 years, 61% female # placement: M = 1.5, range 0-9	<i>Carer</i> : M_{age} 'early 40s', gender NR	+ ? + + + ?
KEEP2 USA	Chamberlain et al. (2008); Price et al. (2008)	RCT KEEP: 359 TAU: 351	Community/Group KEEP: 16 x 90min sessions, weekly	<i>N</i> = 700 Foster & kinship parents <i>Inclusion</i> : Foster children aged 5-12 entering new placement, in care for > 30 days	KEEP: M_{age} 8.9 years, 50% female TAU: M_{age} 8.7 years, 54% female # placement: $M_{KEEP} = 2.95$, $M_{TAU} = 2.8$	KEEP: M_{age} 50 years, 94% female; TAU: M_{age} 47 years	? ? + + - ?

Study ID & Country	Author (year)	Design, intervention/ comparison	Intervention: setting / format / duration	Sample size, population, inclusion criteria	Child characteristics	Carer characteristics	Quality
KEEP3 USA	Price et al. (2015)	RCT KEEP: 179 TAU: 175	Community/Group KEEP: 16 x 90min sessions, weekly	<i>N</i> = 354 Foster & kinship parents <i>Inclusion</i> : Foster children aged 5-12, in care for > 30 days; not 'medically fragile'	KEEP: M_{age} 7.8 years, 47% female; TAU: M_{age} 7.3 years, 49% female. # placement: NR	45 years, 93% female	? - + ? - +
KITS USA	Pears et al. (2012); Pears et al. (2013); Pears et al. (2016)	RCT KITS: 102 TAU: 90	Community/Separate Parent and Child Groups <i>Child group</i> : Phase 1: 16 x 2hr sessions, twice weekly Phase 2: 8 x 2hr sessions, weekly <i>Parent group</i> : Phase 1: 4 x 2hr sessions, 1/night Phase 2: 4 x 2hr sessions, 1/night	<i>N</i> = 192 Foster/kinship parent and child <i>Inclusion</i> : Foster children entering kindergarten, English speaker, not previously involved in KITS-associated intervention	M_{age} 5.3 years, 51% female # placement: NR	NR	? ? + - ? ?
MSS USA	Kim and Leve (2011); Smith et al. (2011); Kim et al. (2013)	RCT MSS: 48 TAU: 52	Community/Separate Parent and Child Groups + Follow up: individual child & group parent 6 x 2 hr sessions, twice weekly (3-week duration) Follow up, 2 hr sessions, weekly (throughout first year of school)	<i>N</i> =100 Foster/kinship parent and child <i>Inclusion</i> : Foster girls aged 10-12, in final year of elementary school between 2004 and 2007	M_{age} 11.5 years, 100% female # placement: M = 4.3, range 1-20	NR	- - + - + - +
PCIT ^b USA	Mersky et al. (2015); Mersky et al. (2016)	RCT PCIT/brief: 48 PCIT/extended: 35 TAU: 46	Community/Group + Dyad PCIT/brief: 8 weeks, 2 x 7hr sessions + phone support for 8 weeks PCIT/extended: as above + 1 x 7hr booster session + 6 more weeks of phone support	<i>N</i> = 129 Foster parent and child <i>Inclusion</i> : Children aged 3-6 years, in nonrelative foster care, with significant behavioural problems	M_{age} 4.6 years, 56% female # placement: NR	M_{age} 44 years, range 23-79, 89% female	- ? + - - ?
PFR USA	Spieker et al. (2012); Spieker et al. (2014)	RCT PFR: 105 EES: 105	Home/ Dyad PFR: 10 x 60-75min sessions, weekly EES: 3 x 90-minute visits, monthly	<i>N</i> = 210 Carer (foster, kinship and birth) and child <i>Inclusion</i> : Infants aged 10-24 months; with court-ordered placement resulting in a primary caregiver change within prior 7 weeks	M_{age} 18 months, 44% female # placement: M = 2.7	PFR: M_{age} 35 years, EES: M_{age} 37 years, gender NR	- - - - -
PMTO The Netherlands	Maaskant et al. (2016)	RCT PMTO: 47 TAU: 41	Community/ Individual PMTO: $M_{no. sessions}$ 21.42, weekly (duration: 6 - 9 months)	<i>N</i> = 88 Foster/kinship carers <i>Inclusion</i> : Foster children aged 4-12, in long term care, with significant behavioural problems	PMTO: M_{age} 7.9 years, 64% female TAU: M_{age} 7.5 years, 50% female # placement: PMTO: M = 0.96; TAU: M = 1.05	PMTO: M_{age} 47 years, TAU: M_{age} 50 years, gender NR	- - + - - +
PSB USA	Linares et al. (2015)	RCT PSB: 13 pairs TAU: 9 pairs	Community/Dyad (siblings) + Family group (siblings + parent) 8 x 90 min sessions, weekly	<i>N</i> = 22 Foster/kinship parent and child <i>Inclusion</i> : Sibling pairs aged 5-11, with history of maltreatment placed in same foster home	PSB: M_{age} Younger sib 7.2, Older sib 9.7 years, 39% female TAU: M_{age} Younger sib 7.3, Older sib 8.5 years, 61% female # placement: NR	PSB: M_{age} 48 years, TAU: M_{age} 55 years, gender NR	+ ? + - - ?

Note. Quality = risk of bias coding where - = low risk of bias, + = high risk of bias, and ? = unclear risk of bias on the following indices: (1) random allocation; (2) allocation concealment; (3) blinding of participants; (4) blinding of outcome assessors; (5) incomplete outcome data and (6) reporting bias. Countries: USA = United States of America, UK = United Kingdom. Active controls. DEF: Developmental Education for Families Intervention. EES: Early Education Support. Abbreviations: NR = not reported. *ns* = non-significant. RCT = Randomised controlled trial. TAU = Treatment as usual. WLC = wait-list control. # placement = Number of prior placements.

^a ABC1 had multiple reports with different sample sizes and reported participant characteristics. Correspondence with primary author confirmed these are from the same RCT. Client characteristics reported are from Dozier et al. (2008). ^b Sample size differed between reports; sample size and characteristics are reported from Mersky et al. (2015)

4.4.2.2 Table 4*Abbreviations for Included Interventions*

Abbreviation	Name
ABC	Attachment and Biobehavioral Catchup
CBT-PT	Cognitive-Behavioural Parent Training
CEBPT	Short Enhanced Cognitive–Behavioral Parent Training
FCCT	Foster Carers’ Communication Training
FFI	Foster Carer-Foster Child Intervention
IY	Incredible Years (Basic Parenting Program)
IY+CP	Incredible Years (Basic Parenting Program) + Co-parent Adaption
KEEP	Keeping Foster Parents Trained and Supported
KITS	Kids in Transition to School
MSS	Middle School Success
PCIT	Parent Child Interaction Therapy
PFR	Promoting First Relationships
PMTO	Parent Management Training Oregon
PSB	Promoting Sibling Bonds

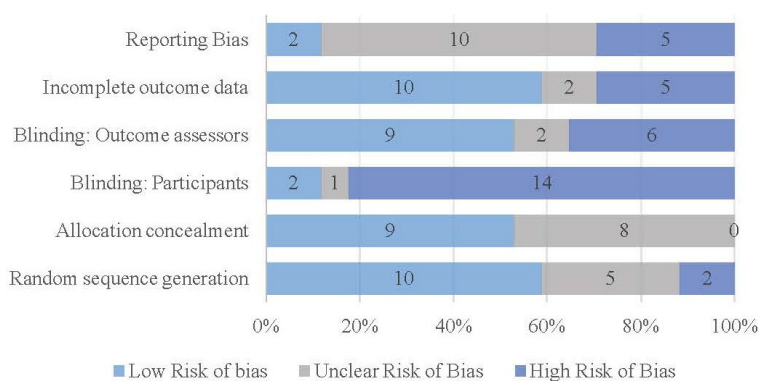
4.4.3 Risk of Bias within Studies

Risk of bias ratings are shown in Table 3. The methodological quality of the studies varied greatly, as illustrated in Figure 2. Ten studies (59%) reported adequate detail of random allocation methods, 53% reported sufficient allocation concealment detail, 12% and 53% reported necessary blinding of participants and outcome assessors, respectively, to be classified as low risk of bias. The majority of studies (59%) were classified as low risk of bias for incomplete outcome data. Most studies were classified as having unclear (59%) risk of reporting bias, as the majority of trials were not pre-registered and/or reported on multiple outcome measures without stating a priori primary outcomes of interest, so it was not possible to determine if studies were subject to selective outcome reporting. Overall, only one study was classified by reviewers as

low risk of bias on all six indices. Three studies were classified as low risk on four indices, three studies on three, six studies on two and four studies on none or one bias measure.

4.4.3.1 Figure 2

Risk of Bias Graph



Note. This summarises authors' ratings of included studies on risk of bias dimensions, presented as percentages across all included studies.

4.4.4 Overview of Intervention Components

Table 5 presents the synthesis of components across each intervention and summary of main outcomes, grouped by theoretical basis.

Theoretical Basis of Interventions. Interventions were categorised according to broad theoretical basis, where possible. This included attachment, social learning, social learning combined with educational and/or developmental theories, and cognitive behavioral. One intervention did not report a theoretical basis (See Table 5).

Intervention Components. All interventions were delivered as multi-sessions to foster and kinship carers who were currently caring for foster children, as opposed to pre-service training (i.e., training received prior to becoming a foster parent). No randomised or quasi-randomised trials of pre-service training that met our criteria were identified in the literature.

Nine of the fourteen interventions were delivered in a group format, some of which had group components and additional individual and/or dyadic components. Of the six interventions delivered to dyads, four were delivered to parent-child pairs (ABC, PCIT, FFI and PFR), one was to sibling pairs (PSB), and another to pairs of foster and biological parents (IY+CP; see Table 5). The PSB intervention (Linares et al., 2015) had three delivery components in each 90-minute session: sibling pairs, individual foster parent and joint family (with the sibling pair and the foster parent). The sibling pair and parent sessions were delivered concurrently; siblings had a session with one clinician, while the parent engaged in an individual session with another clinician in another room nearby. The joint family sessions occurred at the beginning and end of each 90-minute session. The IY+CP intervention (Linares et al., 2006) was an adaptation of the Incredible Years parent training program (Webster-Stratton 2001), designed to deliver a joint training format to foster and biological parent pairs to develop more collaborative parenting relationships between them. They delivered group parent training to groups of foster/biological parents and an additional co-parenting component that included the biological parent, foster parent and target child. PMTO (Maaskant et al., 2016) was the only intervention that solely used an individual format to deliver the parent management training intervention.

4.4.4.1 Table 5

Program Components and Main Outcome Summary

Theoretical basis	Target population	Intervention	Participants	Delivery Mode	Trauma Psychoed.		Positive Parenting Skills	Relational Skills	Behaviour Management	Problem Solving	Cognitive Skills	Social Skills	Parent-Related Factors	Participation Strategies		Main Outcome Summary	
					Discipline	Reward								Attributions	Role Play		Direct Coach
Attachment	Infants	PFR	Parent and Child	Dyad	x	x	x						x	2, 4	x	Attachment security = Parent sensitivity + Placement =	
	Infants/Toddlers	ABC	Parent and Child	Dyad	x	x	x						x	2, 3	x	Parent sensitivity + Attachment: avoidant + / secure = Behaviour problems + Psychological function + Self regulation + Cognitive functioning + Social Competence + Parent Skills + Parent psych. function +	
		FFI	Parent and Child	Dyad	x	x	x		x	x			x	x	x	Parent-child relationship + Self regulation = Parent psych. function =	
Attachment + Social Learning	Preschool/ Early primary	PCIT	Parent and Child	Group + Dyad		x		x	x					1, 2, 3	x	x	Parent psych. function + Parent skills + Behaviour problems + Psychological function +
Social Learning	Primary	IY	Parent	Group		x		x	x	x					x	Behaviour problems = Psychological function = Parent skills = Parent psych. function =	
	Preschool/ Early Primary	IY+CP	Parent	Group + Dyad	x	x		x	x	x	x				x	Behaviour problems = Coparenting relationship = Parent skills +	
	Primary	PMTO	Parent	Individ		x		x	x	x					x	Behaviour problems = Psychological function = Parent psych. function = Parent skills =	
	Primary	KEEP	Parent	Group	x	x		x	x	x	x	x		1, 2, 3, 4	x	Behaviour problems + Parent skills + Parent psych. function = Placement: positive exits + negative exits =	
NR	Primary/ Adolescents	FCCT	Parent	Group	x	x								x		Psychological functioning =	

	Theoretical basis	Target population	Intervention	Participants	Delivery Mode	Trauma Psychoed- Positive Parenting Skills Relational Skills		Behaviour Management	Problem Solving	Cognitive Skills Social Skills	Parent-Related Factors		Participation Strategies		Main Outcome Summary		
						Discipline	Reward				Self-reg- ons	Attributi- ons	Role Play	Direct Coach			
Cognitive- Behavioral	Primary/ Adolescents	CEBPT	Parent	Group		x	x	x		x	x				Placement breakdown = Behaviour problems + Parent skills + Parent psych. function +		
Cognitive Behavioral & Social Learning	NR	CBT-PT	Parent	Group	x		x	x			x				Placement breakdown = Behaviour problems = Parental knowledge +		
Social Learning, Developmental & Educational	Preschool	KITS	Parent and Child	Group	x		x	x		x	x			x	x	Behaviour problems + Academic function + Social competence = Self-regulation + Delinquent behaviour = / + Psychological function +	
Social Learning & Developmental	Preadolescent	MSS	Parent and Child	Group + Individ	x		x	x	x		x			4	x	Delinquent behaviour = / + Substance use + Behaviour problems + Psychological function + Social competence + Placement +	
Social Learning, Family Systems, Emotion Regulation	Primary	PSB	Parent and Child	Individ + Dyad	x		x	x	x		x	x		2	x	Sibling interaction: positive + / negative - Sibling aggression: physical + / verbal = Parent skills +	
Percentage of interventions that included each component					64%	71%	21%	71%	79%	57%	14%	36%	29%	43%	43%	64%	36%

Note. NR = not reported. Participation strategies, numbers listed: 1 = Provision of child care during sessions. 2 = Reimbursement for travel or participation. 3 = Credit towards foster training requirements. 4 = Opportunity to catch up on missed sessions. Outcomes key: +: a statistically significant difference in the desired direction compared to control post intervention; =: no significant difference between intervention and control; -: a significant difference in the opposite direction

4.4.5 The Relation Between Intervention Effectiveness and Intervention Components

Overall, eleven of seventeen trials reported comparative benefit of the intervention compared to a control group in eighteen different domains of child and carer wellbeing (see Table 5). While 100 outcome measures were used to assess program effectiveness altogether, 52 outcome measures were directly related to stated primary aims of the intervention and are reported on Table 6. The heterogeneity in outcomes presented a challenge to synthesising intervention effectiveness within this review. To address this challenge, the results are structured to report the effectiveness of interventions on three core domains that best reflected the primary aims of the interventions: child behaviour problems, attachment/relational problems and placement

status. In addition, observable relationships between components and outcomes are reported within these domains.

Child Behaviour Problems. Twelve of the seventeen RCTs specifically aimed to reduce child behaviour problems (e.g., externalising, disruptive behaviours). Eleven of these aimed to do so by strengthening parent skills within a social learning or cognitive-behavioural framework (CBT-PT, CEBPT, IY, IY+CP, KEEP1/2/3, KITS, MSS, PCIT, PMTO; see Table 5). One RCT, ABC2 (Sprang, 2009), aimed to assess the effects of an attachment-based intervention on child behaviour. All RCTs assessed intervention effects on behaviour problems in the short to medium term (up to 6 months' post intervention), with the exception of KITS, which reported significant improvement in child behaviour problems around 12 months post baseline (Pears et al., 2012).

Of the 12 RCTs that measured child behaviour, only six showed significantly fewer behaviour problems in the intervention group compared to control, with effect sizes ranging from small to large (i.e., ABC2, CEBPT, KEEP2, KITS, MSS and PCIT, see Table 6). Three RCTs reported no statistically significant improvements in child behaviour in the intervention group compared to the control (CBT-PT; IY+CP; PMTO; see Table 6).

While three other RCTs reported the intervention was effective in reducing child behaviour problems (i.e. KEEP1, KEEP3, IY), results from these trials did not show intervention versus control effects. The IY trial (Bywater et al., 2011) reported significantly larger pre-post reductions in the intervention group compared to pre-post reductions in the control group; however, results between intervention and control groups on post intervention mean scores on child behaviour problems were not significant. Large differences between baseline scores were noted in their results, with the intervention group having higher baseline child behaviour problems. KEEP1

(Chamberlain et al., 1992) reported significant reduction in number of problem behaviours in the ‘enhanced support and training’ group (i.e., KEEP intervention + \$70 weekly stipend; ES&T) compared to the increased payment only (IPO) and TAU groups. However, the authors reported significantly higher behaviour problem scores at baseline in the intervention group (ES&T) compared to the other two groups (IPO and TAU) and the significant reduction in problem behaviour reported reflect these differences rather than differences in post intervention mean scores, a point noted previously by Turner et al. (2007). The KEEP3 study (Price et al., 2015) reported that the intervention was effective in reducing child behaviour when delivered by a community agency yet, when results were analyzed using the same focal child at pre and post intervention, the interaction between group and time was no longer significant. Authors reported significantly higher behaviour problem scores at baseline for focal children in the intervention group compared to focal children in the control group.

As shown on Table 5, all of the interventions aiming to improve behaviour problems included behaviour management components, with the exception of ABC2 (Sprang, 2009). Given the mixed evidence of effectiveness, this analysis suggests that behaviour management components alone are not sufficient to improve child behaviour problems. The six interventions that were effective had more comprehensive content. Three or more of these six interventions included a combination of components in addition to behaviour management such as providing trauma psychoeducation, training to build social skills and/or incorporating specific participation strategies (see Table 5). Five of them were delivered as group training, although two of these combined group with an additional format. PCIT (Mersky et al., 2016) had additional dyad (parent-child) coaching sessions and MSS (Smith et al., 2011) had additional individual child sessions. The ABC2 (Sprang, 2009) intervention for toddlers and preschoolers was theorised to

improve child behaviour through focusing on strengthening sensitive, responsive and nurturing parenting behaviour to teach the child to depend on their foster carer for external regulation assistance while they learn self-regulation strategies. Only interventions that reported inclusion of these extra components showed significant intervention versus control effects in child problem behaviour. For these interventions that did not show comparative benefit, the most noticeably absent common components were participation strategies and trauma psychoeducation.

Attachment and Relational Problems. Three RCTs specifically aimed to build parent-child relationships and remediate the negative effects of relationship disruption, by enhancing carer sensitivity, responsiveness and nurturance (i.e., ABC1, FFI and PFR, see Table 5 and 6). All of these interventions were broadly based on attachment theory and were targeted towards infants and toddlers and delivered to parent/child dyads in their own homes. ABC1 reported significant improvement in carer sensitivity (Bick & Dozier, 2013) and reduction in child avoidant behaviour in the intervention group compared to an active control one-month post intervention; however, there were no significant differences between groups in child secure behaviour (Dozier et al., 2009). Van Andel et al. (2016) reported significant improvements on several parent-child relationship indices in the FFI group compared to those who received TAU in the short term (up to 3 months post intervention), with medium to large effect sizes. Spieker et al. (2012) reported significant differences between PFR and an active control on parental sensitivity post intervention with a small/medium effect size, but these differences became non-significant at 6 month follow-up. Their findings did not show significant comparative improvement on attachment security post intervention or at 6 month follow-up. It is notable that this study was rated as having the lowest risk of bias of all studies reviewed.

Common content across these three interventions was trauma psychoeducation, positive parenting, relational skills, direct coaching/feedback on parent skills and a focus on parental self-reflection and acknowledgement of the impact of parental attributions and perceptions of the foster child on the parent-child relationship.

Placement. Six RCTs reported on placement outcomes. Of these, two reported significant improvements on placement stability, compared to control. In KEEP2, Price et al. (2008) assessed child exits within 200 days of baseline assessment. They found that children in the KEEP intervention group were almost twice as likely to experience a positive placement change (e.g., reunion with biological parent or adoption) than children in the control group. They reported that there were similar overall rates of negative exits between the KEEP and control groups. Kim and Leve (2011) reported that the MSS intervention group was significantly related to fewer placement changes in preadolescent girls compared to the control group, up to 24 months post baseline. One other RCT, KEEP1 (Chamberlain et al., 1992) reported children in the KEEP + \$70 weekly stipend group had significantly more successful days in care compared to unsuccessful days (e.g., ran away, moved placement to more restrictive setting) than children in the other two conditions (i.e., \$70 stipend only and TAU groups). This analysis was based on the 54 children (of 72) who had not rejoined their families during the 2 year study period. However, there were substantial baseline differences between these groups, indicating these results should be interpreted with caution. The other studies examining this domain reported no significant differences on placement outcomes in the short-medium term (up to 6 months follow-up; Gavita et al., 2012; Macdonald & Turner, 2005) or longer term (two years post randomization; Spieker et al., 2014). Few patterns were observed between content and delivery variables and the effectiveness of interventions on placement outcomes.

4.4.5.1 Table 6

Summary of Intervention Outcome Domains, Measures and Main Findings

Study	Outcome domain	Measures	Main findings
ABC1 Dozier et al., (2006b ¹ ; 2008 ² ; 2009 ³) Bick & Dozier (2013 ⁴)	Self-regulation	Diurnal cortisol, saliva sampling (b) ¹ HPA functioning (b) ² pre and post exposure to Strange Situation (SS) (b) PAD ³ (p)	Improved cortisol regulation post intervention, effect size NR Lower salivary cortisol (more normative) pre exposure to SS in intervention group, effect size NR; No sig. differences between groups 15 or 30 mins post SS Reduced avoidant behaviour post intervention, effect size NR No sig. differences in secure behaviour post intervention
	Attachment behaviour Parent sensitivity	Play task (MS) ⁴ (o) Cognitive flexibility: DCCS (cp)	Improved caregiver sensitivity post intervention, effect size NR Higher post-switch performance 2 years post intervention, large effect size ($d=1.06$); No sig. difference on pre-switch performance 2 years post intervention Higher TOM performance 2 years post intervention, large effect size ($d=1.08$)
ABC2 Sprang (2009)	Behaviour problems	Theory of mind task (TOM) (cp) CBCL-E (p)	Fewer externalising problems post intervention, medium effect size (partial eta squared=0.51) Fewer internalising problems post intervention, medium effect size (partial eta squared=0.44)
	Psychological functioning Parent skills	CBCL-I (p) CAPI (p)	Reduced self-reported risk of child abuse potential post intervention, large effect size (partial eta squared=0.79) Reduced self-reported parental stress post intervention, medium effect size (partial eta squared=0.59)
	Parent psychological functioning	PSI (p)	
CBT-PT Macdonald, & Turner (2005)	Placement	Parent report	No sig. differences in no. of unplanned placement breakdowns post intervention
	Behaviour problems Parental knowledge	CBCL (p) KBPAC (p)	No sig. differences in behaviour problems post intervention Improvement in self-reported knowledge of behavioural principles post intervention, effect size NR
CEBPT Gavita et al. (2012)	Placement	Case records (cr)	No sig. differences in placement disruption rate post intervention or at 3-month follow-up
	Behaviour problems Parent skills	CBCL-E (p) PS (p)	Fewer externalizing problems post treatment, medium effect size ($d=0.67$) Improvement in discipline skills post treatment, large effect size ($d=0.97$)
	Parent psychological functioning	PED (p)	Improvement in distress levels post treatment, medium effect size ($d=0.69$)
FCCT Minnis et al. (2001)	Psychological functioning	SDQ (p & c & t) MRS (c)	No sig. differences on foster carer, teacher and child self-report on SDQ 9 months post intervention No sig. differences on self-esteem 9 months post intervention
		RAD (p)	No sig. differences on attachment disorders immediately and 9 months post intervention
FFI Van Andel et al. (2016)	Self-regulation	Diurnal cortisol response	No sig. differences on diurnal cortisol post intervention
	Parent psychological functioning Parent-child relationship	NOSI-R (p) EAS (o)	No sig. differences on parent stress post intervention Improvements on following emotional availability subscales post intervention, medium to large effect sizes: Sensitivity ($d=0.82$); Structuring ($d=0.73$); Nonintrusiveness ($d=0.60$); Responsiveness ($d=0.46$); Involvement: no sig. differences
	Behaviour problems	ECBI-Intensity (p) SDQ Hyperactive (p) SDQ Total (p)	No sig. between group differences on child behaviour problems post intervention, effect size NR for intervention versus control effects No sig. between group differences post intervention on child psychological functioning, effect size NR for intervention versus control effects
IY Bywater et al. (2011)	Psychological functioning Parent psychological functioning Parent skills	BDI (p) PS (p)	No sig. between group differences on parental depression, effect size NR for intervention versus control effects No sig. between group differences on parental skills, effect size NR for intervention versus control effects
	Behaviour problems	CBCL-E (p); ECBI (p); SESBI-R (t)	No sig. differences on externalizing problems at post-treatment and 3 month follow up on any of the behaviour problem outcome measures
	Co-parenting relationship Parent skills	Composite of measures ^a (p) PPI (p), foster & biological parent outcomes combined	Improvements in co-parenting relationship indices post-intervention, small to medium effect sizes; Flexibility ($d=0.42$); Problem Solving ($d=0.52$); Total ($d=0.48$); these became <i>ns</i> at 3-month follow-up Increased support for positive discipline post intervention, medium effect size ($d=0.40$), and 3-month follow-up ($d=0.59$) Increased use of clear expectations at 3 month follow up, medium effect size ($d=0.54$) Appropriate discipline: no sig. difference post or at 3-month follow-up Harsh discipline: no sig. difference post or 3-month follow-up
KEEP1 Chamberlain et al. (1992)	Behaviour problems Placement	PDR (p) Placement change (cr)	Reduced problem behaviour compared to other two conditions, effect size NR More successful days in care than children in the other two conditions (less negative placement changes), effect size NR
	Behaviour problems Parent skills	PDR ⁵ (p) Positive reinforcement ratio ⁵ (p)	Improvement in child behaviour post treatment, small effect size ($d=0.26$) Increased ratio of positive reinforcement to discipline post treatment, small effect size ($d=0.29$)
KEEP2 Chamberlain et al. (2008 ⁵) Price et al. (2008 ⁶)	Placement	Parent report ⁶	Improvement in positive exits, effect size NR No sig. differences in negative exits

Study	Outcome domain	Measures	Main findings	
KEEP3 Price et al. (2015)	Behaviour problems	PDR (p)	No sig. difference in child behaviour in post intervention group compared to control, using data from the same target child pre and post intervention	
	Parent psychological functioning	PDR-Stress (p)	HLM analysis showed sig. group x time interaction for parent stress with the same target child assessed pre and post intervention	
	KITS ^b Pears et al., (2012 ⁷ ; 2013 ⁸ ; 2016 ⁹)	Behaviour problems	Latent variable of: TRF-O+A; CTRS:S(t) ⁷	Fewer oppositional and aggressive behaviors at follow-up (approx. 6-9 months post intervention), medium effect size ($d=0.33$)
		Academic Functioning	Early literacy measures ^c (p & cp) ⁸	Improved early literacy skills post phase 1 of the intervention, small effect size (standardized mean change = 0.26. Note, this is not a standardised mean difference score)
	Social Competence	Prosocial measures ^d (p & cp) ⁸	No sig. differences on prosocial skills between groups post phase 1 of the intervention	
	Self-Regulation	Composite measure ^c (p & cp) ⁸	Improved self-regulation post phase 1 of the intervention, small effect size (standardized mean change = 0.18. Note, this is not a standardised mean difference score)	
	Delinquent Behaviour	Attitudes towards alcohol use (c) ⁹ Attitudes towards antisocial behaviour (c) ⁹ Involvement with deviant peers (c) ⁹	SPCC (c) ⁹	Lower scores on positive attitudes towards alcohol use in the third grade, up to 4 years post baseline, effect size NR
				No sig. differences between groups on positive attitudes towards antisocial behaviour in third grade, up to 4 years post baseline
				No sig. differences between groups on involvement with deviant peers in third grade, up to 4 years post baseline
	Psychological Functioning			Higher child-report of self-worth, up to 4 years post baseline, effect size NR
MSS ^b Kim & Lee (2011 ¹⁰)	Delinquent Behaviours	SRD ¹⁰ (c)	No sig. direct effect of MSS on delinquency 36 months post baseline	
		Health-risking sexual behaviour ¹² (c)	Sig. direct effect of intervention on health risking sexual behaviour 36 months post baseline, medium effect size ($d=0.48$)	
Smith et al. (2011 ¹¹)	Substance Use	Tobacco, alcohol, marijuana composite ¹⁰ (c)	Lower levels of substance use 36 months post baseline, medium effect size ($d=0.47$)	
Kim et al. (2013 ¹²)	Placement	Case records ¹⁰ (cr)	Fewer placement changes 6-12 months post baseline, medium effect size ($d=0.50$)	
	Psychological functioning	CBCL-E + CBCL-I ¹⁰	No. sig difference in combined internalizing/externalizing problems at 12 and 24 months post baseline	
	Behaviour problems Social Competence	PDR-I ¹¹ (p)	Fewer internalizing problems 6 months post baseline, effect size NR	
		PDR-E ¹¹ (p)	Fewer externalizing problems 6 months post baseline, effect size NR	
		PDR-PS ^{10, 11} (p)	Increased frequency of prosocial behaviour 6 to 12 months post baseline (on average) ¹⁰ , medium effect size ($d=0.46$)	
			<u>No sig. differences on prosocial behaviour 6 months post baseline¹¹</u>	
PCIT ^f Mersky et al. (2015 ¹³ ; 2016 ¹⁴)	Parent psychological functioning	PSI-SF ¹³ (p)	Reduced parent stress post intervention, medium effect size ($d=0.45$)	
	Parent skills	DPICS-II ¹³ (o)	Increased positive parent behaviours post intervention, med effect size ($d=0.72$) Reduced negative parent behaviours post intervention, large effect size ($d=0.92$)	
	Behaviour problems	ECBI-I (p) ¹⁴	No sig. differences post intervention on ECBI Intensity scale	
		ECBI-P (p) ¹⁴	Fewer externalising problems on ECBI-P, small effect sizes ($r^2=0.06$)	
		CBCL-E (p)	Fewer externalising problems on CBCL-E, medium effect size ($r^2=0.09$)	
Psychological functioning	CBCL-I ¹⁴ (p)	Fewer internalising problems post intervention, medium effect size ($r^2=0.08$)		
PFR ^g Spieker et al. (2012 ¹⁵ ; 2014 ¹⁶)	Attachment behaviour	TAS45 ¹⁵ (o)	No sig. differences on child attachment security at post intervention or 6 month follow up	
	Parent sensitivity	NCATS ¹⁵ (o)	Improved parental sensitivity post intervention, medium effect size ($d=0.42$) No sig. differences on sensitivity at 6 month follow up	
	Placement	Case records: stability ¹⁶ (cr); permanency ¹⁶ (cr)	No sig. effect of intervention on both placement outcomes (2 years post randomization)	
PMTO Maaskant et al. (2016)	Behaviour problems	CBCL (p); TRF (t)	No sig. differences post intervention or at 4 month follow-up	
	Psychological Functioning	CBCL-I (p); TRF-I (t)	No sig. differences post intervention or at 4 month follow-up	
	Parent psychological functioning	NOSI-R (p)	Reduced parent stress post intervention but became <i>ns</i> at 4 month follow up	
	Parent skills	PBQ (p)	No significant differences on parenting behaviour post intervention or 4 month follow-up	
PSB Linares et al. (2015)	Sibling Interaction	SIQ (o)	Higher positive sibling interactions, effect size NR Higher negative sibling interactions, effect size NR	
	Sibling Aggression	SAS (p)	Less conflict during low-competition play, effect size NR	
			Lower sibling physical aggression from older toward younger child, effect size NR	
	Parent skills	Conflict mediation CC (p)	No sig. differences for verbal aggression from older toward younger child, or verbal and physical aggression from younger to older child. Higher use of mediation strategies, effect size NR No sig. differences in non-mediation strategies	

Table 6 Note. (p) parent-self report; (c): child self-report; (cp) child performance measure; (b) biomarker measure (t): teacher report about child; (cr) case records/professional report; (o) observational measure. Main findings: Unless otherwise noted, findings reported are between group differences and the experimental condition resulted in significantly better outcomes than comparison group ($p < .05$). Effect sizes include statistically significant ($p < .05$) effects reported by study authors. Interpretation of effect sizes as small, medium or large is defined as Cohen’s $d = 0.20, 0.50, 0.80$ and correlation coefficient, $r = 0.10, 0.30, 0.50$, respectively (Cohen, 1988). Where partial eta squared was used as an estimate of effect size, we report the interpretation provided by the authors. Numerical subscripts pair reports with outcomes. Abbreviations: HLM = hierarchical linear modelling; *ns* = Non-significant. Measure abbreviations: BDI: Beck Depression Inventory. CAPI: Child Abuse Potential Inventory. CBCL: Child

Behavior Checklist, Total; Externalizing subscale (CBCL-E); Internalising subscale (CBCL-I); Oppositional and Aggressive subscales (CBCL-O+A); Social Competence subscale (CBCL-SC). CC: Parent Conflict Mediation Conflict Checklist. DCCS: The Dimensional Change Card Sort. DPICS-II: Dyadic Parent–Child Interaction Coding System. EAS: Emotional Availability Scales. ECBI Eyberg Child Behavior Inventory, Intensity subscale (ECBI-I); Problem subscale (ECBI-P). KBPAC: Knowledge of Behavioral Principles as Applied to Children. MS: Observational play task. NCATS: Nursing Child Assessment Teaching Scale. NOSI-R: Dutch adaptation of Parenting Stress Index. PAD: Parent Attachment Diary. PBQ: Parenting Behavior Questionnaire. PDR: Parent Daily Report Checklist; Externalizing subscale (PDR-E); Internalising subscale (PDR-I); Prosocial subscale (PDR – PS); Parental stress subscale (PDR-Stress). PED: Profile of Emotional Distress. PPI: Parenting Practices Interview. PS: Parenting Scale. PSI: Parenting Stress Index. RAD: Reactive Attachment Disorder Scale. RSES: Modified Rosenberg Self-Esteem Scale. SAS: Sibling Aggression Scale. SDQ: Strengths and Difficulties Questionnaire; Hyperactivity subscale (SDQ-H). SESBI-R: Sutter-Eyberg Student Behavior Inventory – Revised. SIQ: Sibling Interaction Quality. SPCC: Self-perception profile for children, global self-worth subscale. SRD: Self-report Delinquency Scale. TAS45: Toddler Attachment Sort-45. TOM: Theory of Mind Task. TRF: Teacher Report Form, Total Problems subscale; Externalizing subscale (TRF-E); Internalising subscale (TRF-I); Oppositional and Aggressive subscales (TRF – O +A)

^a Composite score from combination of items from the Family Functioning Style Scale (FFSS); Family Adaptability and Cohesion Scale (FACES III), and 2 newly developed items. ^b Studies used path analysis to examine effects of intervention on outcomes; results reported above are the direct effects of intervention on outcome. ^c Early literacy skill measures included: Concepts About Print (CAPS); Dynamic Indicators of Basic Early Literacy Skills (DIBELS); Caregiver rating of literacy skills. ^d Prosocial skill measures included. Preschool Penn Interactive Peer Play Scale (PPIPPS); CBCL-SC & Emotion Understanding vignettes. ^e Self-regulation - Composite of three subcomponents: Emotion regulation (composite measure); Behaviour Regulation (composite measure), Inhibitory control (composite measure). ^f Outcomes reported are linear interaction contrasts comparing trends of WLC to the average of both treatment conditions (PCIT/brief + PCIT/extended). ^g Multiple child and caregiver outcomes are reported in the PFR intervention. This table includes stated primary outcome variables relevant to this analysis.

4.5 Discussion

4.5.1 Summary of Findings

This review aimed to examine the comparative effectiveness of foster and kinship care interventions and for the first time analyse the components within each intervention, exploring their potential impact on target outcomes. Seventeen studies were identified, representing RCTs of 14 different interventions. Overall, eleven RCTs showed comparative benefit of the intervention compared to an active or inactive control group on one or more targeted outcomes aligned with the broad aim of each interventions. In respect to program content, effective interventions were developed specifically to meet the needs of foster and kinship families with children who had experienced maltreatment and relationship disruption. They had clearly defined aims, were targeted towards specific domains and developmental stages, and included content

components that specifically targeted this domain. Interventions that were effective in improving parent-child relationship quality (e.g., attachment behaviours, parental sensitivity) used relational skills components that were focused on developing empathic, sensitive, nurturing and attuned parental responses to child need. Effective interventions also provided opportunities for carer skill development via in-session practice with role play and/or direct coaching. The substantial heterogeneity in the included studies presented significant difficulties in evaluating foster interventions, consistent with observations made by previous reviewers (Kerr & Cossar, 2014; Kinsey & Schlosser, 2013). In response to the diverse intervention aims, participant characteristics and outcome measurement, we synthesized intervention effectiveness for three key domains: child behaviour problems, attachment and relational issues and placement outcomes.

Twelve trials reviewed aimed to reduce child behaviour problems (e.g., externalising, disruptive behaviours). This aim is hardly startling, given the increased rates of behaviour problems identified in foster children that present substantial challenges to foster parents (Landsverk et al., 2002), and the reciprocal association between placement stability and child behaviour problems (Fisher, 2015). However, only six of the twelve trials were found to have significant benefits on child behaviour problems compared to control groups post-intervention.

Common components across the studies that were effective in addressing behaviour problems included content specifically designed to address these problems (i.e., specific discipline strategies and a focus on contingent positive reinforcement for desirable behaviour) and increase positive family interactions by building parental engagement skills. Trauma psychoeducation, problem solving and social skill development, and parent-related factors (i.e., parental self-regulation, stress

management and self-reflection) were also relatively common. They all included specialised content designed to respond to the needs of the foster population that they were treating. All were group-based, although two also combined group with an additional format. Effective interventions targeting behaviour problems typically drew on social learning theory and/or incorporated, other theoretical models relevant to the target population and intervention aim. The one exception to this was ABC2 (Sprang, 2009), which was based on attachment theory. Sprang theorized that strengthening sensitive, responsive and nurturing parenting behaviour helps to regulate child behaviour. Interventions found to have little benefit on problem behaviour were more traditional parenting management training programs developed for parents of children where developmental trauma was not indicated, with little adaptation for foster carers or children who have experienced maltreatment. This contrast highlights the importance of acknowledging the impact of complex trauma on family relationships, and addressing it specifically within foster family interventions. These findings augment previous reviews that have criticised traditional parent training programs treating child behaviour problems for having little benefit in foster populations (Kinsey & Schlosser, 2013; Turner et al., 2007).

Three trials specifically aimed to build parent-child relationships and remediate the negative effects of relationship disruption. All of these were found to enhance one or more of the following outcomes directly post treatment: carer sensitivity, attachment behaviour and parent-child relationship. Informed by attachment theory, these interventions were strongly focused on helping parents manage their own emotional reactions to perceived rejection from their foster child and learning to sensitively interpret child cues. Overall, relational skill components focusing on developing empathic, sensitive, nurturing and attuned parental responses to child need were

relatively rare across all of the interventions reviewed and were only apparent in the attachment-based interventions. Other common content across these interventions was trauma psychoeducation, positive parenting, direct coaching and feedback on parent skills and parent-related factors.

Improving foster parent-child relationships was also targeted indirectly by social learning interventions. Those which were successful in reducing child behaviour aimed to enhance positive parenting skills, such as teaching about the impact of trauma, increasing carers' capacity to follow their child's lead and encouraging them to reflect on factors impacting their parenting responses. Social learning theory-based programs have been shown to promote parental sensitivity in normative populations (O'Connor et al., 2013), suggesting these components build foster carer sensitivity and stronger relationships with their foster children. Given maltreated children's recognised impairment in early bonding (Perry, 2009) and their experience of disrupted attachment with their primary caregiver, this is an especially important target. However because programs that aimed to address child behaviour did not measure the quality of foster parent-child relationships, the association between improvements in foster family relationships and reductions in child behaviour problems remains unknown. This reflects the current lack of research into the mechanisms underlying change within effectiveness research (Henggeler & Sheidow, 2012).

Of the six RCTs that measured placement, only two showed positive effects of the intervention on placement stability and/or permanency, compared to control. In the context of the well-identified negative implications of placement disruption on child mental health (Fisher et al., 2013), the few observable associations between intervention components and placement outcomes clearly indicates a striking need for further research in this area.

Existing reviews have been based on evaluations of the efficacy of foster interventions as a whole. In contrast, this review examined intervention components through a transtheoretical lens, finding evidence that certain program components were associated with effectiveness. By focusing on the associations between program components and outcomes, these findings support and extend prior research. For example, we found that effective interventions were those targeting specific domains and developmental stages, consistent with reviewers' conclusions that foster interventions that target specific developmental, neurobiological and behavioural needs appear to have the most promising results (Dorsey et al., 2008; Leve et al., 2012). This is of particular importance because developmental trauma results in a wide range of complex needs (Van der Kolk, 2005), and foster children frequently receive interventions with questionable effectiveness that are not targeted to meet their specific needs (Bellamy et al., 2014). Also consistent with previous research are our findings that suggest enhancing parent-child relationships was integral to intervention effectiveness. A range of researchers have argued that approaches to both behavioural and emotional concerns are most effective when they are able to strengthen parent-child relationships, either indirectly by enhancing carer understanding of their children's emotional needs (Kelly & Salmon, 2014; Luke et al., 2014) or directly through dyadic interventions (e.g., ABC). This is vital because secure, loving, and sustained parent-child relationships play an integral role in supporting foster children's mental health and wellbeing (Tarren-Sweeney, 2014).

4.5.2 Limitations

The robustness of these findings is limited by variation in the methodological quality, procedures and outcome measures used to assess effectiveness. The quality of the studies varied, with only five interventions rated as having low risk of bias on more

than three internal validity indicators. Reporting often lacked clarity and sample characteristics were often poorly reported. Outcome measurement varied enormously, with over 100 outcome measures used across the included studies to assess 18 different domains. Many studies did not clearly articulate the rationale between the aim of the study and the outcomes used to assess its efficacy. Finally, most outcomes reported were short-term assessments (less than 6 months post intervention) and longer term follow-up was limited. A thorough review of methodological challenges in the field has been presented elsewhere (Dickes et al., 2018). This variation and lack of consensus made it more difficult to draw definitive conclusions.

Published information about intervention components was limited. The degree to which programs contained unreported components is unknown and there may be minor differences between our coded content and delivered program content. However, we aimed to mitigate this by collecting additional intervention information from secondary sources (e.g., published intervention model descriptions).

The exclusion criteria also restricted ‘wrap-around’ services so as to focus on the components within foster/kinship care interventions. However, this excluded a number of noteworthy interventions in foster/kinship populations. Treatment Foster Care Oregon (TFCO), formerly known as Multidimensional Treatment Foster Care (Chamberlain et al., 2007; Leve & Chamberlain, 2005, 2007) and TFCO-P, for preschoolers (Fisher et al., 2005; Fisher & Kim, 2007; Fisher et al., 2007; Fisher et al., 2011) have both produced positive outcomes for adolescent delinquent and preschool populations, respectively. These programs involve comprehensive, lengthy and intense training and support for specialised foster caregivers and incorporate coordinated treatment with a team of professionals, in the home and educational settings, with peers

and permanent placement resources (e.g., birth family, adoptive family, permanent foster family).

4.5.3 Implications for Future Research and Clinical Practice

In order to advance the field, research needs to occur in a more coordinated and collaborative fashion, where one study can build upon another. Only two of 14 interventions were evaluated in more than one RCT, indicating a clear need for more replication. Population subgroups need to be clearly identified and programs need to be developed and empirically validated to be able to answer what works for whom and for which particular domain. There remains a need to identify better ways of matching interventions for particular groups of children, based on their vulnerabilities. The needs of children in care due to physical abuse may well be distinct from those who have experienced neglect or those seeking asylum. Moreover, clinicians working in the field of early intervention often hope they are changing the trajectory of the children they treat, but without high quality longer term follow-up, we are unable to know if this is really the case. A more consistent approach to these factors would allow quantitative analysis across studies with the capacity to provide more definitive conclusions.

Empirical questions yet to be answered are numerous. For example, does including a relational focus and improving parental sensitivity and responsiveness add to potential improvements in problem behaviour? Does the addition of parent-focused components improve child behaviour or mental health outcomes? Do engagement strategies reduce attrition and improve outcomes? The clearest way to examine the individual benefit of certain components on outcomes is to dismantle the components within an intervention and compare them in a well-designed, high quality RCT.

4.5.4 Conclusions

Results from this review extend previous research by providing a comprehensive, systematic overview of foster/kinship interventions and the components within them. Findings from this review suggest that interventions should be developed specifically to meet the needs of the children who have experienced maltreatment, targeting specific domains and developmental stages. Additionally, interventions that provide opportunities for parent skill development via in-session practice with role play and/or direct coaching are likely to be more effective. These results further highlight the need for clinicians to conduct thorough assessments and deliver targeted care (Luke et al., 2014; Tarren-Sweeney, 2014). Given the importance of the parent-child relationship, future interventions should include the aim of enhancing parent-child relationship quality, by focusing on developing empathic, sensitive, nurturing and attuned parental responses to child need. Child behaviour problems are highly prevalent in children who have experienced maltreatment and multiple placement breakdowns. Equipping parents with education and skills to meet these behavioural challenges is essential. A better understanding of the association between parent-child relationships and child behaviour problems would allow us to develop, deliver and evaluate programs that combine these components more effectively.

4.6 Chapter 4 References

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Chapter 5: Importance of the Consumer Perspective

5.1 Results from the Previous Study

Results from the previous study highlight gaps in current alternative care intervention research and provide suggestions for future intervention development. The review identified the need to measure both behavioural and relational outcomes in populations that have experienced maltreatment and complex trauma. It highlighted the components that were useful to improve parent-child relationships, namely elements that assisted parents to develop attuned sensitive responses to child need. Considering that socio-emotional capacities develop in the context of caregiving relationships and that these capacities are essential for managing challenges, forming successful relationships and adapting effectively to future adversity (Shonkoff et al., 2016; Tronick & Beeghly, 2011), supporting the development of safe, stable and nurturing caregiving relationships is an integral treatment goal for children who have experienced complex trauma. Study 2 (Kemmis-Riggs et al., 2018) also demonstrated the value of equipping parents with education and skills to manage child behaviour problems, as these are prevalent in children who have experienced maltreatment. Findings extend conclusions from the synthesis of parenting programs for maltreatment prevention and intervention in [Chapter 3](#), which found that interventions that have demonstrated effective outcomes include the following elements: the establishment of therapeutic relationships between clinician and parent, the promotion of sensitive, empathic parenting, parental reflection on their own childrearing history, a tailored approach based on family needs and resources, collaborative problem-solving, improving parenting skills, providing social and emotional support and increasing parenting self-confidence (Fergusson et al., 2005; Olds, 2006; van der Put et al., 2018). Collectively, these findings provide valuable information to incorporate into our young parents' intervention.

5.2 Importance of the Consumer Perspective

Consistent with recommendations for consumer involvement in research (National Health and Medical Research Council (NHMRC), 2016; National Health Service, 2014; National Institute for Health and Care Excellence (NICE), 2013a), an important step in developing Holding Hands Young Parents was to gain insight from young parents themselves. The importance and value of patient involvement in their own health care and health and medical research is widely recognised (National Health and Medical Research Council (NHMRC), 2016; National Health Service, 2014; National Institute for Health and Care Excellence (NICE), 2013a). A primary reason to gain consumer feedback is to increase our understanding of the therapeutic mechanisms and therapy processes to maximise the intervention's effectiveness and utility and engagement so that consumers remain engaged in treatment throughout. Involvement in research is essentially an active and collaborative process between researchers, consumers and community members to work together to shape research priorities, practice and policies. Benefits to consumers and the broader community include more relevant research for community needs, greater transparency, accountability and quality in research to deliver improved outcomes (NHMRC, 2016).

5.3 Study 3

The purpose of the subsequent study was to glean insight from young parents themselves about their experiences of parenting and their own experience of being parented to inform clinical practice and the development of our parenting intervention. Data for this study were collected anonymously using an online survey platform. This method was chosen to enable access to a wider audience than may have been possible with face-to-face interviews or focus groups. The anonymous nature also aimed to reduce stigma and allow participants to answer openly without fear of embarrassment.

