Acceptability and Effectiveness of Behavioural and Non-Behavioural Parenting Interventions for Child and Adolescent Mental Health

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December 2025

A thesis submitted for the degree of Doctor of Philosophy (Clinical Psychology) of
The Australian National University

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university. To the best of the author's knowledge, it contains no material previously published or written by another person, except where due reference is made in the text.

Samantha Jugovac

December 2025

"In theory, theory and practice are the same, in practice, they are not."

- *Albert Einstein*

"If we value our children, we must cherish their parents."

- *John Bowlby*

Acknowledgements

First, to my supervisor, Associate Professor Dave Pasalich. I could not be more grateful to have had you as a supervisor over these years. I feel incredibly fortunate to have been mentored by you. You have heavily contributed to my professional identity and development, and been a critical sounding board throughout this process. Your continuous encouragement, respect, and reflective discussions have guided me through my candidature. Your continued passion for this field has been an inspiration for me, and I cannot imagine this experience without you. Thank you for the numerous coffee walks, meaningful discussions, the plethora of opportunities, and your willingness to go on this journey with me. I have appreciated that you have recognised my growth over the course of this degree and moved with me on that journey, not only helping me complete this thesis but also supporting my overall professional development as a psychologist.

To my supervisory panel members, Professor Richard O'Kearney and Professor David Hawes, I feel honoured to have worked with you both during my PhD. You have both positively challenged my thinking and contributed to my learning and professional development. Thank you for your time, wisdom, and your role in shaping my thesis and its papers. I would also like to thank Dr Lucy Tully for your important contributions to Study 2 and for sharing your expertise, which enhanced both my clinical and research development.

To my thesis examiners, thank you for your thoughtful and meaningful reflections on my thesis that contributed to strengthening the final result. It truly meant a lot to read your comments.

I would like to acknowledge that this research was supported by an Australian Government Research Training Program (RTP) Scholarship.

To the participants who willingly volunteered their time to participate in the studies included in this thesis, thank you for your willingness to share your professional insights. Particularly, to the psychologists who participated in the interviews for Study 3, I learned so much from each of you, and feel privileged that you shared your professional stories with me.

I would also like to thank my colleagues, Lauren Fee and Sarah Mckenna for your help coding data for Study 1; and Anna Dawson, for your help in reflexive thematic analysis for Study 3, including the many interesting discussions we had in the lab.

To the remainder of my colleagues along the way at ANU who I have been fortunate to work alongside with, I have the fondest memories of the clinical program, and have met so many inspiring psychologists. For those who have stayed with me along the journey and become a close friend - the few that can truly understand the experience of a clinical PhD - I have appreciated the normalisation and validation, including the helpful reminders to ground me in reality and prompt self-care.

To all my friends, the ones I have had for over 20 years, and the ones who have joined me along the PhD journey, I am not sure how I am so fortunate. I find it so interesting that many of you are in helping professions, and that we became friends before even knowing what career pathways we would take. Thank you to the genuine friends, your part in who I am, and supporting this PhD journey. You know who you are – the ones who sent me messages, just to let me know you were thinking of me; the ones who have dropped off little surprises; the ones who have given me words of encouragement, and never stopped believing in me; the ones who have been willing to read parts of this thesis; the ones who have attended milestones along the way; and been a smiling face.

To my family, papa, mamma, Jaimie, and Monique – I would truly not be the person I am today without each of you. I realise not every family celebrates a person in the way you all do; you truly take note of life milestones and make sure those memories last a lifetime. You did not seem too surprised when I first embarked on this degree, even though I was, though we probably did not fully understand what I was getting myself into. I have appreciated that no matter what, or how well you understood the process, you have supported me along this journey. Thank you for always believing in me, even when I did not believe in myself. Thank you for encouraging me to never give up on my dreams, and for providing me with a life of opportunity. I love each of you with all my heart.

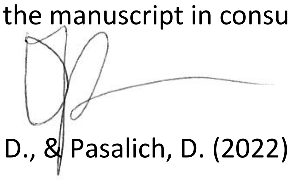
To James, my husband, I know you are ready more than anyone for me to have this thesis submitted. It is surreal to think that we have not known each other without this thesis being part of our lives, so I am looking forward to getting to know you all over again. Thank you for your continuous support, big and small. Being able to come home to you each day, and be greeted with a warm hug means everything to me. Thank you for helping me laugh when I truly need it most. Thank you for your patience, love, and support throughout this journey.

Finally, I want to not only acknowledge, but dedicate this thesis to *I miei nonni.* You are all my true inspiration, and I wish each of you were here for the end of this journey. I want to thank you all for being brave enough to move countries to give your family a better life. I know how much some of you loved the little schooling you received and wished to be able to continue. I know that study and school were privileges only reserved for a few in your circumstances, I really hope I made you proud. Nonno, I wish you were here to see me become Dr. Jugovac; Nonna, to see *la tua dottoressa*. I wish so much that you were here for this part, to share a glass of wine or a home-cooked meal with you. I am also so grateful for all the parts you were there for me throughout my studies and throughout my life. I am thankful that I still have two of you here with me to share this with. All of you are immensely important to me and who I am. *Grazie mille, vi amo per sempre*.

Statement of Contribution

This thesis is submitted as a thesis by compilation and includes the following papers:

Study 1

Title	Attachment- and emotion-focused parenting interventions for child and adolescent externalizing and internalizing behaviors: A meta-analysis
Authors	Samantha Jugovac, Richard O'Kearney, David J Hawes, Dave S Pasalich
Word Length	17, 731
Publication Outlet	Clinical Child and Family Psychology Review
Current Status of Paper	Published
Contribution of Paper	All authors contributed to study design. SJ conducted the literature searches, data extraction, and coding. DP provided overall supervision and reviewed any disagreements in determining study eligibility and data extraction. SJ conducted the statistical analyses in consultation with ROK and DP. SJ wrote the manuscript in consultation with DP, ROK, and DH.
Endorsement from Co-author	

Jugovac, S., O'Kearney, R., Hawes, D., & Pasalich, D. (2022). Attachment- and emotion-focused parenting interventions for child and adolescent externalizing and internalizing behaviors: A meta-analysis. *Clinical Child and Family Psychology Review, 25,* 754-733. https://doi.org/10.1007/s10567-022-00401-8

Study 2

Title	Practitioners' Use and Acceptability of Time-Out
Authors	Samantha Jugovac, David J Hawes, Lucy A Tully, Dave S Pasalich
Word Length	11,569
Publication Outlet	Child Psychiatry and Human Development
Current Status of Paper	Published
Contribution of Paper	All authors contributed to study design. SJ recruited participants and conducted data collection. SJ completed data analysis in consultation with DP and DP provided overall supervision of the

project. SJ wrote the manuscript in consultation with DP, LT, and DH. All authors reviewed the manuscript.

Endorsement from Co-Author

Jugovac, S., Hawes, D., Tully, L., & Pasalich, D. (2024). Practitioners' use and acceptability of time-out. *Child Psychiatry and Human Development.* https://doi.org/10.1007/s10578-024-01798-9

Study 3

Title	Psychologists' Perspectives on Behavioral Versus Attachment and- Emotion-Focused Parenting Interventions
Authors	Samantha Jugovac, Dave S Pasalich
Word Length	12,251
Publication Outlet	Child Psychiatry and Human Development
Current Status of Paper	Published
Contribution of Paper	SJ and DP contributed to the study design and concept. Participant recruitment and data collection was conducted by SJ. Data analysis and the first draft of the manuscript was written by SJ in consultation with DP. DP also provided overall supervision of the project. SJ and DP read and approved the final manuscript.
Endorsement from co-author	

Jugovac, S., & Pasalich, D. (2025). Psychologists' perspectives on behavioral versus attachment- and emotion-focused parenting interventions. *Child Psychiatry and Human Development.* https://doi.org/10.1007/s10578-025-01946-9

Note. The versions of the published manuscripts presented in this thesis have been slightly edited, including formatting changes (e.g., headings) and changing spelling to British English for consistency with the thesis.

Abstract

Mental health problems have widespread impacts on children and adolescents (“youth”), their families, and society. Parenting represents one of the most modifiable and proximal targets for supporting youth mental health. Accordingly, decades of research have examined various theoretical approaches to parenting interventions, which can be broadly categorised as behavioural and non-behavioural parenting interventions. Behavioural parenting interventions rely on social learning principles, whereby, child behaviour is strengthened or weakened through parental reinforcers of attention. These interventions are currently considered the treatment of choice for child externalising problems (e.g., aggression, noncompliance) and also show secondary effects for youth internalising problems (e.g., anxiety, depressive symptoms). Despite the strong empirical support for this model, a core procedure of behavioural parenting interventions, namely “time-out,” has received increasing criticism in the community. This has occurred alongside speculation of an apparent paradigm shift towards non-behavioural parenting interventions, specifically attachment- and emotion-focused parenting interventions, which strengthen the parent-child relationship and improve child wellbeing outcomes by helping parents sensitively respond to children’s underlying emotional needs behind their behaviour. These interventions have substantial empirical support for improving child secure attachment, caregiver sensitivity, and emotional competence; however, there has been less research attention on the effects of these interventions on youth mental health problems. In particular, the comparative advantages of behavioural and non-behavioural parenting interventions for addressing youth mental health outcomes remains understudied.

This thesis included three studies that collectively aimed to examine the effectiveness and acceptability of behavioural and non-behavioural parenting interventions. First, a systematic review and meta-analysis (*k* = 43) on the effectiveness of attachment- and emotion focused parenting interventions found significant small reductions in youth externalising outcomes and small-to-moderate reductions in internalising outcomes. However, the relative effectiveness of these interventions to behavioural parenting interventions remains largely unknown. Second, a survey with 110 practitioners working with children and families found that only 38% of the relevant sample reported using time-out, with some endorsing criticisms of the procedure. Notably, greater knowledge of appropriate time-out implementation was associated with increased time-out use and acceptability. Finally, interviews with 24 psychologists on their broader acceptability and implementation of behavioural and non-behavioural parenting interventions were analysed using reflexive thematic analysis. Results indicated a perceived polarisation between behavioural and non-behavioural parenting interventions in practice; though, not all psychologists were in favour of this.

Further, provider-level factors including training, affective experiences, and values played a role in their implementation of parenting interventions.

In sum, the findings of this thesis shed light on future research and practice directions in implementing evidence-based parenting interventions for youth mental health problems. Findings suggest that both behavioural and non-behavioural parenting interventions are effective and generally acceptable treatment options for youth mental health problems, though, more research is needed to understand the relative effectiveness of these approaches. Furthermore, the misconceptions about behavioural parenting interventions, particularly time-out, warrant attention. Notwithstanding this, it remains essential to consider alternative parenting intervention approaches in research and practice, as inevitably, families' preferences, values, and needs will align with different theoretical approaches.