The study was submitted for publication in 2020 to the *Journal of Child and Family Studies* using the APA referencing style and is currently under review. The content of this paper remains the same as the current submission under review.

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Chapter 6: Study 3 - Voices of Young Parents: Exploring Young Parents' Perspectives to Inform the Development of Parenting Interventions

Kemmis-Riggs, J., & McAloon, J. (under review). The voices of young parents: Exploring young parents' perspectives to inform the development of parenting interventions. *Journal of Child and Family Studies*.

6.1 Abstract

We aimed to explore young parents' perspectives to inform the development of a parent-child intervention for young parents who have experienced adverse childhood experiences. A mixed qualitative and quantitative method was utilised. Thematic analysis was used to analyse the qualitative data. Thirty-one young parents ($M = 22.4$ years, range: 15-26) of young children ($M = 2.2$ years) participated in an anonymous online survey. Participants were asked structured and open-ended questions about their experiences of parenting, parenting skills/topics of interest, mental health, parent self-efficacy and adverse childhood experiences (ACEs). Results showed that 71% of the participants had experienced two or more ACEs. Mental health screeners indicated that 84% of the sample reported mild to moderate distress; 64% indicated more severe problems. Parent self-efficacy scores were generally high. Six qualitative themes provide additional insight into their experiences. These were *need for support, understanding my child, dealing with mental health, stigma and isolation, challenging behaviour and emotions, I want to do better, and family as helpers*. Findings indicated that parents wanted to learn more about how to support child social, emotional and cognitive development and improve their own emotion regulation capacities. Challenges reported included parental isolation, stigma, mental health concerns, limited support and child behavioural/emotional problems. Parents felt their childhood experiences had a major impact on their parenting, both positive and negatively. Findings demonstrate the value of asking consumers directly about their experiences,

highlight the need for accessible support, and can contribute to the development and piloting of parenting programs for young parents.

Keywords: adolescent parents, adverse childhood experiences, qualitative, consumer involvement, parenting interventions

Highlights:

- Young parents reported being highly invested in being effective parents
- Over two thirds of young parents reported experiencing two or more ACEs
- Over four fifths of young parents reported mild to moderate psychological distress
- Parent's childhood experiences remain central in shaping their parenting skills
- Challenges include isolation, stigma and managing difficult child behaviour

6.2 Introduction

Young parents and their children have been identified as vulnerable to breaches of rights to health, education and care (Australian Human Rights Commission (ARC), 2017). Higher rates of teenage pregnancy are related to sexual and physical abuse, socioeconomic disadvantage and unstable housing (Francisco et al., 2008; Madigan et al., 2014; Marino et al., 2016; Noll et al., 2009). Adverse circumstances are further exacerbated by social, financial, medical, educational and employment challenges of raising a child (Australian Human Rights Commission (ARC), 2017). Young parents frequently experience poor mental health, poverty, difficulties gaining employment or continuing education and stigma for being a young parent (Bradbury, 2006; Goossens et

al., 2015; Kalb et al., 2015; Rice et al., 2019; SmithBattle, 2013). Children of young people are also at greater risk of poor outcomes, such as low birthweight, increased morbidity in first year of life, more behaviour problems, and more likely to be born into and continue to live in social and economic disadvantage (Australian Institute of Health and Welfare, 2018b; Chen et al., 2007; Furstenberg Jr et al., 1987; Goossens et al., 2015; Jaffee et al., 2001; Klein, 2005; Weston et al., 2006).

With ongoing stressors and without social support and/or interventions, young people who have experienced adverse childhood experiences are less likely to be equipped to take on a parenting role and more likely to adopt parenting behaviours that perpetuate a cycle of adverse parenting across generations (Britto et al., 2017; Lomanowska et al., 2017). However, negative outcomes are not inevitable and adolescent mothers vary greatly in their parenting behaviour and attitudes (Wakschlag & Hans, 2000). A meta-synthesis of 25 qualitative studies that investigated the experiences of adolescent mothers highlights the complexity involved (Clemmens, 2003). Clemmens (2003) identified themes describing parenting challenges, including 1) the reality of motherhood brings hardship; and (2) living in the two worlds of adolescence and motherhood. She also identified positive themes in her synthesis of these studies, including (3) motherhood as positively transforming; (4) baby as stabilizing influence; and (5) supportive context as turning point for the future. Aparicio and colleagues' in-depth qualitative analysis of teen mothers in foster care identified comparable themes (Aparicio et al., 2015). They identified themes of darkness and despair, incorporating experiences of child maltreatment, substance abuse and poverty, which contrasted with the theme of new beginnings which was related to new identities as a mother (Aparicio et al., 2015). The young mothers in their study also spoke about

efforts to break cycles of child maltreatment with their own children and identified the need to parent differently and reduce isolation/enhance support (Aparicio, 2017).

A range of factors including cohesive family support, decreased social isolation, increased educational attainment, positive mother-child interactions and preventing repeat pregnancy have all been found to predict improved outcomes for teenage parents and their children (Ruedinger & Cox, 2012; Whiteley & Brown, 2010). Similarly, interventions that are developmentally informed and deliver care in culturally sensitive ways have demonstrated effective outcomes (Ruedinger & Cox, 2012). Systematic reviews of randomized controlled trials of short-term parenting programs for teenage mothers have found that individual and group parenting programs are effective in improving maternal sensitivity, self-confidence, positive maternal identity, infant responsiveness and parent-child interaction (Barlow et al., 2011; Coren et al., 2003), all factors that can serve to ameliorate risk associated with early parenting.

Nevertheless, there remain limited support services for young parents. Many parenting programs exist to support children who have experienced maltreatment, including programs for foster and kinship carers (for reviews see Kemmis-Riggs et al., 2018; Kinsey & Schlosser, 2013), and for birth families identified as high risk for maltreatment to help interrupt intergenerational cycles of maltreatment (for reviews see Levey et al., 2017; van der Put et al., 2018). However, there are limited intensive individual parent-child interventions that have been developed specifically for young parents who have experienced early adversity (including child maltreatment, family dysfunction and hardship).

Because of this identified need, a research team at the University of Technology Sydney have been developing an intensive parent-child intervention to support young parents and their toddlers who have experienced early adversity. It aims to help equip

young parents to understand and respond effectively to their children to provide a foundation for optimal child development. One important step in program development is to involve consumers to gain feedback and insight into their perspectives and needs (National Health and Medical Research Council (NHMRC), 2016; National Health Service, 2014; National Institute for Health and Care Excellence (NICE), 2013a). Benefits to consumers and the broader community include more relevant research for community needs, greater transparency, accountability and quality in research and, importantly, more effective translation of research to improve clinical outcomes (NHMRC, 2016). While several large scale surveys have been conducted that explore parenting perspectives (e.g., Parenting Research Centre, 2017; Zero to Three, 2016) there is less research focussed on the perspectives of young parents. Thus, we aimed to explore the views and experiences of young parents (aged between 16 and 26 years) and use their feedback to inform intervention development and clinical practice.

6.3 Method

6.3.1 Study Population

Participants for this study ($N = 31$) were recruited from a range of community and online fora. They were eligible if they were aged between 15 and 26 years, the parent of at least one child under the age of 6 years, and currently actively involved in parenting their child/ren.

6.3.2 Study Design and Procedures

Ethics approval was obtained by the University of Technology Sydney Human Research Ethics Committee (ETH18-3146). Informed consent was obtained from participants online and data for the study were collected anonymously using a secure, web-based platform. It was anticipated some parents may not complete the full survey due to its length. Therefore, it was designed in blocks to maximise use of data for

participants who partially completed the survey. At completion, participants were offered the chance to win one of ten \$50.00 gift cards. The survey link was circulated nationally through online parenting websites and through the networks of research team members and health service partners. Flyers were posted at universities and on community noticeboards. An unknown number of potential respondents saw the link, so it is not possible to calculate a response rate. The survey ran from June 2019 to November 2019.

6.3.3 Measures

The survey included structured and open-ended questions that sought demographic information, information about parents' previous participation in parenting programs, information they would like should they attend a parenting program, their attitudes toward parenting, challenges they experience, the impact of their own childhood experiences including their experience of adversity on their parenting, and their mental health (available from the first author on request). The open-ended questions are listed in the Appendix. Several questions in the current study were adapted from the Zero to Three (2016) survey material, as Zero to Three and The Bezos Family Foundation have kindly allowed adaptations for research and non-commercial purposes. Specific psychometric measures are listed below

Demographics. Parents' age, gender, ethnicity, language, region of residence and educational background was collected. Children's age and gender was also collected.

Mental Health. The Kessler 6-item scale (K6; Kessler et al., 2002; Kessler et al., 2003) was used as an indicator of non-specific psychological distress. It has demonstrated robust psychometric properties in prior research (Furukawa et al., 2003; Kessler et al., 2003). The K6 is measured on a 5-point scale. Scores are summed to

create a total score ranging from 0 to 24, with higher scores indicating higher distress. Scores of 13 or more correspond to probable severe mental illness (Kessler et al., 2003), whereas scores of 6 or more are considered indicative of mild to moderate non-specific psychological distress (Furukawa et al., 2003). Cronbach's $\alpha = .86$.

Parent self-efficacy, describes parents' perceptions of their confidence in and mastery of parenting skills. This was measured using 4 items from the Brief Parental Self-Efficacy Scale (BPSES; Selwyn et al., 2016). The items are rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Types of items include 'the things I do make a difference to my child's behavior'. The minimum score is 4 and the maximum is 20; higher scores indicate higher self-efficacy. Cronbach's $\alpha = .78$.

Adverse Childhood Experiences. The Adverse Childhood Experiences questionnaire, (ACE-Q; Felitti et al., 1998) was used to measure child trauma history. It is a 10-item self-report measure that assesses a range of categories of childhood adversity, including abuse and neglect. One point is scored for each type of childhood trauma endorsed.

6.3.4 Data analysis

The qualitative data from open-text responses was analysed using thematic analysis (Braun & Clarke, 2006). This involved prolonged engagement with the data by repeated reading, creating initial codes, coding responses, and organising codes into themes by the lead author, who has experience and training in qualitative methods. The second author independently reviewed the data and provided further input to refine the themes. Thematic coding is a process used within major qualitative analytic traditions, however, thematic analysis should be considered a method in its own right (Braun & Clarke, 2006). Frequencies of responses were calculated for survey data with structured responses (e.g., formats that asked parents to choose one or more listed items).

Descriptive statistics for quantitative data were calculated using SPSS 25 (IBM Corp, 2017) and used to describe the sample and investigate patterns between quantitative results and identified themes.

6.4 Results

6.4.1 Sample Characteristics

Thirty-one parents completed the initial block of the survey. As anticipated, there was progressive attrition throughout the survey; 24 participants completed the entire survey. Participant numbers for each block are provided with the results. Parents' ages ranged from 18 to 26 years; 84% of the sample were pregnant with their first child between the ages of 15 and 21. The majority (71%) of the sample were born in Australia and 71% had an educational level of Year 12 or below. Table 1 provides further demographic information.

6.4.1 Table 1*Demographic Characteristics*

	<i>N</i> = 31
	(%)
Parent demographics	
Gender (female)	97%
Parent age ^a (years)	22.39 (3.58)
Age ^a (years) when pregnant with first child	19.67 (2.61)
English as primary language	89%
Ethnicity	
White/Caucasian	55%
African	10%
Pacific Islander	6%
European	6%
Australian Aboriginal	3%
Asian	3%
Middle Eastern	3%
Caregiving responsibility	
Primary caregiver	48%
Sole caregiver	29%
Equal caregiver	23%
Number of children	
1 child	55%
2 children	39%
3 children	6%
Child demographics	
Child gender (female)	51%
Child age ^a (years)	2.20 (1.86)
Child age range	1.5 months – 9 years

Note. ^a M (SD)

6.4.2 Parental Indicators of Wellbeing and Childhood Experiences

The majority of the sample reported that their childhood was very happy or pretty happy (58%), with some describing it as unhappy (25%) and others as very unhappy (17%). Most of the sample (58%) reported there was a lot of tension in their household while growing up. The ACE-Q scores showed a range of childhood experiences; 79% sample had experienced at least one ACE, 71% of sample had experienced 2 or more ACEs and 42% of sample had experienced 3 or more ACEs. The most common ACEs reported were related to emotional neglect (50%), parents' separation/divorce (50%), physical abuse (46%) and emotional abuse (42%). The majority (63%) of parents agreed or strongly agreed with the statement "I feel as though I am a really good parent", which was consistent with generally high parent self-efficacy scores demonstrated in the BPSES. In contrast to high parent self-efficacy, scores on the K6 indicated that 84% of the sample reported mild to moderate distress and 64% reported probable severe mental illness. The descriptive statistics for adverse childhood experiences (ACE-Q), mental health (K6) and self-efficacy are shown in Table 2.

6.4.2.1 Table 2

Descriptive Statistics for Psychometric Scales Used in This Study

Measure	<i>N</i>	Min	Max	<i>Mean</i>	<i>SD</i>
Brief Parental Self-Efficacy Scale	30	11	20	15.57	2.22
K6	25	3	22	14.36	5.07
ACE-Q	24	0	9	2.9	2.65

Note. BPSES = Brief Parental Self-Efficacy Scale. K6 = Kessler 6-item scale. ACE-Q = Adverse Childhood Experiences questionnaire

6.4.3 Parenting Program Feedback

Thirteen of the 31 parents reported that they had previously completed a parenting course. The most common method of delivery was face-to-face in a clinic/community setting ($n = 12$), compared to face-to-face at home ($n = 1$). There were no reports of participating in online parenting courses or courses delivered using e-health methods. The majority had attended a parenting course with a group of other parents ($n = 11$), with others reporting attendance with their child ($n = 1$) or with their child and partner ($n = 1$). Parents were asked to choose from a list of structured and open-choice items about what they liked about participating in the parenting program. The most common responses were that it provided information that suited their needs (33%), helped to improve their ability to stay calm (26%) and helped to improve their relationship with their child (23%).

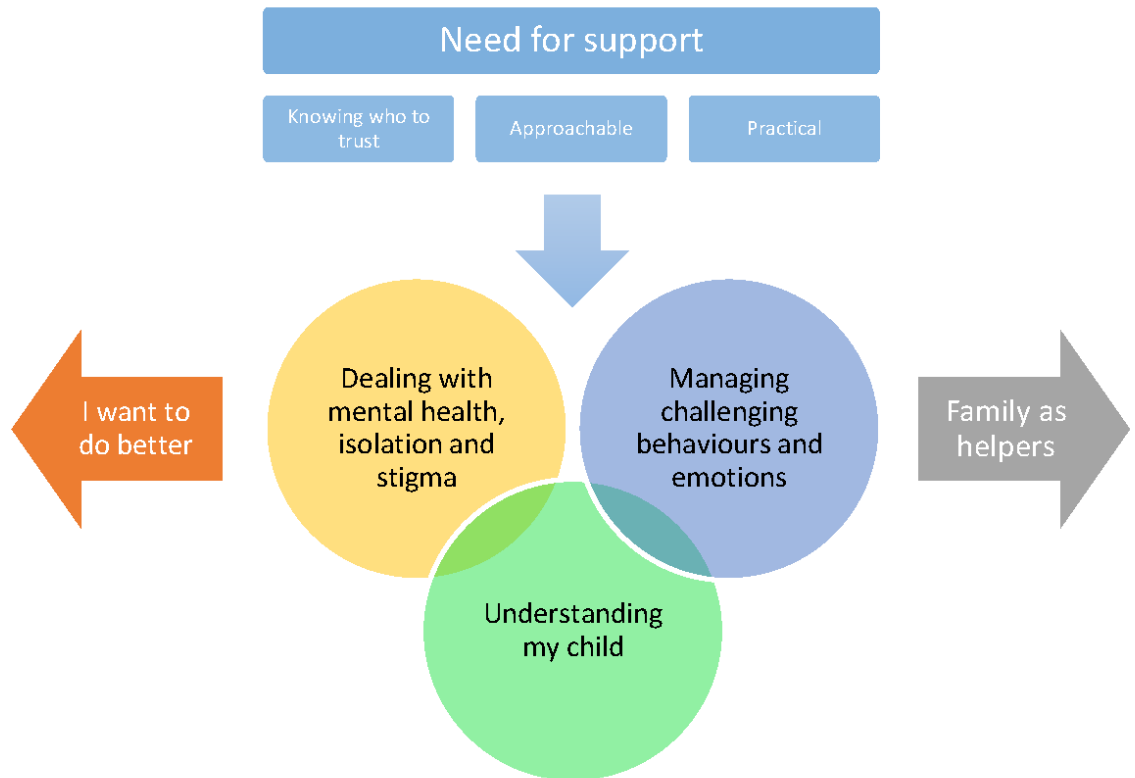
All parents ($n = 31$) answered questions about potential barriers to participation, should they choose to participate in a parenting intervention. The most commonly endorsed barriers were related to costs of attendance or travel, and the time commitment. (Supplementary Figure 1 shows the complete list and frequencies for each item).

6.4.4 Qualitative Themes

Parents responded to structured and open-ended questions about topics of interest, experiences of parenting and how their own childhood experiences affect their parenting approach. Length of open-text responses ranged from a few words to longer sentences and were organised into five superordinate themes. Results from the structured questions are presented in conjunction with these themes to highlight commonalities and differences between them. Figure 1 shows a visual depiction of the themes.

6.4.4.1 Figure 1

Visual Depiction of Qualitative Themes



Understanding my child. Despite 97% of parents agreeing with the statement that “being a parent is my greatest joy”, the majority of participants expressed the desire to understand their child better. This was particularly related to understanding their developmental stages and emotions and adapting to their child’s changing stages and needs (e.g. changes with sleep or other needs). Participants wanted to learn about “developmental progression and how to help stimulate their development from a young age” [Mother, age 19] and wanted “help understanding the developmental stages of growth from 0-4” [Mother, age 18]. Some expressed frustration about not knowing how best to meet their child’s needs. For example, one parent wrote, “Having a constantly

unhappy baby and not knowing what's wrong as it's nothing obvious" [Mother, age 23]. As illustrated in Figure 1, this theme also related to the theme 'managing challenging behaviours and emotions' as some parents expressed that they wanted to understand "how to give discipline at different ages such as appropriate discipline at age one compared to age two" [Mother, age 23].

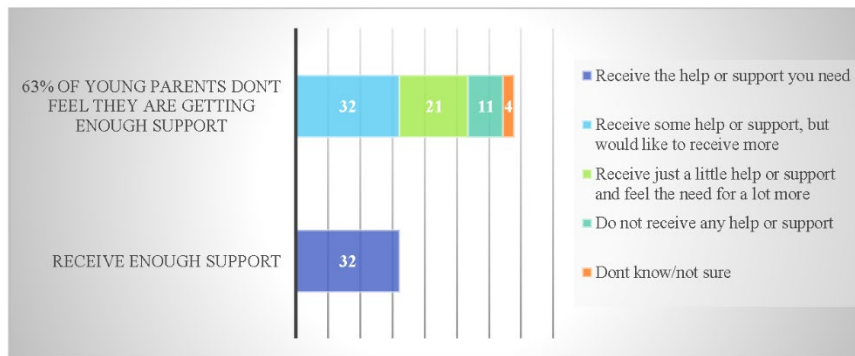
All parents ($n = 31$) also provided feedback about educational topics of potential interest, should they participate in a parenting intervention. Parents were asked to select items from a list of structured items (see Supplementary Figure 2 for the complete list and frequencies for each item). The two topics of greatest interest were children's emotional development (81%) and knowing what skills to expect at different ages (77%). More than half the sample wanted to learn about early brain development (65%), how and when children develop self-control (61%), recognising potential delays in child development (58%) and how parent-child relationships affect child development (52%).

When presented with a list of choices about practical skills of potential interest, the majority reported that they wanted to learn effective ways to support their child's social, emotional and cognitive development, including helping their child develop self-control (84%), learn new skills (71%), and ideas for educational activities (61%) and playing with their child (58%). Many reported that they wanted to learn about effective discipline (52%) and how to discipline without spanking/physical punishment (48%), which relates to the theme of managing challenging behaviour (see Supplementary Figure 3 for the complete list and frequencies for each item).

Need for support. While some parents were happy with the support they receive when they felt stressed or experienced challenges (32%), almost two thirds felt they did not receive enough support. Figure 2 provides a graphical representation of parents' perceived support.

6.4.4.2 Figure 2

Support Needs When Facing Stress or Challenges (n = 28).



Several subthemes in this superordinate theme were identified.

Approachable services. Parents stated they wanted supportive services that were easily accessible, approachable and offered a “warm and comforting environment” [Mother age 25], “validation” [Mother, age 23], and “someone to talk to and get advice” [Mother, age 21]. One 21-year-old father commented that “having someone to talk to about any concerns with my child” was very helpful.

Practical support was identified as valuable. One parent noted it was helpful to have “an extra set of hands” [Mother, age 23], and a “hands on approach” [Father, age 21]. Others wrote about practical support offered by friends too, such “having friends come over and watch my baby so I can sleep” [Mother, age 26], and “friends coming over and doing housework” [Mother, age 26].

Knowing who to trust. Several participants stated that it can be hard to know who to ask or turn to for support. One young mother stated “Not knowing who I can trust with my kids and not having a big network of people available that understand my circumstances [makes it harder]” [Mother, age 25]. In contrast to the subtheme

approachable services, one parent highlighted it was much harder when “people did not listen to your actual concerns and frustrations” [Mother, age 25]. Some parents felt it was hard to ask for help “when you are afraid you have to entertain your friends so asking them to help just seems like another added thing” or that “it is easier if I just did it than asking someone else to get involved” [Mother, age 25]. Another articulated that they needed “help with accepting help” [Mother, age 26].

Dealing with mental health, stigma and isolation. This theme encapsulated ideas about the challenges of managing isolation, stigma, self-confidence, mental health problems and unrealistic expectations. Some said that they would like help with “building self-confidence” [Mother, age 23] and “how to stop having unrealistic expectations” [Mother, age 26]. Other comments included “strategies to cope when it feels like it's too much to handle” [Mother, age 22] and “[how to] cope with a tired, upset child whilst sleep deprived and under your own pressures” [Mother, age 22]. Many commented about feelings of shame and stigma, for example “there's so much stigma around young parents” [Mother, age 24]. Another mother (age 24) wrote that the “shame of being a single parent” made it more difficult to get support. One mother (age 26) said she would like to know “what to do when you feel isolated”. Another reflected that it was important to “be aware of your mental health and get help straight away” [Mother, age 2]. This qualitative feedback was consistent with participants K6 scores demonstrating relatively high psychological distress among this sample.

When parents were asked to rate their biggest challenges from a list of common parenting challenges, half the participants reported that feeling alone or isolated and feeling judged by others were among the top five challenges of being a parent. (See Supplementary Figure 4 for the complete list and frequencies for each item). When we explored feelings of judgement using a list of structured questions, almost all

participants (93%) said they feel judged as a parent, with a large proportion reporting they feel judged all the time or nearly all the time (43%). Parents felt most likely to be judged by strangers in the community (57%), family members (54%), and other parents (50%), and experience self-judgement (46%). One quarter of the parents said that they felt judged for the way they discipline their child and 29% felt judged for spoiling their child. A third of the participants agreed with the statement “I love my child, but if I could do it over again, I would have waited longer before having children”.

Open-text responses indicated that several parents also felt judged about being a young parent. For example, participants wrote they felt judged for “Being a young mum” [Mother, age 21] and “Being a young mum. I feel people judge me based on how young I look” [Mother, age 24]. Others reported they felt judged about being single mum, not involving the child’s father because of his violence and alcohol abuse, or decisions around kinship care. For example, one 24-year-old mother of three children wrote “my two eldest children are in kinship with my mother, even though our bond is really close I do get judgement from others about my children not being with me.”

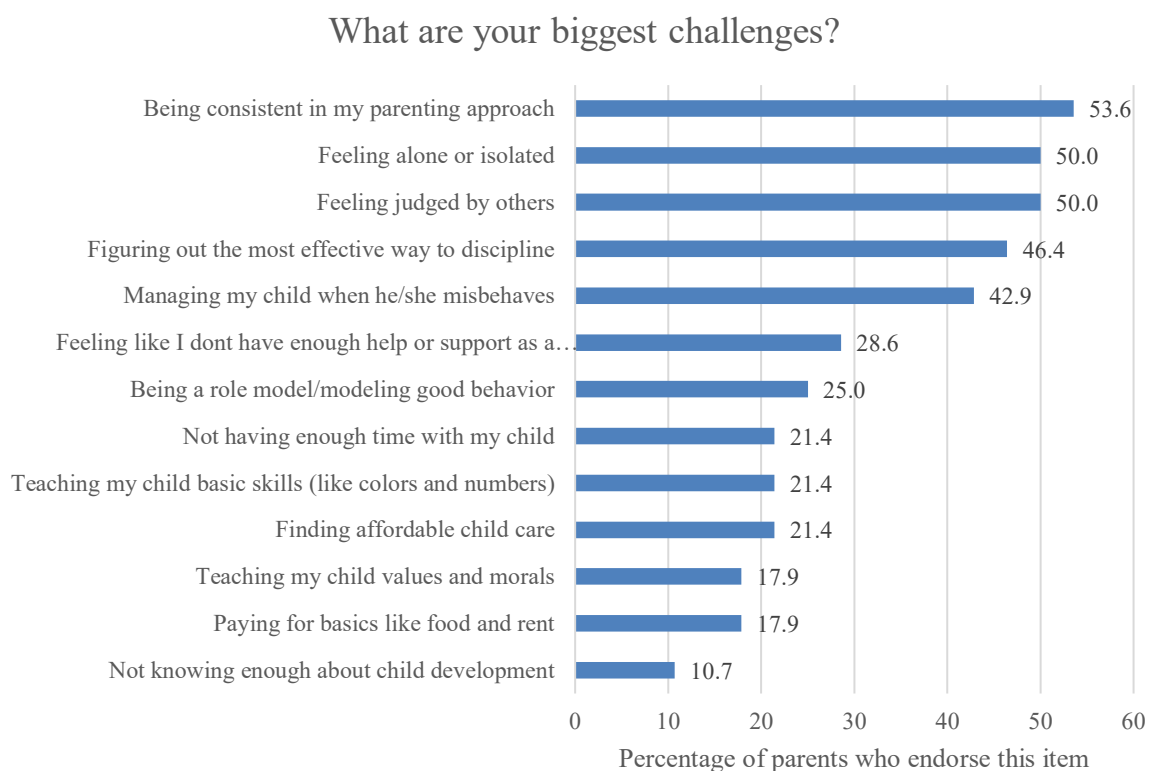
Managing challenging behaviour and emotions. Open-text responses indicated that managing sleep, tantrums, screaming, crying, distress on separating and managing boundaries were identified as common challenges for participants. One mother of two children (age 25) wrote she found it hard when she did not know “what to do when my child has a tantrum and I feel like I can’t handle it anymore”. Another mother (age 21) was clear that the challenges also came with rewards when she stated “being a young mum has been very challenging but very rewarding, it’s changed me in many ways.”

In addition to isolation and feeling judged, when presented with a list of structured items, a large proportion of the sample reported that being consistent in their

parenting approach (54%), knowing how to discipline effectively (46%), and managing misbehaviour (43%) were among the top 5 challenges experienced (See Figure 5 for all items). These challenges also related to the list of options that parents endorsed when asked what they would like to do better. As shown in Figure 3, ‘controlling my own emotions and reactions’ and ‘having enough patience’ were endorsed as one of the top 3 things that parents would like to do better by the majority of the sample.

6.4.4.3 Figure 3

Common Parenting Challenges Endorsed By Young Parents (n = 28)



I want to do better. Seven parents were clear that their childhood experiences were not optimal and that their experience “makes me want to do better” [Mother, age 21] and “My parents were never involved in anything when I was growing up.” [Mother, age 19]. Others said they were “trying to be the opposite for my children by

being more present in their lives” [Mother, age 25] and “[My experience] showed me that I should not raise my child the way I was raised”. [Father, age 21]. One 23-year-old mother stated

“I learnt how not to treat a child. I learnt firsthand what a lack of emotional support does to a child. I also try to do the exact opposite of what my emotionally abusive and emotionally neglectful parents did to me.”

These qualitative statements were supported by data from the ACE-Q as parents who expressed these perspectives endorsed higher ACE scores on average ($M = 4.67$, $SD = 2.5$) than the overall sample ($M = 2.9$, $SD = 2.65$).

In general, many participants wanted to improve areas of their parenting. Almost all parents agreed or strongly agreed with the statement “I work hard at becoming a more effective parent (90%) and 63% agreed with the statement “I wish I were a better parent”. However, parents also reported that they were more affectionate, present and positive than their own parents, which may be related to the generally high parent self-efficacy scores in this sample. For example, when presented with a list of statements and asked to indicate whether they “use each of the following approaches more, as much as, or less, than your parents did when you were a child”, or if “neither I nor my parents do this.”, they reported that they show more affection (73%), say I love you more (65%), praise their children more (62%), participate in more play time (62%) have more fun as a family (53%) and spend more time listening and talking (58%) than their parents did with them. Many also reported that they used less harsh discipline measures than their own parents. This included yelling/shouting less (58%) and spanking/hitting less (50%).

Family as helpers. In contrast to the parents who reported high ACEs and spoke of wanting to do better than their own parents, five participants reflected that their

parents and family members had provided stable, nurturing environments that had helped them to parent better. Parents who expressed these sentiments had lower ACE scores on average ($M = 1$, $SD = 1$) than the overall sample ($M = 2.9$, $SD = 2.65$). One mother (age 24) commented “My parents have been good role models for my parenting. They have allowed me to find what I do and don't like in my parenting”. Another mother (age 19) reflected “I have really learnt a lot from my Nan and how she talked and acted with me, and she's also teaching me how to be a better parent everyday”. Other parents reported that their family members provided vital ongoing support. Examples included “my parents and siblings being there for either a chat or to have my son for a few hours/ overnight to let me relax” [Mother, age 25] and “my parents giving me advice on how to approach situations better with my child” [Mother, age 21].

6.5 Discussion

We aimed to explore young parents' views and experiences of parenting to inform a newly developed parent-child intervention and support clinicians working with young parents. Consumer involvement in research is consistent with best-practice recommendations (NHMRC, 2016; NICE, 2013). While findings demonstrated generally high parent self-efficacy scores, 71% of sample had experienced 2 or more ACEs and 64% reported probable severe mental illness. Six qualitative themes were identified that extend prior research on young parents' experiences (Aparicio, 2017; Aparicio et al., 2015; Clemmens, 2003). These themes, *understanding my child, need for support, dealing with mental health, isolation and stigma, managing challenging behaviour and emotions, I want to do better*, and *family as helpers* capture the perspectives of participants.

The feedback about educational topics and practical skills of interest was informative and will be used to inform content of our parenting program. Parents

expressed their interest in understanding more about child socio-emotional development and wanted help to improve their own emotion regulation and management of challenging child behaviours and emotions. Interventions for young parents may need more explicit information about child development than is traditionally offered in general parenting programs. Additionally, to be able to co-regulate their child effectively, parents need to be able to regulate their own emotional and behavioural responses (Schore, 1994, 2001). Given self-regulation capacities are commonly impacted by the experience of abuse and neglect (Harel & Finzi-Dottan, 2018; Murray et al., 2015), young parents who have experienced disrupted attachment relationships with their own caregivers may need additional support to increase their self-regulation. Maternal self-regulation difficulties have been shown to moderate the relationship between maternal history of maltreatment and child behaviour and emotional problems (Plant et al., 2017) and increase the risk of maltreatment continuity (Smith et al., 2014). Self-regulation appears malleable and responsive to intervention (Murray et al., 2015). Thus, a strong focus on parents' self-regulation within young parenting intervention protocols, teaching evidence-based regulation strategies, may improve outcomes for young parents and their children.

Stigma, isolation, mental health concerns and the need for approachable support were also strong themes that demonstrated the importance of meeting the needs of this commonly under-resourced group of parents. Almost two thirds of the young parents felt that they were not getting the support they need when feeling stressed or overwhelmed. This is concerning given the protective role of supportive relationships (e.g., Ruedinger & Cox, 2012; Whiteley & Brown, 2010). Some of the barriers to accessing support included not knowing whom to trust or how to ask for support, especially when feeling isolated or stressed. Stigma may compound isolation and

contribute to higher psychological distress and interfere with help-seeking (SmithBattle, 2013). While stigma clearly needs to be addressed at broader social levels, including policy and within communities, professionals working in the field can also contribute to reducing stigma. One important way that therapists may help address stigma and feelings of isolation is to ensure they focus on building a strong, therapeutic, supportive relationship between the therapist and parent throughout interventions, to model relationship-building skills and provide a safe, nurturing relational foundation for parents to improve parenting behaviours. Quantitative and qualitative findings converged to indicate a high prevalence of psychological distress, consistent with prior research showing that teenage parents frequently experience mental health concerns (Goossens et al., 2015). Screening for psychological distress at intake when parents present to services for parenting concerns and offering concurrent referral to mental health services may help meet this need.

Parents felt that their childhood experiences influenced their parenting approach. Several parents reported experiencing stable, nurturing childhood environments, with a low number of ACEs, and felt that this had helped them to parent better. In contrast, parents who had experienced high rates of ACEs often articulated the desire to provide more supportive and responsive parenting than they had experienced. Consistent with Aparicio (2017), parents wanted to break cycles of child maltreatment and provide very different environments for their own children. Average rates of ACEs reported in this study were substantially higher than the rates reported in the seminal ACE studies (Felitti et al., 1998). For instance, the proportion of the sample who reported two or more ACEs in this study was 71% compared to 25% in Felitti et al. (1998). Considering the ACE studies have shown that children who grow up with abuse, neglect, poverty or extreme distress are at greater risk of poor physical and mental health throughout their

lifetime (Felitti, 2009; Felitti et al., 1998), these findings provide further imperative to continue improving support for young parents who have experienced childhood adversity.

There are several limitations of this study. Because of the small sample size, the findings may not be generalisable to a broader range of young parents, however the qualitative responses provide rich insight into the experiences of young parents and add to our understanding. Further work is needed to extend these findings to a larger sample. It is noteworthy that only one participant was male, so we acknowledge this study is more a 'mothers' voice than 'parents' per se. The length and written nature of the survey may have excluded participants with low English reading ability. Additionally, the anonymous format of the survey did not allow opportunity for further questions. However, the anonymous online format was designed to reduce potential stigma that parents may feel in reporting potential parenting difficulties and reach a somewhat larger audience than was possible with other qualitative methods, such as focus groups or in-depth interviews.

Despite these limitations, findings provide valuable insight into the views and experiences of young parents and can contribute to the development and piloting of parenting programs for young parents. It is evident from the results of this study that young parents are not only highly invested in developing strong parenting relationships with their children but also demonstrate clear potential to inform ways that parenting assistance can be provided. Understanding their perspectives is vital if we are to meet young parents' needs effectively. Future research should focus on exploring young fathers' perspectives, expanding intervention programs for young parents to support them to manage challenges and provide safe, nurturing care for their children, and research trials to evaluate program efficacy.

6.6 Chapter 6 References

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6.7 Chapter 6 Appendix: Supplementary Figures and Tables**Supplementary Table 1**

Open-ended questions in the Voices of Young Parents Survey

Open-ended questions

What would you like to see in a parenting course?

If you have participated in a parenting course before, was there anything you liked or didn't like about it?

Other than the topics listed, are there any other things you would like to learn about if you did a parenting course?

Thinking about the times you have been overwhelmed or stressed as a parent of a young child, what sort of support has been helpful?

If it is sometimes more difficult to get support, what makes it difficult?

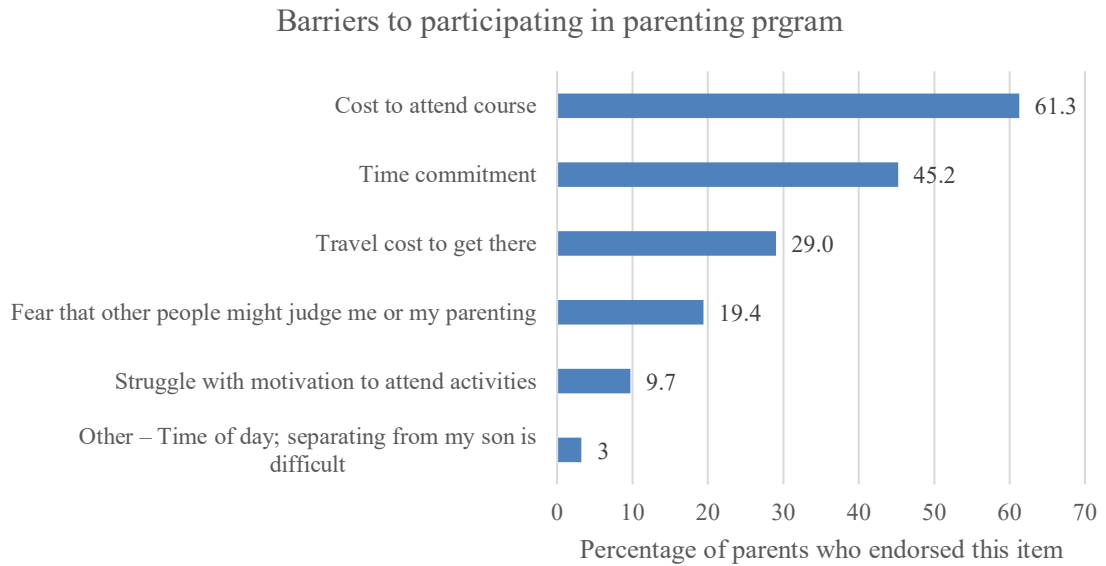
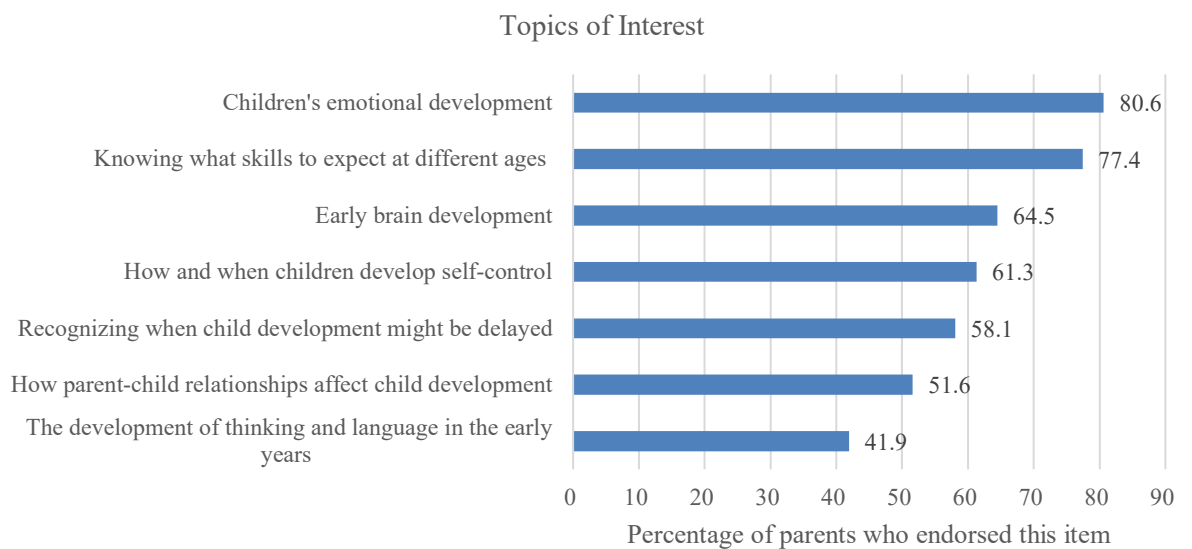
Other than the challenges listed above, are there any other challenges you face?

How do you deal with these challenges?

Other than the list above, who do you feel judgement from?

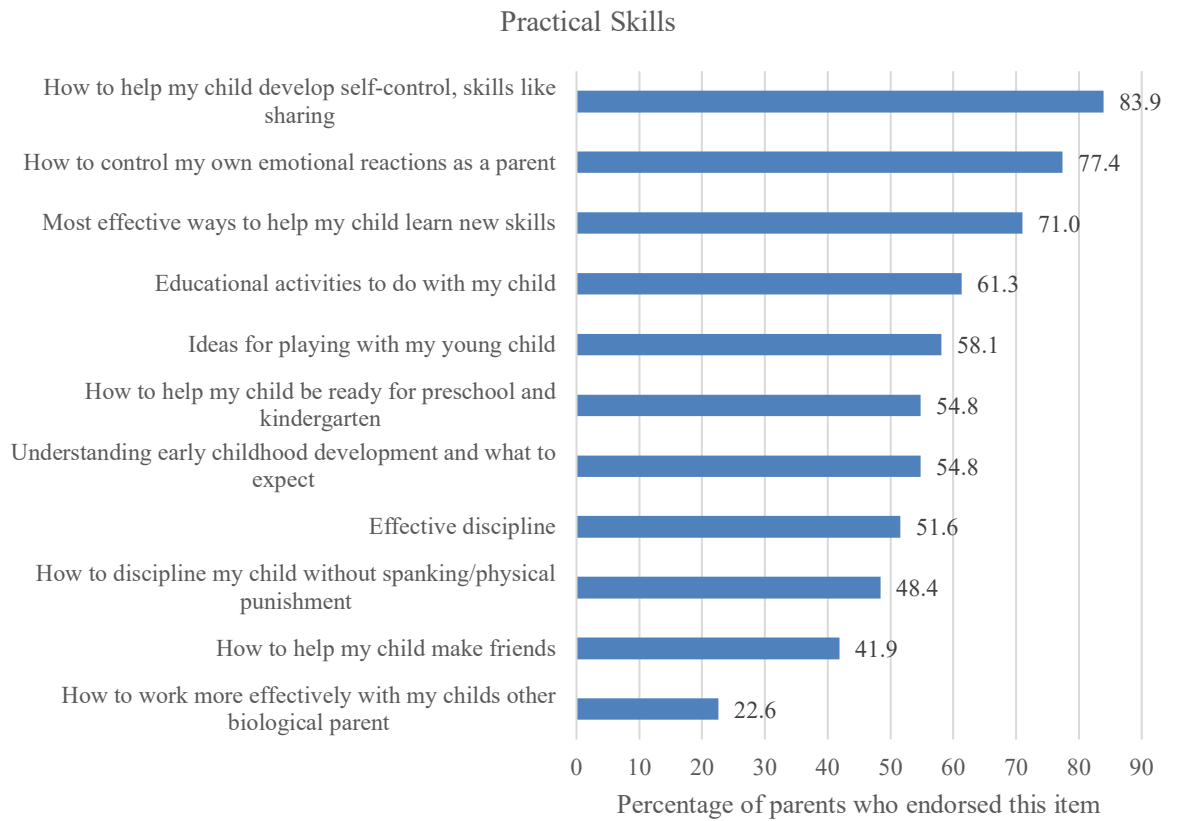
How do you think your experiences of being parented have influenced or impacted your parenting?

Other than the items above, is there anything else you wish you could do a better job of?

Supplementary Figure 1*Perceived Barriers to Participating in Parenting Course (n= 31)***Supplementary Figure 2***Educational Parenting Topics of Interest Endorsed By Young Parents (n = 31)*

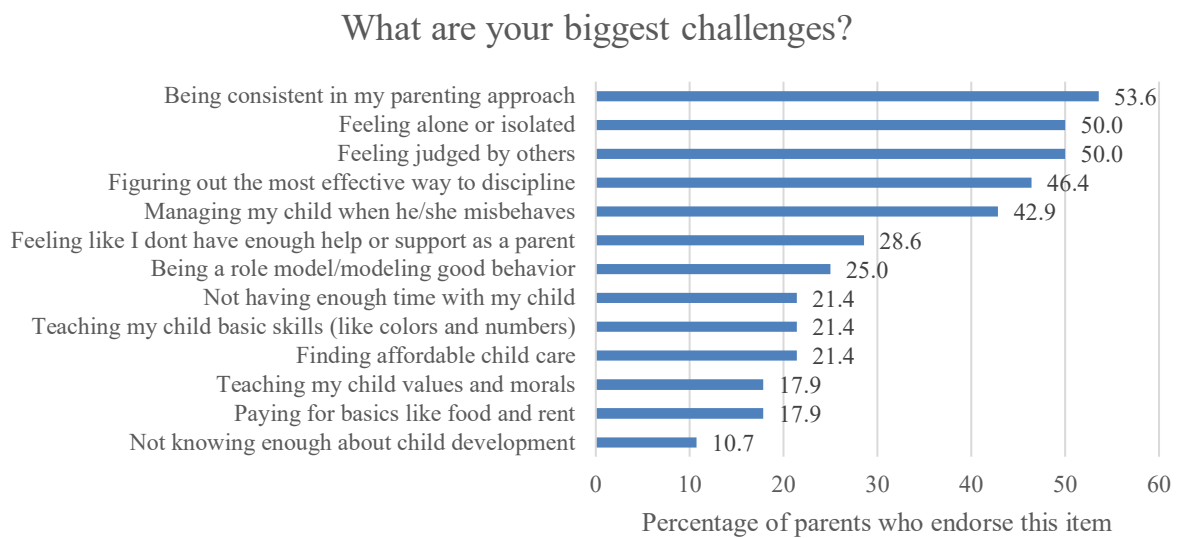
Supplementary Figure 3

Practical Skills of Interest Endorsed By Young Parents in This Study (n = 31)



Supplementary Figure 4

Common Parenting Challenges Endorsed By Young Parents (n = 28)



Chapter 7: Holding Hands Young Parents Intervention Development Rationale

7.1 Results from the Previous Studies

Study 3 ([Chapter 6](#)) provided insight into young parents' perspectives and needs; understanding their needs is integral for improved treatment outcomes. Findings were broadly consistent with research discussed in previous chapters, highlighting both the joys and the challenges of being a young parent. Parents expressed their openness to learning new skills and desire to be a positive influence in their children's lives. Stigma, isolation, mental health concerns and the need for approachable support were also strong themes that demonstrated the importance of meeting the needs of this commonly under-resourced group of parents. The feedback about the types of information that would be useful should parents participate in a parenting program was particularly informative and helped shape the content of our parenting program. Parents expressed their interest in understanding more about child socio-emotional development and wanted help to improve their own emotion regulation and management of challenging child behaviours. These aspects have been incorporated into our intervention in several ways. First, the intervention provides explicit information about areas of interest, such as strategies for managing challenging behaviour, emotion regulation skills and child socio-emotional development, which will be discussed in detail in the next section. Second, the desire for approachable support relates to research discussed in [Chapter 1](#) and [3](#), showing the importance of the therapeutic relationship for effective outcomes for young parent interventions. Thus, another key aim of the intervention is to build a strong therapeutic, supportive relationship between the therapist and parent throughout the program to model relationship-building skills, help increase parenting self-efficacy and provide a safe, nurturing relational foundation for parents to improve parenting behaviours.

This remainder of this chapter draws together much of the research examined in this series that informs the design of the intervention for young parents who have experienced complex trauma, *Holding Hands Young Parents* (HHYP). This intervention has been developed to address intergenerational trauma by strengthening parenting behaviours to provide children with an improved social environment that supports the development of secure attachment, stronger parent-child relationships and socio-emotional capacities. The following section provides the theoretical and empirical rationale of HHYP, focussing on three core aims of the intervention. It also provides an overview of treatment topics and details about the intervention format. The therapist manual and participant handouts for the intervention are in Appendix 1 and 2, respectively.

7.2 Theoretical and Empirical Foundation of Holding Hands Young Parents

HHYP aims to improve the quality of the parent-child relationship, increase young parents' self-regulation and self-efficacy, and support them in responding more effectively to child behavioural and emotional problems. In targeting these areas, the overarching aim of HHYP is to help parents provide a strong foundation for child social and emotional development and help break intergenerational cycles of trauma. Evidence from a large meta-analysis of the comparative effectiveness of attachment-based interventions indicated interventions that were most effective at improving parental sensitivity and attachment security included a moderate number of sessions (i.e., less than 16), were behaviourally focussed and conducted after the child was 6 months or older (Bakermans-Kranenburg et al., 2003). The prenatal to three-year-old period is vital for creating a strong neural foundation for ongoing development (Shonkoff et al., 2016), therefore, HHYP has been developed for parents with toddlers between the ages of 6 and 36 months.