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List of Common Abbreviations

General Abbreviations

ADHD	Attention- deficit/hyperactivity disorder
BDI-II	Beck Depression Inventory-II
BPT	Behavioural parent training
CBCL	Child Behaviour Checklist
CI	Confidence interval
EBP	Evidence-based practice
RCT	Randomised control trial
PTSD	Post-traumatic stress disorder
TAU	Treatment as usual
SMD	Standardised mean difference
U.S.	United States of America
Youth	Child and adolescent

Abbreviations of Parenting Programs Reported in this Thesis

ABC	Attachment and Biobehavioural Catch-Up
ABFT	Attachment-Based Family Therapy
COPE	Cunningham's Community Parent Education
COS	Circle of Security
CPP	Child Parent Psychotherapy
HNC	Helping the Noncompliant Child
PCIT	Parent-Child Interaction Therapy
PCIT-T	Parent-Child Interaction Therapy with Toddlers
TIK	Tuning in to Kids
TINT	Tuning in to Teens
Triple P	Triple P Positive Parenting Program
IY	The Incredible Years
VIPP	Video-Feedback Intervention to Promote Positive Parenting
VIPP-SD	Video-Feedback Intervention to Promote Positive Parenting – Sensitive Discipline
WWW	Watch, Wait, Wonder

Chapter 1: Historical and Contemporary Accounts of Behavioural and Non-Behavioural Parenting Interventions for Child and Adolescent Mental Health Problems

Child and adolescent (herein, "youth") mental health problems represent a significant global concern with long-term negative consequences for individuals, families, and society. It is well-established that the development and maintenance of youth mental health problems are linked to parenting and the parent-child relationship. Consequently, numerous parenting interventions have been developed to target parenting, though evolved along different theoretical trajectories. Behavioural parenting interventions are based on social learning theory and aim to strengthen the parent-child relationship through directly targeting parenting practices. These include increasing parent[1] attention towards desirable behaviour through positive reinforcement and quality time with their child; and decreasing attention towards undesirable behaviour through non-coercive discipline techniques such as time-out or planned ignoring. Alternatively, non-behavioural parenting approaches based on theories of attachment and emotion socialisation have focused on strengthening caregivers' awareness of and responsiveness to their children's psychological needs underlying their behaviours. To meaningfully understand how these varied intervention approaches are implemented in modern practice for the treatment of youth mental health problems, it is crucial to first understand where they originated.

Child and Adolescent Mental Health Problems and their Links to Parenting

Mental health problems affect millions of youth worldwide. Recent global statistics indicate approximately 8% of children and 15% of adolescents experience a mental health disorder (World Health Organization, 2025). When youth mental health disorders are left untreated, they can have significant and lasting impacts on youth psychosocial development that extend into adulthood. Given these lasting consequences, it is unsurprising that research commonly focuses on the treatment of youth mental health outcomes. These outcomes are often conceptualised in two broad dimensions: externalising and internalising problems (Achenbach, 1966).

Externalising problems refer to a cluster of outwardly displayed behaviours including hyperactivity, aggression, impulsivity, and delinquency. When these behaviours are persistent across time and settings, are elevated above their same-aged peers, and are related to significant distress or

[1] Parent refers to the primary caregiver of the child, whether that is their birth parent, or a non-birth caregiver, unless otherwise specified.

impairment, they can form two major diagnostic categories (American Psychiatric Association, 2022). These diagnostic categories are attention-deficit hyperactivity disorder (ADHD), characterised by inattention, impulsivity, and hyperactivity; and oppositional defiant disorder or conduct disorder, characterised by noncompliance, aggression, and argumentativeness (Liu, 2004). Conduct disorder is believed to affect approximately 3% of youth worldwide, while approximately 8% of youth are expected to have ADHD (Ayano, Abraha, et al., 2024; Ayano, Tsegay, et al., 2024). Externalising disorders are one of the most common reasons for youth mental health referrals. They are also associated with several long-term problems, including, reduced academic achievement, unemployment, physical health concerns, delinquency, and substance abuse (Kimonis et al., 2019). Not only do these disorders lead to significant distress for youth themselves, but they can also place burden on broader systems including family, schools, and community. In particular, youth externalising disorders are considered a large source of public sector costs (Rivenbark et al., 2018). Finally, they are associated with co-occurring and subsequent internalising problems and disorders (Kim-Cohen et al., 2003; Vergunst et al., 2023).

The second dimension, internalising problems, refers to a cluster of inward experiences that are sometimes observable, including anxiety, depressive, and somatic symptoms related to youths' psychological states. While some level of distress emotions (e.g., worry, fear, shyness, low self-esteem, sadness) can be developmentally typical, when these emotions are experienced intensely, frequently, and cause functional impairment or distress, they can form an anxiety or depressive disorder (Liu et al., 2011). Anxiety and depressive disorders affect 3-7% of youth (Sander et al., 2024), who without effective intervention are at risk for developing adult mental health disorders, including anxiety, depressive, and substance use disorders (Copeland et al., 2021; Morales-Muñoz et al., 2023). These presentations are also associated with worse educational, occupational, physical health, and criminal outcomes in adulthood (Copeland et al., 2021; Morales-Muñoz et al., 2023).

Focusing on youth externalising and internalising mental health problems is therefore paramount to delivering change on the global burden of disease. Depression, anxiety, and behavioural disorders are among the leading causes of illness and disability among youth (World Health Organization, 2025). Furthermore, in Australia suicide is the leading cause of death for 15-24 year-olds (Australian Institute of Health and Welfare [AIHW], 2023). The significant impact of these youth mental health problems on individuals and society has resulted in ongoing advances in research and intervention development; however, treatment effect sizes for these disorders are not improving. In fact, for depression and conduct problems[2], treatment effect sizes have demonstrated

[2] Conduct problems are a subset of externalising problems that refer to a pattern of repetitive behaviours such as oppositionality, disruptiveness, aggression, and rule-breaking behaviour.

significant declines over time, suggesting a strong need for more research and understanding on how to best provide prevention and intervention for youth mental health problems (Weisz et al., 2019). Concentrating research efforts on youth mental health interventions not only benefits this age cohort but also has the potential to create cascading effects on adult mental health outcomes.

Given the significant prevalence and impact of youth mental health problems, understanding how these problems are maintained and treated is of utmost importance. While multiple factors contribute to the emergence and persistence of youth mental health problems, parenting represents one of the most proximal and modifiable influences on youth psychological development (Sanders & Turner, 2018). For over half a century, researchers have documented clear relationships between parenting variables and youth psychological outcomes. For example, meta-analytic evidence confirms robust associations between parenting dimensions such as warmth and control with both externalising and internalising problems in youth, whereby lower warmth and harsher control are associated with higher externalising and internalising problems (Pinquart, 2017a, 2017b). Researchers broadly refer to parenting styles across these dimensions as authoritative (i.e., high warmth, positive assertive control), authoritarian (low warmth, high control), permissive (high warmth, low control), and uninvolved (low warmth, low control). An authoritative parenting style is considered favourable and has consistently related to increased prosocial outcomes, academic achievements, social competence, and reduced mental health problems (Sanvictores & Mendez, 2022; Scott, 2008). Importantly, the relationship between parenting and child behaviours has long been considered bidirectional, with parenting behaviours affecting children’s behaviours, and children’s behaviours shaping parenting behaviours (Sears, 1951). Thus, interactions within the parent-child relationship and the quality of the parent-child relationship are also considered key to establishing positive psychological outcomes for youth (Hawes & Allen, 2016; Sanders & Turner, 2018).

Given the abundance of support for the effects of parenting factors and parent-child relationships on the development and maintenance of youth mental health problems, it is unsurprising that much research attention has focused on the effectiveness of providing interventions to parents (Hawes & Allen, 2016). Parenting interventions rely on parents as the primary agents to drive therapeutic change (Hawes, 2017). This means interventions targeting parenting can create positive cascades, where improved parenting behaviours elicit positive child responses, further reinforcing adaptive parenting behaviour. Importantly though, different approaches to parenting interventions have aimed to target different mechanisms pertaining to parenting and/or the parent-child relationship. Traditionally, many parenting approaches to interventions have focused on targeting parenting practices or skills, such as teaching parents praise, child-led play, or effective instruction sequences (Reitman & McMahon, 2013). Alternatively, other approaches have primarily aimed at enhancing caregivers' responses to children's emotional expressions, or shifting parents' mentalisation of their child's expressed feelings and behaviours (Havighurst et al., 2020; Steele & Steele, 2018). These varied approaches share recognition that modifying parenting behaviours and strengthening the parent-child relationship are central to improving child psychological outcomes; though, they do so along different pathways and have been developed through largely independent research fields.

Understanding the historical development of these different theoretical approaches to parenting is essential for comprehending the contemporary context of parenting interventions for effectively treating youth mental health problems. Thus, the following section traces the historical development of these intervention approaches, examining how their distinct theoretical foundations shape their specific mechanisms for strengthening parent-child relationships and ultimately supporting youth psychological outcomes.

Historical Origins of Behavioural and Non-Behavioural Parenting Interventions

The various theoretical approaches to parenting can be broadly classified in the literature as behavioural and non-behavioural parenting interventions. Behavioural parenting interventions are rooted in social learning theory, while non-behavioural approaches include approaches underpinned by attachment theory and emotion socialisation theory. Both intervention approaches focus on the importance of the parent-child relationship for developing healthy psychological adjustment and preventing mental health problems. However, they have typically been independently designed, investigated, and understood through different hypothesised mechanisms of change, and consequently targets of interventions.

Historical Origins of Behavioural Parenting Interventions

Behaviourism and behavioural parenting interventions emerged primarily in response to a movement away from psychodynamic approaches. In the early 1900s, youth mental health treatment was dominated by psychodynamic approaches, with therapy primarily child-focused, emphasising the therapist-client relationship (Grusec, 2020; Rutter & Stevenson, 2009). Psychodynamic approaches used techniques such as play therapy, with a core focus on unconscious psychological processes (Delgado, 2008). By the 1950s, this approach faced increasing criticism, particularly regarding treatment of youth externalising problems. The conceptual structure of psychodynamic theory was criticised for disregarding the complexity of human responsiveness, with critics suggesting internal motivations could not account for the variation in incidence and strength of a given behaviour across different situations (Bandura, 1971). Researchers further observed treatment changes within clinical settings between a therapist and a child were unlikely to generalise to other settings, and began recognising the parent as an important target for therapeutic change (Reitman & McMahon, 2013).