Reviewers have suggested that while behavioural interventions tailored to young mothers are needed, there are no ‘quick fixes’ that will repair childhood adversity and the social and economic disadvantage that contribute to teenage births and poorer maternal and infant outcomes (SmithBattle et al., 2017). Others have suggested that parenting interventions may have a limited role in supporting teenage parents and that they should potentially be used in conjunction with more intensive and comprehensive support that target broader outcomes related to social exclusion (Barlow et al., 2011). Comprehensive, multidisciplinary, culturally sensitive and developmentally appropriate services can potentially improve long term outcomes for adolescent parents and their children (Ruedinger & Cox, 2012). Thus, this intervention was developed to be delivered within the context of multifaceted service responses that provide case management, housing and life skills support. Parents who are considered most appropriate for the intervention are aged between 16 and 25 years, have stable living/housing arrangements, have a support person who is able to attend sessions with them, and are motivated to improve the quality of the relationship with their child.

7.2.1 Aim 1: Improve the Quality of Parent-Child Relationships

Attachment theory is one of the primary theoretical foundations of HHYP. Child attachment significantly predicts short and long-term social, emotional and cognitive functioning (Bowlby, 1973, 1980; Ranson & Urichuk, 2008; Sroufe, 2005). Early socio-emotional development occurs within the context of the parent-child relationship and higher quality parent-child relationships are positively related to children’s socio-emotional development (Cyr et al., 2010; Harrist & Waugh, 2002; Saint-Georges et al., 2013; Stack et al., 2010). Moreover, safe, secure and stable relationships play a vital role in regulating physiological and behavioural responses to stressors during infancy and childhood (Gunnar & Quevedo, 2007) and protect against excessive activation of

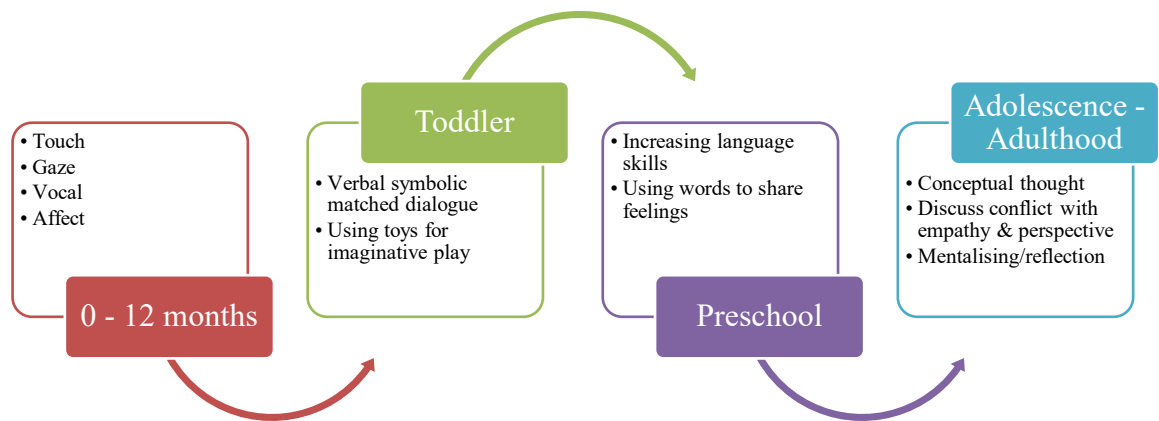
the stress-response system, potentially mitigating detrimental effects of toxic stress (National Scientific Council on the Developing Child, 2014; Shonkoff et al., 2016). Thus, HHYP aims to strengthen parenting behaviours to provide children with an improved social environment that supports the development of secure attachment, stronger parent-child relationships and socio-emotional capacities.

As introduced in [Chapter 1](#), an integral relational process in attachment relationships that shapes socio-emotional development is parent-child synchrony, sometimes termed reciprocity (Feldman, 2007a, 2007b; Kochanska, 1994). The *biobehavioural synchrony* model (Feldman, 2007b, 2012a) proposes a principal mechanism by which early environments impact social, emotional and cognitive development through the coordination of biological and social processes during social contact between attachment partners. Because of the importance of reciprocity, HHYP explicitly teaches parents how to increase reciprocal, give-and-take moments with their child by providing education and coaching for parents on specific bottom-up processes or behavioral building blocks of synchrony. Reciprocal interactions change over time from infancy through to adulthood, with early interactions requiring more parental attunement to meet the infant's bids for connection (Feldman, 2012a). This progresses to more mutually reciprocal interactions as the infant develops (Feldman, 2007b, 2015b; Feldman, Bamberger, et al., 2013). As reciprocity develops, both parent and child experience the rewards of being in a responsive relationship with one another. Figure 1 below provides a visual depiction of these stages. Children who have experienced complex trauma may have missed some important early processes during sensitive periods. Therefore, they may need additional support to provide early essential elements, using a bottom-up approach. Accordingly, HHYP focusses on coaching basic bottom-up processes of vocalisations, facial expressions, shared gaze, affective displays,

affectionate touch, and proximity positions (Feldman, 2007b) to build reciprocal interactions.

7.2.1.1 Figure 1

Visual Depiction of Reciprocal Processes Throughout Child Development



Note. The information in this figure has been informed by Feldman and colleagues (Feldman, 2007a, 2015b; Feldman, Bamberger, et al., 2013).

In addition to these bottom-up processes, HHYP targets top-down processes involving parent's internal representations, as these also influence parenting behaviour and by extension, the parent-child relationship. Parents' internal working models of attachment have been theorised to shape parenting behaviours by guiding the parents' interpretation and responses to child needs, which in turn affect the quality of child's attachment to that parent (Bowlby, 1980; Main & Hesse, 1990). Parent sensitivity (i.e., the capacity to perceive and interpret the meaning behind the child's signals, and to respond to them promptly and appropriately Ainsworth et al., 1978), reflective functioning/mentalising (i.e. the capacity to understand behaviour in light of underlying

mental states; Allen et al., 2008), and insensitivity/dysregulation (e.g., withdrawal, negative intrusiveness, role confusion, conflicting cues) have been identified as important mediators between maternal representations and infant attachment quality (Bailey et al., 2007; De Wolff & Van Ijzendoorn, 1997; Koren-Karie et al., 2002; Lyons-Ruth et al., 2005; Madigan et al., 2006; Van Ijzendoorn, 1995). For many parents who have experienced abuse and neglect, their attachment relationships with their own parents have been disrupted, which can impact their emotion regulation and capacity to develop secure attachments with their own children (Harel & Finzi-Dottan, 2018). For these reasons, the intervention includes parent education, exploration and coaching on parental sensitivity, mentalising and insensitive/dysregulated parenting behaviours. Throughout the intervention parents are guided to reflect on their own history and provided the opportunity to sensitively acknowledge how past experiences may impact current parenting to promote positive change in their parenting behaviours (for more details, see [Chapter 9](#)).

Another important therapeutic task for interventions aiming to enhance early attachment security is to develop a secure attachment relationship between therapist and parent (Berlin, 2005; Berlin et al., 2008; Bowlby, 1988). The therapeutic relationship between the parent and therapist can be a powerful mechanism of change because secure attachment to the therapist allows the parent to safely explore her relationship with her child and facilitate insights into the parent's own history and attempts for change of parenting behaviours (Bowlby, 1988). Moreover, evidence from interventions targeting maltreatment indicate that the establishment of therapeutic relationships between the clinician and parent contributes to improved outcomes (Olds et al., 2007). Individual variability in skills and experience in clinicians is an important to consider when implementing the intervention. We recommend that HHYP is delivered by well-

qualified mental health professionals who have experience and training in trauma-informed care and receive suitable supervision and support to engage, build and maintain strong therapeutic relationships with participating parents.

7.2.2 Aim 2: Increase Parenting Self-Regulation and Self-Efficacy

Research presented in [Chapter 1](#) and throughout this study series demonstrates that children rely on their caregiving relationships to develop their capacity to effectively regulate their own feelings and behaviours. To be able to effectively co-regulate their child, parents need to be able to regulate their own emotional and behavioural responses (Schoore, 1994, 2001). Given regulation capacities are commonly impacted by the experience of complex trauma (Harel & Finzi-Dottan, 2018; Murray et al., 2015) young parents who have experienced disrupted attachment relationships with their own caregivers may need additional support to increase their self-regulation. Findings from study 3 ([Chapter 6](#)) indicated that young parents would like to improve their own emotion regulation capacities. Maternal self-regulation difficulties moderate the relationship between maternal history of maltreatment and child behaviour and emotional problems (Plant et al., 2017) and increase the risk of maltreatment continuity (Smith et al., 2014), providing further support for improving parenting regulation and parenting behaviours among young parents with a history of child maltreatment and other adversity. Self-regulation appears malleable and responsive to intervention (Murray et al., 2015). Thus, HHYP introduces diaphragmatic breathing and mindfulness-based grounding exercises to help support parental self-regulation, based on cognitive behavioural approaches such as Acceptance and Commitment Therapy (ACT; Hayes, 2004) and Compassion Focussed Therapy (CFT; Gilbert, 2010).

As examined in study 1 (Kemmis-Riggs, Grove, et al., 2020) feelings of parental self-efficacy also play an important role in children's socio-emotional competence, both

directly and indirectly through parenting behaviours (Albanese et al., 2019; Jones & Prinz, 2005). Parental self-efficacy predicts or contributes to beneficial outcomes for the parent-child relationship, parenting competence and child socio-emotional development, and is negatively related to parental depression and anxiety (Albanese et al., 2019; Coleman & Karraker, 1998; Jones & Prinz, 2005). Parental self-efficacy has been positively related to more effective parenting behaviours, including more responsive and sensitive parenting and less coercive parenting styles (Albanese et al., 2019). Findings show that higher parental self-efficacy is generally related to better child behavioural outcomes, academic and school related outcomes and lower mental health outcomes, including internalising problems, negative emotionality, lower feelings of self-worth and child self-efficacy (Albanese et al., 2019; Jones & Prinz, 2005). Furthermore, results from study 1 (Kemmis-Riggs, Grove, et al., 2020) showed that low parental self-efficacy assessed during the toddler years was a significant predictor of unfavourable trajectories of internalising symptoms across later childhood in a population-based sample. Taken together, increasing parental self-efficacy and self-regulation are important targets for HHYP.

7.2.3 Aim 3: Support Parents to Respond to Child Emotional and Behavioural Problems

Maternal history of maltreatment and other adverse childhood experiences and the experience of maltreatment are both associated with increased risk of child emotional and behavioural problems (Burns et al., 2004; Keyes et al., 2012; Plant et al., 2017; Schickedanz et al., 2018). Young parents who participated in the third study in this series ([Chapter 6](#)) reported that they commonly struggle with managing emotional and behavioural problems and wanted to learn how to manage these challenges more effectively. HHYP draws on principles from both attachment theory and social learning

theory (Bandura, 1977, 1986; Patterson, 1982) to help support parents to manage and respond more effectively to child emotional and behavioural problems. Social learning principles form the basis of all evidence-based parent management training programs that aim to improve child behaviour problems (e.g., Dadds & Hawes, 2006; Eyberg et al., 1995; Patterson, 2002, 2005; Sanders, 1999; Webster-Stratton & Reid, 2018). In brief, social learning theory has been used to explain how children's experiences shape behaviour, both directly and indirectly, by the processes of modelling (i.e., imitation) and reinforcement (Gardner et al., 2006; Hood & Eyberg, 2003; Patterson et al., 1989; Scaramella & Leve, 2004). Extensive evidence supports these principles (Snyder & Stoolmiller, 2002), and a multitude of efficacious parenting programs to treat child behaviour problems have been developed based on this model.

Patterson's (1982) "coercion hypothesis" has been particularly influential in explaining processes involved in the development of child behaviour problems. The first process is by modelling of aggressive or antisocial behaviours, where the child may have observed and then imitated these behaviours from members within their family. The second process involves reinforcement cycles. Patterson argued that when parent-child interactions are contentious, both parent and child attempt to control the other using aversive strategies, developing a coercive cycle maintained by negative reinforcement. For example, a parental command may meet with noncompliance in the child (e.g., tantrums, yelling, crying). Progressively, the child learns to repeat or increase coercive behaviours to end the parent's command, negatively reinforcing the child's use of these strategies. Alternatively the parent may increase coercive behaviours (e.g., yelling at child, corporal punishment) to gain compliance. The child then responds to the parent's escalated behaviour and momentarily complies, reinforcing the parent's coercive behaviour. The more the child behaves in undesirable

ways, the less likely the parent will notice and reinforce the child's positive behaviours, developing a 'reinforcement trap' (Dadds & Hawes, 2006).

Consistent and non-coercive strategies are vital to build positive and supportive family relationships (Webster-Stratton & Reid, 2012). Programs underpinned by social learning theory target specific parenting behaviours in order to create change in the child's behaviour, encouraging increases in positive attention and praise for desirable behaviours, contingent reinforcement, clear instructions and reasonable boundaries, and limiting attention and criticism for undesirable behaviours. Moreover, consistent with empirical evidence stemming from both attachment and social learning theories, effective management of child emotional and behavioural problems requires parental self-regulation. Thus, parental processes of self-control, emotion regulation and a capacity to self-reflect are integral parts of managing child emotional and behavioural problems.

7.3 What's the Format of HHYP?

HHYP commences with two initial assessment sessions that include observation of parent-child interactions, clinical interviews and parent-report measures. These assessment sessions are integral for understanding the needs of each dyad and contribute to establishing the therapeutic relationship. Research investigating outcomes for children who have experienced complex trauma in alternative care indicates that thorough assessments and targeted care is vital for effective treatment outcomes (Dickes et al., 2018; Luke et al., 2014; Tarren-Sweeney, 2014). HHYP incorporates 8 individual modules, delivered weekly in 90-minute sessions, by trained mental health professionals, either face-to-face or by telehealth in a clinic or home setting. An optional bi-weekly telehealth check-in provides an additional opportunity to observe parent-child play and problem-solve any pressing parental concerns. The flexible delivery method

aims to maximise engagement and retention. Material is designed to be paced according to the needs of the family and expected to be delivered between 10 and 14 weeks, including two assessment sessions to build rapport and gain sufficient information to develop a collaborative formulation with each family. Each treatment session is split into two. The first 60 minutes is spent with parent and therapist (referred to as Parent Time) and the remainder is spent with the parent, child and therapist (referred to as Toddler Time). Having time alone with the clinician allows the parent/s the opportunity to reflect on and discuss the concepts more fully than if their child was present for the entire duration (Dozier et al., 2002). The aim of the parent session is to continue building the therapeutic relationship between parent and therapist, provide opportunity for parents to gradually learn to reflect on their own parenting and sensitively acknowledge how past experiences may be impacting their current parenting. Education on skills to be practiced in toddler time is also provided prior to the child coming into the session. Video feedback is also used in HHYP during Parent Time because it has been shown to promote reciprocal interactions and develop parental sensitivity and responsiveness in several parenting programs with sound empirical support (e.g., Juffer et al., 2008; Moss et al., 2018; Moss et al., 2014; Rusconi-Serpa et al., 2009; Spieker et al., 2012). Video is recorded during each parent-child play session and shown to the parent in the following session. Video feedback involves watching the interaction while being guided by the therapist, who provides feedback on the parent and child emotions and behaviours to highlight the positive impact of the parent's sensitive responses (Moss et al., 2018). The therapist also uses probes to encourage the parent to reflect on the child's thoughts and feelings during the interaction. For example, on seeing the child lean in close to the parent, the therapist might ask "how do you think Johnny feels when he sits in close to you?", thus extending parental reflection. Informal feedback gained from

case managers of young parents during the development of HHYP indicated that many young parents with a history of trauma may have difficulty tolerating video-feedback and may not engage in the program if this was the sole focus of treatment. Therefore, therapists introduced video-feedback gently, normalising fears about seeing oneself on camera and scaffolding the video sections so that parents did not become overwhelmed and were able to remain in their ‘window of tolerance’ (Ogden et al., 2006; Siegel, 2015).

During Toddler Time, the clinician coaches the parent in free-play session with their child from an observation room. Where there are no facilities to coach from an observation room, coaching can be done in the same room as the parent. Coaching provides an opportunity for parents to practice and strengthen skills learned in session while receiving real-time feedback on skill development. Study 2 (Kemmis-Riggs et al., 2018) demonstrated that in vivo coaching was associated with more effective outcomes for children in alternative care. Coaching in real-time has also been shown to predict larger effect sizes in parenting programs for the general population (Kaminski et al., 2008). In vivo coaching is a therapeutic strategy whereby a therapist encourages parental engagement in targeted behaviours by commenting on relevant parenting behaviour during parent-child interactions. This feedback can be both directive, scaffolding parents’ learning and engagement, and responsive, by praising parental behaviour or providing constructive criticism (Borrego & Urquiza, 1998). This type of coaching was informed by efficacious parenting programs that have been evaluated in populations who are at risk of maltreatment (e.g., Chaffin & Friedrich, 2004; Chaffin et al., 2011; Dozier & Bernard, 2019; Thomas & Zimmer-Gembeck, 2011, 2012).

7.4 Overview of Topics

All treatment sessions include a brief review of the previous week, including any homework given. From Topic 2 onwards, basic emotion regulation exercises are introduced and parent-time sessions include practice of strategies discussed. At the end of each session, the clinician discusses homework for the week, which is typically 5-10 minutes of child-led play and regular practice of emotion regulation strategies discussed in session. Topics covered in each module are outlined in Table 1. Figure 2 provides a visual overview of the core components of the intervention.

7.4.1 Table 1

Overview of Modules and Core Components in HHYP

Topic	Brief Overview	Core components
1	Understanding my child I	
	<u>Parent Time: The Power of Attention</u>	
	<i>Children are wired to seek our attention. Behaviours that get more attention occur more often over time. If we pay attention to things we want to see more of, these behaviours will occur more often over time.</i>	<input type="checkbox"/> Parent complete weekly assessment measure <input type="checkbox"/> Provide rationale and aims of intervention <input type="checkbox"/> Provide brief overview of topics <input type="checkbox"/> Orient parent to structure of sessions <input type="checkbox"/> Collaborative and formulation-driven goal setting <input type="checkbox"/> Video feedback from assessment sessions <input type="checkbox"/> Psychoeducation on the power of positive attention (i.e., social learning framework) <input type="checkbox"/> Introduce and role play toddler time skills <input type="checkbox"/> Reinforce rationale for child-led play
	<u>Toddler Time: Verbal Support Skills</u>	
	<i>Using our voice to respond to our children's needs</i>	<input type="checkbox"/> Coach positive verbal commentary (positive descriptions, reflections & verbal praise) <input type="checkbox"/> Coach warm tone of voice
2	Understanding my child II	
	<u>Parent Time: Emotion Regulation / Cycles of Behaviour</u>	
	<i>We can unintentionally fall into patterns of behaviour that are unhelpful for our children and ourselves. This topic helps to explain these and talk about ways to break these cycles.</i>	<input type="checkbox"/> Parent complete weekly assessment measure <input type="checkbox"/> Homework review <input type="checkbox"/> Video Feedback of clip from previous session <input type="checkbox"/> Psychoeducation on benefits of parental emotion regulation to support child regulation <input type="checkbox"/> Introduce a calm breathing exercise to facilitate regulation and sense of calm <input type="checkbox"/> Psychoeducation on coercive cycles (Patterson, 1982, 2002) <input type="checkbox"/> Psychoeducation on anxious cycles (CBT framework) <input type="checkbox"/> Role play "how to break coercive (or anxious) cycles" <input type="checkbox"/> Collaborative discussion about challenging situations and development of practical strategies to meet child needs during those times <input type="checkbox"/> Introduce and role play toddler time skills
	<u>Toddler Time: Verbal Support Skills II</u>	
	<i>Using our voice to respond to our children's needs</i>	<input type="checkbox"/> Reduce verbal responses that can interfere with child-led play; instructions, questions and negative commentary (e.g. criticism, sarcasm, disapproval)

3 Getting in closeParent Time: Attachment and Affectionate Touch

Children can't look after themselves, so they are wired to stay connected to their parents to meet their needs. Providing a secure base for our children helps them feel safe, and allows them to start exploring the world. Our child's attachment to us provides the biological basis for their stress response system, bonding system and social development.

- Parent complete weekly assessment measure
- Homework review
- Video Feedback of clip from previous session
- Collaborative discussion about child needs
- Psychoeducation on attachment and its role in the development of child regulation
- Psychoeducation about affectionate touch – addressed with increased sensitivity considering that this may be difficult topic for some parents with a history of trauma.
- Calm breathing practice
- Introduce and role play toddler time skills

Toddler Time: Proximity, Gaze and Touch

Using our bodies (eyes and touch) to respond to our children's needs and help them regulate their behaviour and emotions

- Coaching non-verbal behaviours to support increased reciprocity
- Coach proximity: sit close to child to allow opportunities for affectionate touch where appropriate
- Coach gaze: watch child's face and observe child's responses

4 Infectious calmParent Time: Emotions and Co-regulation

Young children are dominated by their emotional and sensory systems, so they need us to help them learn to regulate their behaviours and emotions. If we can learn to stay calm and regulate our own emotions and stay present with our children 'in the moment', our infectious calm can help children to feel safe, to calm down and learn to regulate their own emotions as they grow older.

- Parent complete weekly assessment measure
- Homework review
- Video Feedback of clip from previous session
- Discussion about the impact of emotions on parenting behaviours
- Introduce metaphor of 'Shark Music' (Cooper et al., 2000) to facilitate reflection about thoughts and emotions that arise when child is distressed so that parents can start to understand and manage the impact of their own internal responses on their parenting behaviours
- Discuss co-regulation and introduce Siegel's 'hand model of the brain' to explain and normalise different responses (Siegel, 2015)
- Calm breathing practice
- Introduce and role play toddler time skills, including watching a video of the 'still face paradigm' (Tronick et al., 1978) to demonstrate the effect of parental withdrawal and non-responsiveness on the infant.

Toddler Time: Showing Delight

Showing delight in your child, in your face and in your actions

- Coach expression of genuine positive emotions to child, using facial expressions and eye contact
- Coach reduction of unhelpful facial expressions, such as eye rolls, blank/flat expressions, scowling

5 Consistency is keyParent Time: Consistency, being clear and using your attention wisely

- It's easy for children to learn when they have consistent experience of the world. It's also easy for them to feel safe and stay calm when they know what to expect. By being consistent in our caregiving, we provide certainty and security for our children as they develop*
- Parent complete weekly assessment measure
 - Homework review
 - Video Feedback of clip from previous session
 - Psychoeducation about the importance of consistent and predictable parental responses
 - Collaborative discussion about boundaries and challenges maintaining them
 - Role play challenging situation
 - Introduce basic mindfulness/grounding skills to extend calm breathing practice
 - Calm breathing practice/grounding skills practice
 - Reflect on progress of toddler time skills using feedback from observational measures, develop goals for today's session

Toddler time: Consolidate skills, practice consistent responses

- Focus on consistent, sensitive and responsive parenting*
- Coach lagging skills informed by CIB
 - Focus on consolidating skills

6 ReciprocityParent Time: Building Reciprocity

- A lot of the program is about developing healthy give and take interactions, which we call reciprocity. These reciprocal moments are the foundation for developing a healthy strong relationship*
- Parent complete weekly assessment measure
 - Homework review
 - Video Feedback of clip from previous session
 - Psychoeducation about reciprocity (e.g., Feldman, 2007b; Tronick, 1989)
 - Calm breathing practice/grounding skills practice
 - Introduce and role play toddler time skills

Toddler time: Notice and increase reciprocal moments

- Reflect on reciprocal responses, notice and try to increase*
- Coach reciprocal responses, respond verbally or non-verbally using skills learned to date

7 What's that little head up to now?Parent Time: Mentalising

- Mentalisation is all about understanding others (and ourselves) – not just behaviours, but internal thoughts and feelings. Mentalisation helps us answer questions like 'what they are thinking?' 'what are they feeling?' 'why are they behaving that way?'*
- Parent complete weekly assessment measure
 - Homework review
 - Video Feedback of clip from previous session
 - Psychoeducation about mentalising (Allen et al., 2008), including discussion of concrete examples
 - Calm breathing practice/grounding skills practice
 - Role play responses to different emotions; draw on emotion coaching principles (Gottman, 2011)
 - Introduce and role play toddler time skills

Toddler time: Watch, listen and respond to child's inner world

- Practice mentalising and communicating a running commentary on your child's*
- Coach parent to reflect on what might be going on in child's inner world

internal world, i.e. thoughts and feelings Continue to coach skills learned, verbal and non-verbal

8 Bringing it all together

Parent Time: Review remaining challenges and plan for next steps

The final topic brings all of the topics together and we review 'where to from here?'

- Parent complete end treatment measure
- Homework review
- Video feedback: Video clips of progress throughout the intervention are collated and presented to parent in one video.
- Reflect on progress together
- Future plan for relapse prevention
- Calm breathing practice/grounding skills practice

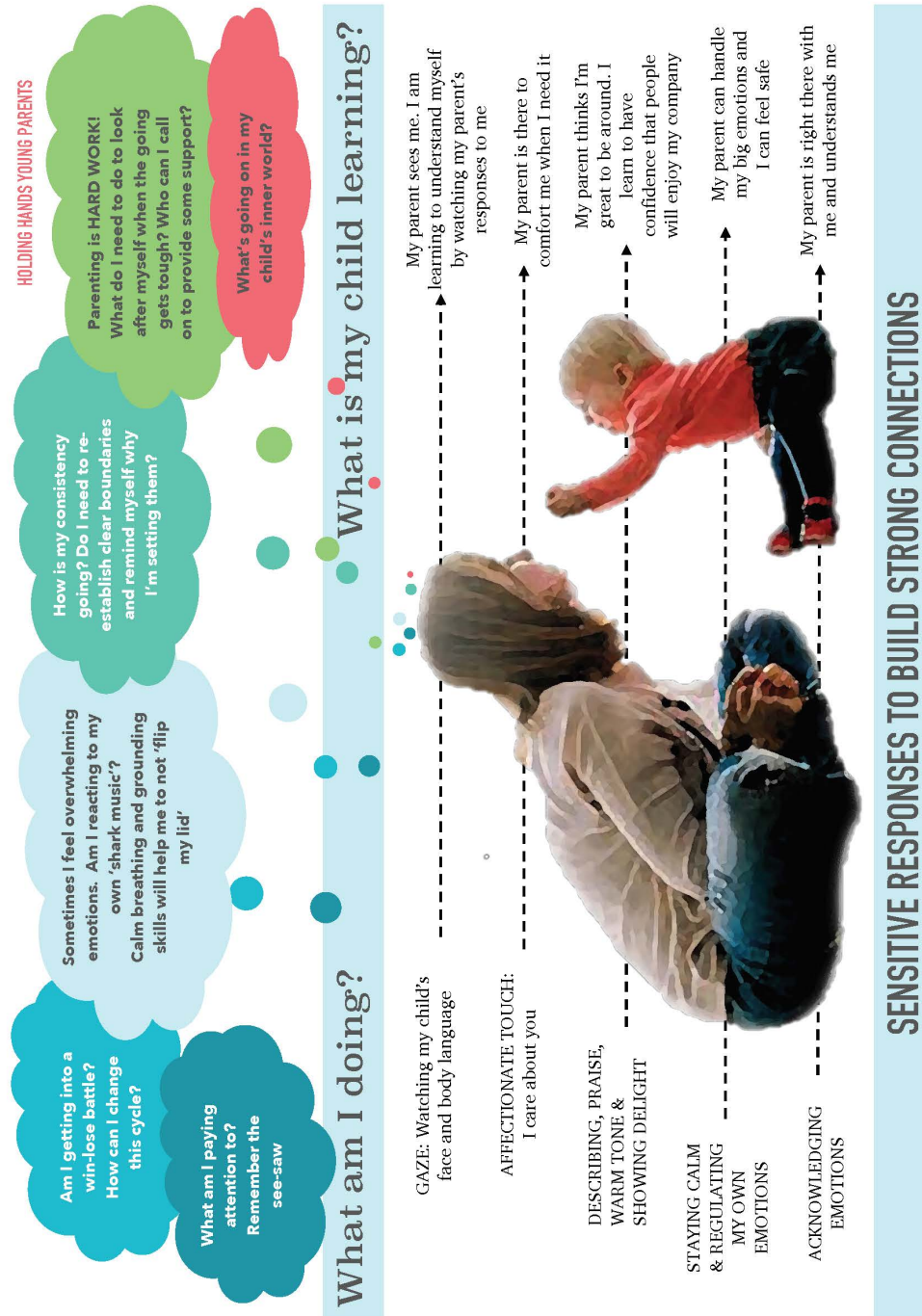
Toddler time: Practice skills that remain challenging

Practice any skills that remain challenging. Reflect on strengths and progress.

- Coach skills that may still be challenging, positively reinforce strengths
-

7.4.2 Figure 2

Overview of the Core Components of Holding Hands Young Parents



7.5 Study 4

Studies 4 and 5 are interconnected studies. Study 4 presents a brief rationale and research basis of the HHYP intervention. It also provides an outline of the intervention and uses case examples from the four mothers who completed treatment in study 5 to highlight intervention implementation. Findings provide insight from both parents and therapists to inform clinical practice and refine the intervention.

This paper is prepared for publication using the APA referencing style. We plan to submit it to the *Journal of Clinical Case Studies* so we have followed their formatting guidelines.

7.6 Study 5

Study 4 follows directly after study 5 and provides a preliminary evaluation of *Holding Hands Young Parents* (HHYP). Four mothers (17-22 years) and their toddlers (12-33 months) completed the intervention. This study uses a single-case multiple baseline experimental design with time series analysis to assess progress. One of the important contributions of the single case experimental design is to generate new hypotheses that can be tested subsequently in more rigorous experimental methods (Barlow et al., 2009). Suited to pilot testing, single-case experimental designs are ideal for preliminary investigations of treatment mechanisms and able to deal with sample heterogeneity by using each participant as their own control (Barlow et al., 2009). They are important for generating multiple hypotheses that can be further tested using robust randomised clinical trials (Holman & Koerner, 2014). A series of single case designs, where the experiment is replicated with different participants, have been recognised as an important clinical research method and provides increased generalisability of a results than replication within a single case (Holman & Koerner, 2014). They are ideal for detailed case by case analysis of populations that are both complex and

heterogeneous (Barlow et al., 2009). They allow for exploratory research where resources are limited or hypotheses are still in the theoretical stage. Case-based time series analysis focuses on within subject change over time (Borckardt et al., 2008). Thus, a series of replicated single-case designs was considered to be ideal for evaluating the HHYP intervention. The A-B-A design, where the treatment is introduced and then withdrawn was deemed the most feasible and ethical design for this pilot study. Each phase involves repeated assessment throughout. While only two baseline measurement points are needed to gain useful data, at least three are typically recommended, with four or more increasing the strength of the design (Barlow et al., 2009).

This paper was submitted for publication in the *Journal of Behavior Modification* using the APA referencing style and is currently under review. The content remains the same as that which was submitted.

7.7 Chapter 7 References

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Chapter 8: Study 4 - Implementing Holding Hands Young Parents Intervention for High Risk Young parents and Their Toddlers

Kemmis-Riggs, J., & McAloon, J. (prepared for publication). Implementing Holding Hands Young Parents intervention for high risk young parents and their toddlers. Manuscript prepared for publication for submission to *Clinical Case Studies*.

8.1 Abstract

Young parents, particularly teenage parents, with a history of adverse childhood experiences, are a highly vulnerable group with specific needs related to their developmental stage, social and economic disadvantage, and potential to parent. To improve outcomes for young parents and their children, access to effective parenting support services that address their specific their needs is essential. This study reports on the development of a dyadic parenting intervention for young parents who have experienced early adversity, *Holding Hands Young Parents (HHYP)*, which aims to improve parent-child relationships, parent self-regulation, parent self-efficacy and mental health, and child behaviour and emotional problems. We first present the rationale and research basis of the intervention. Second we present an intervention outline and case examples of four mothers (age range, 17-22 years) with toddlers (age range, 13 – 33 months), to highlight intervention implementation. Findings demonstrated that young parents were highly invested in their parenting role, motivated to improve their relationships with their toddlers and benefited from the intervention. Parent-report demonstrated reliable change pre- to post-intervention for all four dyads for parent self-regulation and child behavioural problems. Three of the four mothers demonstrated reliable change in observed reciprocity. Qualitative feedback from participants indicated that the intervention led to greater understanding of their child, strengthened their relationship with their toddler and increased their parenting confidence. Findings provide valuable insight from both parents and therapists to

inform clinical practice and reinforce the importance of continuing treatment-based research for young parents with a history of early adversity.

Keywords: Teenage parents, intervention, adverse childhood experiences, parent-child relationships, complex trauma

8.2 Theoretical and Research Basis of Treatment

Infants and young children develop in the context of their caregiving relationships and these early experiences provide the foundation for ongoing development (National Scientific Council on the Developing Child, 2004). Higher quality parent-child relationships are positively related to children's socio-emotional development (Cyr et al., 2010). In contrast, adverse childhood experiences, such as childhood maltreatment and domestic violence, have the potential for far-reaching negative impacts including increased risk of teenage pregnancy (Hillis et al., 2004), mental and physical health problems (De Venter et al., 2013; Gilbert et al., 2015), the potential for continuing cycles of maltreatment (Assink et al., 2018) and poor parenting from one generation to the next (Plant et al., 2017). Young parents and their children have also been identified as vulnerable to breaches of rights to health, education and care (AHRC, 2017).

Growing evidence from both animal and human studies demonstrates a relationship between child maltreatment and adverse alterations in structure and function of stress-susceptible brain regions. (Teicher & Samson, 2016). As a consequence, potentially permanent disruptions to children's social, emotional and cognitive development can result (Shonkoff et al., 2012). Given the increased risks for

adverse outcomes for young parents and their children, the parenting qualities that buffer children from the impact of adversity, such as sensitivity, nurturance, and stability, are particularly important (Parenting Research Centre & Murdoch Childrens Research Institute, 2017). Contributing to the development of stable and responsive relationships between parents/carers and their children can help protect against excessive activation of the stress-response system, potentially mitigating detrimental effects of early adversity (Shonkoff et al., 2016).

An integral relational process that shapes social-emotional development is parent-child synchrony, also termed reciprocity (Feldman, 2007b). The *biobehavioural synchrony* model (Feldman, 2007b, 2012a) proposes a principal mechanism by which early environments impact social, emotional and cognitive development through the coordination of biological and social process during social contact between attachment partners. Feldman describes synchrony in the context of parent-child interactions as the “matching of behaviour, affective states and biological rhythms between parent and child that form a single relational unit” (Feldman, 2007b, p. 329). It is through this process that the parent’s physiology and representational world can begin to have an impact on the child’s mind and behaviour and begin to provide the building blocks for the child’s stable competencies, internal representations, well-being, and emotional growth (Feldman, 2012a). Reciprocity between mother-infant dyads is positively associated with, and predictive of, lower externalising problems (Feldman & Eidelman, 2004), self-regulation (Kochanska et al., 2009) mutual initiation and mutual compliance (Lindsey et al., 1997).

Parents’ self-regulation capacities, which are integral for the development of the child’s regulatory capacities (Schore, 2001), are commonly impacted by the experience of abuse and neglect (Murray et al., 2015). While the foundation for self-regulation is

laid in infancy and early childhood, self-regulation capacities continue to develop through adolescence and into early adulthood (Center on the Developing Child at Harvard University, 2011). So for young parents who have experienced complex trauma, learning to self-regulate in the context of parenting is arguably even more challenging as these capacities are still developing. Thus, young parents who have experienced disrupted attachment relationships with their own caregivers may need additional support to increase their self-regulation. Moreover, children of parents who report higher adverse childhood experiences have higher likelihood of behavioural and emotional problems compared to parents who report no early childhood adversity (Schickedanz et al., 2018). Helping young parents improve their capacity to manage challenging child behaviours is also highly important.

Parenting interventions delivered specifically to adolescent parents have been found to be effective in improving maternal sensitivity, parent-child interactions, and infant responsiveness towards the mother, yet researchers have also suggested that parenting interventions may have a limited role in supporting teenage parents and that they may be more beneficial if delivered in conjunction with comprehensive support that targets broader outcomes related to social exclusion (Barlow et al., 2011; SmithBattle et al., 2017). Several multifaceted services within NSW provide support for parents between the ages of 13 to 25 who have experienced early adversity, such as the Red Cross Young Parents Program, Raise Foundation, and Salvation Army Oasis Youth Support. They provide valuable support that includes case management, home visiting, parenting classes, education and vocational opportunities, life skills groups, child development services and playgroups (Spencer & Vogl, 2009). However, they typically do not provide intensive, therapeutic support for individual parent-child dyads and often struggle to find therapy services that meet these needs. To achieve improved outcomes

for young parents and their children, effective and accessible parenting support that caters for their needs must be provided (Parenting Research Centre & Murdoch Childrens Research Institute, 2017). Very few clinical parenting interventions have been developed specifically for young parents and their toddlers with these experiences.

Thus, our parenting intervention, *Holding Hands Young Parents (HHYP)* (Kemmis-Riggs, Dickes, et al., 2020) was developed to help meet this need. HHYP aims improve the quality of the parent-child relationship, increase young parents' self-regulation and self-efficacy, and support them in responding more effectively to child behavioural and emotional problems. HHYP was designed to be delivered in the context of multifaceted services, so that parents have access to case management, peer support, and other opportunities to support ongoing wellbeing. The purpose of the current study is to describe the general structure of *Holding Hands Young Parents (HHYP)* and illustrate themes throughout. HHYP is designed to be responsive to individual needs and so personal details and qualitative feedback are used to highlight program implementation and provide insight from both therapists and parents to inform clinical practice.

8.3 Case Introduction

The following case study presents data from four young mothers and their toddlers who recently participated in a pilot evaluation of HHYP using a series of single-case multiple baseline experimental designs (Study 4). Following approval from the University of Technology Sydney Human Research Ethics Committee (ETH18-2949), dyads were referred to our parenting intervention at the Family Child Behaviour Clinic, University of Technology Sydney (UTS) by case managers from a community program for young parents which provides multifaceted services (Community program name has been withheld to protect participant confidentiality). All mothers were

referred to the treatment program to improve their relationships with their toddlers, their self-regulation, and their capacity to manage challenging toddler behaviours, such as internalising and externalising behaviours. Pseudonyms are used for each case, with other identifying details altered.

8.4 Presenting Complaints

Jessica, age 20, is the single mother of a 2-year-old boy, Oscar. At assessment, Jessica explained that Oscar's tantrums occurred multiple times per day and were difficult to manage. She wanted help to manage them and increase her parenting confidence and self-regulation. She stated that her own Mother had "never been there emotionally for me and I don't want Oscar to feel that way". We highlight Jessica and Oscar's progress predominantly throughout this article, and have included the other cases to demonstrate similarities and differences in treatment response throughout the intervention.

Jane, age 17 is the single mother of a 13-month-old boy, Ben, who had been removed from Jane's care by Child Protection Services (CPS) when he was an infant and restored several months later when she moved into a residential placement for young parents. Jane had been requested to participate in the intervention as part of her CPS restoration plan. She stated that CPS wanted her to "improve my bond with Ben". During the assessment Jane shared with the therapist that she was terrified Ben might be removed from her care again. Jane reported she wanted Ben to learn to be gentle, less aggressive and wanted to be able to help him regulate his own emotions. At intake, Ben was reportedly engaging in frequent head banging and squealing. She explained "sometimes I raise my voice [at him] when I am stressed and I don't want to do that".

Amanda, age 22, is the single mother of two children and pregnant with her third child. Amanda's eldest daughter Harper, aged 33 months, participated in the

intervention with her. Amanda also had ongoing involvement with CPS due to drug and alcohol abuse and domestic violence in the family. Harper had been removed from Amanda's care temporarily when she was under 12 months of age. Amanda appeared extremely anxious about engaging in HHYP but wanted help with establishing some boundaries with Harper, who she described as friendly but also jealous, often behaving aggressively towards her younger sister.

Nicole, age 18, is the mother of a 3-year-old daughter, who was in kinship care with her mother, and a 21-month-old son, Noah, who participated in the intervention. She was in a relationship with the children's father, Ryan, but they lived separately. Ryan attended intervention sessions when he was able to take time off work. Nicole wanted support to manage Noah's aggressive behaviour and to improve their relationship. Nicole reported during the assessment that "I love my son to bits" but that she also sometimes feels rejected, exhausted and thinks to herself "why bother? [continue trying to be a good mum] I'm putting in the hard yards and getting nothing in return."

8.5. History

All four mothers reported a history of complex trauma, including childhood abuse and/or neglect, drug and alcohol abuse (personal and within family), and domestic violence. (Three reported experiencing violence from previous/current partners; two reported experiencing violence within their family of origin). They all had limited social support.

8.6. Assessment

Data was collected weekly throughout baseline, treatment, and for two to three-weeks post-treatment. Clinical interviews occurred at baseline and post-treatment. The following measures were used to assess baseline and progress:

The Childhood Trauma Questionnaire (CTQ-SF; Bernstein et al., 2003) was used to assess childhood history of trauma at baseline. All four mothers' scores on the CTQ-SF demonstrated moderate to severe levels across all indices of childhood abuse and neglect.

The Coding Interactive Behaviour (CIB; Feldman, 1998) scale, a global observational rating system for social behaviour, was used to observe changes dyadic reciprocity. Five minutes of free-play between parent and child were video-recorded each session and coded using the CIB. The CIB includes 45 codes rated from 1 to 5, organised into several composites that index important relationship aspects. Three coders who had completed certification in CIB coding and trained to 85% reliability on all codes coded the interactions. Two coders were independent to this study and blind to dyad status. The third coder was the primary author (JKR) and clinician delivering the intervention. Inter-rater reliability was computed for over 39% of the interactions and inter-rater agreement was > 85% on all codes (intra-class $r = .90$, range between .80 and .98). This study reports on Reciprocity, a composite code that included dyadic reciprocity, dyadic adaptation-regulation and dyadic fluency ($\alpha = 0.96$). Weekly CIB scores are reported throughout each phase.

The Me as a Parent Scale (MaaP; Hamilton et al., 2014), a 16-item self-report with a 5-point response scale, was used to assess parent self-regulation perceptions. In the present study, Cronbach's alpha for the Total was $\alpha = .94$. Weekly MaaP scores are reported throughout each phase.

The Child Behaviour Checklist 1.5-5 (CBCL/1.5-5; Achenbach & Rescorla, 2000), a 99-item parent-report with a 3-point response scale, was used to assess child emotional and behavioural problems. CBCL scores were collected pre- and post-treatment

8.7 Case Conceptualisation

Jessica demonstrated obvious strengths in the initial assessments. She was highly motivated to improve her parenting skills, engaged well with the therapists and demonstrated insight about her difficulties. However, she appeared to struggle to follow Oscar's lead in play and was intrusive at times, which caused Oscar to withdraw or become a little aggressive. For example, during one interaction, Jessica had a toy shark that she kept poking near Oscar's face to get his attention. He said "no" and hit the toy and then withdrew and turned his back towards her but she continued to poke him with the toy. Although Jessica's tone of voice and gestures were playful, she did not pick up on his cues of distress or withdrawal. Oscar was also very wary of the therapists when they first came in for the assessment sessions. He went to his mum for comfort and would retreat into her arms when we was overwhelmed; however, Oscar rarely looked at Jessica's face and they spent much of their time playing side by side without much social engagement or reciprocal play. Much like two toddlers, they seemed happy enough in each other's company but appeared involved in their own inner world rather than a shared social world between them. Their focus was often on the play object rather than on the person sitting alongside. Jessica particularly wanted to focus on improving her own emotion regulation and reducing the frequency and intensity of Oscar's tantrums.

Jane was the youngest participant in this study and demonstrated difficulty regulating her own emotions. During the observed play time, Jane's attention tended to get absorbed in a toy or her phone and then lose focus on Ben for several minutes. Ben was not overtly distressed by this, rather he seemed used to this pattern and would wander off to another area to play. Jane's affect was often flat and she was slow to respond to his bids for nurture or attention. For example, during one assessment session

she had left the room where Ben was playing with the therapist. Ben was a little distressed when she left but was quickly soothed by the therapist and started playing again. When Jane returned a couple of minutes later, he looked towards her with a smile and shout, but she did not acknowledge or respond to his bid and he turned away. He often lacked focus in play and would often seek social interaction with the therapist or case manager if they were present and paying him positive attention. In addition to the general HHYP aims, treatment also aimed to increase Jane's capacity to notice and prioritise Ben's needs.

Amanda commenced the intervention with very high levels of anxiety and flat affect. She was not able to tolerate being on her own with the therapist initially and asked her case manager to accompany her for the first five sessions. In contrast to her mother's flat affect, her daughter Harper was enthusiastic and sociable. She bounced into the first assessment session and had energy and enthusiasm to spare. She was also very emotionally reactive and had difficulty paying attention to a task for any length of time. Amanda was warm and affectionate towards Harper but seemed to have difficulty responding to Harper's emotional outbursts and would sometimes withdraw. Harper was also observed to be quite bossy at times. Amanda said that she had developed a pattern of giving in to Harper's demands to avoid conflict, which was not causing problems as Harper "was little Miss Boss" and tended to be non-compliant, which left Amanda feeling powerless and wanting to yell at her frequently. Treatment aimed to increase Amanda's confidence to establish consistent boundaries and manage Harper's challenging behaviour more effectively.

Nicole was insightful and articulate about her own adverse childhood experiences and current challenges. She was working very hard to be a 'good mum' but expressed unrelenting standards and high self-criticism so she had difficulty

acknowledging her strengths. Nicole reported a long history of domestic violence from her father towards her mother, and later in her childhood, he was also abusive to Nicole. Nicole eventually ceased contact with her father. Nicole explained that she sometimes felt scared that Noah would disconnect with her as she knew that she had cut her own father off. She often felt rejected by Noah when he went to his father for comfort instead of her. Nicole also reported being worried that she might become too harsh, like her own mother, so was actually often very passive with Noah and had trouble holding her own boundaries. Nicole was also observed to be intrusive at times. For example, we noticed a pattern early on where Noah would be playing happily during toddler time, and Nicole would go over to him and pull him over and ask for a cuddle. He tended to give it unwillingly and then would push her away a little as though he was saying, “I’m not ready yet for a cuddle mummy”. For Nicole, a particular focus of treatment was to reduce her intrusiveness.

8.8 Course of Treatment and Assessment of Progress

The treatment manual for HHYP (Kemmis-Riggs, Dickes, et al., 2020) incorporates 8 individual 90-minute modules. While sessions are guided by the protocol in the HHYP manual, the intervention is designed to be flexible and responsive to meet individuals’ needs. Each session involved 50 minutes with the parent (Parent-Time) and 30 minutes with the parent and child (Toddler Time), during which the therapist coaches the parent in free-play with their child from an observation room. This provides an opportunity for parents to practice and strengthen skills learned in session while receiving real-time feedback on skill development. The final 10 minutes is spent with the parent, child and parent’s case manager to identify and develop support for the client’s current needs.

Dyads in this study participated in weekly sessions (ranging between 10 and 13 sessions), paced according to the family's needs, and provided by two therapists (JKR and AD). The first author served as the leading therapist; she is a registered psychologist with a Master's Degree in clinical psychology and experience and training in trauma-informed practice. Clinical supervision was provided throughout the study by the second author, a senior clinical psychologist with clinical and operational experience in trauma-based services for individuals presenting with childhood adversity.

8.8.1 Topic One: Understanding my Child

The first parent time topic in HHYP focusses on 'the power of positive attention' using a social learning theory framework (Bandura, 1986). Toddler Time explicitly coaches parents to increase their positive verbal commentary and warm tone of voice. Jessica had difficulty focussing on what Oscar was doing well when she first started the intervention. She often described him as "being nasty to me" and seemed to find it hard to recognise his needs in challenging situations. This response, with negative attributions about Oscar's character, was similar to the other mother's accounts. For example, Nicole described a situation with Noah when he had been aggressive.

Therapist: "So on bad day, how bad does it get?"

Nicole: "Like last Wednesday, Noah hit and scratched me on the face all day. I was bawling my eyes out by the end of the day. It felt like my face was on fire. Sometimes I yell at him but that fires him up. Sometimes I ignore him but he laughs, which makes me angry. What sort of a kid laughs when he hits his Mum?"

8.8.2 Topic Two: Understanding my Child II

The second topic focusses on the value of parent self-regulation and introduces a calm breathing exercise used in Compassion Focussed Therapy (CFT; Gilbert, 2010).

Parents are encouraged to practice in session and throughout each week to support their

regulation skills. After practice in session, Jessica reflected that she felt “a lot more at ease” and appeared more grounded. She recognised the importance of staying calm when Oscar’s arousal was high and was motivated to practice the calm breathing during the week. This session also includes an explanation and discussion of coercive cycles (Patterson, 1982) if the child presented with externalising behaviours, and/or anxious cycles (using a cognitive-behavioural framework), if the child presented with internalising problems. The therapist uses these models to discuss a recent example of a challenging situation with the parent, exploring potential parental responses. In toddler time, parents are encouraged to reduce negative verbal commentary and questions to encourage child-led play and reduce potential parental hostility (e.g. sarcasm, criticism, harsh disapproval) and intrusiveness.

During the video feedback in the early sessions, only very short segments were shown to mothers (e.g. 30-60 seconds). The therapists spent time normalising fears about seeing oneself on camera and scaffolding the video sections so that parents did not become overwhelmed. Below illustrates an early example of video feedback with Jessica:

Therapist: This was a really lovely interaction with between you both - you got down on the floor and you were following his lead. There’s a few moments where he looks back up at you and ... your body is facing his and kind of saying with your body language “I am here for you and we’re in this together” and we really saw that. [*Therapist starts the video*]

Therapist: See how when you went over to sit down with him, immediately he starts talking to you?

Jessica: Yeah! [She smiles]

Therapist: And he looks up at your face as though he’s checking in with you and you look back at him - that’s exactly the kind of moments we want to build.

Jessica: mm, I didn’t notice that at the time

8.8.3 Topic Three: Getting in Close

The third topic focusses on attachment (Bowlby, 1973), emphasising the importance of the attachment relationship for child socio-emotional development. This topic also discusses the importance of affectionate touch and how touch can be used to soothe and regulate our children. The session that we introduced Topic 3 to Amanda and Harper was a particularly notable. We had spent four sessions prior to this topic slowly pacing the content. Because Amanda was so anxious about participating in the intervention, her case manager had attended all of the sessions with her thus far. To facilitate Amanda's engagement and sense of safety, the therapist had also been delivering the treatment at the community setting where Amanda attended parent support groups because it was familiar and convenient; however, the university clinic was better suited for coaching purposes. We hoped Amanda would feel comfortable in due time to come into the clinic. By this session, she felt comfortable to do so and attend the session without her case manager. As the session progressed, Amanda became more relaxed and opened up about some of the challenges in her life, including when things did not go to plan and she lost her temper with the girls. This allowed more of an open discussion about how to manage challenging situations. This was the first session that Amanda reported noticing improvements with Harper's aggressive behaviour. When asked by the therapist how things were going with Harper, Amanda replied:

Amanda: She's not hurting her sister

Therapist: Wow, that's good! I noticed Harper is more settled

Amanda: Yeah, and she sits there and plays more

Therapist: What I see is that you are really creating that secure base. What's that like for you when you are sitting there and playing with her?

Amanda: Fun

Therapist: It looks like you are having fun together. What are the things that Harper is doing well?

Amanda: Sharing and staying focussed on one activity

Therapist: That's great! That's some of the things you wanted to improve wasn't it?

Toddler time focusses on increasing affectionate touch, proximity (i.e., parent sitting close enough to the child that they are in a position to offer affectionate touch if appropriate), and parent gaze. These elements are based on the biobehavioral synchrony model (Feldman, 2007b) that suggests bottom-up processes of vocalisations, facial expressions, shared gaze, affective displays, affectionate touch, and proximity positions build reciprocal, mutually rewarding interactions. Towards the end of parent-child coaching in this session, Harper bumped her thumb on a toy. She gave a cry out and Amanda was quick to look up and respond to Harper. She opened her arms and Harper came to her for a cuddle. The therapist quickly coached 'That's lovely affectionate touch Amanda, you did a great job responding so quickly to her need for comfort'

8.8.4 Topic Four: Infectious Calm

Topic 4 focusses on emotions and co-regulation (Schoore, 2001). The metaphor of 'shark music' developed by Cooper et al. (2000) is used to explain how parents' own experiences of being parented can influence how we perceive certain behaviours or feelings. Siegel's "hand model of the brain" (Siegel, 2015) is also used to explain that different areas in the brain process different types of information, which provides understanding why it can be so hard to manage big emotions when we are in a heightened emotional state. The following excerpt from this session with Jessica illustrates her growing insight about her own emotions and the impact they have on her behaviour and her responses to Oscar:

Therapist: Do you think you've been doing anything differently in how you respond to him?

Jessica: I guess every day is different depending on what we're doing. Like, I think it just comes back to me and what I am going through.

Therapist: mmm, that's great insight

Jessica: I think I set the mood depending on however I'm feeling

Therapist: yeah okay

Jessica: like if I'm feeling, like if I'm not talking, not rude, but if I'm feeling down and depressed or something and my tone or the way I speak or whatever, like he knows...

Therapist: yeah

Jessica:somethings wrong. Or if I'm nasty and say 'no Oscar!', or like, not nasty or just want my own space, I think that has a lot to do with it, like how we react to each other

Therapist: This is really good timing for this discussion because one of the things we want to focus on this week is emotions. And the fact that our children can bring out the strongest emotions we ever feel in our life! We can feel the most joy, the most happiness but also the most doubt about ourselves and the most worry and fears

Following this exchange, a discussion of the relation between parent emotion and child behaviour was developed with Jessica. This was engaged well by Jessica as she later revealed that she gets very anxious in social situations and is fearful of negative evaluation when Oscar has tantrums in public, which impacts how she responds to him – it makes it more difficult to keep calm and respond sensitively to him. She acknowledged that in those stressful situations she often felt “useless” and “upset” so part of the session was spent collaboratively brainstorming ways that she could stay grounded, remain present-focussed and meet his needs.

Topic 4 also includes coaching on showing delight to our child, emphasising smiling and other positive facial expressions and reciprocal eye contact. A video of the seminal 'still face paradigm' (Tronick et al., 1978) is shown to demonstrate the effect of parental withdrawal and non-responsiveness on the infant. The final section of the video clip demonstrates a successful repair or reunion between the mother and her infant.

Parents are asked to consider their response to the video and reflect on their own interactions with their child. The benefits of reparative moments for children's social and emotional development are reviewed. All of the mothers in this case illustration reported experiencing symptoms of depression, and had difficulties showing delight so this was a challenging topic. Jessica and Nicole both reflected that they wanted to improve in this area.

8.8.5 Topic Five: Consistency is Key

The focus of the 5th topic is on the importance of predictable and consistent parental responses to help children feel safe, manage their own emotions and learn appropriate boundaries. Parents are asked to consider what behaviours are acceptable and why boundaries are helpful for children. All of the mothers acknowledged that consistent boundaries helped children feel safe and develop better socio-emotional skills but reported that it was really difficult to maintain – for a range of reasons that centred on their own childhood experiences. The therapist engaged in a collaborative discussion with parents to clarify boundaries that they felt were most important. Noah's father, Ryan had come to this session with Nicole and they both reported it was beneficial to attend together to help them “be on the same page” with their parenting. Nicole was clear that most of her boundaries related to safety and social skills but was quick to acknowledge that managing her own emotions was the most difficult part of remaining consistent. For example:

Therapist: When you say Nicole that it's hard to manage your emotions, tell me about that?

Nicole: Oh it gets to a point where I've got all these things that I need to get done but I get so overwhelmed with all of them that I either break down and can't do anything. I hide away and don't want to do anything or I just can't cope and I shut everyone off and tell everyone to go away or I will have a really short fuse with everyone and I don't know how to kind of manage my emotions when it's like, I don't know...

This topic also introduces some additional grounding skills to help with parents' emotion regulation to help stay calm and consistent, drawing on strategies from Acceptance and Commitment Therapy (ACT; Hayes, 2004). The following is an excerpt from the discussion where the therapist introduces these to Nicole.

Therapist: I guess one of the things, a bit like with we've talked about with Noah - where you guys need to notice when he's upping his emotions - it's really helpful to notice yourself, like I'm feeling a bit tense, now's the time to go and have a couple of minutes to recoup before I hit the wall or flip my lid

Nicole: yeah

Therapist: I've got a little handout with some strategies. Would you like to learn some other strategies that can be helpful?

Nicole: yeah [smiles]

Ryan: okay

Therapist: One of them is a little bit like the calm breathing, and they're based on the same idea, based on mindfulness. Do you guys know much about mindfulness?

Nicole: I know a little bit

Ryan: a bit

Therapist: So what do you know Nicole?

Nicole: I guess um being aware of yourself and your surroundings. I don't know how to explain it.

Therapist: yeah that's a really great start

Nicole: that's kind of the core of it I guess

Therapist: Yeah, so being aware of yourself and your environment and knowing where your attention is

Nicole: yeah and I guess knowing how you respond to that and deal with that

Following this, the therapist explained the practice of mindfulness in more detail and they practiced some strategies in session. One of the rewarding parts of implementing this intervention was seeing parents' increased insight as the intervention

progressed. As described earlier, when she first presented, Nicole would often interrupt Noah's playtime by asking him to come to her for a cuddle. We had been working on Nicole noticing Noah's bids and then sensitively responding to them. Following is an excerpt where the therapist asked Nicole to explain the toddler time skills to Ryan to check understanding and reinforce her growing knowledge. She reflected that not asking Noah for a cuddle when she wanted one was one of the hardest things about what she had learned so far.

Nicole: so they're the verbal skills and then you've got the physical things too. Remember how I was telling you last week don't ask for a cuddle and stuff?

Ryan: yeah but you never really elaborated on that so I was a bit unsure

Nicole: oh did I never explain that to you?

Ryan: no you never explained that to me

Nicole: yeah so it's just about showing him that we're going to be there for him when he needs us

Ryan: yeah

Ryan: instead of smothering him?

Nicole: [Nods and then looks at therapist] can you explain more?

Therapist: that was great Nicole. [Looks toward Ryan] Sometimes we can be leaning in and asking for the cuddle and he's not really wanting to. So we were talking about how sometimes Nicole would like Noah to come to her a bit more for affection, um, but feels a little bit like he's rejecting her sometimes. Because he's not into it. So I suggested to Nicole why not wait until he comes and makes the bid to you as opposed to asking him for the cuddle.

Ryan: yeah

Therapist: Because he does come into her for the cuddle I've noticed. And that's when to respond to that bid instead of asking for it. So following his lead.

Nicole: That's been the hardest thing I think, because I do it all the time

Toddler Time in Topic 5 focusses on consolidating skills learned so far. Parents are asked to consider which skills have been easier and those that have been more challenging. Feedback is given to parent on which skills have improved so far, based on

the observational measure, CIB (Feldman, 1998). Coaching is focused on lagging skills in this session. Jessica had been depressed for some time and her facial affect was often flat, especially early on in the intervention. It seemed that one of the repercussions of her flat affect was that Oscar did not look up at her face very often, so he was getting limited opportunities to see her joy or pleasure even when she did express it. So we targeted Oscar's engagement in this session in particular, and coached Jessica to be creative in engaging him socially. Below is part of the discussion about it:

Therapist: ... our facial expressions ...there are lots of different ways we can tune in. Our voice, our body and we don't always have to match or meet bids in the same kind of language, if that makes sense? So they might say something, but we might look over at them and smile. So we haven't actually said something but we've communicated to him and responded to their bid

Jessica: yeah

Therapist: so it's thinking about how we can do that. Like both of you might be playing with toys and he might look at you. And you kind of sense that he's looking at you, you might just look at him and share a little smile and then go back to the toys, that little moment is like 'oh we're doing this together and it's fun' and that little moment can be really valuable

Jessica: yep

Therapist: so being aware of when he's looking at you is one way that would be really good for you to catch his bids. It's almost like catching them, as though he's throwing you a ball to say "I'm looking at you now" and he throws you the ball and if you're still focussed on the toys, it's really easy to miss it

Jessica: yep!

Therapist: and he'll be like, 'oh okay, I'll just keep playing with my toys' but if you catch it and smile back at him, he gets this little reward for looking at you which feels good, which means he's going to do it more often

Jessica: yeah

Therapist: so you'll be able to pick up on that more and get him to look at your face. So even some of those games that you probably play in playgroup and maybe did when he was littler, like 'incy wincy spider' and 'pat-a-cake', often those games are encouraging that social interaction and so it would be good to do some of those games with Oscar. Even when you're here, with the toys that we have, you could bring Mr Potato Head up closer to your face and then say "hello Mr Potato Head" [therapist uses silly voice] so Oscar has to look up. He is sometimes so focussed on the toy but that might help him to look up and look at your face too.

[Therapist and Jessica laugh]

Therapist: it might feel silly but it's about giving opportunities for him to look up at your face so you can give him that smile or the opposite of the still face. So maybe think of ways of trying to do that in our play today.

Jessica: ok [smile]

During this session we observed many warm and reciprocal interactions where Jessica facilitated opportunities for Oscar to look up at her face. One time they were playing with the toy medical kit and the toy bear, giving him some medicine together and Jessica said:

Jessica: Do you want to check the bear's eyes? [Oscar then checked the bear's eyes]

Jessica: Do you want to check Mummy's eyes? [He promptly looked up at her and they laughed together].

The therapist coached Jessica to 'light up' with her face every time Oscar looked at her and quickly praised her efforts when she did. In later sessions, the therapist used video feedback to show Jessica moments where Oscar was increasing his social engagement with her, which pleased Jessica greatly.

8.8.6 Topic Six: Reciprocity

The 6th topic brings together many of the skills learned to date and directly focusses on parent-child reciprocity, an integral relational process that shapes socio-emotional development (Feldman, 2007b). HHYP explicitly teaches parents how to increase reciprocal, give-and-take moments with their child by providing education and coaching for parents on specific behavioral building blocks of synchrony. Thus, this topic emphasises how parents can increase reciprocal moments with their children as they notice their child's bids, respond, and elaborate on their child's actions or words. The following is an example with Nicole and the therapist.

Therapist: This week one of the things, and we've talked about it from the beginning of the program really, and this week it's a bit more explicit. We're

talking about the idea of reciprocity, which is this give-and-take in relationships which is really the foundation of any relationship. Where one person makes a bid for attention or communication or need and the other person responds. And they happen in little tiny moments. And a lot of the skills we've been working on is about noticing those bids that Noah makes and responding

Nicole: Yep (nodding)

Therapist: and using our voice to respond, or our face, or our other non-verbal skills to respond also. Because what we know is that right from when babies are born they're wired to engage with us and we're wired also to be responding to that. Imagine a tennis ball that you've got between one little baby and the parent and there's this tennis ball throwing of interactions between them, you know the baby makes a gurgle sound and the parent responds.

[Therapist paused to allow Nicole to respond. Nicole smiles].

Therapist: It's like when Noah points to something and you look over and follow his gaze, that's a serve and you return it. The more you have those reciprocal interactions, the more they build that relationship. And so it's mostly an automatic thing, we're naturally wired to do that. But we can learn extra things to help build those give and take responses. And they're the things we've been working on, so today is really about naming that and focussing on that in toddler time today

8.8.7 Topic Seven: What's That Little Head up to Now?

The 7th topic draws on research about mentalising, described as understanding behavior related to mental states, such as feelings, wishes and desires or the ability "to hold others' minds in mind" (Allen et al., 2008). Mentalising plays a vital role in navigating the social world because this capacity allows us to understand and predict others' behaviour and often determines our attitude towards another (Allen et al., 2008). Parents are encouraged to reflect on their child's internal world to help them respond sensitively and appropriately to meet their child's needs.

During this session with Jessica, she shared how she found it harder to mentalise when she had a lot on her mind, which the therapist normalised. The therapist introduced a video clip of Peter Fonagy to explain mentalising more fully. Following is Jessica's response:

Jessica: It's just crazy that how like, even at two, like at two years old, like how you respond to your child and like how that sets him up and that he's going to

remember and that sets up your relationship, and how he's going to think of other people

Therapist: and himself as well

Jessica: yeah I think he [Fonagy] said something else as well...like I never want Oscar to feel like I wasn't there for him. I love what he said. But I do also feel bad in a way, like because it is setting him up for – oh what was it? He said something about emotions?

Therapist: learning about his own his own self in how you look at him?

Jessica: yeah and if you just ignore it he's not going to know how to react.

Therapist: He said something about that he's looking to you to judge himself

Jessica: yeah...at two that's very important – to give that reaction back and let him know what's good and what's not

After some more discussion, the therapist summarises by saying:

Therapist: I guess what you were saying before is that all of the information about who you are comes from the way other people respond to us

Jessica: Yeah

Therapist: if they respond to us joyfully and kindly, we'll think we're someone that people like and if people are dismissive and disapproving, we're like 'there's something wrong with me' because all of the information that I'm getting is negative. So the more we can give that understanding and respond in that warm way, that's teaching him about who they are and what their feelings are.

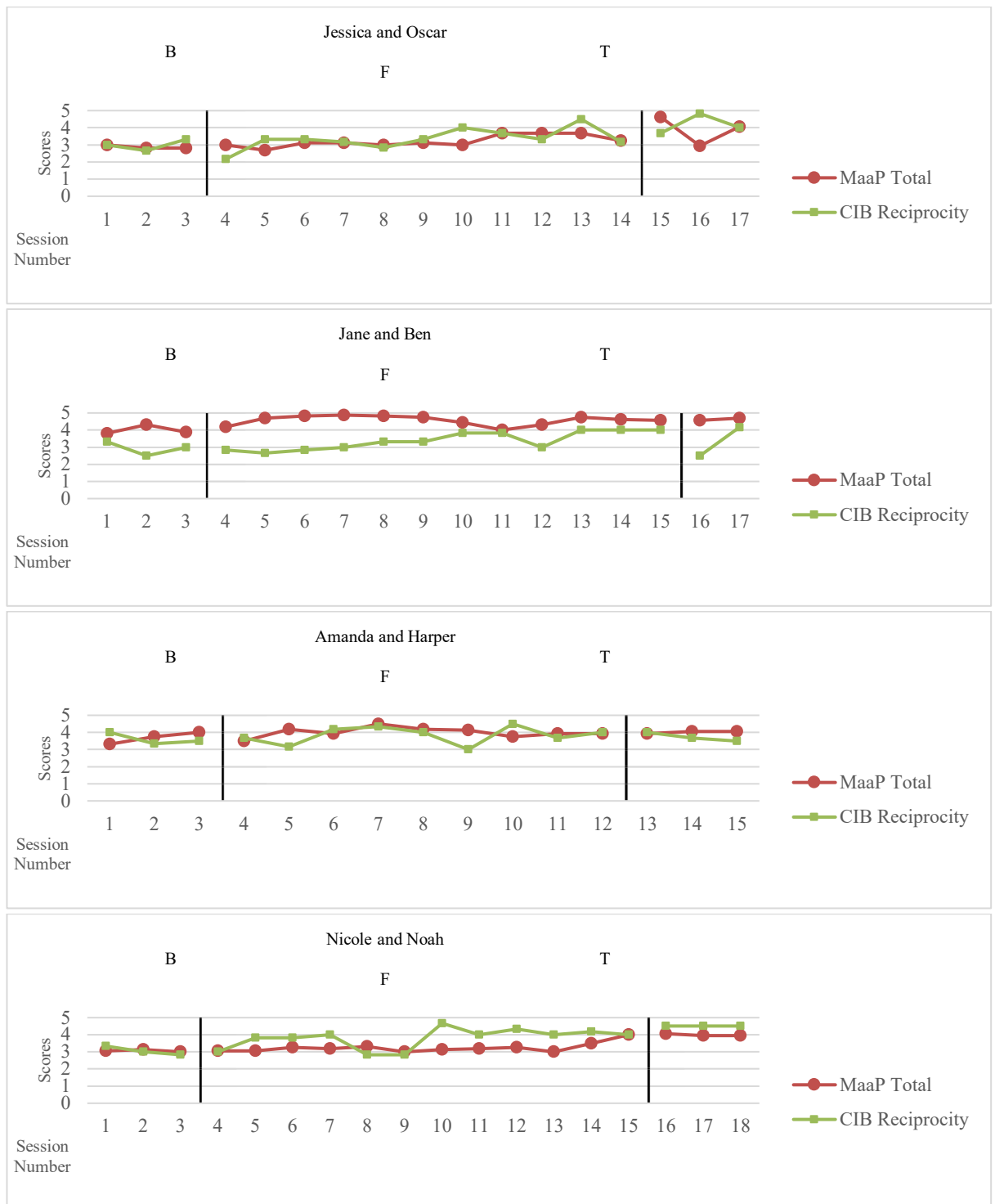
8.8.8 Topic Eight: Bringing It All Together

The final session focusses on review and relapse prevention. Prior to the final session, the therapist created a summary video of parent-child interactions filmed throughout the intervention that demonstrates progress. Parents are offered the opportunity to watch this in the final session to acknowledge their progress and elicit feedback.

Figure 1 shows a visual graph of the MaaP and CIB reciprocity data over the course of the intervention. Table 1 presents pre and post-intervention scores and reliable change indices for the MaaP, CIB reciprocity and CBCL.

9.8.8.1 Figure 1

CIB Dyadic Reciprocity and Maap Total Scores For All Four Cases



Note. B = Baseline; T = Treatment; F = Follow-up; CIB = Coding Interactive Behaviour scale. MaaP = Me as a Parent Scale. MaaP scores range between 16 and 80. MaaP scores were re-calculated to fit a scale of 0-5 for the purposes of this visual graph.

9.8.8.2 Table 1*Reliable Change Indices (RCI) For Parent-Reported and Observational Outcome**Measures*

Parent	MaaP			CBCL			CIB Reciprocity		
	Raw Scores			Raw Scores			Raw Scores		
	Pre	Post	RCI	Pre	Post	RCI	Pre	Post	RCI
Jessica	46	61.3	-7.28*	68	48	6.39*	2.86	4.00	-8.58*
Jane	64	76	-5.70*	49	29	6.39*	2.69	3.34	-4.89*
Jane	53	65	-5.70*	49	24	7.99*	3.58	3.72	-1.05
Amanda	49	64	-7.12*	108	76	10.22*	3.04	4.50	-10.98*

Note. Bold* represents reliable change from baseline to follow-up. Because there were repeated measures at baseline and follow-up for the CIB and MaaP, the mean scores for each phase were calculated and used to determine the RCI. CBCL = Child Behaviour Checklist (Achenbach & Rescorla, 2000); CIB = Coding Interactive Behaviour scale (Feldman, 1998); MaaP = Me as a Parent Scale (Hamilton et al., 2014).

8.9 Complicating Factors

Young parents with a history of complex trauma are often at risk of other concerns that require support, including housing instability, domestic violence, educational and vocational needs, mental health problems and substance abuse. There are no silver bullets that will repair childhood adversity and the social and economic disadvantage that contribute to teenage births and poorer maternal and infant outcomes (SmithBattle et al., 2017). These issues require multifaceted services and often long-term, intensive treatment to meet these needs. We agree with Hoyer and Dozier (2018) that to improve parent-child relationships, it is vital that parenting interventions are delivered in the midst of ongoing stressors and issues that may persist through infancy and early childhood. However, these concerns do add challenges and potential barriers to delivering parenting interventions. Even with our small sample, there were key differences between the parents. While, all mothers had a history of mental health concerns, two had less support overall and were in stressful, unstable intimate relationships, experienced more recent domestic violence and drug abuse exposure and

had ongoing CPS involvement. They were very sensitive to perceived criticism, took much longer to engage and build rapport and were very fearful of child removal by CPS. It was particularly important to focus on their strengths to facilitate engagement and build parent self-efficacy.

8.10 Access and Barriers to Care

Treatment was provided at no cost to participants because it was provided at the University of Technology Sydney as part of an approved research study. Collaborative relationships with the therapist and case managers in the community program were integral for participant engagement as case managers provided transport, care for toddlers during parent-sessions, and ongoing support and encouragement to practice skills at home. One barrier to treatment was disruption from external stressors. As discussed above, unstable intimate relationships and CPS involvement often made it more difficult to engage parents and disrupted treatment.

8.11 Follow-Up

Post-intervention assessments were completed with all four mothers for two to three weeks post-treatment. As shown in Table 1, parent-report demonstrated reliable change pre to post-intervention for all four dyads for parent self-regulation and child behavioural and emotional problems. Three of the four mothers demonstrated reliable change in reciprocity.

Over the course of the intervention, Jessica was able to acknowledge her own anxiety and low mood and recognise how her low mood could interfere with her capacity to interact with her son and change how she viewed his behaviour. Jessica developed more capacity to reflect on her son's internal world and expressed more curiosity about his needs as the intervention progressed. Post-intervention, Jessica reflected on the challenges of engaging in the intervention. She explained that "opening

up about my past”, making time in her routine for sessions and disclosing her parenting challenges with her son was hard initially. She also verbalised that it was difficult to manage her own emotions and tune into her son’s need, but she said she felt pleased that she got better at thinking “what’s going on for him” instead of “being triggered and swallowed up in my own reactions”. She felt the benefits of the intervention were that she learned to tune into her son’s needs, follow his lead and have more fun. She said she felt more emotionally connected to him than she had in the beginning. She articulated that she had learned to notice what he was doing well instead of just seeing the “naughty stuff”. She also expressed that she was:

“proud of myself that I finished the program – I knew it was intense and I was a bit concerned I wouldn’t be able to finish it. But it has increased my confidence in being able to manage Oscar and support him better.”

Jane’s motivation to engage in the intervention waxed and waned over the course of the intervention, however, she was clear that she wanted to strengthen her relationship with Ben and persevered with the intervention despite substantial disruptions with her living situation and relationship with her boyfriend. Post-intervention, Jane reflected that it had been worthwhile and she had learned more skills. She felt that her bond with Ben had got stronger and that she thought they had more fun playing together and she showed him more enthusiasm. The following is an excerpt of her post-intervention interview that illustrates some of her experience.

Therapist: What have you think you have learned along the way?

Jane: Everything

Therapist: So what is that?

Jane: How to respond to Ben ...and what it means when he whines and what not.

Therapist: That’s super cool ... I’m pleased ...how is that for you?

Jane: Good

Therapist: What’s changed then for you as well?

Jane: My parenting ...the way I respond to him, the way I play with him, the way I do everything with him, the way I see him and think about him.

Therapist: What has been hard [about the intervention]?

Jane: I'm trying to think of the word...umm...regulating my emotions.

Therapist: I think that's really important. Are there times when it's harder to regulate?

Jane: When I put my own needs before Ben...It's hard, but I'm learning, and I think I will be learning it my whole life

Therapist: What's helped to regulate?

Jane: Using the breathing...Like something happened the other day with [boyfriend] and I was feeding Ben and I was like 'No Jane, focus on Ben'

Therapist: yeah

Jane: I told [boyfriend] that I couldn't talk at the moment and I just didn't let my emotions and what was happening get in the way of me and Ben

Therapist: that's so great Jane. So it's kind of like re-directing yourself?

Jane: yeah

Therapist: That's important...especially when you move out of [your current supported housing]...there won't be someone to hand Ben over to in the same way

Jane: yeah, that's exactly what I thought

Post-intervention, Harper demonstrated gains in her capacity to stay focused in an activity and Amanda's parenting confidence had increased. During the post-intervention interview, the therapist asked Amanda what she had learned and she verbalised "How to keep Harper interested in one thing for a longer period of time". She also reflected with the therapist that creative play had expanded between the dyad. She was pleased that Harper had started to play more gently and share more readily with her mum and her younger sister. The therapist asked her what had helped to increase those behaviours and Amanda replied "Maybe because I'm actually sitting there playing with her and she's got my full attention". She then went on to say that she wanted to start

using similar child-led play time with her younger daughter as she thought it would also help her younger daughter.

Nicole also felt that the intervention had been beneficial. When Nicole was asked for feedback post-intervention, she said:

I'm really happy with where we've come in terms of stuff at home. Like we've come so far in terms of general stuff. Like it's... like we can get through the weekend without it being like 'damn, I wish you were at school', which I know that sounds bad but that's a big thing.

She went on to explain that she used to dread the weekends because she did not get a break from her son and she was not confident that she could manage his emotional outbursts. The following is an excerpt after Nicole and the therapist watched the summary video:

Therapist: It's pretty great right? ... What did you think?

Nicole: I wanted to cry! There's so much difference, I knew there was a difference. But even like how in like how gentle he is and how... Like he's turned into a real person. Like at the start he was almost like a little robot baby and like we had no idea how to respond to one another and now he's become a little person.

Therapist: You're responding to him and picking up on his cues

Nicole: I want to cry [smiles]

Therapist: What else did you notice?

Nicole: I think I am understanding him more as a person. Like at the start I could literally pick up on other children's cues better than his. So I think I understand him more as a person now.

Therapist: How are you feeling in terms of your confidence with him?

Nicole: A lot better. I feel like, like for example this morning, it took two hours to get down here [to the clinic] which is a hell of a long time, well it is for a 2-year-old, but this morning it was more of a... I was looking forward to the train trip down, getting to spend some time with him and getting a hot chocolate with him and ..and just spending the time with him as opposed to 'oh no, I've got to catch the train for two hours'. I feel like I've got this under control, kind of thing, we'll be okay.

Informal follow-up occurred for both Jessica and Nicole as they kept in contact with the therapist. Six months after Jessica had completed the intervention, she reported that Oscar was doing well at home and at preschool. She had gained employment and was still feeling confident in her parenting. Similarly, 9 months after completing the intervention Nicole reported that “Noah has progressed so much” and asked to refer a friend and her toddler to the intervention. Unfortunately we lost contact with both Jane and Amanda shortly after they completed the intervention so are unable to comment on any longer term progress.

8.12 Treatment Implications of the Case

This case study demonstrates the implementation of the newly developed dyadic parenting intervention, HHYP, for young mothers with toddlers who have a history of early adversity. Findings demonstrate that young parents in this study were highly invested in being effective parents, motivated to improve their relationships with their toddlers, open to learning new skills and benefited from the intervention. Mothers reported that it led to greater understanding of their child, strengthened their relationship with their toddler and increased their parenting confidence. Observational measures demonstrated reliable change for three of the four mothers for reciprocity. Parent-report demonstrated reliable change for all four dyads for parent self-regulation and child behavioural and emotional problems. Further information about outcomes are reported elsewhere (See study 4). It is of course vital to extend these findings with further evaluation and replication with a larger sample of young parents and their toddlers.

Parents’ feedback was elicited throughout the intervention to refine participant materials and delivery strategies. The bi-weekly session was designed to offer a booster during the week, however, feedback from parents and case managers indicated that this extra session was difficult to squeeze into a busy week. As a result, this bi-weekly

session was adapted to be an optional extra. All parents expressed discomfort about being videoed initially. For Jessica and Nicole, this diminished over time. However Amanda and Jane found it very difficult to tolerate and given the choice, would opt not to watch the feedback. We did not insist on using the video feedback in these instances and aimed to give them agency. Sometimes playing the video in slow motion with no audio was more tolerable and was useful to illustrate strengths of each interaction. The combination of parent-only sessions that provided time to focus on parent needs and skills followed by parent-child coaching sessions was feasible to deliver and parents engaged well with this format. It also appears that with necessary supports (e.g., case managers attending the session to look after the toddler during parent-time), that it is feasible to deliver the intervention in a clinic or community setting.

8.13 Recommendations to Clinicians and Students

The illustration of the four cases demonstrate that, while HHYP is manualised, it is also flexible and responsive to meet individuals' needs. We believe this responsiveness, in addition to building strong therapeutic rapport, is integral for treatment gain. As illustrated in the discussion of barriers and complicating factors, young parents with a history of adverse childhood experiences bring multiple complexities that impact engagement and retention in treatment. Teenage mothers also often experience stigma from unhelpful stereotypes that they are unmotivated and incompetent parents which can exacerbate isolation and distress (SmithBattle, 2013). It is because of this range of difficulties that young parents may not get the support they need, accentuating the requirement to engage in treatment-based research in this area. The importance of improving parent-child relationships for young parents with a history of adversity cannot be overstated, particularly considering the fact that the quality and stability of a child's caregiving relationships provides the foundation for a diverse range

of later developmental outcomes, including mental health, motivation to learn, moral reasoning, self-regulation, ability to develop healthy, supportive relationships with others and ultimately, the capacity to be a successful parent (National Scientific Council on the Developing Child, 2004).

8.14 Chapter 8 References

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Chapter 9: Study 5 - Improving Parent-Child Relationships for Families in the Shadow of Complex Trauma: A Single-Case Multiple Baseline Experimental Design

Kemmis-Riggs, J., Dickes, A., Berle, D., & McAloon, J. (under review). Improving parent-child relationships for young parents in the shadow of complex trauma: A single-case multiple baseline experimental design. Manuscript submitted for publication. *Journal of Behavior Modification*.

9.1 Abstract

This study provides a preliminary evaluation of a dyadic intervention for young parents with history of complex trauma and their toddlers, *Holding Hands Young Parents (HHYP)*. Four mothers (17-22 years) and their toddlers (13-33 months) completed the intervention, which aims to improve parent-child relationships, parent self-regulation, parent self-efficacy and mental health, and child behaviour and emotional problems. A single-case multiple baseline experimental design with time series analysis was used to assess progress. The treatment protocol includes 8 modules based on attachment theory, the biobehavioral synchrony model and social learning theory. After screening, dyads were randomised to either two or three-week baseline control conditions and subsequently treated in a university-based psychology clinic. Baseline assessments included semi-structured clinical interviews, parent-report measures and observational measures of parent-child relationship interactions. Biweekly observational assessments of the parent-child relationship and weekly parent-report measures occurred throughout treatment. Comprehensive assessment was obtained pre- and post-treatment. Single-case results indicated that parent sensitivity improved for four mothers and dyadic reciprocity improved for three dyads, comparing baseline with the intervention and follow-up periods combined. Reliable Change Index indicated improvement in parent-reported self-regulation, self-efficacy, stress and child emotional and behavioural problems from baseline to follow-up. Self-reported depression also demonstrated

reliable change for three of the four mothers. Parental sensitivity and child engagement appeared to change concurrently. This study provides insight into the process of relational change between young parents and their toddlers over the course of HHYP and preliminary data on the HHYP protocol. Further replication and evaluation are needed.

9.2 Introduction

Complex trauma, also known as developmental trauma, is defined as the experience of multiple and developmentally adverse traumatic events, most often of an interpersonal nature and with early-life onset (Van der Kolk, 2005). These exposures often occur within the child's caregiving system and can have extremely negative impacts on child wellbeing in the short and longer term. Children who grow up with abuse, severe neglect and extreme distress are at greater risk of poor physical and mental health (e.g., Felitti, 2009; Felitti et al., 1998), greater difficulties in parenting behaviours (Collishaw et al., 2007; Lomanowska et al., 2017; Plant et al., 2017), and continuity of maltreatment (Assink et al., 2018; Ertem et al., 2000; Thornberry et al., 2012).

Young parents who have experienced complex trauma, especially adolescent parents, are at particular risk of poor outcomes. Adolescent parents have reduced educational opportunities, unstable housing, socioeconomic disadvantage and limited social support (Bradbury, 2006; Goossens et al., 2015; Jeon et al., 2011; Kalb et al., 2015). Children of young parents are also at greater risk of poor outcomes, such as low birthweight, increased morbidity in the first year of life, more behaviour problems, higher risk of removal into care, more likely to be born into and continue to live in social and economic disadvantage and more likely to become young parents themselves

(Australian Human Rights Commission (ARC), 2017; Australian Institute of Health and Welfare, 2018b; Chen et al., 2007; Goossens et al., 2015; Jaffee et al., 2001; Klein, 2005; Weston et al., 2006). Thus, it is vital that young parents who have experienced complex trauma are supported to ensure better outcomes for their children and to break intergenerational cycles of trauma and maltreatment.

A wealth of research indicates that safe, stable, and nurturing relationships for infants and children protect them from the negative effects of stress and adversity and can help to break intergenerational cycles of trauma, abuse and neglect (Britto et al., 2017; Schofield et al., 2013). Early socio-emotional development occurs within the context of the parent-child relationship and higher quality parent-child relationships are positively related to children's socio-emotional development (Cyr et al., 2010; Harrist & Waugh, 2002; Saint-Georges et al., 2013; Stack et al., 2010). Thus, enhancing parenting behaviours provides children with an improved social environment that supports the development of secure attachment and socio-emotional capacities. One key aspect of parenting behaviour is sensitivity, defined as the capacity to perceive and interpret the meaning behind the child's signals, and to respond to them promptly and appropriately (Ainsworth et al., 1978). It is central for the development of secure attachment and for promoting healthy child socio-emotional development (Bakermans-Kranenburg et al., 2003; Bakermans-Kranenburg et al., 2008; Cyr et al., 2010; Harrist & Waugh, 2002; Saint-Georges et al., 2013; Stack et al., 2010).

9.2.1 Holding Hands Young Parents

The Holding Hands Young Parents intervention (HHYP; Kemmis-Riggs, Dickes, et al., 2020) was developed as a clinical intervention to support young parents who have experienced complex trauma and their toddlers. HHYP aims to improve the quality of the parent-child relationship, increase young parents' self-regulation and self-

efficacy, and support them in responding more effectively to child behavioural and emotional problems and is founded on principles of attachment theory (Ainsworth et al., 1978; Bowlby, 1973, 1980), the biobehavioural synchrony model (Feldman, 2007b, 2012a), social learning theory (Bandura, 1977, 1986) and coercion theory (Patterson, 1982). Thus, it shares commonalities with multiple evidence-based parenting programs (e.g., Cooper et al., 2000; Dozier et al., 2002; Eyberg & Bussing, 2010; Webster-Stratton & Reid, 2018). The intervention also incorporates several adaptations to meet the needs of younger parents who have experienced complex trauma, including an explicit focus on skills to improve parent emotion regulation and tailored education about child socio-emotional development. HHYP includes several delivery methods that have robust empirical support in trials with families at risk of, or with a history of, maltreatment, including video-feedback (e.g., Juffer & Steele, 2014; Moss et al., 2014; Spieker et al., 2012) and in-vivo coaching (e.g., Bernard et al., 2012; Thomas & Zimmer-Gembeck, 2011, 2012).

Systematic reviews of randomised controlled trials evaluating short-term parenting interventions targeted specifically at adolescent parents have shown that these interventions may be effective in improving maternal sensitivity and parent-child interactions (Barlow et al., 2011; Coren et al., 2003). However, reviewers have suggested that they may have a limited role in supporting teenage parents and that increased benefit may result from their use in conjunction with more intensive services that target broader outcomes related to social exclusion (Barlow et al., 2011). Therefore, this intervention was developed to be delivered within the context of multifaceted service responses that provide ongoing case management, home-visiting and support for housing, educational, vocational and/or life skills needs.

We aimed to examine the effects of HHYP on parent-child relationship quality, parent self-regulation and self-efficacy, parent mental health, and child behaviour problems for young parents who have experienced complex trauma and their toddlers. Considering the early stage of intervention development and the vulnerable and heterogeneous nature of the population, a single-case multiple baseline experimental design was deemed the most appropriate. Given the evidence-base for the components in the intervention, it was expected that indices of parent-child relationship quality would improve. Specifically, we expected that parent sensitivity, child engagement and dyadic reciprocity would increase and parental intrusiveness, child withdrawal and dyadic negative states would decrease over the course of the intervention. We also expected the intervention would yield positive effects on parent self-regulation and self-efficacy, parent mental health, parenting stress, and child behaviour problems (i.e., child internalising & externalising problems). Considering the limited data on the process of relational change between young parents and their toddlers throughout interventions in the extant literature, the study also aimed to explore whether increases in parental sensitivity precede improvement in child involvement, or whether changes occur concurrently. Similarly, whether decreases in parental intrusiveness precede decreases in child withdrawal, or whether changes (in each pair) occur concurrently.

9.3 Method

9.3.1 Participants

Following approval from the University of Technology Sydney Human Research Ethics Committee (ETH18-2949), participants were recruited from a community young parents program which provides multifaceted services, including case management, home visiting, housing support, parent education and parenting playgroups (Community program name has been withheld to protect participant confidentiality) . Recruitment

commenced in July 2018. The HHYP intervention was delivered from August 2018 until October 2019. Treatment was conducted at the Family Child Behaviour Clinic at the University of Technology Sydney, Australia. No compensation was provided to participants, however, they participated in the clinical intervention at no cost.

Participants were eligible for the study if they met the following inclusion criteria a) parent was aged between 16 and 25 years with a child aged between 6 and 48 months; b) parent reported difficulties in their relationship with their child; c) parent was assessed as having a history of complex trauma. Complex trauma was defined as having a history of child maltreatment, exposure to domestic violence or drug and alcohol abuse within family environment. This was initially screened using information provided by community program case managers and substantiated by self-report during the assessment stage, using the Child Trauma Questionnaire (Bernstein et al., 2003) and clinical interviews. Participants were ineligible for inclusion in the study if they met any of the following criteria a) child had a prior diagnosis of Severe Intellectual Disability, Autism Spectrum Disorder (level 2 or 3), deafness or blindness; b) parent had current untreated substance abuse or dependence; c) parent had suicidal or homicidal ideation or significant risk of harm to self or others; or d) parent had current psychotic symptoms or psychotic disorder.

The final sample included 4 mother-toddler dyads. Eight dyads were referred to the intervention by case managers to improve their attachment relationships, self-regulation, reflective capacity, and challenging toddler behaviours and screened for eligibility by the lead researcher (JKR). Eligible dyads were then scheduled for an assessment. Parents provided informed consent for themselves and their children at their first visit. Of the 8 dyads referred, all were eligible and completed the baseline assessment. Four discontinued in the assessment stage or in the first few weeks of the

intervention due to environmental factors¹. The demographic characteristics of the final sample are as follows. Mothers' ages ranged from 17 to 22 years and their toddlers were aged between 13 and 33 months. All mothers were teenagers when they gave birth. They all spoke English as their main language at home. All mothers and their toddlers were born in Australia. Two described their ethnic background as Aboriginal Australian and two described their background as Caucasian. Mothers' highest education ranged from Year 6 to Year 10. Table 1 provides additional information about mother's history of childhood trauma assessed at baseline.

¹ One dyad discontinued because the child was removed from the mother's care by child protection services, two others due to extreme family stress. The fourth dyad moved from her supported residential home to a location that prohibited her travelling to the university clinic.

9.3.1.1 Table 1*Means and Standard Deviations on the Childhood Trauma Questionnaire (CTQ-SF)**Assessed at Baseline*

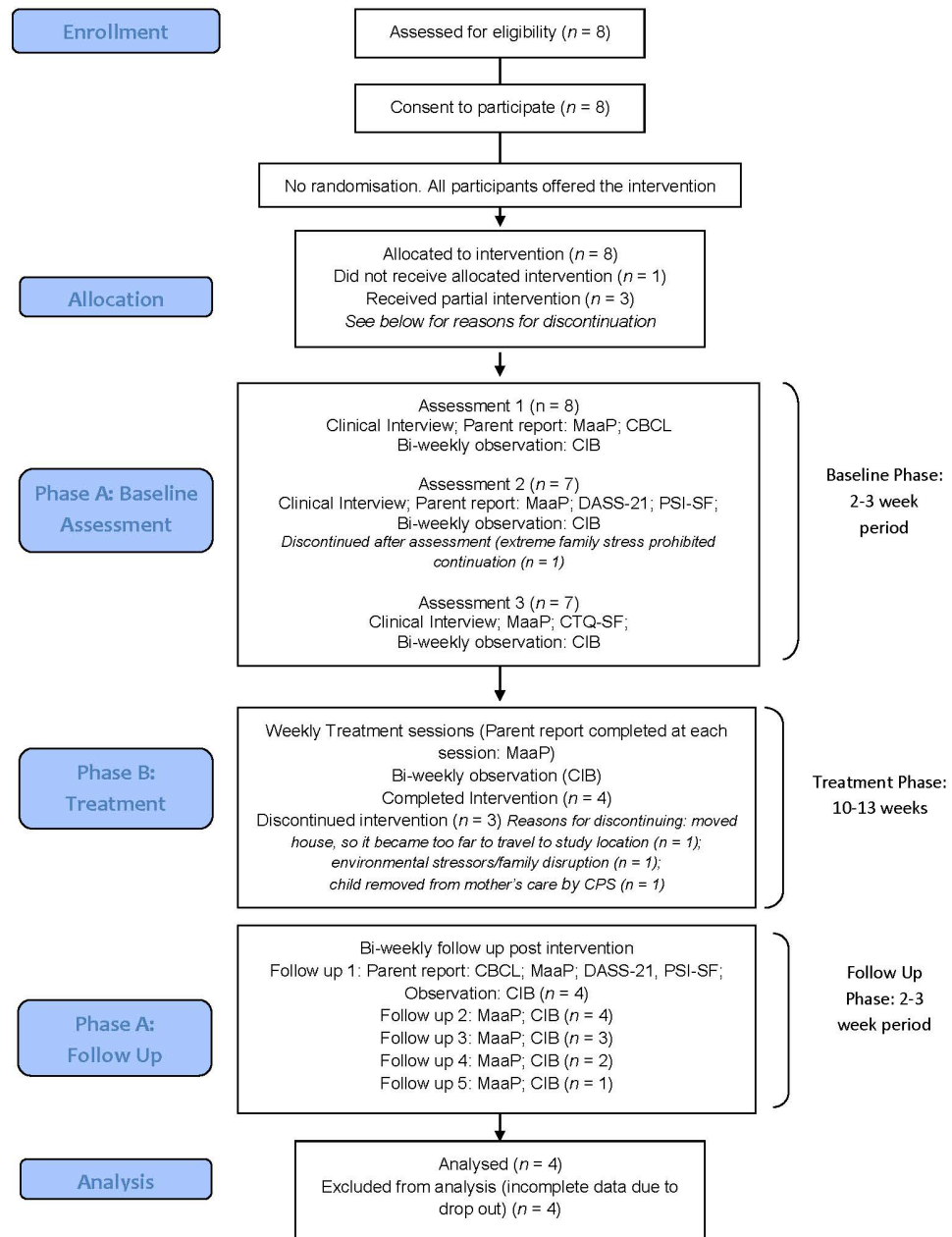
CTQ-SF subscale	Mean	SD	Clinical Range
Emotional abuse	14.50	7.14	Severe
Physical abuse	14.50	6.18	Severe
Sexual abuse	12.75	7.23	Severe
Emotional neglect	10.50	2.87	Moderate
Physical neglect	10.25	3.70	Severe

9.3.2 Study Design and Procedure

A single-case multiple baseline experimental design was used. This design is a series of replicated single-case A-B-A time series designs with randomised baseline periods. The recruitment of a vulnerable and hard-to-reach population and limitations in intake in the service that we utilised to identify prospective participants meant it was difficult to engage more than two dyads concurrently. We report findings using the single-case reporting guidelines in behavioural interventions (SCRIBE; Tate et al., 2016). Participants were randomly assigned to baseline phases lasting 2 or 3 weeks. Parents participated in repeated biweekly observational assessments and completed weekly parent-report questionnaires via a secure, online survey platform during each study phase. During the treatment phase, parents completed all measures at the start of each session. Figure 1 shows the consort flow diagram outlining data collection points and measures used.

9.3.2.1 Figure 1

Consort Flow Diagram of Intervention Phases and Measures Collected Throughout the Study



Note. CBCL: Child Behaviour Checklist; CIB: Coding Interactive Behaviour scale; CTQ-SF; Child Trauma Questionnaire; DASS-21; Depression, Anxiety Stress scale; MaaP: Me as a Parent scale; PSI-SF: Parenting Stress Index 4th Edition Short Form.

9.3.4 Measures

Parents participated in a semi-structured clinical interview assessing presenting concerns, child and family details, child health and development, family relationships, social support, and parents' family history and early childhood environment. Parents also completed a range of structured questionnaires and participated in observational assessments at baseline, throughout treatment and at follow-up. Qualitative data collected is reported elsewhere (ref other study).

Demographics included parent and child age, gender, ethnic background, educational background, language spoken at home and experience of out of home care.