Behaviourism flourished in the beginning of the 20th century moving away from psychodynamic and introspection approaches and focusing on actual behaviour. John Watson applied classical conditioning principles to child behaviour, arguing that child behaviour and emotions are learnt through associations (Holden, 2010; Pavlov, 2010; Watson, 1925). At the time, behaviourists believed behaviour could be limitlessly modifiable through environmental manipulation, and hence classical conditioning represented a powerful tool parents yielded to influence their child's development (Grusec, 2020; Holden, 2010). A noteworthy quote that illustrated behaviourism's early conceptualisation of child development is:

> Give me a dozen healthy infants, well-formed and my own world to bring them up in and I'll guarantee to bring any one at random and train him to become any type of specialist I might select - doctor, lawyer, artist, merchant-chief and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocation, and race of his ancestors (Watson, 1925, p104).

One of the most influential studies illustrating how classical conditioning in a laboratory could influence child behaviour was "Little Albert" (Watson & Rayner, 1920). This well-known study demonstrated that a healthy 9-month old infant could be conditioned to fear a white rat by repeatedly pairing the rat with a loud noise that elicited a fear response. This conditioned fear response then generalised to other white, fluffy objects, including rabbits, fur coats, and Santa Claus' beard (Watson & Rayner, 1920). While this early work helped establish behaviourism as a psychological framework, subsequent researchers identified limitations in classical conditioning, demonstrating that its principles alone could not fully explain human behaviour.

B.F. Skinner then introduced "operant conditioning," a learning theory that proposes behaviours are strengthened or weakened by the consequences that follow them (Watson & Rayner, 1920). For an illustration of operant conditioning principles, see Figure 1. Operant conditioning outlines that if the consequence of a behaviour increases the likelihood of that behaviour, it is considered a reinforcement effect. In contrast, if the consequence decreases future repetitions of behaviour, it is considered a punishment effect. A further differentiation exists between positive and negative reinforcement/punishment, whereby, adding a stimulus is considered positive, and removing a stimulus is considered negative. Importantly, this means that whether a procedure is considered a reinforcement or punishment is not based on the stimulus itself, but rather the likelihood that the behaviour increases or decreases in the future (Skinner, 1963). For example, if a child is provided a sticker in response to a “desirable behaviour” and this increases behaviour in the future, it is considered positive reinforcement, as in Quadrant 1 of Figure 1.

Figure 1

Skinner’s (1963) Operant Conditioning: Positive and Negative Reinforcement/ Punishment

	Reinforcement (increases/maintains behaviour)	**Punishment** (decreases behaviour)
Positive (add stimulus)	Quadrant 1 – Positive Reinforcement *Add* pleasant stimulus to *increase/ maintain* behaviour (e.g., give child sticker)	Quadrant 2 – Positive Punishment *Add* aversive stimulus to *decrease* behaviour (e.g., smacking a child)
Negative (remove stimulus)	Quadrant 3 – Negative Reinforcement *Remove* aversive stimulus to *increase/maintain* behaviour (e.g., skip chores if complete homework)	Quadrant 4 – Negative Punishment Remove pleasant stimulus to decrease behaviour (e.g., remove the x-box when undesirable behaviour).

These early roots in general learning theory and behaviourism paved the way for social learning theory (Bandura, 1971). Albert Bandura’s early experimental work established that learning could occur simply by observing the behaviour of others, even without reinforcement. Perhaps most famously, the “Bobo doll” experiment showed that children reproduced aggressive behaviours after watching adults behave aggressively towards a doll. Furthermore, he found increased imitation if the behaviour was rewarded rather than punished. Hence, according to social learning theory, social behaviour is learnt through observing and imitating others (Bandura, 1971; Grusec, 2020).

Not long after, Gerald Patterson was interested in developing methods to better understand the origins of child conduct problems, and how following the initial learning of aggression, how these and other conduct problems in children are maintained. Patterson observed the limitations of laboratory settings in capturing real-world scenarios and thus applied social learning principles to direct observational research of family interactions in their own naturalistic environments in real-time. Following hundreds of home observations by Patterson and his team, Patterson suggested two main processes were operating within families of youth displaying conduct problems. Firstly, parents can model aggressive behaviours, and youth then learn these too; and secondly, family processes involve reinforcement traps (Patterson, 1982; Scott & Dadds, 2009). The latter formed the basis of his “coercion theory,” which suggests conduct problems are maintained through parent-child escalation traps, whereby, ineffective parent management strategies are the proximal cause of entry (Lunkenheimer et al., 2016; Patterson, 1982). Parent-child escalation traps are believed to occur when the parent and child develop a negative pattern of interaction, whereby, both escalate their own aversive behaviour (e.g., yelling) until either the parent or child capitulates. For example, if a parent escalates their behaviour (e.g., yelling, smacking), and the child’s stops their aversive behaviour, this positively punishes the child’s behaviour, while negatively reinforcing the parent’s aversive behaviour. Alternatively, if a child escalates their behaviour (e.g., yelling, throwing an object), and the parent capitulates, this negatively reinforces the child’s behaviour (see Figure 1, Quadrant 2 and 3). When these patterns are repeated frequently, it can progressively worsen aggressive behaviours. Consequently, caregivers increase aversive control tactics while positive and warm interactions become extinguished (Hawes & Allen, 2016). Thus, through Patterson’s work, early learning theories were formally applied to family processes in the development and maintenance of child conduct problems.