Parent Trauma History. The Childhood Trauma Questionnaire (CTQ-SF; Bernstein et al., 2003) is a 28-item screening for maltreatment histories, the presence and severity of emotional, physical and sexual abuse, and emotional and physical neglect. The CTQ-SF has been validated for adults and adolescents, demonstrating strong psychometric properties in clinical and non-clinical populations (Bernstein et al., 2003; Scher et al., 2001; Spinhoven et al., 2014). The CTQ scoring manual provides guidelines for establishing thresholds for four levels of abuse/neglect for each subscale: None; Moderate; Severe; Extreme.

Parent-Child Relationship. The Coding Interactive Behaviour (CIB; Feldman, 1998) is a global observational rating system for social behaviour and was the primary measure for this study. It includes 45 codes rated from 1 to 5, organised into several composites that index important relationship aspects, including parental sensitivity, parental intrusiveness, child engagement, child withdrawal and dyadic interactions of reciprocity and negative states. The CIB is typically applied to free social interactions between two partners. The CIB has been validated in multiple studies across numerous cultures with children ranging in age from newborn to adolescents, demonstrating good

psychometric properties (Feldman, 2012b). Five minutes of free-play between parent and child were video-recorded at the beginning of each session. Three coders who had completed certification in CIB coding and trained to 85% reliability on all codes coded the interactions. Two coders were independent to this study. The third coder (JKR) was the primary author and clinician delivering the intervention. The order of the videos was randomised (so they were not coded in chronological order) and videos were coded after treatment was completed. Inter-rater reliability was computed for over 39% of the interactions and inter-rater agreement was $> 85\%$ on all codes (intra-class $r = .90$, range between $.80$ and $.98$). Composites, codes included in each composite, and internal consistency for the current sample were as follows: *Parent intrusiveness* includes forcing, overriding, anxiety, and parent-led interactions ($\alpha = 0.73$). *Parent sensitivity* includes acknowledging, elaborating, parent gaze/joint attention, positive affect, vocal appropriateness, appropriate range of affect, resourcefulness, praising, affectionate touch, and parent supportive presence ($\alpha = 0.85$). *Child social engagement* includes child gaze/joint attention, child positive affect, child affection to parent, alert, fatigue (reversed), child vocalization, child initiation, competent use of the environment, and creative symbolic play ($\alpha = 0.79$). *Child withdrawal* includes negative emotionality, withdrawal, emotion lability, child avoidance of parent ($\alpha = 0.64$). *Dyadic reciprocity* includes dyadic reciprocity, adaptation-regulation and fluency ($\alpha = 0.96$). *Dyadic negative states* includes constriction and tension ($\alpha = 0.62$).

Parent Self-Regulation. The Me as a Parent Scale (MaaP; Hamilton et al., 2014) is a 16-item self-report questionnaire comprising 4 subscales measuring global beliefs about self-efficacy, personal agency, self-management, and self-sufficiency, theorised to constitute parent self-regulation perceptions. Scores are calculated for an

overall total and each subscale. Parents rated items on a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Items were averaged so that higher scores indicated higher parenting self-regulation. Questions ask parents how strongly they agree or disagree with statements such as “I know I am doing a good job as a parent” and “I meet my expectations for providing emotional support for my child”. The MaaP has been validated for use in the Australian context, demonstrating good psychometric properties (Hamilton et al., 2014). In the present study, Cronbach’s alpha were: Self-Efficacy; $\alpha = .84$; Personal Agency, $\alpha = .77$; Self-Management, $\alpha = .84$, Self-Sufficiency, $\alpha = .91$; and Total, $\alpha = .94$. The original study protocol (available from the primary author) had also planned to use 4 questions from this scale to be administered daily using a phone app, during each phase. However, feedback from all participants demonstrated this was not acceptable and too burdensome given their other life stressors.

Mental Health. The Depression Anxiety and Stress Scale (DASS-21; Lovibond & Lovibond, 1995) is a 21-item scale is comprised of three subscales relating to Depression (symptoms associated with dysphoric mood such as anhedonia, hopelessness, and low self-esteem), Anxiety (symptoms relating to anxious affect, such as shakiness), and Stress (general tension, irritability). Higher score are indicative of greater psychopathology, with clinical cut-off scores for each subscale indicative of mild, moderate, severe, and extremely severe symptoms. The scales of the DASS-21 have been shown to have strong psychometric properties and measure both current state and change over course of treatment (Antony et al., 1998; Brown et al., 1997).

Parent Stress. The Parenting Stress Index 4th Edition Short Form (PSI-SF; Abidin, 2012) is a brief version of the Parenting Stress Index (Abidin & Abidin, 1990), a widely used and well-researched self-report measure of parenting stress. The PSI-SF

has 36 items from the original 120-item PSI. The PSI-SF yields a Total score and scores on the following subscales: 1) Parental Distress, 2) Parent-Child Dysfunctional Interaction, and 3) Difficult Child. Items are identical to those in the original version. Higher scores on the PSI-SF are indicative of greater dysfunction, with Total Stress scores in the 90th percentile or above representing clinically significant parenting stress (Abidin, 2012). The PSI-SF has demonstrated strong psychometric properties in prior research (Haskett et al., 2006; Reitman et al., 2002; Whiteside-Mansell et al., 2007).

Child Emotional and Behavioural Problems. The Child Behaviour Checklist 1.5-5 (CBCL/1.5-5; Achenbach & Rescorla, 2000) is a widely used, standardized parent-report measure of child emotional and behavioural problems. The CBCL/1.5-5 consists of 99 items. It produces two broadband scales (externalizing problems and internalizing problems) and a total problems scale. The CBCL has demonstrated strong psychometric properties in prior research with a diverse range of populations (Rescorla et al., 2007). Responders rate items on a scale of 0 (*not true*) to 2 (*very true*). Higher scores indicate higher problems, with scores in the 97th percentile or above represent clinically significant problems (Achenbach & Rescorla, 2000).

9.3.5 Treatment

The treatment manual for HHYP (Kemmis-Riggs, Dickes, et al., 2020) incorporates 8 individual 90-minute modules that can be delivered in varying order depending on the needs of the family. Each session involved 50 minutes with the parent and 30 minutes with the parent and child, during which the therapist coached the parent in free-play with their child from an observation room. This provides an opportunity for parents to practice and strengthen skills learned in session while receiving real-time feedback on skill development. The final 10 minutes is spent with the parent, child and case manager supporting the young parent. An optional bi-weekly telehealth check-in

provides for additional observation of parent-child play and the problem-solving of any pressing parental concerns. The manual includes treatment protocols and handouts for each session. It was expected that dyads would participate in at least 8, once weekly treatment sessions, and that treatment would be paced according to individual need. The number of face-to-face sessions delivered to participants in this study ranged from 10 to 13, and the modules were delivered in the order presented in the manual. Dyad 1 also participated in regular bi-weekly sessions via telehealth, whereas the other dyads engaged in weekly sessions and chose fewer bi-weekly check-ins.

Assessment and treatment was provided by two of the authors (JKR and AD) who are registered psychologists with a Master's Degree in clinical psychology and experience and training in trauma-informed practice. Authors (JKK, AD, JM) co-developed the treatment. Clinical supervision was provided throughout the study by a senior clinical psychologist (JM) with clinical and operational experience in trauma-based services for individuals presenting with childhood adversity. The two researchers who served as therapists used an implementation checklist contained in the treatment manual that outlines the core components of the intervention to deliver in each module. All sessions were audio or video recorded, and 25% of the treatment sessions were selected and checked for therapist competence (e.g., rapport, therapist knowledge of content, session management) and inclusion of the manual content for each module. Overall, average competence ratings were high (4.75 on a 5-point scale) and all of the rated sessions included all core content outlined in the HHYP manual.

9.3.6 Data Analysis

Data was analysed individually for the four dyads who completed the intervention. To examine whether observed parent-child interaction quality improved over the course of the intervention, phase-effect comparisons were conducted for each

case using observational data from the CIB subscales. Analyses were run using Simulation Modeling Analysis, version 11.10.16 (SMA; Borckardt, 2006). SMA is designed for analyzing short, autocorrelated data streams commonly found in clinical practice (Borckardt & Nash, 2014; Borckardt et al., 2008). SMA allows an investigation of both the level of improvement across treatment phases (level-change analysis), slope of the symptom change and multivariate process change between variables. Because of the relatively short follow-up phase, we analysed the intervention and follow phases combined compared to the baseline phase to examine if change occurred as a result of treatment and beyond. For level-change analysis, SMA utilises bootstrapping techniques to compare the mean score of two phases and produces an effect size and significance level that represent the significance of change in symptoms of interest across treatment phases. For slope change analyses, SMA determines the strength of association between the data stream and a predetermined slope vector. In this study, we tested an a priori model in which the slope vector is flat during baseline and then increases during the treatment and follow-up phase combined.

The Reliable Change Index (RCI; Jacobson & Truax, 1991) was also calculated to evaluate whether there were improvements from baseline to follow-up on observed parent-child interaction quality indices (i.e., CIB subscales) and on parent-reported measures of their own mental health symptoms (DASS-21), self-regulation (MaaP), child internalising, externalising and total behaviour problems (CBCL) and parenting stress (PSI-SF). The RCI indicates whether the difference between baseline and follow-up scores is greater than a difference that could have occurred due to random measurement error alone (Guhn et al., 2014; Jacobson & Truax, 1991). The formula for reliable change is calculated by dividing participants' difference scores (pre and post

intervention) by the standard error of the measure.² (Jacobson & Truax, 1991). Values greater than 1.96 represent reliable change. Because there were repeated measures at baseline and follow-up for the CIB and MaaP, the mean scores for each phase were calculated and used to determine the RCI. To examine the temporal change between parent sensitivity and child involvement, and parent intrusiveness and child withdrawal respectively, we used SMA to analyse multivariate process change. The analysis allows for the examination of cross-lagged correlations between two variables of interest. Data was also plotted graphically for the CIB and visually assessed for changes in level and slope across the study phases, as per analytic guidelines for SCEDs (Barlow et al., 2009).

9.4 Results

We had planned for 5 follow-up sessions to allow for a longer follow-up period to meet recommendations for robust methodology (i.e., U.S. Department of Education, 2018). However, for three dyads, this was not possible. Mother 2 moved out of her supported housing at the end of the intervention and no longer had the support of her caseworker to transport her to the final follow-up sessions. Mother 3 was experiencing substantial family stress and involved with child protection services during the intervention, which interrupted her capacity to engage in the final planned follow-up sessions. Mother 4 was also unable to complete the final follow-up due to family stress and disruption. Nil adverse events occurred during the current study. Table 3 indicates the number of sessions for each dyad.

² The formula is: $RCI = (x^1 - x^2) / S_E$, where $S_E = SD \sqrt{1 - r}$

9.4.1 Table 3

Number of Sessions Completed for Each Dyad Per Phase

Participant	Baseline	Intervention	Follow-up
Dyad 1	6	21	5
Dyad 2	6	14	2
Dyad 3	4	13	3
Dyad 4	4	14	4

9.4.1 Parent-Child Relationship

Table 4 shows the means scores on the CIB for each participant for each phase, the SMA level and slope change results, and the RCI comparing baseline with follow-up scores.

Dyadic reciprocity. Two dyads demonstrated significant level change for reciprocity when comparing the baseline with the intervention and follow-up periods combined using SMA, and three demonstrated significant slope change, indicating that the baseline was relatively flat and that reciprocity increased throughout treatment and beyond as expected. Three dyads demonstrated significant improvement in reciprocity from baseline to follow-up as indexed by the RCI.

Dyadic negative states. Two dyads demonstrated significant level change for negative states when comparing the baseline with the intervention and follow-up periods combined using SMA, and two demonstrated significant slope change where the baseline was relatively flat and negative states decreased throughout treatment and beyond. One dyad demonstrated significant decrease in negative states from baseline to follow-up as indexed by the RCI.

Parent sensitivity. Three parents demonstrated significant level change for sensitivity, and all four demonstrated significant slope change when comparing the

baseline with the intervention and follow-up periods combined using SMA. All four parents demonstrated significant improvement in sensitivity from baseline to follow-up as indexed by the RCI.

Parent intrusiveness. One parent demonstrated significant level change for intrusiveness, and two parents demonstrated significant slope change when comparing the baseline with the intervention and follow-up periods combined using SMA. Two demonstrated significant decrease in intrusiveness from baseline to follow-up as indexed by the RCI.

Child engagement. One child demonstrated significant level change for engagement when comparing the baseline with the intervention and follow-up periods combined using SMA, whereas all four children demonstrated significant slope change in the expected direction. Two children demonstrated significant improvement in engagement from baseline to follow-up as indexed by the RCI.

Child withdrawal. One child demonstrated significant level change for engagement when comparing the baseline with the intervention and follow-up periods combined using SMA; two children demonstrated significant slope change in the expected direction. Three children demonstrated significant improvement in engagement from baseline to follow-up as indexed by the RCI.

Figures 2 and 3 show visual graphs of change over time for the CIB subscales.

9.4.1.1 Table 4

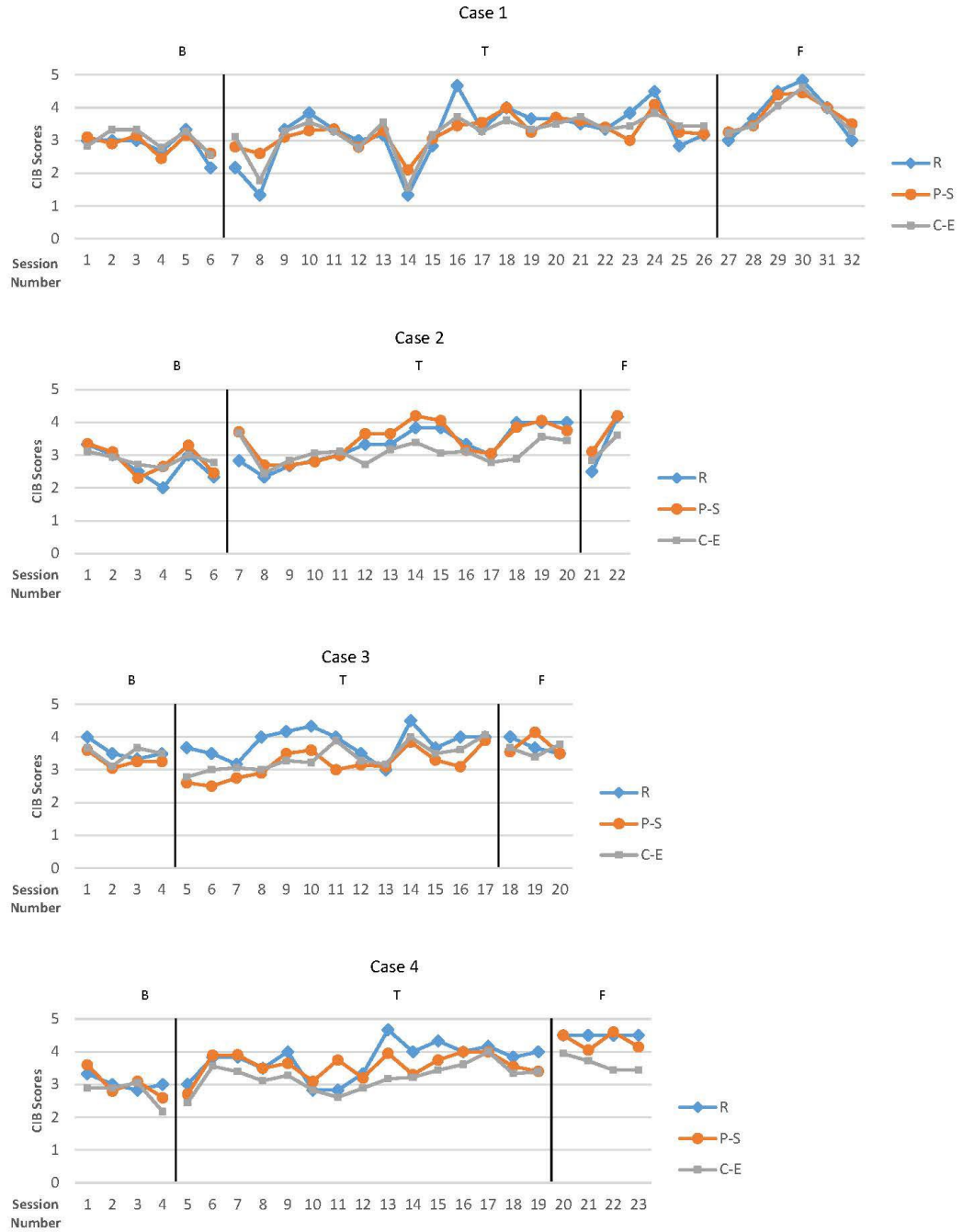
Means, Standard Deviations, SMA Level and RCI for CIB Subscale Scores

Measure	SMA Level Change					SMA Slope Change ^a		Phase M	RCI B vs F
	Case	Phase M		<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>		
		B	I + F					F	
<i>Dyadic Reciprocity</i>	1	2.86	3.38	.25	.09	.51	.05	4.0	Yes
	2	2.69	3.31	.49	.04	.67	.01	3.34	Yes
	3	3.58	3.79	.22	.35	.21	.39	3.72	No
	4	3.04	3.9	.54	.02	.77	<.001	4.5	Yes
<i>Dyadic Negative States</i>	1	1.75	1.5	-.15	.40	-.41	.04	1.1	No
	2	1.79	1.40	-.36	.04	-.34	.09	1.5	No
	3	1.5	1.36	-.19	.27	-.24	.26	1.42	No
	4	2.19	1.22	-.72	<.001	-.76	<.001	1	Yes
<i>Parent Sensitivity</i>	1	2.89	3.38	.37	.01	.37	.01	3.96	Yes
	2	2.86	3.48	.49	.02	.61	.02	3.65	Yes
	3	3.28	3.28	-.01	.96	.56	.05	3.73	Yes
	4	3.03	3.73	.52	.001	.52	.002	4.33	Yes
<i>Parent Intrusiveness</i>	1	2.02	1.70	-.29	.20	-.02	.89	1.78	No
	2	1.96	1.57	-.35	.08	-.65	.002	1.19	Yes
	3	1.66	1.59	-.06	.84	-.26	.37	1.34	No
	4	2.28	1.35	-.86	<.001	-.86	<.001	1.31	Yes
<i>Child Engagement</i>	1	3.02	3.37	.23	.13	.54	.008	3.87	Yes
	2	2.86	3.10	.34	.09	.41	.04	3.22	No
	3	3.49	3.42	-.08	.66	.49	.05	3.61	No
	4	2.75	3.31	.48	.02	.66	.006	3.64	Yes
<i>Child Withdrawal</i>	1	1.65	1.39	-.17	.20	-.34	.06	1.18	Yes
	2	1.61	1.44	-.19	.35	-.46	.02	1.13	Yes
	3	1.41	1.42	.03	.86	-.10	.57	1.38	No
	4	1.88	1.17	-.64	<.001	-.61	<.001	1.03	Yes

Note. ^a Slope change examining whether the slope vector is flat during baseline and then increases during the treatment and follow-up phase combined. Results in bold represent statistically significant differences. B = Baseline. CIB = Coding Interactive Behaviour scale (Feldman, 1998). F = Follow-up. I+F = Intervention and Follow-up combined. RCI = reliable change index between baseline and follow up scores. *r* = Pearson's *r*, correlation between B and I+F. SMA = Simulation Modelling Analysis

9.4.1.2 Figure 2

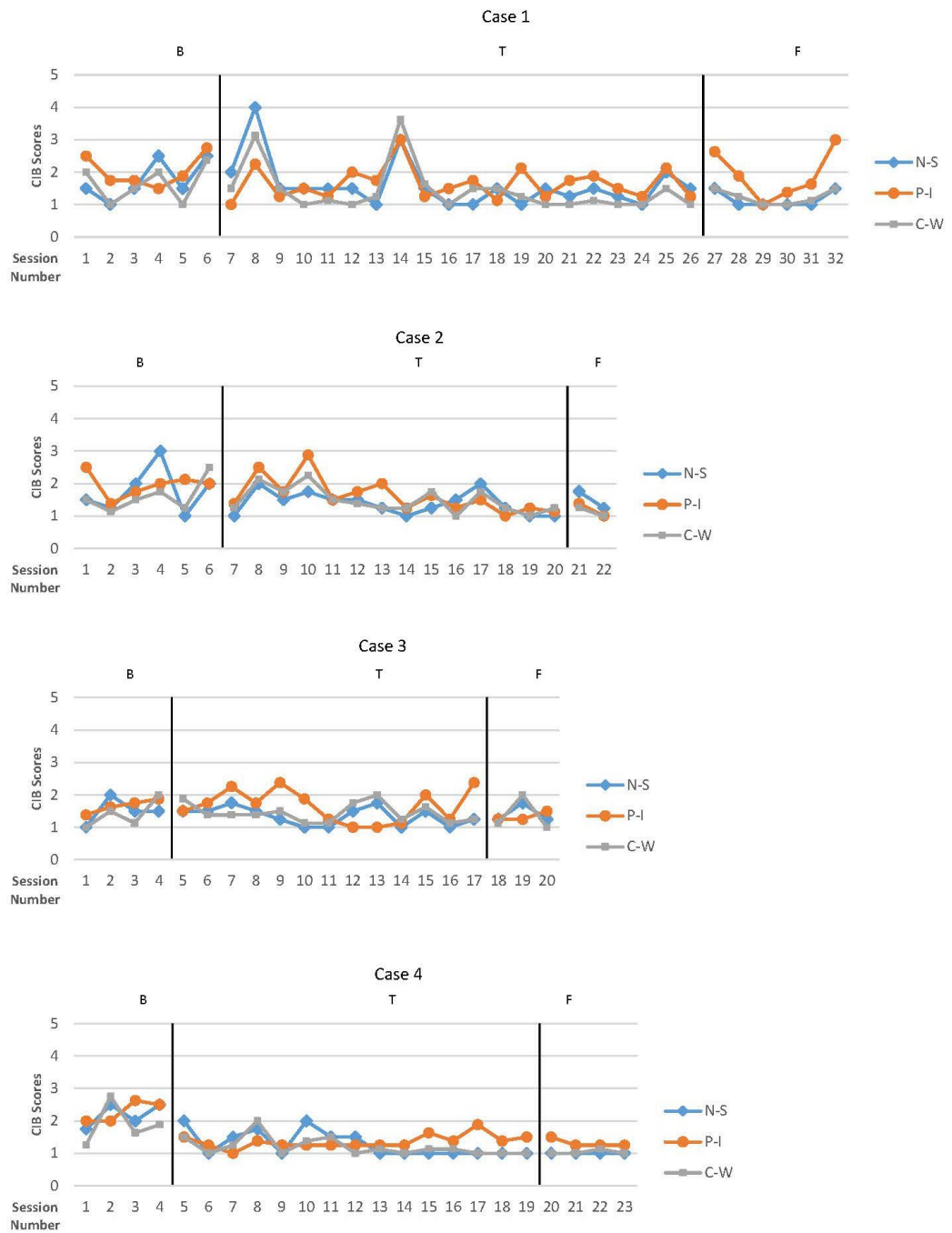
Positive Indices of Parent-Child Relationship



Note. CIB Dyadic reciprocity (R), CIB Parent sensitivity (P-S) and CIB Child engagement (C-E) data for cases 1- 4 with 2- and 3-week baselines. B = Baseline; T = Treatment; F = Follow-up; CIB = Coding Interactive Behaviour scale.

9.4.1.3 Figure 3

Negative Indices of Parent-Child Relationship



Note. CIB Dyadic negative states (N-S), CIB Parent intrusiveness (P-I) and CIB Child withdrawal (C-W) data for cases 1- 4 with 2- and 3-week baselines. B = Baseline; T = Treatment; F = Follow-up; CIB = Coding Interactive Behaviour scale.

9.4.2 Parent Self-Report Outcomes

As expected, all four participants demonstrated reliable change from baseline to follow-up on the MaaP Total scale, the Self-Sufficiency and Self-Efficacy subscales. Three showed improvements on the Personal Agency subscale and two showed improvement on the Personal Management subscale.

As expected, on the DASS-21, all four parents demonstrated reliable change on Stress. Three showed improvement on Depression and one showed improvement on Anxiety. One parent (P4) reported an increase in anxiety. Qualitative feedback indicated this related to additional external factors impacting her anxiety levels towards the close of the intervention (e.g. unexpected illness in the family).

On the PSI-SF Total, two parents demonstrated reliable change in Total parenting stress, two on Parental Distress, one on Parent-Child Dysfunctional Interaction and one on the Difficult Child subscales.

All four parents demonstrated reliable change on the CBCL Total, with three parents reporting significant improvement on the CBCL Externalising subscale. Table 5 shows RCI results for the parent-reported outcomes.

9.4.2.1 Table 5

Reliable Change Indices (RCI) for Parent-Reported Outcome Measures

Variable	Case 1	Case 2	Case 3	Case 4
MaaP Total	-7.28*	-5.70*	-5.70*	-7.12*
MaaP – Self-Sufficiency	-3.58*	-2.68*	-2.68*	-6.25*
MaaP – Self-Efficacy	-2.73*	-2.73*	-2.12*	-4.56*
MaaP – Personal Agency	-2.66*	-0.66	-3.76*	-2.77*
MaaP – Self-Management	-5.26*	-5.58*	-1.86	-1.09
DASS – Depression	2.11*	3.16*	4.22*	1.05
DASS – Anxiety	1.13	4.52*	1.13	-3.39*
DASS - Stress	6.39*	6.39*	3.19*	7.45*
PSI – Total	3.84*	6.43*	1.24	1.86
PSI – Parent Distress	2.94*	2.69*	1.47	0.98
PSI – CDI	0.48	2.16*	0.96	0.96
PSI – Difficult Child	3.58*	0.42	0.00	1.47
CBCL Total	6.39*	6.39*	7.99*	10.22*
CBCL Internalising	1.28	1.92	0.64	1.07
CBCL Externalising	2.27*	0.25	3.79*	4.04*

Note. CBCL = Child Behaviour Checklist (Achenbach & Rescorla, 2000); CIB = Coding Interactive Behaviour scale (Feldman, 1998); DASS = Depression Anxiety and Stress Scale (Lovibond & Lovibond, 1995); MaaP = Me as a Parent Scale (Hamilton et al., 2014); PSI-SF = Parenting Stress Index 4th Edition Short Form (Abidin, 2012). Bold* represents reliable change from baseline to follow-up

9.4.3 *Process of Relationship Change*

All four dyads demonstrated the same pattern of change for parental sensitivity and child engagement, indicating that these variables changed concurrently rather than parental sensitivity preceding change in child engagement. Parent intrusiveness and child withdrawal changed concurrently for only two of the four dyads. Results from this analysis are shown in Table 6. Larger correlations reflect stronger relationships between the two variables for each lag reported.

9.4.3.1 Table 6*Multivariate Process Change Analysis for CIB Parent and Child Subscales*

Dyad	Cross-Lagged correlations							
	Parent Sensitivity and Child Engagement				Parent Intrusiveness and Child Withdrawal			
	<i>r</i> (lag)							
1	0.87 (0)*	0.36 (1)	0.35 (2)	0.10 (3)	0.57 (0)*	0.01 (1)	0.17 (2)	0.03 (3)
2	0.72 (0)*	0.15 (1)	0.24 (2)	0.05 (3)	0.69 (0)*	0.14 (1)	0.41 (2)	0.13 (3)
3	0.64 (0)*	0.40 (1)	0.35 (2)	0.28 (3)	0.09 (0)	-0.34 (1)	0.20 (2)	0.14 (3)
4	0.79 (0)*	0.45 (1)	0.23 (2)	0.12 (3)	0.50 (0)	0.42 (1)	0.15 (2)	0.08 (3)

Note. CIB = Coding Interaction Behaviour Scale (Feldman, 1998).

* $p < .05$ with Bonferroni correction for multiple comparisons

9.5 Discussion

We conducted a preliminary evaluation of a parenting intervention, HHYP, which endeavours to improve the quality of the parent-child relationship, increase parent self-regulation and self-efficacy, and support young parents to respond more effectively to child behavioural and emotional problems. We used a series of single-case multiple baseline experimental designs to refine the intervention and investigate treatment progress.

Overall, results suggest that several aspects of parent-child relationship quality improved over the course of the intervention. The most marked changes were for parent sensitivity and reciprocity. All four mothers demonstrated improvement in sensitivity and three dyads showed improvement in reciprocity. This is encouraging considering parent sensitivity and reciprocity are both integral for secure attachment and promoting healthy child socio-emotional development (Bakermans-Kranenburg et al., 2008; Cyr et al., 2010; Harrist & Waugh, 2002; Saint-Georges et al., 2013; Stack et al., 2010). Results from this study are consistent with prior intervention studies (Cohen et al., 2002; Dollberg et al., 2013), demonstrating that reciprocity and sensitivity can be

improved with intervention. Both attachment- and social learning-based interventions focus on changing parenting behaviour in order to create change in the parent-child relationship and in child behaviour (e.g., Cooper et al., 2000; Dozier et al., 2002; Eyberg & Bussing, 2010; Juffer et al., 2017; Webster-Stratton & Reid, 2012). However, even when interventions focus on changing parenting behaviours to generate improvement in parent-child relationships, few studies in the extant literature have measured session-by-session observational data of the process of relational change between young parents and their toddlers throughout interventions, which is a strength of this study.

All four parents reported improvements in child behaviour and emotional problems, stress, parent self-regulation and parent self-efficacy and three parents reported significant improvements in depressive symptoms from baseline to follow-up. Only one parent demonstrated positive change in anxiety. In terms of parenting stress, only two parents demonstrated improvements on parent stress. Given improvements in other areas of parent child functioning, this finding may be indicative of relatively strong parental attributions about parent-child relationships, attributions that may have been derived from their own experience of early adversity. It may also reflect broad, more generalized concerns about their current situation and future potential. Improving maternal self-regulation, parent self-efficacy, depressive symptoms and child behaviour and emotional problems may have longer term benefits for these families. For instance, research has shown that maternal self-regulation difficulties moderate the relationship between maternal history of maltreatment and child behaviour and emotional problems (Plant et al., 2017) and increase the risk of maltreatment continuity (Smith et al., 2014). Additionally, parent self-efficacy predicts or contributes to beneficial outcomes for the parent-child relationship, parenting competence and child socio-emotional development,

and is negatively related to parental depression and anxiety (Albanese et al., 2019; Coleman & Karraker, 1998; Jones & Prinz, 2005). The negative relationship between maternal depression and child wellbeing is well established, with findings showing that maternal depression is associated with parent irritability, hostility, intrusiveness, lower sensitivity and withdrawal (Lovejoy et al., 2000; Vakrat et al., 2017) and also related to higher levels of child problems, including internalising, externalising and general psychopathology (Goodman et al., 2011). Thus, improvements in these areas are promising.

When exploring the process of relational change between mothers and their toddlers, findings showed that changes in parent sensitivity and child engagement occurred concurrently, whereas this same pattern for parent intrusiveness and child withdrawal only occurred for two of the four mothers. The findings for concurrent changes are consistent with the biobehavioural synchrony model (Feldman, 2007b, 2012a) and support the idea that interactions between the dyad shape and reciprocally reorganise each other's behaviour from moment to moment. Our findings reinforce the benefit of targeting parent sensitivity, as it is likely important to improve child engagement over time. While only one of the four toddlers demonstrated significant level change for engagement when comparing the baseline with the intervention and follow-up periods combined, all four children demonstrated significant slope change in the expected direction. It is possible that significant mean increases in child engagement take longer to develop in a population characterised by significant complexity and history of trauma.

Although not all of the observed changes in parent, child and dyadic behaviour were significant, most showed positive improvements over the course of the intervention. It is possible that small magnitude and non-significant changes in these

observable behaviours accumulated to result in larger changes in the parent self-report measures of mental health, parent-self-efficacy, parent regulation and child behaviour. It is also possible that the parent and child engagement with the therapist contributed to improvements in self-report symptoms. This speculation would be an interesting avenue for future research.

We acknowledge several limitations of this study. While the SCED methodology was designed rigorously, this population is both hard to reach and difficult to retain in treatment, which limited the number of completed cases and the data in the follow-up phase and follow-up time frame, limiting conclusions about longer term effects. While these characteristics underline the necessity of pursuing treatment based research in this area, an extended pretreatment baseline would also strengthen causal inferences about intervention effects. The intervention was designed to be flexible to meet individual needs, however, this meant that not all participants had the same number of sessions so it is not possible to draw definite conclusions about whether the number of sessions affect outcomes. However, we believe this flexibility in delivery is vital to help meet individual and complex needs. Dyad 1 had substantially more tele-health sessions, however, extra sessions did not seem to improve outcomes, so perhaps these did not contribute to substantive change. Further, this study was replicated across participants but not across settings or therapists and was, in addition, delivered by the intervention developers. Replication is, therefore, essential.

One of the strengths of this study was that it included repeated observational measures as well as parent-report. The combination of delivery methods, including in vivo coaching, video feedback and separate parent and dyad sessions that were guided by the treatment manual but also able to be tailored to individual needs is a strength of the HHYP intervention. While the dyads shared commonalities, including parent and

toddler ages, they were relatively heterogeneous, with different trauma history, relationship support, ethnic backgrounds and child concerns. For example, Dyad 1 and 4 demonstrated greater motivation and openness to learn new skills and were in more stable living conditions than Dyad 2 and 3. These two dyads had less support overall, ongoing child protection involvement, more recent history of domestic violence and drug use and were in stressful, unstable intimate relationships and fearful of child removal. Understandably, these factors appeared to impact their engagement, openness about parenting difficulties and development of trust with the therapist. Thus, we believe the capacity to develop strong therapeutic relationships, pace the program and target particular needs was integral to its effectiveness. The feedback gained throughout, from both participants and case managers will be used to refine the treatment manual.

In general, this study provides important insight into the process of relational change between young parents and their toddlers over the course of a parenting intervention. It also provides preliminary support for the Holding Hands Young Parents Program, delivered within the context of a more comprehensive multifaceted service. Ongoing support from participants' case managers was an important factor that facilitated engagement with our intervention. To extend these findings, future research using a randomised clinical trial, with well-matched control groups, assessed across settings and therapists is warranted.

9.6 Chapter 9 References

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Chapter 10: Summary and Conclusions

10.1 The Study Series

The overarching goal of this study series was to develop and pilot a parenting intervention to meet the complex and diverse needs of young parents and their children. We used five studies to develop and deliver the pilot with a particular focus on addressing parent-child relational characteristics and interrupting intergenerational cycles of trauma. This final chapter provides a summary of each study, and discusses the overall strengths, limitations and clinical implications of this body of work. It also provides a brief examination of the economic benefits of developing and delivering effective parenting treatment for families at risk, suggestions for future research and final conclusions.

10.1.2 Study 1 - Early Parenting Characteristics Associated With Internalising Symptoms Across Seven Waves of the Longitudinal Study of Australian Children

The first study investigated whether parenting behaviours during a child's toddler years predict the course of the child's internalising symptoms throughout early to middle childhood. This study used data from waves 1 to 7 of the infant cohort ($N = 4494$) of Growing up in Australia: the Longitudinal Study of Australian Children (LSAC). Findings showed that low self-efficacy and socioeconomic disadvantage during the toddler years were significant predictors of unfavourable (i.e., increasing) trajectories of internalizing symptoms across later childhood. Parenting hostility was a significant predictor of the low increasing trajectory. Additionally, male children were more likely than females to follow unfavourable trajectories. Our findings highlight the importance of parenting factors in a child's early years and provide converging evidence for the value of equipping parents to provide nurturing care that supports young children's development, particularly for children who may start life with early

socioeconomic disadvantage. Findings in this study lend support for targeting parenting hostility and parent self-efficacy in our young parents' intervention. They also highlight the impact of socioeconomic disadvantage on child emotional development across time, giving further incentive to provide support for disadvantaged communities. This is particularly relevant for teenage parents because children of young parents are more likely to be born into and continue to live in social and economic disadvantage (Australian Institute of Health and Welfare, 2018b).

10.1.3 Study 2 - Program Components of Psychosocial Interventions in Foster and Kinship Care: A Systematic Review

The second study was a systematic review of randomised or quasi-randomised trials of foster family interventions and their different therapeutic components. Effective interventions had clearly defined aims, targeted specific domains and developmental stages, provided coaching or role-play, and were developed to ameliorate the effects of maltreatment and relationship disruption. Interestingly, interventions found to have little benefit on problem behaviour were more traditional parenting management training programs developed for parents of children where developmental trauma was not indicated, with little adaptation for children who have experienced maltreatment. This underscores the importance of acknowledging the impact of complex trauma on family relationships, and addressing it specifically within parenting interventions if they are to be delivered to populations who have experienced complex trauma. Interventions effective in improving parent-child relationships included components focussed on developing empathic, sensitive and attuned parental responses to children's needs. This illustrates the value of improving parenting behaviors to support higher quality parent-child relationships. In conjunction with the findings from [Chapter 3](#), which synthesised key literature investigating parenting interventions for maltreatment prevention and

intervention, these findings provided valuable information to incorporate into our young parents' intervention.

10.1.4 Study 3 - The Voices of Young Parents: Exploring Young Parents' Perspectives to Inform the Development of Parenting Interventions

The third study investigated young parents' views and experiences of parenting, using quantitative and qualitative methods. Thirty-one parents, aged between 15 and 26 years ($M = 22.4$ years), with young children ($M = 2.2$ years), responded to an online anonymous survey. Findings from this study demonstrated that young parents are not only highly invested in developing strong parenting relationships with their children but also show clear potential to inform ways that parenting assistance can be provided. For example, results indicated that parents would like to learn more about how to support child social, emotional and cognitive development and improve their own emotion regulation capacities. Challenges reported included parental isolation, stigma, mental health concerns, limited support and child behavioural/emotional problems. Young parents' feedback was highly useful and helped to shape the content of our parenting intervention.

10.1.5 Study 4 - Implementing Holding Hands Parenting Intervention for High Risk Young Parents and Their Toddlers

The fourth study reports on the development of *Holding Hands Young Parent*. It first presents a summary of the rationale and research basis of the intervention. It also presents an outline of the intervention and uses qualitative feedback from the four young mothers who participated in study 5, to highlight intervention implementation. Using this qualitative feedback transcribed from real-world clinical settings provided more in-depth insight than using quantitative measures alone. At times, when reading statistical results in a research paper, it is easy to forget that the numbers relate to

meaningful change in someone's life and relationships. Hearing real voices reminds us that even small changes for individuals can be highly valuable. Overall, findings demonstrated that these young parents were highly committed to their parenting role, motivated to improve their relationships with their toddlers and benefited from the intervention. The mothers reported that it led to greater understanding of their child, strengthened their relationship with their toddler and increased their parenting confidence. Findings provide valuable information from both parents and therapists to inform clinical practice and reinforce the importance of continuing treatment based-research for young parents with a history of early adversity.

10.1.6 Study 5 - Improving Parent-Child Relationships for Young Parents in the Shadow of Complex Trauma: A Single Case Multiple Baseline Experimental Design

The fifth and final study provided a preliminary evaluation of *Holding Hands Young Parents* (HHYP), using a single case multiple baseline experimental design with time series analysis. Four mothers (17-22 years) and their toddlers (13-33 months) completed the intervention, which aims to improve parent-child relationships, parent self-regulation, parent self-efficacy and mental health, and child behaviour and emotional problems. Results demonstrated that several aspects of parent-child relationship quality improved over the course of the intervention. The most marked relational changes were for parent sensitivity, child engagement and reciprocity. Single-case results indicated that parent sensitivity improved for four mothers and dyadic reciprocity improved for three dyads, comparing baseline with the intervention and follow-up periods combined. This is heartening considering parent sensitivity and reciprocity are integral for secure attachment and promoting healthy child socio-emotional development (Bakermans-Kranenburg et al., 2008; Cyr et al., 2010; Harrist & Waugh, 2002; Saint-Georges et al., 2013; Stack et al., 2010). Similarly, longitudinal

research demonstrates that reciprocity between mother-child dyads experienced in the early stages of life has long-term benefits on children's overall adaptation and wellbeing (Leclere et al., 2014).

One of the strengths of this study is that it measured session-by-session observational data of the process of relational change between young parents and their toddlers throughout interventions. This is rare in the existing intervention literature that focusses on changing parenting behaviours to generate improvement in parent-child relationships. Findings also showed that parental sensitivity and child engagement changed concurrently, which is consistent with the biobehavioural synchrony model (Feldman, 2007b, 2012a), which proposes that interactions between the dyad shape and reciprocally reorganise each other's behaviour from moment to moment. In keeping with the intervention aims, all four mothers reported improvement in self-regulation, self-efficacy, stress and child emotional and behavioural problems from baseline to follow-up. Self-reported depression also showed reliable change for three of the four mothers. This study provided insight into the process of relational change between young parents and their toddlers over the course of HHYP and preliminary data on the HHYP protocol. Given these promising preliminary findings, further replication and evaluation are warranted.

10.2 Limitations of the Study Series

There are several limitations of this study series. Those specific to individual studies are considered in the respective chapters. However, overall limitations should also be noted with suggestions for how they can be addressed in forthcoming research. An obvious one is the small sample size in studies 3 and 4, which limits the generalisability of the findings and interpretation of the effectiveness of the HHYP. A larger sample in both of these studies would have strengthened the findings greatly.

However, as illustrated throughout this body of work, this population is characterised by significant complexity stemming from the impacts of complex trauma and ongoing external stressors, including domestic violence, child removal from CPS and drug abuse within family environments. One of the reasons we delivered the intervention within the context of a multi-faceted community program for young parents was that this wrap-around service aimed to address these factors at other levels of service provision, which meant our intervention could concentrate on parenting in the context of adversity. Conflict within family environments and CPS involvement impacted recruitment, engagement and treatment completion in study 5. As noted in this study, eight dyads were recruited for the intervention pilot study but only four completed the intervention. The characteristics that interfere with treatment retention often contribute to poorer outcomes for young mothers and their children, which emphasises the need for continued treatment-based research and more effective methods to support families and improve services. A limited number of fathers were directly involved in the studies. Primary parents in study 1 were predominantly mothers, one father participated in study 3, and one father attended 2-3 treatment sessions in study 5. The importance of father involvement for child developmental outcomes is well-established (Sarkadi et al., 2008). Increased involvement of fathers in parenting research is widely recognised as an essential area for future research and we acknowledge more fathers need to be involved in subsequent evaluations of HHYP. There was also limited opportunity for longer term follow-up within the scope of this study series, which is needed to understand longer term effectiveness of services.

10.3 Strengths of the Study Series

From the outset, this study series was motivated by a desire to develop research that translated into practical clinical changes for those with a history of complex trauma,

working towards strengthening family relationships to create safe, nurturing foundations for children to thrive. While the number of participants involved in the final three studies was small, we believe it achieved that aim and is a strength of this project.

This study series also used a range of research methods to provide insight into parenting and parent-child relationships, from longitudinal providing breadth across time, to single case experimental design, offering deeper understanding about changes in parent-child relationships throughout an intervention. Observational measures are sorely lacking in the existing parenting intervention literature, so observing parents repeatedly, using well-validated observational measures such as the CIB (Feldman, 1998), allowed unique insight into processes of change and is a major contribution of this series. Transcribing qualitative feedback from intervention sessions added further insight into young parents' lives – their strengths as well as the challenges they face and the intergenerational patterns they were trying to break. All of these findings are useful, not just theoretically, but have clinical utility that informs clinicians working with young families who have experienced substantial adversity.

Our intervention, HHYP, also has several strengths. While HHYP shares commonalities with other evidence-based parenting interventions, its explicit focus on both parent self-regulation and the parent-child relationship is a unique characteristic of the intervention. Both are highly important for child socio-emotional development and, as discussed already, particularly useful for parents who have experienced disrupted attachment relationships with their own parents. HHYP also brings together attachment, social learning and biobehavioural models in a cohesive package that helps parents understand and better support their child's development and their relationship. HHYP was also designed to be delivered in the context of comprehensive multi-faceted service responses, which provided an overarching network of services that facilitated young

parents' engagement in HHYP and ongoing care. Collaboration with their service provided the young parents access to a distinctive intervention that they would otherwise not have had access to.

10.4 Clinical Implications

Stigma and isolation have been recurrent themes throughout this study series, which have particularly important clinical implications. Qualitative findings from study 3 ([Chapter 6](#)) demonstrated that stigma and isolation were common experiences for young parents. This was consistent with other findings that suggest interactions between young parents and a broad range of people and services, including schools, family, community and agencies and health care professionals, often trigger experiences of stigma and shame (Australian Human Rights Commission (ARC), 2017). Unhelpful stereotypes that portray young parents as unmotivated and incompetent can exacerbate isolation and distress (SmithBattle, 2013) and present a considerable barrier for access to services (Parenting Research Centre & Murdoch Childrens Research Institute, 2017). Study 2 (Kemmis-Riggs et al., 2018) highlighted some of the challenges for children in alternative care. Girls who have experienced alternative care who then become young mothers are especially vulnerable to stigmatisation, both for being a young mother and a young person in alternative care (CREATE Foundation, 2017). Not surprisingly, young parents who participated in study 3 emphasised the need for approachable and accessible support. Undoubtedly, stigma needs to be addressed at broader social levels, including policy and within communities. Services and organisations need to work towards creating young person-centred environments that are free from stigma (Australian Human Rights Commission (ARC), 2017). We suggested in study 3 that clinicians working in the field can also contribute to reducing stigma. Building strong, therapeutic, supportive relationships between clinicians and parents throughout

interventions, to model relationship-building skills and provide a safe, nurturing relational foundation for parents to improve parenting behaviours, are steps towards reducing stigma and feelings of isolation.

As discussed in study 1 (Kemmis-Riggs, Grove, et al., 2020), Tronick and Gianino (1986) proposed that children of parents who display lower warmth and unresponsive parenting behaviours, experience dysregulated arousal and learn to manage this by withdrawing. Given withdrawal is posited to lower the arousal system, they suggest that this internalising or disengaging response becomes the child's preferred means of coping. When some of the dyads who participated in study 4 ([Chapter 8](#)) first presented for the initial assessments, we observed this disengaged pattern and describe some case examples that illustrate this. The biobehavioural synchrony model argues that parents and infants mutually adapt their physiological and social cues during moments of social contact, which allows the parent to externally regulate the infant's system and provides an adaptive mechanism to sensitise infants to environmental challenges (Feldman, 2007b, 2012a). These reciprocal processes shape the infant's brain structure and functions, laying the foundation for neural pathways for ongoing development (Feldman, 2012a; Shonkoff et al., 2016). When children have experienced complex trauma, where caregivers are consistently, albeit inadvertently, insensitive and unresponsive to infants' needs, instead respond with hostility, aggression, unpredictability or lack of engagement and neglect during early childhood, this can influence the architecture of the developing brain and have potentially permanent effects, disrupting children's social, emotional and cognitive development throughout their lifetime (Lupien et al., 2009; Shonkoff et al., 2012). The impact of complex trauma on children's socio-emotional and relational development is so critical because socio-emotional capacities are fundamental to wellbeing (Tronick & Beeghly,

2011). The ability to understand, communicate and regulate one's emotions, and respond to other's social and emotional cues are central to executive functioning, and support the capacity to manage challenges, form supportive relationships with others and adapt to future adversity (Shonkoff et al., 2016).

All of the parents in study 5 ([Chapter 9](#)) reported moderate to severe childhood abuse and neglect and presented with less than optimal parent-child relationship patterns. Research has demonstrated that the child-rearing behaviours of one's own parents can influence one's own parenting behaviours (Putallaz et al., 1998; Van Ijzendoorn, 1992). For many parents who have experienced child maltreatment, their attachment relationships with their own parents have been disrupted, which can impact their emotion regulation and capacity to develop secure attachments with their own children (Harel & Finzi-Dottan, 2018). Further, literature examined in [Chapter 1](#) showed that a parent's history of childhood maltreatment increases the risk of continuing cycles of maltreatment among his or her own children (Assink et al., 2018; Ertem et al., 2000; Thornberry et al., 2012). Safe, stable, and nurturing relationships for infants and children can protect them from the negative effects of stress and adversity and help break intergenerational cycles of trauma, abuse and neglect (Britto et al., 2017; Schofield et al., 2013). Thus, from a clinical perspective, it is highly encouraging that even a relatively short-term intervention such as HHYP can improve parent-child relationships for mothers with a history of childhood maltreatment. The clinical implications of improving parent-child relationships for young parents with a history of complex trauma may be far-reaching, especially given evidence that demonstrates the quality of a child's caregiving relationships underpins a wide range of later developmental outcomes, including mental health, self-regulation, ability to develop healthy, supportive relationships with others and ultimately, the capacity to be a

successful parent (National Scientific Council on the Developing Child, 2004; Shonkoff et al., 2012).