In parallel, these early behavioural learning principles were applied by Constance Hanf in clinical treatment with parents of youth with externalising problems and neurodevelopmental conditions. Hanf observed that parent attention is a powerful reinforcer that can be used to shape children’s behaviour (Hanf, 1969). Specifically, parents often gave attention to undesirable behaviour which increased this behaviour in future, thereby accidentally providing positive reinforcement (see Figure 1*,* Quadrant 1). Moreover, parents often missed opportunities to attend to desirable behaviours, which led to a reduction in these behaviours, illustrating negative punishment (see Figure 1*,* Quadrant 4) (Holden, 2010). Hanf (1969) developed a two-stage model of parenting intervention — now known as behavioural parenting training (BPT) or parent management training — that aimed to disrupt coercive reinforcement traps through increasing positive attention towards desirable child behaviours (Figure 1*,* Quadrant 1) and reducing attention towards undesirable behaviours (Figure 1*,* Quadrant 4)(McMahon & Pasalich, 2018). That is, parents were encouraged to positively reinforce appropriate behaviour through “attends” (i.e., descriptive statements following child activity) and rewards (i.e., verbal and physical praise); while selectively ignoring minor inappropriate behaviours (i.e., non-aggressive behaviours). In addition, parents were encouraged to engage in quality play time with their child, where they were instructed to imitate their child’s actions while avoiding questions or commands. The primary goal of this initial phase was to establish a positive, mutually reinforcing parent-child relationship (Reitman & McMahon, 2013). Once parents exhibited competency in this stage through increased attends, parents moved into the second stage of the model, named “mother’s game”(Hanf, 1969; Kaehler et al., 2016; Reitman & McMahon, 2013).

Within the second phase of treatment, parents were provided coaching on how to provide clear and effective instruction sequences and implement a time-out procedure.

The implementation of time-out has been frequently studied and adapted over time (e.g., see Everett et al., 2010); however, in the original Hanf model, parents were taught to implement time-out through the "TRIAD" sequence in response to child noncompliance (Hanf, 1969; Kaehler et al., 2016). First, parents were encouraged to provide a warning and if the child did not respond to this warning, they were instructed to take the child to time-out (i.e., a separate location away from the parent or other reinforcers). Once in time-out, if a child did not remain in time-out, they were provided a single warning of the consequence of leaving time-out, which at the time was to give two firm spanks with a hand on the child's bare bottom (Hanf, 1969; Kaehler et al., 2016).

Importantly, since the 1990's spanking has been removed from behavioural parenting interventions as increasing research not only revealed the lack of efficacy of spanking and other physical punishment for child externalising problems, but also the adverse effects it can have on later child development. These negative effects include increased conduct problems, negative relationships, lower cognitive ability, and reduced self-esteem (Ferguson, 2013; Gershoff & Grogan-Kaylor, 2016; Kaehler et al., 2016). Furthermore, the adverse impacts of harsh physical punishment during childhood have been linked to externalising and internalising disorders in adulthood (Afifi et al., 2012, 2019). Spanking or "any punishment in which physical force is used and intended to cause some degree of pain or discomfort however light" (United Nations, 2021) is today recognised as "corporal punishment" and is actively discouraged worldwide. Despite active discouragement and continued research efforts, recent data suggests approximately 62.5% of children in Australia have experienced corporal punishment (Haslam et al., 2024). As of 2014, parental use of corporal punishment in the home is legally prohibited in 38 states and countries worldwide including New Zealand, Sweden, and Norway; however, in Australia, the United Kingdom, and United States (U.S.), the use of "reasonable" corporal punishment by a caregiver is still lawful (Global Initiative to End All Corporal Punishment of Children & Save the Children, 2014). Hence, unsurprisingly, spanking or physical constraint are no longer recommended in behavioural parenting interventions. Instead, time-out is still encouraged, though rather than using spanking as a time-out contingency, parents are encouraged to either use: repeated returns to time-out, a different time-out space (e.g., moving from a chair to a room) (Woodfield, Brodd, et al., 2021), or another logical/ planned consequence.

Over time, researchers have established several "evidence-based" parameters of "appropriate time-out" implementation, including, a reinforcing environment when not in time-out, the removal of reinforcers during time-out, immediacy, consistency, brief duration (i.e., ≤ 5 min); time-out release when child is calm and signalled by the parent; and use in response to deliberate, inappropriate child behaviour (e.g., physical aggression), not fear or distress (Corralejo et al., 2018; Everett et al., 2010; McLean et al., 2022). Importantly, time-out is still designed to be implemented within a broader set of behavioural parenting interventions procedures, not as a stand-alone strategy; whereby strengthening the parent-child relationship through positive reinforcement and building a warm and responsive caregiving context remains an essential foundation (Dadds & Tully, 2019). In sum, time-out is defined as 'time-out from positive reinforcement', whereby a parent temporarily places a child in a minimally reinforcing setting for a brief duration in response to deliberate misbehaviour (e.g., physical aggression, noncompliance).