10.5 Considering the Cost-Benefit of HHYP

This study series has illustrated the vast range of potential negative consequences of child maltreatment on both long and short-term outcomes for children. The economic costs of child maltreatment are no less staggering. Direct cost estimates of child maltreatment for expenses spent on out of home care services (OOHC), intensive family support and family support services were estimated to be \$5.2 billion in Australia in 2016/17 (Australian Institute of Family Studies, 2018). This equates to a real recurrent expenditure of approximately \$959 per child, for every child aged 0-17 in the Australian population in 2016/17 (Australian Institute of Health and Welfare, 2018a). Of course, this is only one small aspect of the financial costs related to child abuse and neglect. Cost estimates that are related to a broader range of direct and indirect costs including provision of health services, educational assistance, poorer future labour market outcomes, supported accommodation and assistance programs, and estimates for total cost of pain and suffering are substantially higher. When wider definitions of childhood trauma are considered, conservative estimates of cost in Australia range from \$6.8 billion per year for child sexual, emotional and physical abuse to \$9.1 billion (Kezelman et al., 2015). Lifetime economic costs for Australian children who were maltreated in 2012/13 for the first time, have been estimated to be \$9.3 billion, which includes costs associated with child protection, health, criminal justice, housing, education, and lost productivity (McCarthy et al., 2016). This equates to a cost of \$176,437 per child maltreated (McCarthy et al., 2016).

The economic case for investment in targeted evidence-based and evidence-informed early intervention programs in child protection and OOHC demonstrates clear

value of return on investment. For instance, cost-benefit modelling from two child abuse and neglect primary intervention programs in the US demonstrated that the programs may help thousands of children per cohort avoid child maltreatment (Peterson et al., 2018). Additionally, this analysis demonstrated that the cost of implementing these programs could be offset substantially in the long term through the monetary benefits associated with reduced child maltreatment. A recent cost benefit analysis of investment in early intervention, modelled on five evidence-based programs, demonstrated the possible impact that additional investment in early intervention over a 10-year period would have on Victoria's baseline system costs (SVA Consulting, 2019). This report showed that cumulative net savings to child protection services and OOHC alone (after subtracting program establishment and delivery costs) over a 10-year period would be \$1.6 billion. Put simply, over 10 years, every dollar invested in early intervention saves \$2 by preventing children from entering OOHC.

Prior research indicates that the cost of delivering parenting interventions is relatively low and cost-effective, which provides some insight into the potential costs and benefits of delivering HHYP to a larger audience. For example, group-based parenting interventions have been estimated to range from \$509-\$2685 per participant, with median cost approximately \$1720, whereas individual interventions have been estimated to range from \$1389-\$10,984, with median cost approximately \$3755 (Ford et al., 2019). Economic evaluations indicate that preventative parenting interventions are cost-effective and can improve child and parent mental health (Edwards et al., 2007; Mihalopoulos et al., 2007; Nystrand et al., 2019; Sampaio et al., 2018; Sayal et al., 2016; Scott et al., 2010). These findings represent good return on investment and provide further argument for expanding targeted support services and treatment-based research for families at risk.

10.6 Future Research

Considering the promising preliminary findings of studies 4 and 5 ([Chapters 8](#) and [9](#) respectively) and the potential for excellent return on investment, further evaluation of HHYP is warranted. Our pilot study was delivered within a wrap-around service, yet not all adolescent mothers with experience of adversity have access to such support. Thus, replication across various treatment settings and therapists is vital to evaluate the efficacy of the intervention. A clinical trial with a larger sample and longer term follow-up is a potential method of evaluating HHYP. It is also important to investigate and plan for the scalability of the intervention. HHYP, delivered to individual parent-child dyads by well-qualified mental health professionals with experience in trauma-informed care, is relatively resource-intensive. One potential adaptation to the format that may improve scalability would be to deliver the intervention in a small group format, for example with four to six dyads and two therapists. The small group format may help to enhance connection with other young parents, increase engagement, and reduce stigma and isolation. It would be less resource-intensive to deliver, so it may be more feasible and increase accessibility. With two therapists, it would still be possible to provide one-on-one coaching that is individualized to each dyad, which we believe is important for intervention effectiveness. One example of this coaching within group interventions is demonstrated in the work of Mersky and colleagues. They adapted Parent-Child Interaction Therapy (PCIT), which is typically delivered to individual dyads (or two parents, one child) to a shorter, group format, to be more accessible and likely to be incorporated into standard care for foster families (Mersky et al., 2016). To deliver individualised coaching, they directed each dyad to a private clinical room to engage in 20 minutes of coaching with the lead clinician on a rotating basis. This format may be workable for HHYP. Another

suggestion would be to co-deliver the intervention with a young parent who has completed the intervention personally, and an experienced therapist in this small group format. Involving a peer in this format may be less intimidating and engaging for young parents, which may contribute to improved outcomes. Evidence suggests peer-facilitated group mental health interventions can improve participants' self-efficacy and empowerment (Burke et al., 2019). These are all potential areas for further investigation for HHYP.

10.7 Conclusions

The primary motivation of this study series was translational research – to translate theory into clinical practice that would contribute to meaningful improvements for young parents and their children. This study series demonstrates that it is possible to strengthen parent-child relationships for families in the shadow of complex trauma and that young parents are willing and able to create positive changes to break intergenerational cycles of maltreatment if offered sufficient support. The findings from this project reinforce the importance of continuing treatment based-research for young parents with a history of early adversity. Researchers, policy makers, clinicians, parents, and all those involved in working with children have a responsibility to develop more effective ways to intervene for complex trauma. This body of work contributes to that process.

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Appendix 1: Holding Hands Treatment Manual

Holding Hands Young Parents

Treatment Manual



Building stronger parent-child relationships

Jacqueline Kemmis-Riggs, Adam Dickes and John McAloon

OVERVIEW OF TOPICS

Program Overview



Topic I: Understanding My Child

Parent Time: The power of attention

Toddler Time: Verbal Skills I



Topic II: Understanding My Child II

Parent Time: Cycles of behaviours and ways to manage when things get challenging

Toddler Time: Verbal Skills II



Topic 3: Getting In Close

Parent Time: Attachment and affectionate touch

Toddler Time: Using touch, our gaze and getting in close



Topic 4: Infectious Calm

Parent Time: Emotions and Co-regulation

Toddler Time: Showing delight, with our eyes, face and body



Topic 5: Consistency Is Key

Parent Time: Consistency, being clear and using your attention wisely

Toddler Time: Consolidate skills, practice consistent responses



Topic 6: Reciprocity - give and take responses

Parent Time: Reciprocity

Toddler Time: Give-and-take responses



Topic 7: What's That Little Head Up To Now?

Parent Time: Mentalising

Toddler Time: Watch, listen and respond to your child's internal world



Topic 8: Review

Parent Time: Review remaining challenges and plan for next steps

Toddler Time: Review skills learned and practice

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PART 1: BACKGROUND TO THE TREATMENT MANUAL

Holding Hands Young Parents (HHYP) aims to improve the quality of the parent-child relationship, increase young parents' self-regulation and self-efficacy, and support them in responding more effectively to child behavioural and emotional problems. In targeting these areas, the overarching aim of HHYP is to help parents provide a strong foundation for child social and emotional development and help break intergenerational cycles of trauma. Because the prenatal to three-year-old period is vital for creating a strong neural foundation for ongoing development (Shonkoff et al., 2016), HHYP has been developed for parents with toddlers between the ages of 12 and 40 months.

Reviewers have suggested that parenting interventions may have a limited role in supporting teenage parents and that they should potentially be used in conjunction with more intensive and comprehensive support (Barlow et al., 2011). Therefore, this intervention was developed to be delivered within the context of comprehensive programs that provide ongoing case management, home-visiting and support for housing, educational, vocational and/or life skills needs, such as the Red Cross Young Parents Program (Spencer & Vogl, 2009).

Young parents (under 25 years) who are considered most appropriate for the intervention have stable living/housing arrangements and a support person who is able to attend sessions with them, and are motivated to improve the quality of the relationship with their child.

This manual has been developed to provide an evidence-based framework to guide therapists working with young parents and their toddlers. Therapists are encouraged to focus on developing strong therapeutic relationships, tailor the intervention to the particular needs of each dyad and pace the content as needed.

PART 2: TREATMENT

TOPIC 1 CHECKLIST: UNDERSTANDING MY CHILD

MATERIALS

- Set up at home sheet – HHYP4b
- Feedback sheet – HHYP6
- CIB formulation sheet – HHYP7
- Overview – HHYP8
- Topic 1 Parent time – HHYP9
- Topic 1 Toddler time – HHYP10
- Video Clip from Baseline Ax

INTRODUCTION (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Welcome chat to all present
- Parent completes progress measures (e.g. MaaP)
- Explain rationale of HHYP
- Provide program overview: work through handout HHYP8
- Caseworker/child minder leaves with child

PARENT TIME (THERAPIST & PARENT)

- Review Feedback (HHYP6) / Formulation (HHYP7)
- Video Clip of Ax sessions
- FBI Psychoeducation (HHYP9)
- Attention Psychoeducation (HHYP9)
- Toddler Time Coaching Psychoeducation (HHYP10)
- Discuss client preference for in-room coaching or earpiece coaching

TODDLER TIME (THERAPIST, PARENT & TODDLER)

- Toddler returns to playroom
- Explain observation and leave room, for 5 minutes of video recording/observation
- Therapist enters room or provides coaching through earpiece
- Provide positive feedback on Coaching Session / Close session and invite case manager/support person back into room if appropriate

WRAP-UP (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Summarise session and provide positive feedback
- Provide opportunity to ask further questions
- Confirm client has handouts (HHYP8, 9 and 10)
- Explain home practice
- Explain skype/facetime sessions (HHYP4b)
- Confirm/schedule telehealth and next session

TOPIC 1 UNDERSTANDING MY CHILD: INTRODUCTION

(Therapist / Parent / Child / Case manager)

WELCOME / PARENT TO COMPLETE SELF-REPORT

Welcome the family and case manager/support person

Ask parent to complete measure chosen to assess progress (E.g. MaaP, ECBI, personalised goals)

INTRODUCTION AND RATIONALE FOR THE PROGRAM

Explain the rationale for the program.

“What this program aims to do is to help work on the things that you find most difficult: developing specific skills and responses to children that can really make a difference.

Parent-child relationships are a really powerful influence on child development so that's why strengthening the relationship is something we focus on throughout the program.

Good parent-child relationships can be thought of as protection for the brain, they are like good medicine

Healthy relationships also promote brain development and help build the skills children need as they grow, including self-regulation, social, language and thinking skills.”

EXPLAIN STRUCTURE OF SESSIONS

Explain the structure of parent session, parent-child coaching and home practice.

Parent session:

“Each week we will spend 60 minutes talking about the skills that help to establish a strong relationship with your child. To begin with, we want to give you some idea of what we will be focussing on over the next few weeks. It's a lot to take in, so don't worry about remembering it all now. We will take it step-by-step. There's also a handout for you to take home and stick on the fridge, to make it easier to keep in mind as we work through it.”

Parent-child coaching:

“Each week we will also spend around 30 minutes practicing specific skills and ways to respond to our children that can help to build strong relationships”

Home practice:

“It's also really important to practice the skills we do in sessions at home each day. When people do this, it really helps to improve skills more quickly.

Do you have any questions about this?"

OVERVIEW OF HOLDING HANDS YOUNG PARENTS PROGRAM

The program is divided up into module topics (see handout HHYP8). Work through handout with parent and caseworker, providing a brief overview and answer any questions. Explain to parents that we progress through the topics at a pace that suits them, so sometimes we might spend more than one session on each topic. The topics are outlined below.

TOPIC 1: UNDERSTANDING MY CHILD

PARENT TIME: THE POWER OF ATTENTION

Children are wired to seek our attention. Behaviours that get more attention occur more often over time. If we pay attention to things we want to see more of, these behaviours will occur more often over time.

TODDLER TIME: VERBAL SUPPORT SKILLS I

Using our voice to respond to our children's needs

TOPIC 2: UNDERSTANDING MY CHILD II

PARENT TIME: CYCLES OF BEHAVIOURS

We can unintentionally fall into patterns of behaviour that are unhelpful for our children and ourselves. This topic helps to explain these and talk about ways to break these cycles.

TODDLER TIME: VERBAL SUPPORT SKILLS II

Using our voice to respond to our children's needs

TOPIC 3: GETTING IN CLOSE

PARENT TIME: ATTACHMENT AND AFFECTIONATE TOUCH

Children can't look after themselves, so they are wired to stay connected to their parents to meet their needs. Providing a secure base for our children helps them feel safe, and allows them to start exploring the world. Our child's attachment to us provides the biological basis for their stress response system, bonding system and social development.

Touch is also one of the first senses we acquire and is it is a powerful way to help regulate arousal, soothe your child and help her feel safe and calm.

TODDLER TIME: USING TOUCH, OUR GAZE AND GETTING IN CLOSE

Using our bodies (eyes and touch) to respond to our children's needs and help them regulate their behaviour and emotions

TOPIC 4: INFECTIOUS CALM

PARENT TIME: EMOTIONS AND CO-REGULATION

Young children are dominated by their emotional and sensory systems, so they need us to help them learn to regulate their behaviours and emotions. If we can learn to stay calm and regulate our own emotions and stay present with our children 'in the moment', our infectious calm can help children to feel safe, to calm down and learn to regulate their own emotions as they grow older.

TODDLER TIME: SHOWING DELIGHT

Showing delight in your child, in your face and in your actions

TOPIC 5: CONSISTENCY IS KEY

PARENT TIME: CONSISTENCY, BEING CLEAR & USING ATTENTION WISELY

It's easy for children to learn when they have consistent experience of the world. It's also easy for them to feel safe and stay calm when they know what to expect. By being consistent in our caregiving, we provide certainty and security for our children as they develop.

TODDLER TIME: CONSOLIDATE SKILLS, PRACTICE CONSISTENT RESPONSES

Focus on consistent, sensitive and responsive parenting

TOPIC 6: RECIPROCITY

PARENT TIME: RECIPROCITY

A lot of the program is about developing healthy give and take interactions, which we call reciprocity. These reciprocal moments are the foundation for developing a healthy strong relationship.

TODDLER TIME: SERVE AND RETURN RESPONSES

Reflect on reciprocal responses, notice and try to increase (child initiate – parent respond)

TOPIC 7: WHAT'S THAT LITTLE HEAD UP TO NOW?

PARENT TIME: MENTALISING

Mentalisation is all about understanding others (and ourselves) – not just behaviours, but internal thoughts and feelings. Mentalisation helps us answer questions like 'what they are thinking?' 'what are they feeling?' 'why are they behaving that way?'

TODDLER TIME: WATCH, LISTEN AND RESPOND TO YOUR CHILD'S INTERNAL WORLD

Practice mentalising and communicating a running commentary on your child's internal world, i.e. thoughts and feelings

TOPIC 8: REVIEW

PARENT TIME: REVIEW REMAINING CHALLENGES AND PLAN FOR NEXT STEPS

The final topic brings all of the topics together and we review 'where to from here?'

TODDLER TIME: REVIEW SKILLS LEARNED

Practice any skills that remain challenging. Encourage strengths and progress.

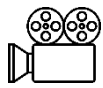
TOPIC 1 UNDERSTANDING MY CHILD: PARENT TIME

(Therapist & Parent)

FEEDBACK FROM INTERVIEW

Use the formulation handout / information from clinical interviews to summarise client's strengths and difficulties. Focus on strengths and normalise challenges. Collaboratively elicit feedback about parent goals for child thriving (Use HHYP5, 6 & 7, Interview, feedback and formulation sheets).

VIDEO FEEDBACK FROM INTERVIEWS



Check in with parent that they are willing to watch video-feedback. This can be difficult for some parents, especially if they are anxious or have experienced a lot of evaluation related to their parenting. Normalise that it can feel uncomfortable and explain the benefits of learning this way. Start with very short (30 sec) clips if it is uncomfortable for parent and encourage parent to watch the child to take the focus off themselves.

Provide positive feedback about parenting using video clip (choose most suitable clip from assessment sessions), with a focus on reciprocal moments of shared joy or where the parent has responded positively to their child's bid.

While reviewing the video, describe the child in terms of what they are thinking and feeling in addition to what they are doing. In theory, this will help the parent respond to what the child is feeling or thinking, not simply the behaviour. This needs to be simple at first, e.g. "he looks happy when you smile at him" or "he is thinking hard about how to do x".

FBI: THE FAMILY BEHAVIOUR INVESTIGATOR

In HHYP we ask parents to become cool, calm investigators of the behaviour in their family. We call this the 'family behaviour investigator' or FBI agent. The aim is for parents to learn to take a moment to observe and reflect on their own behaviour and that of their child, in order to respond with more sensitivity and with less reactivity. It is important to reassure parents that this takes effort and practice, especially for parents who have difficulty managing their own emotions due to the impact of their own trauma. We ask parents to notice:

- What behaviours am I paying attention to? (Where is my attention?)
- How does my child respond to my attention? (Child feelings?)
- How does paying attention to my child make me feel (Parent feelings?)

Explain the concept of the family behaviour investigator. For example:

"One thing I'd like to talk about today is an idea that underpins everything we will be working on from here on. We call this the FBI agent: this is not a

member of the Bureau; the idea is that you become a cool, calm, evidence-collecting observer of the behaviour in your family. An FBI agent is a Family Behaviour Investigator.

There are a few things we are asking you to notice this week: What behaviours am I paying attention to?; How does my child respond to my attention? And how does paying attention to my child make me feel?"

Explain to parents that focussing on shared moments between you and your child:

- Can help reward children with the attention they need
- It can also help us notice how our children are rewarding us with being happy in our company

Ask for feedback from parents and discuss these ideas.

PSYCHOEDUCATION: ATTENTION

Explain the role of attention as a reinforcer of behaviour. For example:

"Being a parent involves keeping children safe and managing some behaviours that can be challenging. As parents, our attention naturally goes to behaviours that are challenging or unsafe. Attending to challenging or unsafe behaviour can be exhausting, and sometimes there is not much attention left over for the rest of the time. It is no surprise we sometimes sit back and take a breather when our kids play quietly."

(Use Socratic questioning to facilitate a discussion about how this principle relates to their family)

Explain:

"As parents, our attention is a really powerful reinforcer of behaviours. Behaviours that get more attention tend to increase. This can set up a learned pattern for our children: they learn that challenging or unsafe behaviour gets our attention, while quiet or happy behaviour doesn't.

It can also set up a pattern for us: we start to focus on all of the problems and not notice the great things our children are doing. Picture a see saw – on one end is all the behaviour you want to see more of and at the other end is all the behaviour you want to see less of. The more we pay attention to the problems, the more they seem to occur. In this program, we want to switch things around so that we are piling on attention to the behaviour you want to see more of and reducing attention on the behaviour you want to see less of.

It takes practice and intention to notice the smaller signs and signals our kids are giving up and take note of the good moments when things are going well.

We know, from both clinical experience and years of research, that paying more attention to the good things increases those good behaviours and at

the same time reduces the challenging and unsafe behaviours you want to see less of."

Formulation driven psychoeducation: Use the formulation to guide your discussion and elicit parent input.

For example:

"I remember that you said that one of your goals is to increase xxx (e.g. sharing). What sorts of behaviours do you want to see more of?... How might you use attention to increase these behaviours?"

PSYCHOEDUCATION: BEHAVIOUR CHAINS

Explain the concept of behaviour chains. For example:

"We often think about our children's behaviours (e.g. a tantrum) as a single thing. As an FBI agent, we want you to think about each big behaviour as a series of small things that go together like links in a chain. Things that come before, during and after can all be important. Breaking down behaviours into pieces gives us valuable clues about what we should pay attention to, what need to can respond to, and what we need to change.

Imagine you ask your toddler to take their plate to the sink. She then picks up her plate, stands up forcing the chair out from behind her, turns to see that the chair has hit the counter, walks toward the sink, turns at the fridge and kicks it with her right foot, stomps her foot following the kick and turns back toward her mother, yells some words at her and immediately throws her fork on the floor, turns and walks back toward the sink, lifts her plate up and drops it noisily into the sink. Many individual behaviours can be identified within this chain and each can be responded to in a variety of ways. So we can choose to ignore the complaining to the sink and focus our attention on what she did well in that situation."

EDUCATION ON TODDLER TIME TOPIC: VERBAL SKILLS I

One of the aims of toddler time for the parent to learn to follow their child's lead in play. This helps to strengthen their relationship, provides an opportunity for the parent to practice observing their child and responding to child bids rather than 'teaching' or taking over the play, helps improve child attention, engagement and child confidence.

The skills in this topic focus on verbal behaviours. These skills help parents remain child-led, engage their child and support language development.



ROLE PLAY: Explain each skill, using examples and role play.

POSITIVE COMMENTARY

- **Describing** what your child is doing in positive terms:
- **Reflecting/repeating** or summarising something your child has said (*Rationale:* Increases your child's verbal communication, improves speech; Helps your child stay engaged in an activity; Shows your child you are interested in them)
- **Praise - Specific Praise** is when you tell your child exactly what it is you like. (*Rationale:* Specific praise helps your child understand what you are pleased about. It's also more genuine than non-specific praise like 'You're a good boy'. Praise nurtures your child's self-esteem, confidence and sense of self. Behaviour that is praised usually increases. By using praise, you're showing your child how to think and talk positively about himself. You're helping your child learn how to recognise when he does well and to pat himself on the back.

WARM TONE OF VOICE

Warm, enthusiastic & positive voice tone, suited to child age and emotional or behavioural state (*Rationale:* Using a warm tone helps your child feel safe and secure with you. Tone can communicate more about your message than the actual words! (Demonstrate praise in sarcastic tone compared to warm tone).

TOPIC 1 UNDERSTANDING MY CHILD: TODDLER TIME

(Therapist & Parent & Child)

OVERVIEW

Therapist coaches Parent in play session with child, either from observation room with earpiece or in-room.

The focus of Toddler time in Topic 1 is to increase parent's positive commentary and use a warm tone of voice. Where necessary, remind the parent that the session is focussed on **child-led play**. The child is encouraged to choose any toy they like and play with it however they wish. The parent's task is to join in and follow the child's lead. Where possible, remind the parent to use a clear, warm, enthusiastic and positive tone of voice.

5 MINUTE OBSERVATION

Explain observation and leave the room.

For example:

"Before we start coaching today, I'm going to leave the room and let you guys settle in. I'll watch and code how things are going for the next five minutes and then come back into the room (or use the earpiece). Use any of the skills we've discussed and try to let your child lead the play. Do you need anything before I go?"

Leave the room and set timer for 6 minutes. Do not code the first 3 minutes as this provides some time for the parent and child to get settled.

During observation, notice parent strengths to provide brief feedback when you start coaching.

COACHING: VERBAL SKILLS I

Start coaching after the observation period.

For the first session, some parents may feel more comfortable with the therapist in the room rather than using the earpiece. If this is the case, model the skills first with the dyad and then gradually withdraw from the interaction and take a back seat as you coach from further away in the room.

- Positive commentary
 - Describe the child's play "you put the cake in the oven!"
 - Reflect the child's vocalisations "Yes, it's a truck!"
 - Praise – specific actions and behaviours "You did such a great job drawing the picture"
- Tone – use a clear, warm and enthusiastic tone.

REFLECTIVE COACHING

Accentuate the positive: Remember to model the **seesaw** in your coaching. Focus attention on positive parent behaviours and selectively ignore any negative commentary for now.

Model: if you are in the room with the dyad; model skills in play with child first and then slowly withdraw from play, depending on parent skills.

Prompt: Notice what the child is doing, and provide parent with example phrases.

Prompt: Notice opportunities for verbal commentary, and point them out to parent

TELEHEALTH CHECKLIST

FEEDBACK AND REFLECTIONS

- Ask for reflections on the last session
 - What have you noticed about [child] this week?
 - What does his/her response tell you?
 - Has anything been particularly difficult or challenging?
- Ask if the handout was clear / is useful / any questions?

PARENT CHILD PLAY OBSERVATION

- Refer parent to HHYP4b
- When settled, set up play time and record 5 minutes' play (remind parent to focus on child during this time, and that therapist will remain quiet)
- Provide positive feedback about the observation
- Answer any other questions/coach as needed for 10 minutes

IN CLOSING

- Remind parent about completing the questionnaire today if applicable and check that parent has the questionnaire to complete (either electronically or hard copy)
- Confirm next face-to-face appointment

TOPIC TWO CHECKLIST: UNDERSTANDING MY CHILD II

MATERIALS

- Topic 2 Parent time – HHYP11
- Topic 2 Toddler time – HHYP12
- Relaxed Breathing Handout (Psychology tools)
- Video Clip prepared for feedback from session 1
- Video 2a from 'Inside Out'
- Video Clip – Reggae video (YouTube link)

INTRODUCTION (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Brief welcome chat with case manager / client
- Parent completes progress measures (e.g. MaaP)
- Caseworker/child minder leaves with child

PARENT TIME (THERAPIST & PARENT)

- Homework review: FBI and child-led play
- Video feedback
- Calm breathing psychoeducation
- Calm breathing practice
- Psychoeducation: Coercive cycles
- Psychoeducation: Anxious cycles
- Role play: how to manage coercive/anxious cycles
- High risk situations: behaviour that makes it harder to stay calm
- Toddler Time Coaching Psychoeducation: Verbal Skills II

TODDLER TIME (THERAPIST, PARENT + TODDLER) ~20-30 MINUTES

- Toddler returns to playroom
- Explain observation and leave room, for 5 minutes of video recording
- Therapist enters room or provides coaching through earpiece

WRAP-UP (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Summarise session
- Provide opportunity to ask further questions
- Explain home practice – give handout to client
- Confirm/schedule telehealth and next session

TOPIC 2 UNDERSTANDING MY CHILD II: INTRODUCTION

(Therapist & Parent & Child & Case Manager)

WELCOME / PROGRESS ASSESSMENT

Welcome the family and case manager/support person

Ask parent to complete measure chosen to assess progress (E.g. MaaP, ECBI, personalised goals)

CHECK IN

Briefly check in with case manager and child while parent fills in scale

TOPIC 2 UNDERSTANDING MY CHILD II: PARENT TIME

(Therapist & Parent)

HOMEWORK REVIEW: ASK PARENT FOR REFLECTIONS ON WEEK

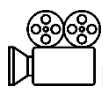
FBI check-in: Review the concept of being a cool, calm observer of behaviour

Ask parent for reflections on their week. For example:

- What behaviours am I paying attention to?
- How does my child's behaviour make me feel?
- How do my responses make my child feel?

Child-led play practice: Check in on practice and elicit parent reflection; encourage daily practice

VIDEO FEEDBACK FROM INTERVIEWS



Provide positive feedback about parenting using video clip, with focus on Verbal Skills covered in Topic 1.

While reviewing the video, describe the child in terms of what they are thinking and feeling in addition to what they are doing. In theory, this will help the parent respond to what the child is feeling or thinking, not simply the behaviour.

Building from Topic 1, the aim is to help the parent understand the child's internal world, but this can be difficult, scary and overwhelming for the parent. So it's important to be sensitive to the parent's experience and pace this process to suit the dyad.

E.g. *"I can see you're trying really hard to get engage him"*

Link Mentalising with Verbal Skills covered in Topic 1 if possible. E.g. *"he feels happy when you praise him"*

INFECTIOUS CALM SKILLS: CALM BREATHING

Parents who have experienced complex trauma often report difficulties regulating their own emotions and managing their toddler's 'big emotions'. Strong emotions can be overwhelming and triggering for parents.

Explain the reason for introducing a method of regulating parent emotions. For example:

"Children have lots of needs, both physical and emotional. They can't look after themselves so they need their parents to meet their needs. When we are stressed, worried or angry it is hard to think clearly and be sensitive to our children's needs."

Our children learn to be calm and control their own powerful feelings from watching how we respond to them. Learning skills to help manage our own emotions helps our children learn to regulate their own emotions and behaviours.

When we're anxious or threatened our breathing speeds up to get our body ready to respond to danger.

Practicing calm breathing can help regulate your own emotions and feel calmer. Calm breathing is slower deeper than regular breathing and happens lower in the belly.

It is important to practice this when we are calm and relaxed so that we can use it in more stressful situations as we get better at doing it."

CALM BREATHING PRACTICE

Teach how to do calm breathing: refer to handout (HHYP11) and the relaxed breathing handout.



Practice breathing in session

PSYCHOEDUCATION: COERCIVE CYCLES

(Discuss if externalising behaviours are present)

Introduce coercive cycles (Patterson, 1982) by reflecting that strong emotions can arise when we ask our children to do something and they refuse or when child puts a demand on parent that the parent does not feel they can meet at that time. Ask parent for examples from the past few weeks or use one they have already told you about.

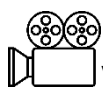
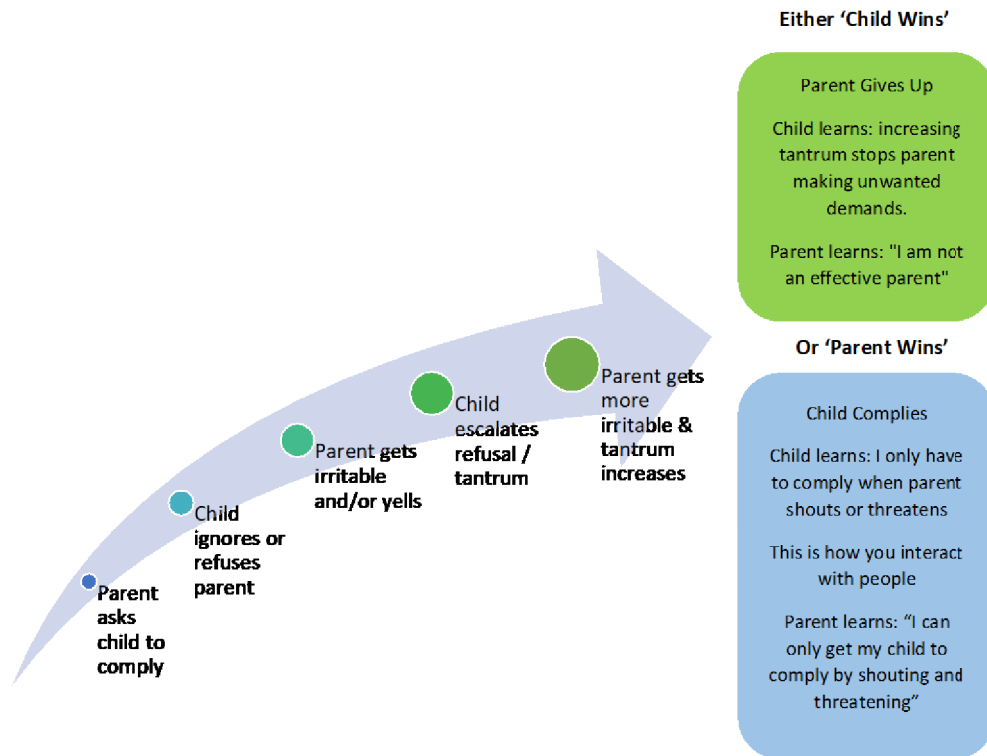
Use the diagram below to discuss the coercive process with parents. For example:

"Sometimes a cycle can develop where we get into a win-lose battle with our children where behaviours we don't want to see start increasing. And the reason they increase is easy to understand, they are often the things that are getting attention.

For example, if I'm a toddler and I'm chucking Lego at the TV and my mum is saying "Stop doing that" because they are seeing something they want to see less of. Well, because I am set up to find attention and have my needs met, and I am not getting much anywhere else, I say "No", I know my mum will respond to that. But then we get into this thing where my parents increase the volume "STOP THAT" and so do I "NO!" And off it goes. One pushes back, the other pushes back more, the other pushes back even more

Now this is a battle. And in a battle, someone always has to win and someone always has to lose. If the parent wins the battle, the child learns that this is the way you parent, and the way you interact with people. By coercing

people. And the parent learns that coercion is an appropriate way to parent. If the parent backs down, they learn they are not effective, or alternatively that to be effective they must coerce more next time. And the child learns that as long as they continue to resist their parent, they will get what they want”



VIDEO CLIP Show the video clip from the Pixar film "Inside Out" ('The foot is down' excerpt) as an example of a coercive cycle (Video 2a)

PSYCHOEDUCATION: ANXIOUS CYCLE

(Discuss if internalising behaviours are present)

Explain how unhelpful cycles can also develop related to anxiety from a cognitive behavioural perspective. For example:

“A similar thing can happen with anxiety or worry. Some children might be shy or hesitant to try new things, and this may be reinforced unintentionally in their environment. For example, parents may affirm their shyness and send the message that agrees with the child’s worry that they can’t do something or are not good at something.

Anxiety is essentially a fear of something bad happening in the future. When we are anxious, we typically underestimate our ability to cope with the feared situation. Anxiety can make us want to avoid the scary situation or sometimes it makes us want to lash out.

Anxiety is useful as it helps to protect us when we are in danger, but it can interfere if we start to avoid doing things we want to do.

When there are no safety concerns, one effective strategy for dealing with anxiety is to 'face the fear' and engage the thing(s) that makes us anxious. Where there are specific things of concern, public speaking for instance, or traveling on lifts, this task is relatively easy.

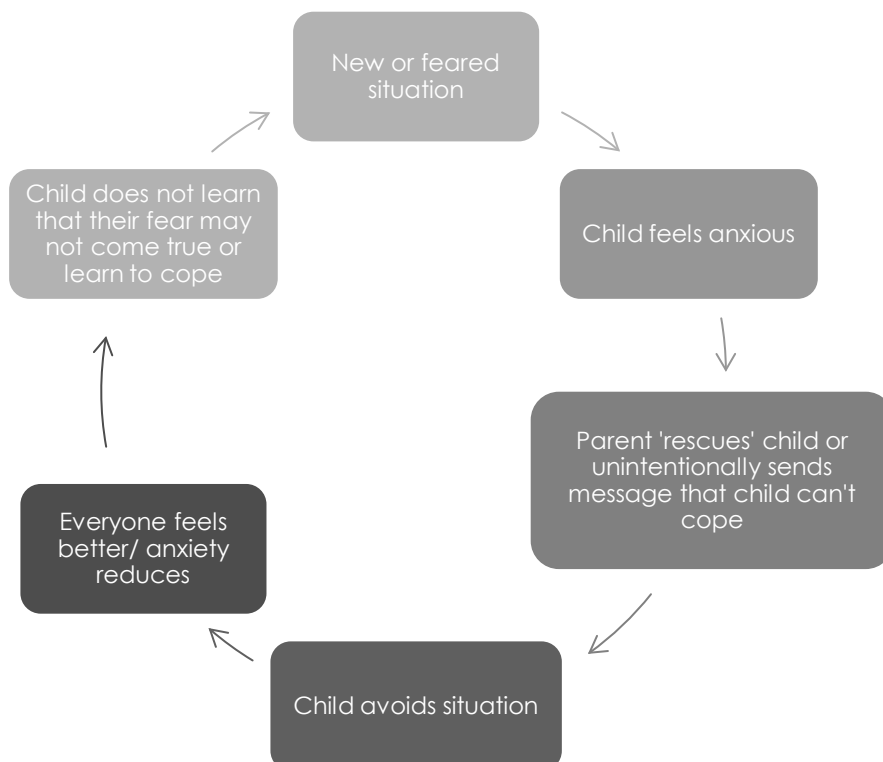
The person engages in the activity, in manageable stages, in a supportive environment as often as possible until it is no longer threatening and may even become enjoyable.

Where the anxiety is more general (e.g., something social that involves eye contact, assertiveness, verbal communication or posture) this task becomes more complex.

As parents, we can help our children by:

- *developing our ability to remain calm and regulate our own feelings*
- *reflecting on our own thoughts and behaviours about our children's anxiety (or our own anxiety) and addressing these*
- *using FBI skills to look for any non-anxious behaviours (such as trying a new task or doing something we know our child finds challenging) and supporting them"*

The model below helps to explain the anxiety cycle.



Role Play

**ROLE PLAY: HOW TO BREAK COERCIVE/ANXIOUS CYCLE (5 mins)**

Set the scene: Use a challenging situation the parent has shared.

Problem Solve: Discuss the best way to respond to the situation that would break the cycle instead of reinforcing it

Key themes to discuss: Staying calm; Being strong vs. being mean; Using emotion coaching to understand child need/want/feelings

Practice: Therapist plays role of parent, while parent plays role of child, then swap over.

PSYCHOEDUCATION: HIGH RISK SITUATIONS

Highlight that there are certain situations that make it harder to stay calm and normalise this with parents. For example:

“All of us find certain situations difficult and challenging. There are times when we are particularly vulnerable as parents (e.g. when we are tired, hungry, in unfamiliar surroundings, feeling anxious or down). Sometimes our need to be in control or our anxieties can make it hard to stay calm.

Then there are times when our children are particularly vulnerable or challenging. This is where we really need to check in with ourselves and our children, using our FBI skills to check what our children find most challenging, and the best ways to help them calm down.

Check in on their arousal – are they bored, tired, hungry, thirsty, fidgety, hyperactive, flat, over-excited, overwhelmed (unexpected event?)”

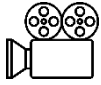
Facilitate a discussion about the high risk situations relevant to the family. Areas to discuss include:

- Do they occur in situations where your children are bored?
- Forced to do something they don't want to do
- Unable to have something they really want
- Transitioning between situations?

What can we do to head off trouble at the pass?

- Check we've met physical needs - food, drink, toilet, sleep.
- Does your child need a hug or affection?

- Introducing something interesting to beat boredom: Have a box of toys that you only bring out for special occasions, like in the car or on the phone. Music or audiobooks are good boredom busters too.
- Distraction – use humour, music, new scenery to 'flip the script'



VIDEO CLIP to illustrate 'Flipping the script' (reggae video)
<https://www.youtube.com/watch?v=buFXaDTZvkw>

Talk to parents about their support and how they can look after themselves too. Brainstorm strategies if appropriate.

WHAT TO DO IF NOTHING ELSE WORKS: THE WALK AWAY

Explain to parents that sometimes there are times when all attempts to stay calm don't work. At these times, it is ideal to be able to hand over to someone else to help out. However, this is not always possible so it can be safer to leave the situation briefly (while making sure your child is safe and not at risk of any harm) to self-regulate. For example:

"Sometimes, all our attempts to stay calm and help our kids regulate don't work. Ideally, when this happens, we pass the ball on to another member of the team. If we can't do that, the safest thing for us to do is walk away and try to regain our calm so we can return to our children ready to meet their needs.

If you are about to lose your temper, (i.e., calm breathing is not possible or enough to help you calm down) check your child is safe and there are no risks (e.g., they are not in a bath, by an open window or out walking on a foot path) and walk 3-5 meters away from them, preferably so you can't see their face and they can't see yours. Ideally they will be in their car seat, in their bedroom, or in another room etc. Walk away, pull the car up safely, leave the table etc. Do some calm breathing until you have regained your sense of calm.

It is unlikely that this will have done anything to calm the child, but it will have allowed you to calm yourself. On your return, keep a focus on calm breathing, get the FBI skills happening, and find the first thing, anything, that you would like to see more of and reinforce it. "I can see you are trying to calm down, that's such good trying" or, if still distressed "I'm just coming in to see that you are OK. You are doing some good calming down and I'll be back in another couple of minutes".

Education on Toddler Time Topic: Verbal skills II

Explain this session is an extension of skills learned last week skill where we continue to focus on positive verbal skills but also reduce some other types of verbal responses that can interfere with child-led play and relationship building.

REDUCING QUESTIONS

Explain rationale for reducing questions. For example:

"It's natural for all parents to ask questions about what their child is doing, and try to extend their play. It's also second nature to want to teach and explain things to our kids to help them understand their world

Because the focus of these play sessions is to let your child lead we ask you to reduce the questions you ask and instead try to develop these other ways of communicating.

This doesn't mean that you reduce questions all the time, but in the child-led play, use descriptions and praise instead so that your child can lead (give examples)."

REDUCING INSTRUCTIONS

Explain the rationale for reducing instructions. For example:

"Much like asking our children questions, we often give them instructions to do certain things, eg. "pick up your toy" or even "look at that" or 'give me a cuddle" Because the child led play times are exactly that - child led - we want your child to be in charge of choosing what to do, so that means we reduce the instructions we give so we can learn to follow their lead."

REDUCING NEGATIVE COMMENTARY

Explain the rationale for reducing negative commentary: We do some things as parents inadvertently that are unhelpful for our children so we want to reduce this, in play and in general everyday interactions.

Negative commentary is any comment that is negative in terms of its narrative, description or response to the child - criticism, sarcasm, disapproval.

Negative commentary reduces your child's sense of confidence over time, and is likely to squash their enthusiasm and willingness to try new things.

Examples: **(N.B. Formulation responsive psychoeducation - use examples from formulation)**

"Don't put the cowboy in the bathtub!"

"If you are so smart, you work it out!"

"Mixing all those things together in the bowl is silly."

"I wish you could be careful with that cowboy and the bathtub."

"This is too hard for you, you put the bathtub under the cowboy!"

TOPIC 2 UNDERSTANDING MY CHILD II: TODDLER TIME

(Therapist & Parent & Child)

OVERVIEW

Therapist coaches Parent in play session with child, either from observation room with earpiece or in-room.

The focus of Toddler time in session 2 is decrease parent's negative verbal responses that may be occurring, this includes intrusive or hostile parent behaviours such as sarcasm, criticism or excessive questioning. In addition, continue with content from session 1 to increase parent's description of child play, reflections and praise. Where necessary, remind the parent that the session is focussed on **child-led play**. The child is encouraged to choose any toy they like and play with it however they wish. The parent's task is to join in and follow the child's lead. Where possible, remind the parent to use a clear, warm, enthusiastic and positive tone of voice.

5 MINUTE OBSERVATION

Explain observation and leave the room.

For example:

"Before we start coaching today, I'm going to leave the room and let you guys settle in. I'll watch and code how things are going for the next five minutes and then come back into the room (or use the earpiece). Use any of the skills we've discussed and try to let your child lead the play. Do you need anything before I go?"

Leave the room and set timer for 6 minutes. Do not code the first 3 minutes as this provides some time for the parent and child to get settled.

Start coaching after the observation period.

COACHING: VERBAL SKILLS II

- Continue coaching for Verbal Skills I also (positive commentary, warm tone)
- Encourage parent to rephrase questions or instructions.
- For example:

Parent: *"Do you want to play with the kitchen toys?"*

Therapist: *"That was a question. It's hard to reduce questions! You could rephrase that to be a description instead. Such as, 'you're looking at the kitchen toys. It looks like you're interested in those!'"*

- Encourage them to find the things that their child is doing well and describe or praise it (especially if the parent tends to have negative attributions about the child)

Reflective Coaching

Accentuate the positive: Remember to model the **seesaw** in your coaching. Focus attention on positive parent behaviours.

Be sensitive to how the parent receives feedback about 'things to reduce'. If they 'shut down' when you comment (e.g. 'that was a question', then selectively ignore any negative commentary for now unless it is very harsh.)

Model: continue to model skills in play with child first and then slowly withdraw from play, depending on parent skills.

Prompt: Notice what the child is doing, and provide parent with example phrases.

Prompt: Notice opportunities for verbal commentary, and point them out to parent

N.B It can be difficult for some parents to engage in play when they are working hard not to lead the play, so encourage parents to imitate their child's play and be an active participant in the play (remember we're aiming to increase reciprocity – the give and take responses between the dyad – so coach this explicitly if you observe it is lagging).

TOPIC 3 CHECKLIST: GETTING IN CLOSE

MATERIALS

- Topic 3 Parent time (HHYP13)
- Topic 3 Toddler time (HHYP14)
- Video Clip from session 2
- Video Clip 3: Communicating with your child

INTRODUCTION (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Brief welcome chat with case manager / client
- Parent completes progress measures (e.g. MaaP)
- Caseworker/child minder leaves with child

PARENT TIME (THERAPIST & PARENT)

- Homework review: FBI, child-led play and calm breathing
- Video feedback
- Collaborative Reflection: Child needs
- Show Video 3
- Psychoeducation: Attachment
- Psychoeducation: Affectionate Touch
- Calm breathing practice
- Toddler Time Coaching Psychoeducation: Getting in Close

TODDLER TIME (THERAPIST, PARENT + TODDLER) ~20-30 MINUTES

- Toddler returns to playroom
- Explain observation and leave room, for 5 minutes of video recording
- Therapist enters room or provides coaching through earpiece

WRAP-UP (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Summarise session and provide opportunity to ask further questions
- Remind about home practice
- Confirm/schedule telehealth and next session

TOPIC 3 GETTING IN CLOSE: INTRODUCTION

(Therapist & Parent & Child & Case Manager)

WELCOME / PROGRESS ASSESSMENT

Welcome the family and case manager/support person

Ask parent to complete measure chosen to assess progress (E.g. MaaP, ECBI, personalised goals)

CHECK IN

Briefly check in with case worker and child while parent fills in the scale. Parent and therapist leave child and case worker in waiting room. Proceed to clinic room for Parent Time with the parent.

TOPIC 3 GETTING IN CLOSE: PARENT TIME

(Therapist & Parent)

HOMework REVIEW: ASK PARENT FOR REFLECTIONS ON WEEK

FBI Review: Things to discuss with parent:

- What did you notice this week?
- What are some of the good things you have noticed (child's name) do?
- What are some things that are going well?
- **Seesaw:** Was it hard to notice the good times?
- **Seesaw** Was it hard to pay less attention to more challenging behaviours?
- How does my child's behaviour make me feel?
- How do my responses make my child feel?
- Did using FBI give you any ideas on what you want to work on?

Child-led play practice: Check in on practice and elicit parent reflection; encourage daily practice

Calm breathing practice: Check in on practice and discuss barriers if any present

VIDEO FEEDBACK FROM INTERVIEWS



Provide positive feedback about parenting using video clip, with focus on any reduction in improvement in Verbal Skills II (reducing in questions, instructions, which will relate to the parent following the child more, describing more etc.)

While reviewing the video, describe the child in terms of what they are thinking and feeling in addition to what they are doing. In theory, this will help the parent respond to what the child is feeling or thinking, not simply the behaviour.

Hopefully the parent is starting to be able to reflect on their child's internal world. Continue to support their skills and observe their capacity to do this.

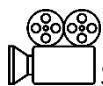
Link Mentalising with Verbal Skills II covered in Topic 2 if possible.

COLLABORATIVE REFLECTION: CHILD NEEDS

Brainstorm what children need - write on worksheet together

Formulation driven: use formulation sheet to review and reflect on child needs in the context of presenting problems, challenges and strengths

VIDEO 3: COMMUNICATING WITH YOUR CHILD



Show Video 3 as a starting point to discuss progress and reinforce skills learned

PSYCHOEDUCATION: ATTACHMENT

Explain the attachment relationship and why it is important for child development. Before beginning, ask parent what they know/understand about attachment to inform and guide your explanation. For example:

“Attachment’ is the word that you may have heard a lot about already. What does it mean to you? (Discuss) We use it to describe the strong emotional bond between child and their caregivers

Because children can’t look after themselves, they look to their caregivers to protect them and meet their needs. All infants are born into the world with an ‘attachment system’, an inbuilt biological system that drives them to connect to the people that care for them.

The attachment system and the stress-response system are tied closely together:

- *when a child feels unsafe, their stress levels become elevated*
- *when they are stressed, children seek the safety of their carers*

So we could say the infant’s attachment system drives them to seek proximity to their caregivers, especially when they feel unsafe. This proximity or closeness gives the child a sense of safety.

The infant’s attachment system is hard-wired into the brain, but the way it operates develops in response to the environment. This means as parent we have the opportunity to be a powerful, positive influence on their social and emotional development. Sensitive, attuned parenting provides a secure base for our children, and sets up their system so that our attention, our affection and our approval is rewarding to them.

When children feel safe they are able to explore the world and when they are exploring, they look to us to see we have an eye on them and that we are nearby. You might notice that often when they experience something new or unfamiliar, they check with us to see if it is safe. When children feel unsafe, or see us looking anxious, this is a signal for them to come back to us as their place of safety. When we are consistent, respond to our children and are kind, we help our children feel safe, allowing them to go out and explore the world.”