Hanf's original two-stage model including time-out has been tailored and packaged into various published interventions, with the first, being Helping the Noncompliant Child (HNC) in 1981 (McMahon & Forehand, 2003). Several other programs were also then developed including: The Incredible Years (IY; Webster-Stratton, 2005); Parent-Child Interaction Therapy (PCIT; Eyberg, 1988); Cunningham's Community Parent Education (COPE; Cunningham et al., 1995); and Defiant Children (Barkley, 2013). These programs today, continue to have the original two stages developed by Hanf, though have been refined over time and slightly vary across programs. Essentially, one phase of each of these Hanf-derived models focus on increasing positive parent attention towards desirable behaviour through parenting strategies such as child-led play, descriptive praise, and other positive reinforcement strategies. The second phase then focuses on developing clear instructions and supporting parents through managing challenging child behaviour using planned ignoring, logical consequences, and time-out. In addition to programs that have derived from Hanf's model, several other parenting programs that rely on social learning theory principles have been developed including Triple P Positive Parenting Program (Triple P; Sanders, 1999) and Parent Management Training Oregon (PMTO; Forgatch & Patterson, 2010). The former program is widely implemented in Australia as a public health initiative to strengthen parenting. Together, these programs now make up some of the most empirically-supported parenting interventions for youth mental health problems, though have undergone significant changes and refinement over time (Kazdin, 2008; Mingebach et al., 2018). See Appendix A for more details on examples of behavioural parenting programs.

To summarise, behavioural parenting interventions are based on social learning theory principles derived from early behavioural principles of classical and operant conditioning. These principles propose child behaviour can be learnt through parent modelling, and parent reinforcers of attention, and be maintained through coercive parent-child reinforcement traps. These interventions aim to target these coercive parent-child interactions by shifting parents' attention towards desirable behaviours through strategies such as praise and quality time with their child; while reducing parent attention to undesirable behaviours through strategies such as planned ignoring, or time-out. Behavioural parenting interventions have a long-standing in the empirical literature and are now considered the gold-standard for child externalising problems. Notwithstanding this, several other approaches to parenting have been developed in parallel to behavioural approaches.

Historical Origins of Non-Behavioural Parenting Interventions

Non-behavioural parenting interventions can encompass a wide variety of interventions with various theoretical bases (e.g., see Lundhal et al., 2006). However, there are particular parenting approaches — namely, attachment- and emotion-focused parenting interventions — that developed in parallel with the movement of behavioural parenting interventions, have strong underpinnings in the literature, and similarly recognise the crucial role of the parent-child relationship for child development and wellbeing. These approaches are rooted in attachment theory and emotion socialisation theory.

Historical Origins of Attachment-Based Parenting Interventions

A second major theoretical framework developed simultaneously with the rise of behaviourism through the work of John Bowlby and Mary Ainsworth, namely, attachment theory. Attachment theory is an ethological theory that like behaviourism has acknowledged the significant role of the early parenting environment on children's socio-emotional development and behaviour (Bowlby, 1988). According to attachment theory, children have a biological need to form selective attachments with their primary caregivers. Through repeated experiences of caregiver responses, children develop internal working models. These mental representations shape children's expectations about whether a caregiver will be physically and psychological available and responsive. When children experience consistent and sensitive caregiving, they are more likely to develop secure internal working models of the parent as available and reliable. Conversely, when caregiving is rejecting or inconsistent, children develop insecure internal working models, expecting their caregiver to be unreliable or unavailable (Ainsworth et al., 1978; Bowlby, 1982). These insecure models shape distinct patterns of proximity-seeking and exploration, with children engaging in compensatory strategies such as avoidance or ambivalence to manage the relational distress arising from their attachment insecurity (Kobak, Zajac, et al., 2015).

Mary Ainsworth and her colleagues developed the Strange Situation procedure to systematically observe and classify these attachment patterns in infants within a structured laboratory paradigm. The Strange Situation measures how infants respond to separation and reunion with their caregiver. The procedure consists of eight experimental episodes lasting approximately 3 minutes each. During the first three episodes, the infant and caregiver are introduced to an unfamiliar playroom, with a stranger entering in the third episode. In the fourth episode, the caregiver leaves while the infant remains with the stranger. In the fifth episode, the caregiver returns and the stranger leaves. In the sixth episode, the caregiver leaves again, leaving the infant completely alone. The stranger then returns in episode seven while the infant is still alone. In the final episode, the caregiver returns, reuniting with the infant (see Ainsworth et al., 1978; Van Rosmalen et al., 2015 for further details).

Based on the infant's behaviour across these episodes, particularly during the reunions, Ainsworth and colleagues (1978) identified three main attachment styles (see Table 1 for an overview of attachment styles according to the Strange Situation procedure; Ainsworth et al., 1978). First, infants with secure attachment styles became distressed when their caregiver left but were effectively comforted upon reunion. These infants also comfortably explored their environment when their caregiver was present. Second, infants with anxious-resistant attachment showed distress at separation but were not effectively calmed at reunion, typically resisting comfort while simultaneously seeking proximity. Third, infants with avoidant attachment showed little to no distress during separation and minimal emotional response to reunion (Ainsworth et al., 1978). Almost a decade later, Main and Solomon (1986) identified a fourth category – disorganised attachment - to capture infants who did not develop one of these coherent/organised attachment styles. Infants with disorganised attachment styles displayed contradictory approach-avoidance behaviours, freezing, or disoriented behaviours during separation and reunion with a caregiver. This pattern has been associated with frightening caregiving behaviours (Main & Solomon, 1986; Malik et al., 2021). For a comparison of caregiving behaviours associated with each of the attachment styles, see Table 1.