PSYCHOEDUCATION: AFFECTIONATE TOUCH

Explain the value of affectionate touch in helping regulate child arousal. Be aware that for some children who have experienced maltreatment, touch can be extremely triggering and not soothing. Likewise, for some parents who have experienced trauma or have not experienced affectionate touch themselves in their childhood, this can be difficult also. Be mindful of this as you introduce the topic and be guided by parent and child response. An example explanation of touch:

“Touch is one of the first senses we acquire and it is a powerful way to help regulate arousal, soothe children and help them feel safe and calm. Affectionate touch activates oxytocin, which is a hormone that helps to strengthen bonding between people.

Playing games like ‘This little piggy goes to market’ or ‘pat-a-cake’ can be fun ways to introduce more affectionate touch.

We communicate a lot with touch, so using affectionate touch with children helps them to understand that you care, you love him and you are a supportive presence in his world

When children are exploring, playing and focussed, they may not need our touch as much. When they are scared, upset or tired, they may need more affectionate touch.”

CALM BREATHING PRACTICE

Refer to instructions in Handout session 2 and practice in session

EDUCATION ON TODDLER TIME TOPIC: GETTING IN CLOSE

Explain that this session focusses on non-verbal behaviours. In addition to practicing skills learned already, this session extends into more non-verbal behaviours that help to strengthen relationships.

PROXIMITY

Sit close to your child, so that your body is positioned towards theirs and you can see their face. If you are both comfortable, sit close enough so your child can reach out and touch you. If possible, sit with open and relaxed posture.

Let them know you're there to help if needed.

GAZE

Explain the importance of gaze (it gives opportunity to really observe child)

Watch your child's face and observe their responses to you

AFFECTIONATE TOUCH

Affectionate touch expresses warmth and care and includes cuddles, gentle touches, playing games like “pat a cake”, massage, rubbing his back, stroking his hair etc.

Observe how your child responds to your touch.

Things to avoid: intrusive behaviours, forcing

TOPIC 3 GETTING IN CLOSE: TODDLER TIME

(Therapist & Parent & Child)

OVERVIEW

Therapist coaches Parent in play session with child, either from observation room with earpiece or in-room.

The focus of Toddler Time in Topic 3 relates to non-verbal behaviours, such as parent proximity, gaze and affectionate touch.

5 MINUTE OBSERVATION

Explain the observation and leave the room.

For example:

"Before we start coaching today, I'm going to leave the room and let you guys settle in. I'll watch and code how things are going for the next five minutes and then come back into the room (or use the earpiece). Use any of the skills we've discussed and try to let your child lead the play. Do you need anything before I go?"

Leave the room and set timer for 6 minutes. Do not code the first 3 minutes as this provides some time for the parent and child to get settled.

Start coaching after the observation period.

COACHING: GETTING IN CLOSE

- Coach Proximity – ask parents to sit close to child, body is positioned towards each other so that parent can see child's face, within touching distance, open and relaxed posture.
- Coach parent to watch child's face and observe child responses. What lights up your child's face?
- Encourage affectionate touch when appropriate
- If parents appear intrusive, gently encourage them to follow-child's lead (e.g., be a curious observer of child)

Reflective Coaching

Accentuate the positive: Remember to model the **seesaw** in your coaching. Focus attention on positive parent behaviours.

Be sensitive to how the parent receives feedback and how the child responds to the parent, especially with touch or eye contact

Encourage parent to follow child's lead with touch and eye contact

Model: Model skills for parent when in the room with the child

Prompt: Notice what the child is doing, and prompt parent to check in and look at the child's face and observe his/her responses

Prompt: Notice opportunities for verbal commentary, affectionate touch or sitting closer to child if/when appropriate and point them out to parent

TOPIC 4 INFECTIOUS CALM: CHECKLIST

MATERIALS

- Topic 4 Parent time (HHYP15)
- Topic 4 Toddler time (HHYP16)
- Video Clip from previous session
- Video 4a: Hand model of the brain
- Video 4b: Still face paradigm

INTRODUCTION (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Brief welcome chat with case manager / client
- Parent completes progress measures (e.g. MaaP)
- Caseworker/child minder leaves with child

PARENT TIME (THERAPIST & PARENT)

- Homework review: FBI, child-led play, calm breathing
- Watch video of previous session to reflect on strengths
- Psychoeducation: Emotions
- Psychoeducation: Co-regulation
- Calm breathing practice – discuss any barriers to practice
- Toddler Time Coaching Psychoeducation: Showing Delight

TODDLER TIME (THERAPIST, PARENT + TODDLER) ~20-30 MINUTES

- Toddler returns to playroom
- Explain observation and leave room, for 5 minutes of video recording
- Therapist enters room or provides coaching through earpiece

WRAP-UP (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Summarise session and provide opportunity to ask further questions
- Remind about home practice
- Confirm/schedule telehealth and next session

TOPIC 4 INFECTIOUS CALM: INTRODUCTION

(Therapist & Parent & Child & Case Manager)

WELCOME / PROGRESS ASSESSMENT

Welcome the family and case manager/support person

Ask parent to complete measure chosen to assess progress (E.g. MaaP, ECBI, personalised goals)

CHECK IN

Briefly check in with case manager and child while parent fills in scale. Proceed to clinic room for Parent Time with parent.

TOPIC 4 INFECTIOUS CALM: PARENT TIME

(Therapist & Parent)

HOMEWORK REVIEW: ASK PARENT FOR REFLECTIONS ON WEEK

FBI check in: Remind parents of last session's topic. (E.g. We practised looking at your child's face and using affectionate touch last week)

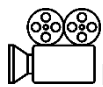
Things to discuss:

- Did you notice doing anything differently this week?
- How do you feel about these changes?
- What do you think your child feels/thinks when you do [the thing they're doing differently]?
- Did using FBI give you any ideas on what you want to work on?

Child-led play practice: Check in on practice and elicit parent reflection; encourage daily practice

Calm breathing practice: Check in on practice and discuss barriers if any present

VIDEO FEEDBACK FROM PRIOR SESSION



Provide positive feedback about parenting using video clip, with focus on proximity, gaze and affectionate touch covered in Topic 3 content. Also highlight reciprocal moments where possible.

While reviewing the video, describe the child in terms of what they are thinking and feeling in addition to what they are doing. In theory, this will help the parent respond to what the child is feeling or thinking, not simply the behaviour. Try to find opportunities for the parent to reflect and acknowledge their progress.

Link Mentalising with emotion and co-regulation covered in Topic 3 if possible.

E.g.

"He feels safe when you sit close to him"

"You are helping to calm him down when you touch him gently on the back like that"

PSYCHOEDUCATION: EMOTIONS

Provide a simple explanation about emotions and their role in directing behaviour, normalising that feelings can be overwhelming at times. For example:

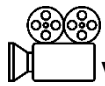
"We all feel strong emotions, which direct our behaviour and the way we think about ourselves and others. Parenting is a deeply emotional process."

Our emotions affect the way we make sense of the world. If we are angry, we tend to blame people, when we are afraid we want to avoid the thing that makes us scared, when we feel safe we feel free to be ourselves.

Being a parent can involve strong emotions that are rewarding and make it easier to be a parent (e.g. joy, pride, happiness. Being a parent can also involve feeling strong emotions that make it harder to care for our children (e.g. anger, fear, frustration).

(Client feedback) What are some things your child does that make you feel strong emotions? (Ask for positive and negative examples)

Introduce the metaphor of 'shark music' as developed by Cooper et al. (2000).



VIDEO CLIP: Show parents video 4c (video clip of a peaceful ocean with soothing music. This clip replays the ocean scene with the theme music from Jaws)

Use the video clip to explain how our own childhood experiences impact responses to our children's emotions and can be like scary background music, even in situations that are completely safe. For example:

"Our own experiences of being parented can make certain behaviours or feelings dangerous (e.g. if our parents shouted at us when we cried, we learn it's okay to show anger, but not sadness)

As parents, we hear 'shark music' when our children have the same emotions we learned to find threatening or dangerous. This can make it difficult to respond to our children in a helpful way, when our children show have certain emotions or behaviours.

In turn, our children can learn from our responses that some feelings are dangerous. In order to help change these patterns for our children, we need to learn to be aware of our own shark music so that we can respond sensitively to their needs and help them manage their own big emotions."

Discuss the parent's response to different emotions in her child, especially when her child needs her or is 'rejecting'. Use specific examples that the parent provides to help increase awareness so that the parent can learn to recognise her own thoughts and responses, so that she can learn to manage their influence on her parenting responses.

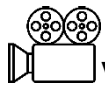
PSYCHOEDUCATION: CO-REGULATION

Introduce the concept of co-regulation, specifically, that children's stress response system is regulated by their parents in infants' early years. In order for an infant to learn to effectively regulate their own feelings and behaviours, those feelings first need to be managed and regulated by their primary caregiver (E.g., Schore, 1994; Sroufe, 2005). The therapist needs to acknowledge that one of the biggest challenges as parents is to learn to regulate our own emotions - to allow their intense

feelings without breaking the connection with our children. Remind parents that this is one of the reasons we ask them to practice calm breathing.

Also explain:

"If we can learn to stay calm and regulate our own emotions and stay present with our children 'in the moment', this infectious calm can help children to feel safe, to calm down and to regulate their emotions. When children become calm again, this can help us to regain a sense of calm. Over time, children can learn this process of calm and self-regulation for themselves.



VIDEO CLIP (4a) Dan Siegel's 'hand model of the brain' and 'flipping lid'

Discussion with parent: What makes you flip your lid? What does it feel like? What do you think would help? (E.g. getting someone to step in, learning to stay calm).

Highlight that the calm breathing skills are one way to help manage own emotions and help children learn to regulate theirs.

CALM BREATHING PRACTICE

Refer to instructions in Handout session 2. Discuss and problem-solve barriers if present.

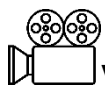
EDUCATION ON TODDLER TIME: SHOWING DELIGHT

Explain to parents that the skills in this topic centre on facial expressions, voice and body language and what these expressions might communicate to children. For example:

"Showing positive emotions communicates to our children that they bring us joy and that we like spending time with them. We can do this with our face or our voice, we can laugh, smile and have reciprocal eye contact. Matching emotional responses when they are sad or upset also helps them learn to understand their own emotions. There are also facial expressions can be unhelpful. For example, rolling your eyes, scowling or having a blank or flat expression can communicate that we are not interested or dislike our children's actions.

Introduce the still face paradigm and then show the video. For example:

"There is a famous experiment with a mother and child that demonstrates how a blank or expressionless face can be distressing for a child. In this video clip, we see an example of the experiment"



VIDEO CLIP (4b) The 'still face paradigm'

Discuss video with parent and reflect how it might be relevant for the family.

TOPIC 4 INFECTIOUS CALM: TODDLER TIME

(Therapist & Parent & Child)

OVERVIEW

Therapist coaches Parent in play session with child, either from observation room with earpiece or in-room.

The focus of Toddler Time in Topic 4 is to help parents show genuine positive emotions to their child, using facial expressions and eye contact. The aim is to encourage a parent's sense of joy in their child – so that they really see and feel the great things their child is doing and understand their inner world when the child is upset or sad also. The aim of this session is to also explain that some facial expressions can be unhelpful. Where possible, remind the parent to use a clear, warm, enthusiastic and positive tone of voice.

5 MINUTE OBSERVATION

Explain observation and leave the room.

For example:

“Before we start coaching today, I'm going to leave the room and let you guys settle in. I'll watch and code how things are going for the next five minutes and then come back into the room (or use the earpiece). Use any of the skills we've discussed and try to let your child lead the play. Do you need anything before I go?”

Leave the room and set timer for 6 minutes. Do not code the first 3 minutes as this provides some time for the parent and child to get settled.

Start coaching after the observation period.

COACHING: SHOWING DELIGHT

- Coach parent to make a big effort to show their child their joy and positive regard for their child
- Comment on what you can see as the coach and reflect how you think that might make the child feel or what you observe about the child's response
- For example:

Parent smiling and nodding

Therapist: *“I can see you are smiling! That's so lovely to see. Johnny is looking up at you and he seems really happy that you are pleased with him”*

Reflective Coaching

Accentuate the positive: Remember to model the **seesaw** in your coaching. Focus attention on positive parent behaviours, such as smiling or eye contact with parent-child.

Be sensitive to how the parent responded to the still face paradigm and gently encourage more positive facial expressions if the parent typically has flat affect.

Prompt: Notice what the child is doing, and provide parent with example phrases.

Praise: Praise efforts for showing delight, point out to parent how child responds when parent 'lights up their face'.

TOPIC 5 CONSISTENCY IS KEY: CHECKLIST

MATERIALS

- | | |
|---|---|
| <input type="checkbox"/> Topic 5 Parent time (HHYP17) | <input type="checkbox"/> Video Clip from previous session |
| <input type="checkbox"/> Topic 5 Toddler time (HHYP18) | <input type="checkbox"/> Video 5: Building positive |
| <input type="checkbox"/> Handout – Grounding/Mindfulness (HHYP19) | relationships |
-

INTRODUCTION (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Brief welcome chat with case manager / client
 - Parent completes progress measures (e.g. MaaP)
 - Caseworker/child minder leaves with child
-

PARENT TIME (THERAPIST & PARENT)

- Homework review: FBI, child-led play and calm breathing
 - Video feedback
 - Psychoeducation: Predictable and Consistent
 - Video 5: Building positive relationships
 - Calm breathing practice
 - Introduce more mindfulness/grounding skills
 - Toddler Time Coaching Psychoeducation: Consolidate skills learned so far
-

TODDLER TIME (THERAPIST, PARENT + TODDLER) ~20-30 MINUTES

- Toddler returns to playroom
 - Explain observation and leave room, for 5 minutes of video recording
 - Therapist enters room or provides coaching through earpiece
-

WRAP-UP (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Summarise session and provide opportunity to ask further questions
- Remind about home practice
- Confirm/schedule telehealth and next session
- email to case worker with handouts attached if appropriate

TOPIC 5 CONSISTENCY IS KEY: INTRODUCTION

(Therapist & Parent & Child & Case Manager)

WELCOME / PROGRESS ASSESSMENT

Welcome the family and case manager/support person

Ask parent to complete measure chosen to assess progress (E.g. MaaP, ECBI, personalised goals)

CHECK IN

Briefly check in with case manager and child while parent fills in scale. Proceed to clinic room for Parent Time with parent.

TOPIC 5 CONSISTENCY IS KEY: PARENT TIME

(Therapist & Parent)

HOMEWORK REVIEW: ASK PARENT FOR REFLECTIONS ON WEEK

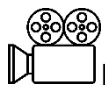
FBI check in: Last week we talked about emotions. Things to discuss this week:

- What are some of the good things you have noticed (child's name) do?
- What are some things that are going well?
- What are the strongest emotions you felt this week? (were there situations that made you flip your lid or where you felt like it?) (reinforce idea of shark music)
- **Seesaw:** Was it hard to notice the good times?
- **Seesaw:** Was it hard to pay less attention to more challenging behaviours?
- Did using FBI give you any ideas on what you want to work on?

Child-led play practice: Check in on practice and elicit parent reflection; encourage daily practice

Calm breathing practice: Check in on practice and discuss barriers if any present

VIDEO FEEDBACK FROM INTERVIEWS



Provide positive feedback about parenting using video clip, with focus on Showing Delight from Topic 4.

While reviewing the video, describe the child in terms of what they are thinking and feeling in addition to what they are doing. In theory, this will help the parent respond to what the child is feeling or thinking, not simply the behaviour. Continue expanding this to build the parent skills in Mentalising (Topic 7)

Link Mentalising with Showing Delight and Emotions/Co-regulation covered in Topic 4 if possible.

E.g. *"He feels so happy when you laugh together"*

PSYCHOEDUCATION: PREDICTABLE AND CONSISTENT

This topic provides education about the value of predictability and consistency for children. When a caregivers' responses are consistent, predictable and responsive to a child's needs, a child is likely to develop expectations that the world is manageable and predictable (Bowlby, 1973, 1980). Normalise how it is difficult to regulate emotions for all of us and especially children.

Explain that consistency helps children manage their strong emotions and make sense of them. When parents are predictable and consistent, children know what to expect which makes it easier for children to feel safe, stay calm and learn.

For example:

“Our kids have to manage some powerful emotions. They feel disappointed when they don't get what they want and frustrated when things don't go their way. They feel impatient when they have to wait and angry when they lose something that important to them. As adults, we can feel that way too. If managing these powerful feeling can be hard enough for adults, it's even harder for children. [Refer to Dan Siegel Hand Model of the Brain']. This is because:

- *Children's brains are wired more directly to their feelings, so their feelings are more immediate and intense than they are for adults.*
- *The parts of their brain that help them wait patiently, stand in someone else's shoes and stay calm are still developing.*
- *Because these skills are still a work in progress, managing feelings is extra hard for them: they need our help. Consistent responses from parents helps children make sense of their own emotions and their environment/”*

There are several ways that parents can be predictable and consistent. Highlight the following with parents and engage in tailored discussion focusing on concerns most relevant to the family. For example:

“Being calm is one way that we can be consistent and predictable for our kids. Being calm helps our children to stay calm. Emotions are contagious: when we are overwhelmed by emotion, they become overwhelmed too. It's hardest to stay calm when we hear shark music. So it helps when we can identify our own shark music and be a bit more prepared for it. When we stay calm in difficult situations, this helps them learn to stay calm too.

If we can stay calm, we can set clear, firm boundaries in a kind manner, using a gentle tone of voice. Being strong in a gentle way makes boundaries safe and protective, instead of challenging or scary. It models a communication style that helps children interact with their peers.

Later in the session we have some other strategies that might be helpful to help stay calm, in addition to the breathing exercise we have been doing.”

BEING CLEAR ABOUT OUR BOUNDARIES

Explain that clarifying our own boundaries and reminding ourselves why we have a boundary helps to maintain the boundary with children and 'be strong' rather than overly permissive. For example:

“Sometimes we don't really consider which behaviours are acceptable and which are not, or we have ideas but we haven't thought much about why 'x' is okay and 'y' is not. As parents, we need to make sure our children are safe and that they don't hurt themselves, us or other people. Reminding ourselves of the reasons we have boundaries can help us stay strong and stick to our

boundaries in a kind, firm way without losing our temper when our children challenge us. What do you think? Why are boundaries useful?

(Brainstorm these reasons with parent - write them out together if appropriate)

Ideas include

- boundaries help our children feel safe and not get hurt
- boundaries are important to teach 'right and wrong'
- research shows children with appropriate boundaries develop better regulation, social functioning
- they reduce potential conflicts (less argument about rules that are clear and consistent)

EXPLAIN BOUNDARIES TO OUR CHILDREN

For example:

"Explaining boundaries to children helps them understand why we are setting the boundary. E.g. "If you do that, you might get hurt. It's my job to keep you safe, so I can't let you do that."

Sometimes there are situations, we call them 'high risk', because you know beforehand that they will be challenging. Things like grocery shopping, leaving a really fun activity or getting into the car are really common challenges for families. It is really helpful to explain the boundaries beforehand to your child so s/he is clear on your expectations.

For example, "when we walk next to the busy road, you need to sit in your pram so you stay safe" (Or choose a relevant example.)

REFLECTIVE PSYCHOEDUCATION

BOUNDARIES: What are your boundaries? Have I got a clear idea of where they are?

CHALLENGES: What makes it hard for me to maintain these boundaries? Refer to previous week 'Shark Music' and formulation (e.g. not wanting to disappoint my child; not wanting my child to reject me; not wanting my child to be angry)

STAYING CALM: Maintaining Boundaries is easier when we are calm. Which child demands, feelings or behaviours make it hard for me to stay calm?

 THINGS TO KEEP IN MIND

Explain to parents that sometimes 'bad' behaviour is a signal that something is not right. There can be a range of reasons children are 'behaving badly'. Discuss the following with parents:

- Our kids are tired or hungry → instead, give them quiet time or a snack
- Our kids are whining and they won't leave us alone → perhaps they need a hug or some affectionate time or some focussed play time together
- Our kids are frustrated, disappointed or angry → recognise their feelings, reduce demands or help them out

"When they are feeling tired, hungry, sad, frustrated, angry or disappointed, the chances are that children's behaviour will become more challenging as they make bids to get their needs met. Meeting these needs before things get challenging is always easier for you and your child than trying to cope with the emotions that come afterwards."

"Keep the see-saw in mind: Remember, if being 'bad' is the only way for our child to get our attention, then we are likely to see a lot more of that behaviour. Look for opportunities to tip the see-saw to pay lots of attention to the behaviour we want to see more of (e.g. prosocial behaviour, learning to regulate)"


ROLE PLAY (5 mins)

Set the scene: Use a challenging situation the parent has shared.

Problem Solve: Discuss the best way to respond to the situation

Practice: Therapist plays role of parent, while parent plays role of child, then swap over.

N.B. Setting clear boundaries and maintaining consistency is often difficult for many parents, especially if it has not been part of their own experience of being parented. For this reason, this topic might need to be covered over several sessions.

 BEING CALM: PRACTICE GROUNDING AND MINDFULNESS EXERCISES

Introduce some additional strategies to help with grounding and mindfulness. Refer to handout HHYP19 for summary of mindfulness skills to practice in session.

EDUCATION ON TODDLER TIME: CONSISTENCY & CONSOLIDATE SKILLS

Explain to parents that the aim of this topic is to aim to consolidate the skills learned so far. Use the information from the CIB to give parents feedback on which skills have improved and which ones to focus on improving this session.

N.B. Monitor intrusiveness and provide sensitive feedback to reduce if needed

Encourage consistent, predictable responses to be a supportive presence in child's life.

Practice pack away if parents are having difficulty with compliance at home or in sessions. Encourage positive reinforcement for every helpful behaviour. Also coach parents to give child warning that it will be pack away time soon.

E.g. *"please tell [child] that we will be packing up in 5 minutes"*

Coach and practice selective attention if necessary

TOPIC 5 CONSISTENCY IS KEY: TODDLER TIME

(Therapist & Parent & Child)

OVERVIEW

Therapist coaches Parent in play session with child, either from observation room with earpiece or in-room.

The focus of Toddler Time in Topic 5 is to consolidate skills learned so far. Use the observation session, and observations from past session to inform which skills you focus on this session and coach any skills that are currently lagging.

5 MINUTE OBSERVATION

Explain observation and leave the room.

For example:

"Before we start coaching today, I'm going to leave the room and let you guys settle in. I'll watch and code how things are going for the next five minutes and then come back into the room (or use the earpiece). Use any of the skills we've discussed and try to let your child lead the play. Do you need anything before I go?"

Leave the room and set timer for 6 minutes. Do not code the first 3 minutes as this provides some time for the parent and child to get settled.

Start coaching after the observation period.

COACHING: CONSOLIDATE SKILLS TO DATE

- Coach parent on skills that are lagging, while encouraging reflection on skills learned to date.

Reflective Coaching

Accentuate the positive: Remember to model the **seesaw** in your coaching. Focus attention on positive parent behaviours, such as smiling or eye contact with parent-child

Be sensitive to how the responds to the idea that there are areas to improve as they may be sensitive to perceived criticism

Model: continue to model skills in play with child first and then slowly withdraw from play, depending on parent skills

Prompt: Notice what the child is doing, and provide parent with example phrases.

Prompt: Notice opportunities for verbal commentary or touch or gaze etc (especially the skills that the parent is finding most difficult), and point them out to parent gently

TOPIC 6 RECIPROCITY: CHECKLIST

EQUIPMENT & MATERIALS

- Handout HHYP20 and HHYP21
- Participant Case File
- Video Clip prepared for Feedback
- Video 6b: Steps for Serve and return interactions

INTRODUCTION (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Parent completes progress measures (e.g. MaaP)
- Caseworker/child minder leaves with child

PARENT TIME (THERAPIST & PARENT)

- Homework review: FBI, child-led play, calm breathing/mindfulness
- Video feedback
- Psychoeducation: Reciprocity
- Video 6b: Serve and Return interactions
- Calm Breathing Practice/grounding skills
- Education on Toddler Time: reciprocity

TODDLER TIME (THERAPIST, PARENT + TODDLER)

- Toddler returns to playroom
- Explain observation and leave room, for 5 minutes of video recording
- Therapist enters room or provides coaching through earpiece
- Coach reciprocity
- Provide positive feedback on Coaching Session / Close session

WRAP-UP (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Summarise session and provide opportunity to ask further questions
- Remind about home practice
- Confirm/schedule telehealth and next session

TOPIC 6 RECIPROCITY: INTRODUCTION

(Therapist & Parent & Child & Case Manager)

WELCOME / PROGRESS ASSESSMENT

Welcome the family and case manager/support person

Ask parent to complete measure chosen to assess progress (E.g. MaaP, ECBI, personalised goals)

CHECK IN

Briefly check in with case manager and child while parent fills in scale. Proceed to clinic room for Parent Time with parent.

TOPIC 6 RECIPROCITY: PARENT TIME

(Therapist & Parent)

HOMEWORK REVIEW: ASK PARENT FOR REFLECTIONS ON WEEK

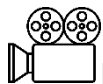
FBI Check in: Last week we talked about consistency and being clear. What did you notice using your FBI skills this week?

- How does your child respond when you are consistent?
- Has the x behaviour (e.g. tantrums, whining etc) started to reduce as you have been able to respond to what [child] needs?
- Did you notice doing anything differently this week?
- What's working well?
- What do you still want to work on?

Child-led play practice: Check in on practice and elicit parent reflection; encourage daily practice

Calm breathing/mindfulness practice: Check in on practice and discuss barriers if any present

VIDEO FEEDBACK



Provide positive feedback about parenting using video clip, with focus on exploring what else the parent might be able to do to encourage shared play. Highlight reciprocal moments and explain that we will be focussing more on those this session.

While reviewing the video, describe the child in terms of what they are thinking and feeling in addition to what they are doing. Continue expanding this to build the parent skills in Mentalising.

Link Mentalising with consistency covered in Topic 5 if possible. Ask parent to reflect on what the child is thinking or feeling during reciprocal moments shown in video and offer suggestion if parent not able to answer.

PSYCHOEDUCATION: RECIPROCITY

Explain what reciprocity is (in concrete terms) and why it is important for child development (i.e. supports socio-emotional development; builds mutually responsive relationship) (E.g., Feldman, 2007; Tronick, 1989) For example:

“One of the foundations for healthy relationships is the give and take we've been talking about throughout the program so far. The word we use for this is 'reciprocity'. These moment by moment experiences form the foundation of our growing relationship with our child.

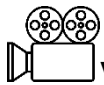
Right from birth, children are born wired to engage with us, and our brains are wired to be captured by our children's activity. We're literally wired to connect together. It's a brain-based process that connects us with our children and triggers biological processes in our body that bond us together and make us feel close.

This back-and-forth 'reciprocal dance' is mostly an automatic process that happens without us always being aware of it. It starts shortly after birth as we respond to our children's actions. We comfort them when they cry, we smile when they smile, we soothe them when they are upset, and we laugh when they laugh. Very quickly they learn to respond to us too, they smile when we smile, they laugh when we laugh, and they get sad or afraid when we are upset or angry. Being connected in this way helps both us and our children stay connected together.

We can help this process by noticing and responding to our children when they want to connect to us. Responding to our children shows them you are there to support them and that they can ask for help when they need you. This means they are able to grow and develop with confidence.

This back and forth also helps our kids learn about the give and take of relationships. They will learn to act in all sorts of ways to show us how they are feeling, what they are thinking, what they want and what they need. By recognising and responding to our children's behaviours they also learn to recognise and respond to our behaviours. It's by understanding them that they learn to understand us, and themselves!

This early back-and-forth also forms the foundation for more complex social behaviours later on. As it develops, the back-and-forth grows into a sharing of thoughts and ideas – a foundation for the conversations we will have when they grow up.



VIDEO CLIP (6b): Show video, Steps for Serve and Return/Centre on the Developing Child, Harvard University

CALM BREATHING PRACTICE

Refer to instructions in Handout session 2 and also the later handout HHYP19 Grounding Skills. Continue with grounding skills if appropriate. E.g. 5 5 5 / Drop anchor. Review home practice, discuss barriers, and practice in session.

EDUCATION ON TODDLER TIME: RECIPROCITY

The focus of Topic 7 Toddler Time is on reciprocity; to provide an opportunity to practice how many 'serves and returns' you get in one session. You respond to them and they respond to you, aiming to 'light up' when child makes bid to connect to parent. Explain to parents how both parent and child learn things from this process:

- What parent learns from responding: I'm in tune with my child. I can meet their needs
- What child learns from being connected: I am understood and my needs are met

Talk about the information in the following table:

What Child Does	Parent Response	What Your Response Says
Sits Close, Touches us. Moves in for a cuddle	Affectionate Touch, Cuddling	I'm happy to be close to you. I see you need a cuddle and I'm here to give you one. I'm here to make you feel safe and loved when you need it.
Looks at us (happy)	Look at them	I see you. I like to see you
Look at us (proud of themselves)	Look back at them. Praise them. Smile	I like what you are doing. I like to watch you. I'm proud of you.
Look at us (scared)	Use our face to reassure them	I am here for you and you are safe.
Look at us / smile	Smile/Facial expression	I see your smile. I like it when you smile. I am happy to see you.
Talk to us	Voice (e.g. imitate, elaborate, praise)	I hear what you say and I respond
Express their feelings	Voice (matching emotion)	I understand you are [tired, sad, happy] and I'm here with you.

TOPIC 6 RECIPROCITY: TODDLER TIME

(Therapist & Parent & Child)

OVERVIEW

Therapist coaches parent in play session with child, either from observation room with earpiece or in-room.

The focus of Toddler Time in Topic 6 is to increase reciprocity by working on specific aspects that may still be lagging, such as reciprocal gaze, touch or verbal reciprocity.

5 MINUTE OBSERVATION

Explain observation and leave the room.

For example:

"Before we start coaching today, I'm going to leave the room and let you guys settle in. I'll watch and code how things are going for the next five minutes and then come back into the room (or use the earpiece). Use any of the skills we've discussed and try to let your child lead the play. Do you need anything before I go?"

Leave the room and set timer for 6 minutes. Do not code the first 3 minutes as this provides some time for the parent and child to get settled.

Start coaching after the observation period.

COACHING: RECIPROCITY

- Coach parent on skills that are lagging, while encouraging reflection on skills learned to date.
- Example coaching:
 - What does it feel like when they respond to you?
 - How many serve and returns can you notice?

Reflective Coaching

Accentuate the positive: Remember to model the **seesaw** in your coaching. Focus attention on positive parent behaviours, such as smiling or eye contact with parent-child. Point out child's bids to parent or praise when parent responds appropriately.

Be sensitive to how the responds to the idea that there are areas to improve as parents may be sensitive to perceived criticism

Prompt: Notice what the child is doing, and provide parent with example phrases. Find opportunities to praise or reflect feelings and thoughts (as well as behaviours)

Prompt: Notice opportunities for reciprocity or any child bids that the parent could be responding to, and point them out to parent

TOPIC 7 WHAT'S THAT LITTLE HEAD UP TO NOW? CHECKLIST

MATERIALS

- | | |
|---|---|
| <input type="checkbox"/> Handout HHYP22 and HHYP23 | <input type="checkbox"/> Video 7a: Fonagy/mentalising |
| <input type="checkbox"/> Participant Case File | <input type="checkbox"/> Video clip 7b: Pixar movie "Inside Out – Sadness comforts Bing Bong" |
| <input type="checkbox"/> Video Clip prepared for feedback | |

INTRODUCTION (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Parent completes progress measures (e.g. MaaP)
- Caseworker/child minder leaves with child

PARENT TIME (THERAPIST & PARENT)

- Homework review: FBI, child-led play, calm breathing/mindfulness
- Video Feedback
- Psychoeducation: Mentalising
- Calm Breathing Practice
- Education on Toddler Time: Mentalising

TODDLER TIME (THERAPIST, PARENT + TODDLER)

- Toddler returns to playroom; explain observation and leave room, for 5 minutes of video recording
- Therapist enters room or provides coaching through earpiece
- Coach Mentalising/Responding to child's inner and outer world
- Provide positive feedback on Coaching Session / Close session

WRAP-UP (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Summarise session; provide opportunity to ask further questions
- Give handouts to client
- Set up/confirm telehealth and next sessions

TOPIC 7 WHAT'S THAT LITTLE HEAD UP TO NOW? INTRODUCTION

(Therapist & Parent & Child & Case Manager)

WELCOME / PROGRESS ASSESSMENT

Welcome the family and case manager/support person

Ask parent to complete measure chosen to assess progress (E.g. MaaP, ECBI, personalised goals)

CHECK IN

Briefly check in with case manager and child while parent fills in scale. Proceed to clinic room for Parent Time with parent.

TOPIC 7 WHAT'S THAT LITTLE HEAD UP TO NOW? PARENT TIME

(Therapist & Parent)

HOMEWORK REVIEW: ASK PARENT FOR REFLECTIONS ON WEEK

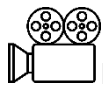
FBI Check-in: Last week we talked about reciprocity. What did you notice using your FBI skills this week?

- Have you noticed more reciprocal moments with your child this week?
- What helps to keep them going?
- Did you notice doing anything differently this week?
- Did you notice your child doing anything differently this week?
- How do you think your behaviour makes your child feel?
- What's working well?
- What do you still want to work on?

Child-led play practice: Check in on practice and elicit parent reflection; encourage daily practice

Calm breathing/mindfulness practice: Check in on practice and discuss barriers if any present

VIDEO FEEDBACK



Provide positive feedback about parenting using video clip, with focus on reciprocity from Topic 6.

While reviewing the video, describe the child in terms of what they are thinking and feeling in addition to what they are doing. Continue expanding this to build the parent skills in Mentalising.

Link Mentalising with reciprocity covered in Topic 6 if possible. Ask parent to reflect on what the child is thinking or feeling during reciprocal moments shown in video and offer suggestion if parent not able to answer.

PSYCHOEDUCATION: MENTALISATION

Provide psychoeducation about mentalisation (Allen et al., 2008) in simple terms. For example:

"Every person in the world has an internal world. It's a world made up of thoughts, feelings, wishes, motivations, imaginations and beliefs.

Although other people's internal world is private (we can't see it from the outside) thinking about it helps us to understand their behaviour. Noticing our own thoughts and feelings helps us to understand our own behaviour too.

Mentalising is the word we use to describe trying to understand our own and others thoughts and feelings. Mentalising helps us to understand the WHY behind what people do. It's often more helpful than just judging the behaviour from the outside."

Provide some concrete examples of judging from the outside compared to explaining thoughts and feelings to give context to behaviour:

"I am a bad parent, that's why I snapped at my child" [judging from the outside/external]

versus

"I am feeling tired, that's why I snapped at my child" [explaining thoughts and feelings]

"My child is the devil, that's why she's having a tantrum" [external]

versus

"My child feels really frustrated that she can't have the chocolate, that's why she's having a tantrum" [explaining thoughts and feelings]

Explain than mentalising can also be used for connecting, thoughts, feelings and behaviours. For example:

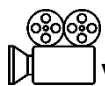
"My child is clingy, that's why she won't let go" [external]

versus

"[My child] believes that I'm going to leave her here, that's why she's feeling anxious"

Highlight to parents that understanding a child's thoughts, wishes, desires, feelings helps to explain WHY they are behaving a certain way. It also helps to understand and respond to the child.

"She'll want something [child feeling], but I know it's dangerous [parent thought], so I won't let her have it [parent behaviour]. But she doesn't understand why [child thought] so she'll feel angry [child feeling] and start to have a tantrum [child behaviour]"



VIDEO CLIP (7a): Watch the Peter Fonagy clip that explains mentalising and uses a great example of a child's actions with a chocolate cake!

Discuss the clip and explain the following:

Mentalising is a skill we learn as we grow up. When children are young, they look to their parents to understand the meaning of their actions. They learn to understand their feelings and thoughts from their parent's responses. The way you react and respond can show your child that you understand how they

feel. This helps them to organise their thinking and feeling and develop their sense of self.

As parents, we only get this right some of the time. No parent understands their children's internal world 100% - or even 50% - of the time, and that's okay. There are lots of things that make it more difficult to mentalise.

Being tired, anxious, stressed or frustrated makes it harder to mentalise. When we are overwhelmed it is hard to reflect on other people's feelings or thoughts. This is because it takes less time and energy to pay attention to behaviour, so we tend to do this when we are under pressure and not feeling safe. Just like in the example of flipping our lids – the logical, planning part of our brain switches off and our 'emotional brain' takes over.

Mentalising is also harder for parents who didn't grow up in a household where their thoughts and feelings were understood. Just remember, it's a work in progress. What's important is that we try to understand and explain whenever we can.

The more we are able to step back and reflect on "what's that little head up to" the better we will be able to understand our child, meet their needs and support their wellbeing. Every time we do this, our children feel understood and we help them develop the capacity to understand their own and other people's mental states."

CALM BREATHING PRACTICE

Refer to instructions in Handout session 2. Continue with grounding skills if appropriate. Review home practice, discuss barriers, and practice in session.

EDUCATION ON TODDLER TIME: RESPONDING TO WHAT IS HAPPENING ON THE 'INSIDE'

Explain to parents that this session focuses on using all of the skills we have learned so far to respond to our child's emotions, feelings and thoughts. Based on principles of emotion coaching (Gottman, 2011), recognising, understanding and talking about their feelings helps our children to:

- Feel recognised
- Feel understood
- Learn that emotions are safe
- Manage emotions
- Understand themselves
- Communicate their feelings
- Understand others feelings

We're asking you to be curious, to put yourself in your child's shoes to ask:

- What's going on for my child?
- What are they thinking and feeling?

- What is motivating them?
- Why are they behaving the way they are behaving?

WATCHING & NOTICING

Use your attention to stay in the moment and focus on child, think about what might be going on in your child's internal world - their thoughts, feelings, desires. If you are paying attention and watching, you are more likely to catch your child's bids, understand what they need and be able to respond sensitively.

GAZE

Watch their face and their body language. This gives us vital clues about what might be going on in your child's head.

REFLECTING AND MATCHING

Reflecting or matching our children's behaviour encourages more of that behaviour. Matching is a great way of being in tune with our kids. It also means there are times when it's important NOT to reflect emotions and feelings that are overwhelming for us and our children.

When to reflect:

When they are happy, interested or excited, you can reflect these feelings and emotions to encourage and support them (e.g. laughing when they laugh, smiling when they smile). When they are feeling tired, and begin to slow down, you can reflect this feeling by slowing down and making your voice softer.

When not to reflect:

However, there are time when you don't want to reflect our child's emotions and feelings. If our child becomes frustrated or upset and we reflect those emotions (becoming frustrated or upset ourselves) we can inadvertently increase those feelings and reinforce those behaviours. This is when it's more helpful if we can recognise our child's emotions and feelings and respond by acknowledging and describing what is going on for them.

**ROLE PLAY (5 mins): Responding to different emotions**

Set the scene: Describe a situation where the child is happy or excited

Problem Solve: Discuss the best way to respond to those emotions

Practice: Therapist plays role of parent, while parent plays role of child, then swap over.

Set the scene: Describe a situation where the child is sad or angry

Problem Solve: Discuss the best way to respond to those emotions

Practice: Therapist plays role of parent, while parent plays role of child, but this time, therapist reflects and matches the negative emotion. Be playful with this! Then role play again, with the therapist responding by acknowledging and describing what is going on for them.

Reflect: Ask parent (when they were in the role of the child) what it felt like when the 'parent' reflected in these different examples.

USING A WARM TONE OF VOICE

A gentle tone of voice can make a big difference when describing and soothing your child. This is where we use our calm skills to help bring our children back from their overwhelming feelings.

DESCRIBING

Try to describe what your child is thinking and feeling, their 'inside world'. (This may involve some guess work, but it's also okay if we don't get this right all of the time). Describing helps you stay focussed on what your child is thinking and feeling. It shows them that you recognise what is going on in their 'inside world'. Over time, describing helps children to understand, name and talk about their 'inside world'.

Examples:

"It looks like you're having great fun cooking the cake in the oven."

"You're bored of the Lego now, and you want to find something else to do."

"You really wanted to have the iPad, and you're upset that you can't have it 'till later"

We all feel negative emotions such as sadness, anger, frustration, jealousy or fear. One natural response is the push these feelings away - both in ourselves and in other people. When we express how we feel and people argue those feelings away, it can make us feel like we are not acknowledged or understood. The inside out clip is a great example of 'joy' trying to push sadness away. Lack of acknowledgment can sometimes make us feel lonely or we can start to second-guess our own feelings.

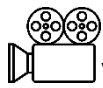
The more we acknowledge and accept feelings in our children, the better they will learn how to manage those difficult feelings themselves. We can respect and acknowledge the thoughts and feelings that lead to behaviour, without accepting the behaviour itself. This means we can set limits and acknowledge their feelings at the same time.

Examples:

"I see that you're angry, but it's not okay to hit me. You can punch the pillow instead!"

"I see you're frustrated, but if you keep kicking the chair, you'll hurt yourself."

"I can see that you really want to climb up there, and it makes you angry that I'm stopping you."



VIDEO CLIP (7b): Show clip from the movie 'Inside Out', where the character Bing Bong comforts Sadness. It's a good example of acknowledging and responding sensitively

SPECIFIC PRAISE

It's useful to praise children when you see them struggling with their powerful emotions. When your child is expressing a 'negative' emotion, try to find a way to tell your child what you like about it

Examples:

"I can see you're really frustrated but I'm really impressed you asked me for help"

"That was really hard for you, but you kept on going!"

"I like it when you are gentle with me even when you're angry"

AFFECTIONATE TOUCH

Affectionate touch expresses warmth and care. Observe how your child responds to your touch and use touch that they respond positively to. When children are exploring, playing and focussed, they may not need our touch as much. When they are scared, upset or tired, they may need more affectionate touch.

TOPIC 7 WHAT'S THAT LITTLE HEAD UP TO NOW? TODDLER TIME

(Therapist & Parent & Child)

OVERVIEW

Therapist coaches parent in play session with child, either from observation room with earpiece or in-room.

The focus of Toddler Time in Topic 7 is to increase parents' mentalising skills and respond to their child's internal world.

5 MINUTE OBSERVATION

Explain observation and leave the room.

For example:

"Before we start coaching today, I'm going to leave the room and let you guys settle in. I'll watch and code how things are going for the next five minutes and then come back into the room (or use the earpiece). Use any of the skills we've discussed and try to let your child lead the play. Do you need anything before I go?"

Leave the room and set timer for 6 minutes. Do not code the first 3 minutes as this provides some time for the parent and child to get settled.

Start coaching after the observation period.

COACHING: MENTALISING

- Coach parent on skills covered in today's topic
- Example coaching:
 - It looks like [child] is frustrated with toy. Tell him you can see he's frustrated.
 - What do you think [child] is feeling right now?
 - What do you think [child] thinks about the [activity]?
- Provide feedback, such as
- "when you notice his feelings, it helps him learn about them"
- "When you acknowledged his frustration, you help him learn how to manage it"

Reflective Coaching

Accentuate the positive: Remember to model the **seesaw** in your coaching. Focus attention on positive parent behaviours, such as sensitive responses to the child. For example, when the parent acknowledges the child's feelings.

Be sensitive to how the responds to the idea that there are areas to improve as they may be sensitive to perceived criticism.

Model: continue to model skills in play with child first and then slowly withdraw from play, depending on parent skills.

Prompt: Notice what the child is doing, and provide parent with example phrases. Find opportunities to praise or reflect feelings and thoughts (as well as behaviours)

Prompt: Notice opportunities for responding to the child's internal world and prompt parent when appropriate.

TOPIC 8 BRINGING IT ALL TOGETHER: CHECKLIST

MATERIALS

- Handout HHYP24 and HHYP25
- Video Clip prepared for Final Session Feedback

INTRODUCTION (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Parent completes progress measures (e.g. MaaP) and any final session measures
- Caseworker/child minder leaves with child

PARENT TIME (THERAPIST & PARENT)

- Review formulation & give feedback on what's changed
- Ask parent for their reflections
- Review things that are still difficult and brainstorm strategies for managing them
- Video Feedback: Watch video of progress across all sessions. Highlight strengths and progress
- Psychoeducation: Review skills learned to date and complete handout with parent to guide reflection on progress.
- Calm Breathing Practice

TODDLER TIME (THERAPIST, PARENT + TODDLER) ~ 20-30 MINUTES

- Toddler returns to playroom
- Explain observation and leave room, for 5 minutes of video recording
- Therapist enters room or provides coaching through earpiece
- Coach all skills and focus on areas the parent is still working towards
- Provide positive feedback on coaching Session / Close session

WRAP-UP (THERAPIST / PARENT / CHILD / CASE MANAGER)

- Summarise session
- Provide opportunity to ask further questions
- Give Handouts to Client
- Explain any post treatment assessment procedures and set appointment date if needed
- Offer booster session for future if appropriate
- Send email to case worker with handouts attached and any other feedback

TOPIC 8 BRINGING IT ALL TOGETHER: INTRODUCTION

(Therapist & Parent & Child & Case Manager)

WELCOME / PROGRESS ASSESSMENT

Welcome the family and case manager/support person

Ask parent to complete measure chosen to assess progress (E.g. MaaP, ECBI, personalised goals)

CHECK IN

TOPIC 8 BRINGING IT ALL TOGETHER: PARENT TIME

(Therapist & Parent)

HOMEWORK REVIEW: ASK PARENT FOR REFLECTIONS ON WEEK

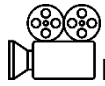
FBI Check-in: Last week we talked about mentalising. What did you notice using your FBI skills this week?

- What have you learned throughout the program?
- What do you still want to work on?

Child-led play practice: Check in on practice and elicit parent reflection; encourage daily practice even after treatment finishes

Calm breathing/mindfulness practice: Check in on practice and discuss barriers if any present

VIDEO FEEDBACK



Prior to the session, create a video clip of observations throughout the program, from baseline right through until last session (approx. 5-10 min long)

Show parent video and ask for their feedback.

Provide positive feedback about their progress. Some parents may feel bad that they were not as engaged at the beginning or that their skills were lacking, so it might be helpful to remind parents that we don't get a manual when our baby is born and so we don't necessarily know how to do all of the parenting behaviours that are taught in Holding Hands.

PSYCHOEDUCATION: REVIEW / FUTURE PLAN / RELAPSE PREVENTION

Review each week's content briefly and ask for feedback from parent about their learning. Provide opportunity for questions.

Use the handout HHYP25 to guide reflection and write notes that the parent can take home with them

- What was hard?
- What I learned?
- What to remember?
- What makes it harder? And what to do in these situations

CALM BREATHING PRACTICE

Refer to instructions in Handout session 2. Continue with grounding skills if appropriate. Practice in session.

TOPIC 8 BRINGING IT ALL TOGETHER: TODDLER TIME

(Therapist & Parent & Child)

OVERVIEW

Therapist coaches parent in play session with child, either from observation room with earpiece or in-room.

The focus of Toddler Time in the final session is to work on skills that the parent is finds most challenging

5 MINUTE OBSERVATION

Explain observation and leave the room.

For example:

“Before we start coaching today, I’m going to leave the room and let you guys settle in. I’ll watch and code how things are going for the next five minutes and then come back into the room (or use the earpiece). Use any of the skills we’ve discussed and try to let your child lead the play. Do you need anything before I go?”

Leave the room and set timer for 6 minutes. Do not code the first 3 minutes as this provides some time for the parent and child to get settled.

Start coaching after the observation period.

COACHING: REVIEW OF ALL SKILLS

- Coach parent on skills that they have found most challenging, continuing to encourage strengths and focus on progress.

TOPIC 8 BRINGING IT ALL TOGETHER: WRAP UP

(Therapist & Casework & Parent & Child)

REVIEW PROGRESS TOGETHER

Thank participants for their attendance.

Allow opportunity for any further questions.

Organise follow up appointments.

Offer booster session if appropriate.

PART 3: PARENT HANDOUTS

ADD IN HANDOUTS IN THIS SECTION

PART 4: REFERENCES

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Appendix 2: Holding Hands Young Parents Participant Handouts

Holding Hands



Building stronger parent-child relationships

Getting ready for sessions at home

Each week we will be catching up with you via Skype or FaceTime.

Here's what to expect and how you can prepare:



- Each session will be about 15 minutes, at the same time each week.
- In the first 10 minutes, we'll be asking a few questions and catching up with you, so have some toys ready to keep your toddler occupied.
- In the last 5 minutes, we will be recording a brief play session with your child, so think about the best place for this (e.g. where there is some space to play but also where you don't have to worry that your toddler will get into things you don't want him/her to).
- Play time: sit on the floor or at a table with your toddler.
- Type of toys that are suitable for this play time (e.g. toys that you can play with while sitting down together):
 - Blocks/lego, building toys
 - Play dough
 - Trucks, cars
 - Dolls, animals
 - Tea set/pretend food and cooking toys
- Phone/tablet needs to be out of toddler reach and set at an angle so we can see the area where you will be playing with your child.
- We will also send you a link to a short questionnaire by text message that you will need to complete by the end of that day. This is important to help track how things are going for you each week.

Holding Hands



Building stronger parent-child relationships

Parent Strengths

What am I doing well?

Love

What I love about my child

Big picture goals

What do I want in the long term?

Specific Goals

Goals for this program

Observations

What have we noticed about parent-child play time

Presenting Concerns

Holding Hands

Building stronger parent-child relationships



What's the key idea behind Holding Hands?

Power of Parenting

This is a tailored program that works on the things that parents find most difficult: developing specific skills and responses to children that can really make a difference.

Parent-child relationships are a really powerful influence on child development so that's why strengthening the relationship is something we focus on throughout the program.



Good parent-child relationships can be thought of as protection for the brain, they are like good medicine

Healthy relationships also promote brain development and help build the skills children need as they grow, including self-regulation, social, language and thinking skills.

WHAT IS THE FORMAT OF HOLDING HANDS?

Parent sessions



Education about child development & parenting

Parent & child coaching sessions



Practice specific skills and get feedback

Home Practice



10 minutes each day of child-led play

Program Overview



Topic I: Understanding My Child

Parent Time: The power of attention

Toddler Time: Verbal Skills I



Topic II: Topic I: Understanding My Child II

Parent Time: Cycles of behaviours and ways to manage when things get challenging

Toddler Time: Verbal Skills II



Topic 3: Getting In Close

Parent Time: Attachment and affectionate touch

Toddler Time: Using touch, our gaze and getting in close



Topic 4: Infectious Calm

Parent Time: Emotions and Co-regulation

Toddler Time: Showing delight, with our eyes, face and body



Topic 5: Consistency Is Key

Parent Time: Consistency, being clear and using your attention wisely

Toddler Time: Consolidate skills, practice consistent responses



Topic 6: Reciprocity - give and take responses

Parent Time: Reciprocity

Toddler Time: Give-and-take responses



Topic 7: What's That Little Head Up To Now?

Parent Time: Mentalising

Toddler Time: Watch, listen and respond to your child's internal world



Topic 8: Review

Parent Time: Review remaining challenges and plan for next steps

Toddler Time: Review skills learned and practice

Holding Hands



Building stronger parent-child relationships



Family Behaviour Investigator

It takes practice to be a cool, calm observer of behaviour.

Aim to focus on shared moments between you and your child.

Tuning into these moments can help us reward children with the attention they need and help us notice how our children are rewarding us with being happy in our company.

THINGS TO THINK ABOUT

1

WHERE'S MY ATTENTION?

What behaviours am I paying attention to?

2

CHILD FEELINGS

How does my child respond to my attention?

3

MY FEELINGS

How does paying attention to my child make me feel?

HOME PRACTICE

Child-led play



10 minutes per day, sit down with your child

Watch what they do

Follow their lead in play

Describe what they are doing

Praise and reflect

Use a warm tone

FBI skills



Cool calm observer

Notice their behaviours

Tune into shared moments

Attention

Attention is a really powerful reinforcer of behaviours. Behaviours that get more attention, tend to increase.

Being a parent involves keeping kids safe and managing some behaviours that can be pretty challenging. It's normal to pay a lot of attention to risky or challenging behaviour.

Often, due to the pressure of parenting, attention goes to behaviours that are challenging or unsafe, and there's not much left over for the rest of the time.

After all that, it's no surprise that we sometimes sit back and take a breather when kids are playing quietly or happily.

This can set up a learned pattern for our children: they learn that challenging or unsafe behaviour gets our attention but quiet or happy behaviour doesn't.

It can also set up a pattern for us. Because we're focussed on all of the problems it's harder to notice the great things our children are doing.

It takes practice and intention to notice the smaller signs and signals our kids are giving us and take note of the good moments when things are going well.



We know, both from clinical experience and years of research, that paying attention to the good things increases those good behaviours and reduces the challenging and unsafe behaviours you want to see less of.

“Attention is the rarest and purest form of generosity” Simone Weil

Behaviour Chains

We often think about our children's behaviours (e.g. a tantrum) as a single event. As an FBI agent, we want you to think about each big behaviour as a series of small things that go together like links in a chain. Things that come before, during and after can all be important. Breaking down behaviours into pieces gives us valuable clues about what we should pay attention to, how we can best respond and what we need to change.

THE ATTENTION SEE SAW

Picture a see saw. At one end is all the behaviour you want to see more of and the other is all the behaviour you want to see less of.

We want to switch things around so that we are piling on attention to the behaviour you want to see more of and reducing attention on the behaviour you want to see less of.



Holding Hands



Building stronger parent-child relationships



Verbal Support Skills I

Using our voice to respond to our child's needs

These skills help you to follow your child's lead, keep your child engaged in an activity, extend their language skills and strengthen your relationship.

Skill	Example	Why is this important?
Positive Commentary		
Describing what your child is doing in positive terms	Child: Drawing on the chalkboard Parent: <i>"You're drawing a big circle on the chalkboard"</i>	Describing your child's actions lets them lead (rather than directing them with questions or requests)
Reflecting/repeating or summarising something your child has said	Child: <i>"I want the doll"</i> Parent: <i>"You want the doll"</i>	Increases your child's verbal communication, improves speech Helps your child stay engaged in an activity and shows your child you are interested in them
Specific Praise is when you tell your child exactly what it is you like.	<i>"Great work putting those blocks together"</i> <i>Or..."I love how gently you are putting the toys in the dolls house"</i> (Child: looks up at parent's face) Parent: <i>"I love the way you looked up at me when I spoke to you"</i>	Specific praise helps your child understand what you are pleased about. It's more genuine than general praise like "good boy" Praise nurtures your child's self-esteem, confidence and sense of self. Behaviour that is praised usually increases By using praise, you're showing your child how to think and talk positively about himself.
Warm Tone of Voice		
Warm, enthusiastic & positive voice, suited to child age and emotional or behavioural state	Parent: (Child crying) soft, gentle voice <i>"it's okay, Mum/Dad's here"</i> Parent: (Child laughing with joy) excited, happy voice <i>"woo hoo!"</i>	Tone of voice tells your child a lot about how you are feeling. Using a warm tone helps your child feel safe and secure with you and helps to regulate your child's emotions.

Home Practice

Questions to reflect on and discuss in your next session

CHILD-LED PLAY



What is it like to follow my child's lead rather than direct the play?

How does my child respond to attention and positive commentary?

What makes it easy or harder to describe what your child is doing?

What happens when you reflect what your child is saying?

FAMILY BEHAVIOUR INVESTIGATOR (FBI)



What have you noticed about your child this week?

What does his/her response tell me?

Holding Hands



Building stronger parent-child relationships



Infectious Calm

Children have lots of needs, both physical and emotional. They can't look after themselves, so they look to their parents to meet their needs.

When we are stressed, worried or angry it is hard to think clearly and be sensitive to our children's needs.

Our children learn to be calm and manage their own powerful feelings from watching how we respond to them.

Learning skills that help manage our own emotions helps our children learn to regulate their own emotions and behaviours.

When we are anxious or threatened our breathing speeds up to get our body ready for danger. Practicing **calm breathing** can help regulate our own emotions and feel calm. Calm breathing is slower and deeper than regular breathing and it happens lower in the belly.

HOW TO DO CALM BREATHING

Calm breathing doesn't always come naturally. It helps to practice regularly so that we are able to do it automatically when we need it

<p>1</p> <p>IN BREATH</p> <p>Count slowly 1..2..3..4</p> <p>Smooth, steady, continuous breath</p>	<p>2</p> <p>PAUSE</p> <p>for a moment</p>	<p>3</p> <p>OUT BREATH</p> <p>Count slowly 1..2..3..4</p> <p>and pause again before breathing in</p>
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HOME PRACTICE

Child-led play



10 minutes per day, sit down with your child, watch what they do and follow their lead

Continue praise, describing and reflecting

Reduce questions, instructions and negative commentary

FBI skills



Cool calm observer, notice and tune in

Calm Breathing



Practice calm breathing for 5-10 minutes, a couple of times per day

Coercive Cycles

Why doesn't my child just do as he's told?

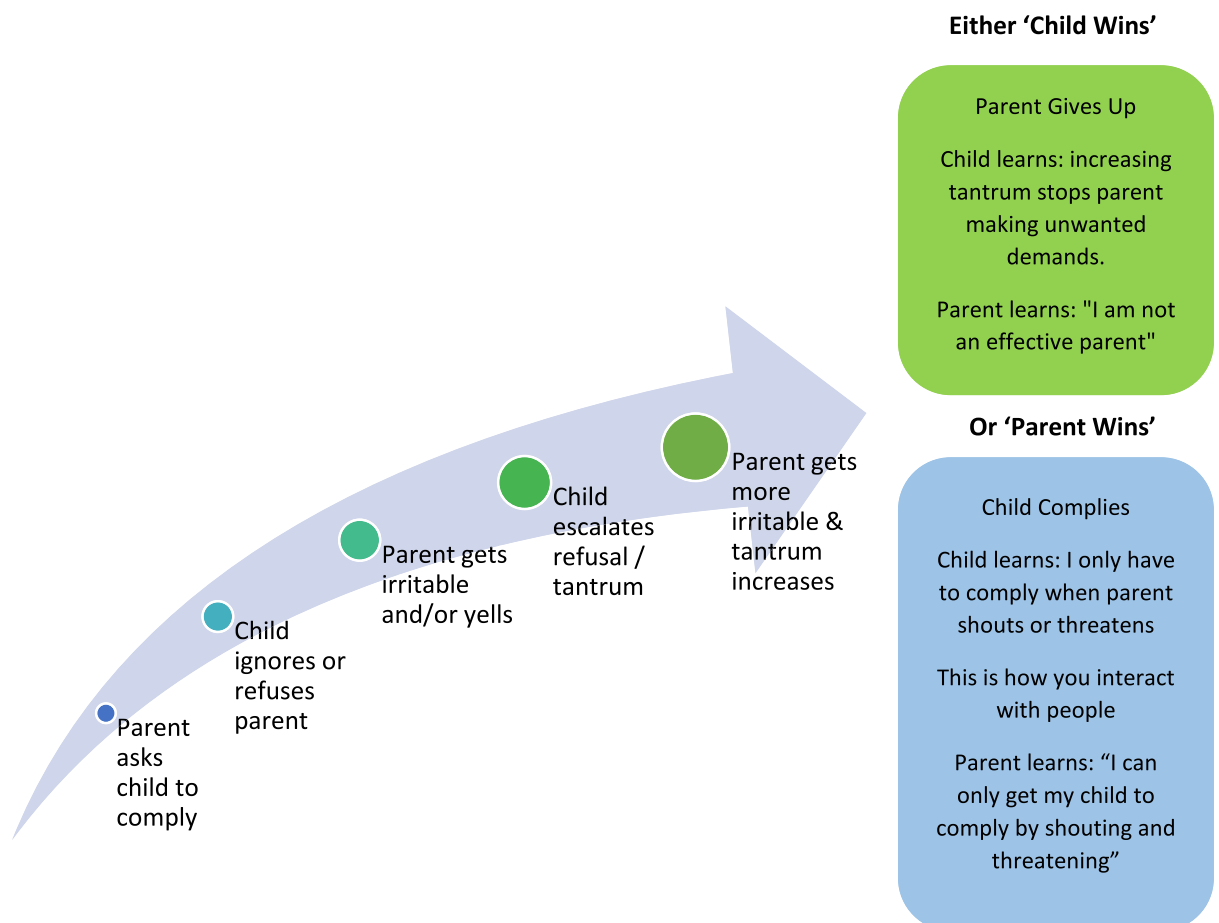
Strong emotions can come up when we ask our children to do something and they refuse or when our children demand something that we are not able to meet at that time.

Sometimes, unintentionally, we get into a win-lose battle with our children, and a cycle develops where undesirable behaviours start increasing. As the parent, we are in the best position to break this cycle because changing our behaviour can influence our children's responses.



When we remain calm, we are better able to think clearly and respond in more helpful ways to our children.

If we find ourselves in these cycles, we can use our FBI skills to notice what our children are doing well, re-focus on reinforcing the behaviours we want to see more of and engage in building positive give-and-take interactions.



Anxious Cycles

A similar cycle can happen with anxiety or worry, especially when children are naturally shy or parents also feel anxious or worried.

Some children might be shy or hesitant to try new things, and this may be reinforced unintentionally in their environment.

For example, parents may affirm their shyness and send the message that agrees with the child's worry that they can't do something or are not good at something.

Anxiety is essentially a fear of something bad happening in the future. When we are anxious, we typically underestimate our ability to cope with the feared situation. Anxiety can make us want to avoid the scary situation or sometimes it makes us want to lash out.

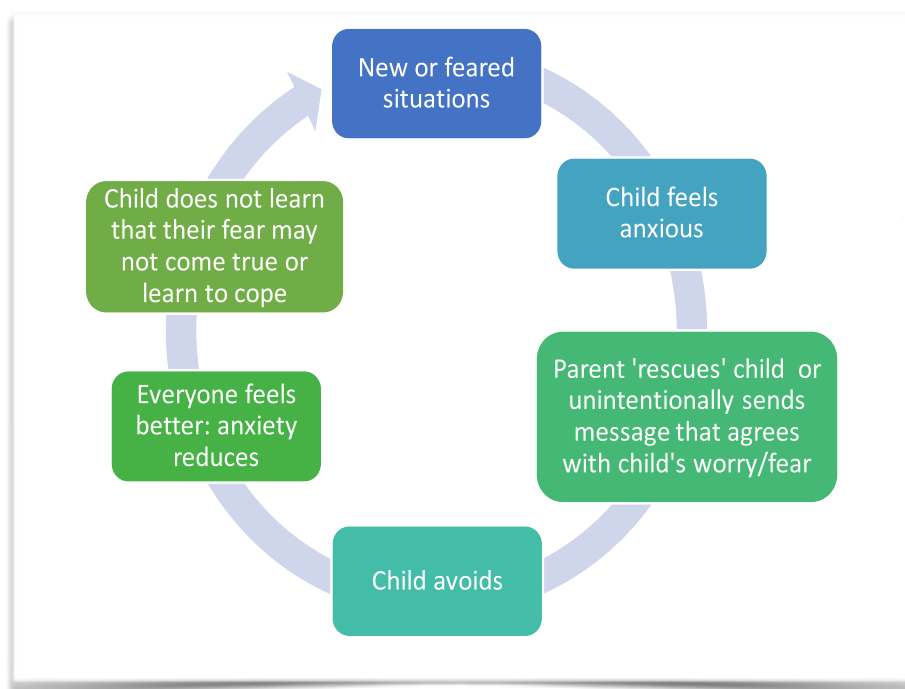
Anxiety is useful as it helps to protect us when we are in danger, but it can interfere if we start to avoid doing things we want to do.



When there are no safety concerns, one effective strategy for dealing with anxiety is to 'face the fear' and engage the thing(s) that makes us anxious. Where there are specific things of concern, public speaking for instance, or traveling on lifts, this task is relatively easy.

The person engages in the activity, in manageable stages, in a supportive environment as often as possible until it is no longer threatening and may even become enjoyable.

Where the anxiety is more general (e.g., something social that involves eye contact, assertiveness, verbal communication or posture) this task becomes more complex.



As parents, we can help our children by:

- developing our ability to remain calm and regulate our own feelings
- reflecting on our own thoughts and behaviours about our children's anxiety (or our own anxiety) and addressing these
- using FBI skills to look for any non-anxious behaviours (such as trying a new task or doing something we know our child finds challenging) and supporting them

High Risk Situations

Behaviour That Makes It Hard To Stay Calm



All of us find certain situations difficult and challenging. There are times when we are particularly vulnerable as parents (e.g. when we are tired, hungry, in unfamiliar surroundings, feeling anxious or down). Sometimes our need to be in control or our anxieties can make it hard to stay calm.

Then there are times when our children are particularly vulnerable or challenging.

Checking in: Here is where we use FBI skills to check in to see what our children find most challenging, and the best ways to help them calm down.

Check in on their arousal - bored, tired, hungry, thirsty, fidgety, hyperactive, flat, over-excited, overwhelmed (unexpected event?)

What are the high risk situations in your family?

- Do they occur in situations where your children are bored?
- Forced to do something they don't want to do
- Unable to have something they really want
- Transitioning between situations?

How to prepare for challenging situations?

- Check we've met physical needs - food, drink, toilet, sleep.
- Does your child need a hug or affection?
- Introducing something interesting to beat boredom: Have a box of toys that you only bring out for special occasions, like in the car or on the phone. Music or audiobooks are good boredom busters too.
- Distraction - Flipping the script: (remember the reggae video?)
- Remember to look after yourself too :)

What To Do If Nothing Else Works

The Walk Away

If you are about to lose your temper, (i.e., calm breathing is not possible or enough to help you calm down) check your child is safe and there are no risks and walk 3-5 metres away from them, preferably so you can't see their face and they can't see yours. Ideally they will be in their car seat, in their bedroom, or in another room etc. Walk away, pull the car up safely, leave the table etc. Do some calm breathing until you have regained your sense of calm.

It is unlikely that this will have done anything to calm the child, but it will have allowed you to calm yourself. On your return, keep a focus on calm breathing, get the FBI skills happening, and find the first thing that you would like to see more of and reinforce it. "I can see you are trying to calm down, that's such good trying" or, if still distressed "I'm just coming in to see that you are OK. You are doing some good calming down and I'll be back in another couple of minutes".

Holding Hands



Building stronger parent-child relationships



Verbal Support Skills II

Things to reduce: Questions, Instructions and Negative Commentary

Things to reduce	Example	Why is this important?
 Questions 	<i>"What are you doing?"</i> Or...	Its natural for all parents to ask questions about what our child is doing, and try to extend their play. It's also second nature to want to teach and explain things to our kids to help them understand their world
	<i>"Do you want to put that piece here?"</i>	Because the focus of these play sessions is to let your child lead we ask you to reduce the questions you ask and instead try to develop these other ways of communicating.
 Instructions 	<i>"Pick up your toy" or ...</i>	Much like asking our children questions, we often give them instructions to do certain things.
	<i>"Look at that" or...</i>	Because the child led play times are exactly that - child led - we want your child to be in charge of choosing what to do, so that means we reduce the instructions we give so we can learn to follow their lead.
	<i>"Come here and give me a cuddle"</i>	
 Negative commentary is any comment that is negative in terms of its narrative, description or response to the child - criticism, sarcasm, disapproval.	<i>"Mixing all those things together in the bowl is silly."</i>	We can sometimes make unhelpful comments to our children unintentionally. It's good to reduce this in play and in general everyday interactions whenever we can.
	<i>"I wish you could be careful with that cowboy and the bathtub."</i>	Negative commentary reduces your child's sense of confidence over time, and is likely to squash their enthusiasm and willingness to try new things.
	<i>"Why can't you just be good for a change!"</i>	

Home Practice

Questions to reflect on and discuss in your next session

CHILD LED PLAY



Do certain situations or behaviours influence how easy or difficult it is to reduce negative commentary?

How did you go reducing questions?

Are there things that get in the way of making time for child-led play each day?

FBI SKILLS



Have you noticed getting stuck in any anxious or coercive cycles?

If so, what starts the cycle?

Did you notice your child doing anything differently this week?

CALM BREATHING PRACTICE



What's it like practising calm breathing?

What makes it hard or easy to practice?

How do you feel after calm breathing?

Holding Hands



Building stronger parent-child relationships



What is attachment?

'Attachment' is the word we use to describe the strong emotional bond between child and their caregivers

All infants are born into the world with an 'attachment system', an inbuilt biological system that drives them to connect to the people that care for them.

The infant's attachment system drives them to seek proximity to their caregivers, especially when they feel unsafe. This proximity or closeness gives the child a sense of safety.

The attachment system and the stress-response system are tied closely together. When a child feels unsafe, their stress levels become elevated.

While the infant's attachment system is hard-wired into the brain, it develops in response to the environment. This means as parent we have the opportunity to be a powerful, positive influence on their social development.

HOME PRACTICE

Child-led play



10 minutes per day, sit down with your child, watch what they do and follow their lead in play

Continue using verbal skills

Sit close and watch your child's face

Use affectionate touch when appropriate

FBI skills



Cool calm observer, notice and tune in

Calm Breathing



Practice calm breathing for 5-10 minutes, twice daily

Sensitive, attuned parenting provides a secure base for our children, and sets up their system so that our attention, our affection and our approval is rewarding to them.

When children feel safe they are able to explore the world. While exploring, they look to us to see that we have an eye on them and are nearby to help them out if they need it.

When children feel unsafe, they need to come back to us as their place of safety. When a child is unsure about something new, they check with us to see if it is safe.

When we are strong and kind, we are the hands that make our children feel safe.

“The relationship you have with your child shapes the structure and function of your child’s brain.” Dr Dan Siegel



Affectionate Touch

Touch is one of the first senses we acquire and it is a powerful way to help regulate arousal, soothe your child and help her feel safe and calm.

Affectionate touch activates oxytocin, which is a hormone that helps to strengthen bonding between people.

We communicate a lot with touch, so using affectionate touch with your child helps him understand that you care, you love him and you are a supportive presence in his world

When children are exploring, playing and focussed, they may not need our touch as much. When they are scared, upset or tired, they may need more affectionate touch.

WHAT ARE SOME OF THE SIGNS WE CAN LOOK OUT FOR SO THAT WE UNDERSTAND THEIR NEEDS?

1

IN BREATH

Count slowly 1..2..3..4

Smooth, steady, continuous breath

2

PAUSE

for a moment

3

OUT BREATH

Count slowly 1..2..3..4

and pause again before breathing in

CALM BREATHING

Practice each day, aim for 5-10 minutes a couple of times per day.

Holding Hands





Building stronger parent-child relationships



Getting In Close

Using our eyes and affectionate touch to respond to our child's needs.

Use your FBI skills to see what you can discover about your child as you follow them in play and learn about their responses

Skill	Example	Why is this important?
<p>Proximity</p>	<p>Sit close to your child, so that your body is positioned towards theirs and you can see their face.</p> <p>Sit close enough so your child can reach out and touch you, and with open and relaxed posture</p> 	<p>This is a gentle way to show you're interested and lets them know you're there to help if needed</p>
<p>Gaze</p>	<p>Watch their face and observe their responses to you</p>	<p>By watching their face, you are more likely to notice their reactions and be able to respond sensitively to their needs.</p>
<p>Affectionate Touch</p>	<p>This includes cuddles, gentle touches, playing games like "pat a cake", massage, rubbing his back, stroking his hair...</p> 	<p>Affectionate touch expresses warmth and care</p> <p>Observe how your child responds to your touch and use touch that they respond positively to.</p> <p>When children are exploring, playing and focussed, they may not need our touch as much. When they are scared, upset or tired, they may need more affectionate touch.</p>

Home Practice

Questions to reflect on and discuss in your next session

CHILD LED PLAY



While doing child-led play have you noticed your child doing anything differently? E.g., some parents notice their child starts to talk more or play more creatively.

Would you recommend child-led play to a friend?

What did you observe by watching their face?

FBI SKILLS



Did you notice doing anything differently with your child this week?

Did you notice your child doing anything differently this week?

CALM BREATHING PRACTICE



What's it like practising calm breathing?

What makes it hard or easy to practice?

How do you feel after calm breathing?

Holding Hands



Building stronger parent-child relationships



Emotions

We all feel strong emotions, which direct our behaviour and the way we think about ourselves and others. Parenting is a deeply emotional process.

Our emotions also affect the way we make sense of the world. If we are angry, we tend to blame people. When we are afraid we want to avoid the thing that makes us scared. when we feel safe we feel free to be ourselves.

Being a parent can involve strong emotions that are rewarding and make it easier to be a parent (e.g. joy, pride, happiness)

Being a parent can also involve feeling strong emotions that make it harder to care for our children (e.g. anger, fear, frustration)

WHAT ARE SOME THINGS YOUR CHILD DOES THAT MAKE YOU FEEL STRONG EMOTIONS?

HOME PRACTICE

Child-led play



10 minutes per day, sit down with your child, watch what they do and follow their lead in play

Continue using verbal skills, affectionate touch and gaze

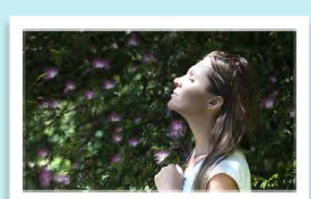
Focus on showing joy and delight with your child

FBI skills



Cool calm observer, notice and tune in

Calm Breathing



Practice calm breathing for 5-10 minutes, twice daily

Our own experiences of being parented can make certain behaviours or feelings dangerous (e.g. if our parents shouted at us when we cried, we learn it's okay to show anger, but not sadness).

As parents, we hear 'shark music' when our children have the same emotions we learned to find threatening or dangerous. This can make it difficult to respond to our children in a helpful way when our children show certain emotions or behaviours.

In turn, our children can learn from our responses that some feelings are dangerous.

Co-regulation

Children's stress response system is regulated by their parents

One of the biggest challenges as parents is to learn to regulate our own emotions - to allow their intense feelings without breaking the connection with our children.

If we can learn to stay calm and regulate our own emotions and stay present with our



children 'in the moment', this infectious calm can help children to feel safe, to calm down and to regulate their emotions.

When children become calm again, this can help us to regain a sense of calm.

Over time, children can learn this process of calm and self-regulation for themselves.

The first step is to learn to be aware of our own feelings that arise in response to our children's reactions.

Our calm breathing skills are one way to help us manage our own emotions and help our children learn to regulate theirs.



Figure 1. A model of the brain.

UNDERSTANDING OUR BRAIN WHEN WE 'FLIP OUR LID'

Different areas in our brains process different kinds of information. Our hand can make a useful model. Make a fist with your thumb tucked inside your fingers.

Wrist represents your brainstem, responsible for basic functions. 'Fight, flight and freeze' response is triggered here.

Thumb represents your midbrain, where emotions and memories are processed.

Fingers represent your frontal cortex, responsible for planning, problem-solving and logical thinking.



Figure 2. Flipping your lid.




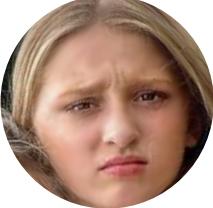
When something triggers us, we are likely to 'flip our lid' which means our frontal cortex has a poor connection to the mid brain, so we are not able to process our logical problem-solving part of our brain.

Holding Hands

Building stronger parent-child relationships

Showing Delight

Positive emotional responses show your child you like spending time with them and they delight you. Matching their emotional responses when they are sad or upset also helps them to learn about their own emotions and what they mean.

Skill	Example	Why is this important?
Smiling & Facial Joy		<p>Facial expression is fundamental to development and maintenance of attachment relationships.</p> <p>It's a clear way to show children we are pleased to see them, and that we like to be with them.</p>
Reciprocal Eye Contact	<p>Eye to eye contact between parent and child</p> 	<p>Eye contact helps build reciprocal interactions.</p> <p>N.B. For some children, making and maintaining eye contact can be difficult and experienced as uncomfortable or distressing. As with all Toddler Time sessions, the child is leading the play so be guided by how your child responds to you.</p>
Things to avoid		
Rolling eyes		<p>Shows disdain and contempt, which is unhelpful when it is directed to children as it does not communicate support</p>
Frown/Scowl		<p>Scowling or frowning also does not convey support to children</p>
Flat/Blank or 'Poker' Face		<p>Just like the 'still face' video, showing a 'poker' face can be distressing for children and communicate we are not interested in them.</p>

Home Practice

Questions to reflect on and discuss in your next session

CHILD LED PLAY



How does your child respond when you increase smiling and joy you show your child?

How do you feel when your child smiles and laughs with you?

How are you going with all the skills learned so far?

FBI SKILLS



Did you notice doing anything differently with your child this week?

Did you notice your child doing anything differently this week?

Did you notice any 'shark music'?

CALM BREATHING PRACTICE



What's it like practising calm breathing?

Can you use calm breathing to help reduce 'flipping your lid'?

Any problems or questions about calm breathing?

Holding Hands



Building stronger parent-child relationships



Consistency

Our children have to manage some pretty powerful emotions. Consistent responses help children know what to expect, and make sense of their own emotions and learn to manage them.

Children can feel disappointed when they don't get what they want and frustrated when things don't go their way or are different from their expectations. Toddlers usually feel impatient when they have to wait and angry when they lose something important to them.

If managing these powerful emotions can be hard for adults, it's even harder for our children! This is because:

- Children's brains are wired more directly to their feelings so that their feelings are more immediate and more intense than they are for adults
- The parts of the brain that help them wait patiently, imagine standing in someone else's shoes and stay calm are still developing.

Because these skills are still a work in progress, managing feelings is extra hard for them. We can help by being consistent and predictable.

Set clear boundaries.

As a parent, it's our job to decide which behaviours are acceptable and which are not. Being clear about these boundaries helps us have consistent responses.

Reflection: Why do you need boundaries with your children?

HOME PRACTICE

Child-led play



10 minutes per day, sit down with your child, watch what they do and follow their lead in play

Continue using verbal skills, affectionate touch, gaze and showing delight

Focus on being consistent as much as you can



FBI skills

Cool calm observer, notice and tune in



Calm Breathing

Practice calm breathing for 5-10 minutes, twice daily



Explain boundaries and expectations

This helps our children understand *why* we are setting the boundary.

High risk situations: Where there are situations that you know can be challenging (e.g. grocery shopping, leaving a fun activity, getting into the car) it's helpful to explain boundaries *beforehand* so your child is very clear on your expectations.

Being Calm

If we can stay calm, we can set clear, firm boundaries in a kind manner, using a gentle tone of voice. Being strong in a gentle way makes boundaries safe and protective, instead of challenging or scary. It models a communication style that helps children interact with their peers.

Experiment with calm breathing and the other grounding activities discussed in session and see which ones are helpful for you.

Is that a request or an instruction?

Request = choice. E.g. "would you like to help me pick up the toys?"

Instruction = no choice. E.g. "pick up the toys"

Being clear about the difference makes it easier for your child.

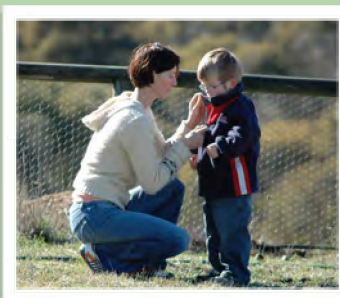
If you give an instruction, you need to have a plan ready if your child does not cooperate. (e.g. If you say: "*Please hold my hand while we cross the road.*" Your plan might be standing/sitting on the footpath until he/she is ready to cross the road until your child holds your hand).

When you give a choice, don't take the choice away by trying to force compliance! If their choice pleases you, makes sure to acknowledge it "*Thanks for putting your shoes away*". When they choose otherwise, that's okay: you gave them a choice!

It's good to use a mix of instructions and requests (just not at the same time!).

- Making choices builds confidence and self-efficacy.
- Learning to follow instructions helps prepare children for preschool and school.

EFFECTIVE INSTRUCTIONS



1. Get your child's attention and bend down to their level

2. Use a firm, calm voice

3. Use clear language

4. Give simple instructions (one step at a time)

5. Tell them what to do, rather than what not to do (e.g. "hold my hand", rather than "don't run away")
6. Wait for them to respond
7. Make it as easy as possible. Repeat instruction and help your child cooperate
8. Praise them when they cooperate
9. If they don't cooperate, you need a plan for dealing with the situation




Holding Hands

Building stronger parent-child relationships

Consistency - Consolidate Skills

All of the skills learned so far are strengthening your relationship with your child. Take a moment to think about which skills are easier and which ones are harder and brainstorm ways you might be able to increase them.

It's also great to practice these skills in your day to day activities, in addition to child-led play times.

Skill	Example	Brief summary
Verbal Support Skills I & II		<p>Increase: positive commentary: describe, reflect, praise</p> <p>Reduce: negative commentary , questions, instructions</p>
Getting in Close		<p>Proximity - sitting close to your child</p> <p>Gaze - watch their face and observe their responses</p> <p>Affectionate touch to express warmth and care</p>
Showing Delight		<p>Positive emotional responses shown by smiling, facial joy and reciprocal eye contact says to your child "I see you and you delight me!"</p>

Home Practice

Questions to reflect on and discuss in your next session

CHILD LED PLAY



How does your child respond when you increase smiling and joy you show your child?

Have you noticed your child talking more as you talk with him/her?

How are you going with all the skills learned so far?

Which skills are easier and which ones are more challenging?

FBI SKILLS



Did you notice doing anything differently with your child this week?

Did you notice your child doing anything differently this week?

What's going well?

CALM BREATHING PRACTICE



What's it like practising calm breathing?

Can you use calm breathing to help reduce 'flipping your lid'?

Did you try out some of the other grounding strategies? If so, what did you find the most helpful?

Holding Hands



Building stronger parent-child relationships



Mindfulness

“Mindfulness means paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally.” Jon Kabat-Zinn.

Emotions are contagious: when we are overwhelmed by emotion, our children become overwhelmed too. It’s hardest to stay calm when we hear ‘shark music’. So it helps when we can identify our own shark music and be a bit more prepared for it. These are some simple grounding or mindfulness strategies to keep calm and focus on the present moment. This helps to connect with our child, even when feelings get overwhelming.

Try them out to see which ones you like the most or are most helpful. Practice throughout the day, especially any time you find yourself getting caught up in your thoughts and feelings. Even five minutes of practice a day can make a difference over time

Drop Anchor

1. Plant your feet into the floor.
2. Push them down—notice the floor beneath you, supporting you.
3. Notice the muscle tension in your legs as you push your feet down.
4. Notice your entire body—and the feeling of gravity flowing down through your head, spine, and legs into your feet.
5. Now look around and notice what you can see and hear around you. Notice where you are and what you’re doing.



Notice Five Things

1. Pause for a moment
2. Look around and notice five things that you can see.
3. Listen carefully and notice five things that you can hear.
4. Notice five things that you can feel in contact with your body (for example, your watch against your wrist, your trousers against your legs, the air on your face, your feet upon the floor, your back against the chair).



Starfish Hand Trace

1. Pause for a moment, close your eyes and breathe deeply
2. Spread your fingers out like a starfish on one hand
3. Take your finger from your other hand and trace around your fingers and hand. As you do this, concentrate on how it feels and let other thoughts float away.
4. Continue until you feel relaxed and calm.



Take Ten Breaths

1. Take ten slow, deep breaths. Focus on breathing out as slowly as possible until the lungs are completely empty—and then allow them to refill by themselves.
2. Notice the sensations of your lungs emptying. Notice them refilling. Notice your rib cage rising and falling. Notice the gentle rise and fall of your shoulders.
3. See if you can let your thoughts come and go as if they're just passing cars, driving past outside your house.
4. Expand your awareness: simultaneously notice your breathing and your body. Then look around the room and notice what you can see, hear, smell, touch, and feel.



Mindfulness of Pleasant Activities

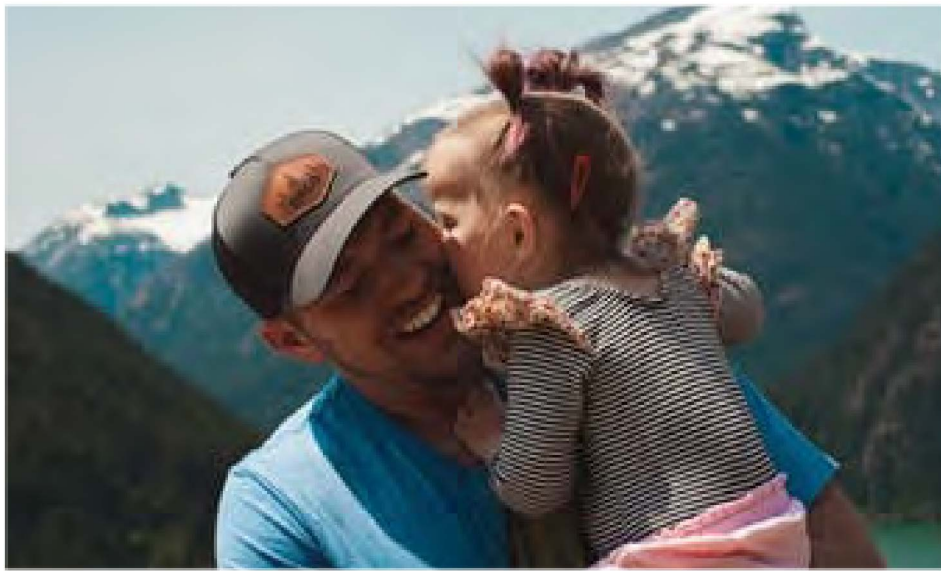
Pick an activity you enjoy such as cuddling with a loved one, eating lunch, stroking the cat, playing with the dog, walking in the park, listening to music, having a soothing hot bath, and so on. Do this activity mindfully: engage in it fully, using all five of your senses, and savour every moment. If and when your attention wanders, as soon as you realise it, note what distracted you, and re-engage in whatever you're doing.



Holding Hands



Building stronger parent-child relationships



Reciprocity

One of the foundations for healthy relationships is reciprocity, or 'give and take' interactions. These moment by moment experiences form the foundation of our growing relationship with our child.

Right from birth, children are born wired to engage with us, and our brains are wired to be captured by our children's activity. We're literally wired to connect together. It's a brain-based process that connects us with our children and triggers biological processes in our body that bond us together and make us feel close.

This back-and-forth 'reciprocal dance' is mostly an automatic process that happens without us always being aware of it. It starts shortly after birth as we respond to our children's actions.



HOME PRACTICE



Child-led play

10 minutes per day, sit down with your child, watch what they do and follow their lead in play

Continue using verbal skills, affectionate touch, gaze and showing delight

Focus on give-and-take moments with your child

FBI skills

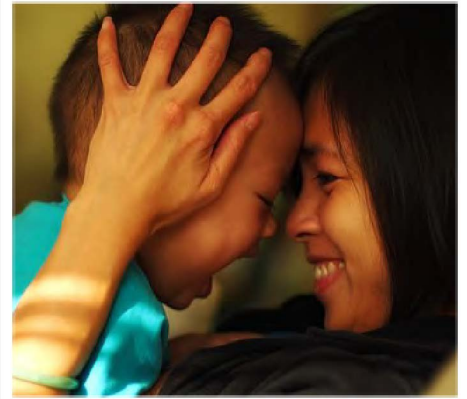


Cool calm observer, notice and tune in

Calm Skills



Practice calm breathing for 5-10 minutes, twice daily & include other grounding strategies that you find helpful



We comfort them when they cry, we smile when they smile, we soothe them when they are upset, we laugh when they laugh. Very quickly they learn to respond to us too, they smile when we smile, they laugh when we laugh, and they get sad or afraid when we are upset or angry. Being connected in this way helps both us and our children stay connected together.

How do we help build reciprocity?



We can help this process by noticing and responding to our children when they want to connect to us. Responding to our children shows them you are there to support them and that they can ask for help when they need you. This means they are able to grow and develop with confidence.

This back and forth also helps our kids learn about the give-and-take of relationships. They will learn to act in all sorts of ways to show us how they are feeling, what they are thinking,

what they want and what they need. By recognising and responding to our children's behaviours they also learn to recognise and respond to our behaviours. It's by understanding them that they learn to understand us, and themselves!

This early back-and-forth also forms the foundation for more complex social behaviours later on. As it develops, the back-and-forth grows into a sharing of thoughts and ideas – a foundation for the conversations we will have as they grow up.



Holding Hands



Building stronger parent-child relationships



Reciprocity

Bringing it all together to create give-and-take interactions with our children.

One of the key elements of strong relationships is give-and-take interactions. Imagine a tennis match between a parent and a child, but instead of a ball passing between the two, other forms of communication pass between them, such as eye contact, touch, and singing. This kind of communication, where our child makes a bid to connect with us and we ‘light up’, attend and return their interest, connects us with our children and triggers biological processes in our body that bond us together and make us feel close.

What do I learn from responding? I’m in tune with my child. I can meet their needs

What do our children learn from being connected? I am understood and my needs are met

What Child Does	Parent Response	What Your Response Says:
Sits close, touches us, moves in for a cuddle	Affectionate Touch, Cuddling	I’m happy to be close to you. I see you need a cuddle and I’m here to give you one. I’m here to make you feel safe and loved when you need it.
Look at us (happy)	Look at them	I see you. I like to see you
Look at us (proud of themselves)	Look back at them. Praise them. Smile	I like what you are doing. I like to watch you. I’m proud of you.
Look at us (scared)	Use our face to reassure them	I am here for you and you are safe.
Look at us / smile	Smile/Facial expression	I see your smile. I like it when you smile. I am happy to see you.
Talk to us	Voice (e.g. imitate, elaborate, praise)	I hear what you say and I respond
Express their feelings	Voice (matching emotion)	I understand you are [tired, sad, happy] and I’m here with you.

Home Practice

Questions to reflect on and discuss in your next session

CHILD LED PLAY



How does your child respond when you are consistent

Have you noticed your child talking more as you talk with him/her?

How are you going with all the skills learned so far?

Which skills are easier and which ones are more challenging?

FBI SKILLS



Did you notice doing anything differently with your child this week?

Did you notice your child doing anything differently this week?

What's going well?

Has the challenging behaviour (e.g. tantrums) started to reduce as you have been able to respond to what your child needs?

CALM BREATHING AND GROUNDING PRACTICE



Can you use calm breathing to help reduce 'flipping your lid'?

Did you try out some of the other grounding strategies? If so, what did you find the most helpful?

Holding Hands



Building stronger parent-child relationships



What's that little head up to now?

Every person in the world has an internal world. It's a world made up of thoughts, feelings, wishes, motivations, imaginations and beliefs.

Although other people's internal world is private (we can't see it from the outside) thinking about it helps us to understand their behaviour. Noticing our own thoughts and feelings helps us to understand our own behaviour too.

Mentalising is the word we use to describe trying to understand our own and others thoughts and feelings. Mentalising helps us to understand the WHY behind what people do. It's often more helpful than just judging the behaviour from the outside.

Mentalising is a skill we learn as we grow up. When children are young, they look to their parents to understand the meaning of their actions. They learn to understand their feelings and thoughts from their parent's responses. The way you react and respond can show your child that you understand how they feel. This helps them to organise their thinking and feeling and develop their sense of self.

HOME PRACTICE



Child-led play

10 minutes per day, sit down with your child, watch what they do and follow their lead in play

Continue using verbal skills, affectionate touch, gaze, showing delight and reciprocity

Ask yourself "What's going on for my child? What are they thinking and feeling?"

FBI skills



Cool calm observer, notice and tune in

Calm Skills



Practice calm breathing and grounding strategies often

There’s no such thing as perfect parenting

As parents, we only get this right some of the time.

No parent understands their children’s internal world 100% - or even 50% - of the time, and that’s okay. There are lots of things that make it more difficult to mentalise.

Being tired, anxious, stressed or frustrated makes it harder to mentalise. When we are overwhelmed it is hard to reflect on other people’s feelings or thoughts. This is because it takes less time and energy to pay attention to behaviour, so we tend to do this when we are under pressure and not feeling safe. Just like in the example of flipping our lids – the logical, planning part of our brain switches off and our ‘emotional brain’ takes over.

Mentalising is also harder for parents who didn’t grow up in a household where their thoughts and feelings were understood. Just remember, it’s a work in progress. What’s important is that we try to understand and explain whenever we can.

The more we are able to step back and reflect on “what’s that little head up to” the better we will be able to understand our child, meet their needs and support their wellbeing.



Recognising, understanding and talking about their thoughts and feelings helps our children to:

- ★ Feel recognised & understood
- ★ Learn that emotions are safe
- ★ Manage emotions
- ★ Understand themselves
- ★ Communicate their thoughts & feelings
- ★ Understand others’ thoughts & feelings

We’re asking you to be curious, to put yourself in your child’s shoes to ask:

- ★ What’s going on for my child?
- ★ What are they thinking and feeling?
- ★ What is motivating them?
- ★ Why are they behaving the way they are behaving?

JUDGING FROM THE OUTSIDE	VS	EXPLAINING THOUGHTS & FEELINGS
“I am a bad parent, that’s why I snapped at my child”		“I am feeling tired, that’s why I snapped at my child”
“My child is the devil, that’s why she’s having a tantrum”		“My child feels really frustrated that she can’t have the chocolate, that’s why she’s having a tantrum”
“My child is clingy, that’s why she won’t let go”		“My child believes that I’m going to leave her here, that’s why she’s feeling anxious”

Holding Hands



Building stronger parent-child relationships

Responding to what is happening on the ‘inside’

This session focuses on using all of the skills we have learned so far to respond to our child’s thoughts and feelings.

Skill	Example	Why is this important?
Stay Present & Notice	Use your attention to stay in the moment and focus on your child and think about what might be going on in your child’s internal world	If you are paying attention and observing, you are more likely to catch your child’s bids, understand how they feel and be able to respond sensitively.
Gaze	Watch their face and their body language.	This gives vital clues about what might be going on in your child’s head.
Reflecting & Matching	When they are happy, interested or excited, you can reflect these feelings and emotions (e.g. laughing when they laugh, smiling when they smile). When they are feeling tired, and begin to slow down, you can reflect this feeling by slowing down and making your voice softer.	Reflecting or matching our children’s behaviour encourages more of that behaviour. Matching is a great way of being in tune with our kids. There are also times when it’s important NOT to reflect emotions and feelings that are overwhelming for us and our children. If our child becomes frustrated or upset and we reflect those emotions (becoming frustrated or upset ourselves) we can unintentionally increase those feelings and reinforce those behaviours.
Describing	Describe what your child might be thinking and feeling “It looks like you’re having great fun cooking the cake in the oven.” “You’re bored of the Lego now, and you want to find something else to do.” “You really wanted to have the iPad, and you’re upset that you can’t have it ‘till later”	This may involve some guess work, but it’s okay if we don’t get this right all of the time. Describing helps you stay focussed on what your child is thinking and feeling. It shows them that you recognise what is going on in their ‘inside world’. Over time, describing helps children to understand, name and talk about their ‘inside world’.
Specific Praise	“I can see you’re really frustrated but I’m really impressed you asked me for help” “That was really hard for you, but you kept on going!” “I like it when you are gentle with me even when you’re angry”	It’s useful to praise children when you see them struggling with their powerful emotions. When your child is expressing a ‘negative’ emotion, try to find a way to tell your child what you like about it.
Affectionate Touch	Cuddles, gentle touches, playing games like “pat a cake”, massage, rubbing his back, stroking his hair.	Affectionate touch expresses warmth and care. When children are exploring, playing and focussed, they may not need our touch as much. When they are scared, upset or tired, they may need more affectionate touch.

Home Practice

Questions to reflect on and discuss in your next session

CHILD LED PLAY



Have you noticed changes in the way your child seeks your attention?

How are you going with all the skills learned so far?

Which skills are easier and which ones are more challenging?

What's one thing you enjoy about child-led play?

FBI SKILLS



Did you notice doing anything differently with your child this week?

Did you notice your child doing anything differently this week?

What's going well?

What have you learned so far about watching your child?

CALM BREATHING AND GROUNDING PRACTICE



Can you use calm breathing to help reduce 'flipping your lid'?

Which grounding strategies the most helpful? Are there ones that are your 'go to' when you feel overwhelmed?

win-lose battle?
How can I change
this cycle?

What am I paying
attention to?
Remember the
see-saw

otions. Am I reacting to my
own 'shark music'?
m breathing and grounding
ills will help me to not 'flip
my lid'

going. Do I need to
establish clear boundaries
and remind myself why
I'm setting them?

Parenting is **HARD WORK!**
What do I need to do to look
after myself when the going
gets tough? Who can I call
on to provide some support?

What's going on in my
child's inner world?

What am I doing?

What is my child learning?



My parent sees me. I am
learning to understand myself
by watching my parent's
responses to me

My parent thinks I'm
great to be around.
I learn to have
confidence that people
will enjoy my company

SENSITIVE RESPONSES TO BUILD STRONG CONNECTIONS