Children's attachment patterns have been heavily researched in the literature showing differential links to later socio-emotional developmental outcomes, including the development of externalising and internalising disorders in youth and adults (Gregory et al., 2020; Groh et al., 2017). Typically, a secure attachment has been associated with positive psychological adjustment, such as more fulfilling relationships, greater sense of self, stronger emotion-regulation, and reduced mental health problems (Bender et al., 2015; Groh et al., 2017; Malik et al., 2021). On the contrary, insecure attachment has been associated with poorer psychological outcomes including reduced social competence, increased peer difficulties, and increased risk of youth mental health problems including anxiety, depression, conduct problems, and callous-unemotional traits (Colonnesi et al., 2011; Pasalich et al., 2012; Spruit et al., 2020; Theule et al., 2016). Meta-analytic findings suggest all types of insecure attachment are associated with depression in youth (Spruit et al., 2020); while ambivalent attachment styles are most strongly associated with youth anxiety presentations (Colonnesi et al., 2011); and disorganised attachment styles are associated with increased conduct problems (Theule et al., 2016). Notably, the strength of associations between attachment security, youth socio-emotional development, externalising problems, and — to a lesser extent — internalising problems, are comparable to the strength of associations between parenting and externalising problems (Groh et al., 2017). This highlights attachment security as another important factor to consider in understanding youth mental health. Moreover, attachment security may moderate the impact of adverse parent-child interactions on youth mental health problems. For example, early insecure attachment increases vulnerability to coercive cycles, which are associated with increased conduct problems, suggesting both direct and indirect influences of attachment on the development of mental health problems (Kochanska et al., 2009).

Table 1

Infants Attachment Styles in the Context of Caregiver-Infant Interactions in the Strange Situation (Ainsworth et al., 1978; Main & Solomon, 1986)

	Secure Attachment	Anxious-resistant/ Ambivalent	Avoidant	Disorganised
Caregiving behaviour	Consistent and sensitive responding to child's needs	Inconsistently responsive to child's needs	Rejecting of child's needs, psychologically disengaged	Frightening, contradictory, abusive
Child reaction to separation	Initial distress	Significant distress	No emotional distress	Inconsistent and conflicting behaviours
Child reaction to reunion	Happily, greets caregiver upon their return	Approaches caregiver though also resistance/ pushing caregiver away. Typically, not effectively calmed by return of caregiver	Appears unaffected by return of caregiver	Odd behaviours such as freezing or fearfulness, approaching without eye contact
Child reaction to stranger/ exploration	Wary of stranger while alone, will explore environment when caregiver present	Fearful of stranger	Limited response; treats strangers like caregiver	Inconsistent and conflicting behaviours

Given established links between attachment security and youth mental health outcomes, it is critical to examine caregiving behaviours that may promote secure attachment. Attachment theory suggests that the quality of caregiving behaviour can influence the development of secure versus insecure attachment, and thereby, have differential effects on youth mental health. Caregiver sensitivity and reflective functioning represent two significant dimensions of caregiving that are often investigated to promote healthy secure attachments (Deans, 2020; Fonagy et al., 1991; Katznelson, 2014). Caregiver sensitivity refers to the ability to consistently perceive, interpret, and respond to children's cues of emotional and behavioural distress (Ainsworth et al., 1978; Deans, 2020). Parental reflective functioning is a similar construct but encompasses more broadly caregivers' capacity to notice and reflect on their own and their child's mental states including being able to understand and verbally reflect their child's internalised experiences (Slade, 2005). Improved caregiver sensitivity and parent reflective functioning are both associated with increased attachment security (Deans, 2020; Fonagy et al., 1991; Katznelson, 2014). In turn, these parenting dimensions have demonstrated bi-directional effects with youth externalising and internalising problems (Carlone & Milan, 2021; Dejko–Wańczyk et al., 2020; Kok et al., 2013; Wang et al., 2013). Thus, attachment theory suggests that caregiving behaviours shape children's internal working models and attachment security, which then may influence youth mental health problems through both direct and indirect pathways.

The understanding that specific caregiving behaviours foster secure attachment (which in turn is associated with improved psychological outcomes) provides clear intervention targets. Attachment-based parenting interventions were primarily developed to target caregivers' capacity to provide sensitive and responsive caregiving, presumed in turn to strengthen children's attachment security. Attachment-based parenting interventions were first developed in the 1990s for children who had experienced abuse and neglect, given the severe impacts of parental maltreatment on the caregiver-child attachment relationship (Steele & Steele, 2018). The earliest structured programs developed included Watch, Wait, Wonder (WWW; Cohen et al., 1999); Child Parent Psychotherapy (CPP; Lieberman & Van Horn, 2005); Circle of Security (COS; Hoffman et al., 2006) and Attachment- and Biobehavioural Catch-up (ABC; Dozier et al., 2005) (See Appendix A for further details on attachment-based parenting programs). These early interventions shared a common goal of strengthening secure attachment, though their specific methods and focus varied. Most typically, these interventions incorporated the use of live coaching, video-feedback, and shifting caregivers' representations of their children and their relationship (Kohlhoff & Cibralic, 2022; Steele & Steele, 2018). By the early 2000's, meta-analytic evidence of 70 attachment-based parenting interventions indicated that these interventions were effective in improving caregiver sensitivity and attachment security (Bakermans-Kranenburg et al., 2003). Furthermore, interventions that focused on improving caregiver sensitivity were significantly more effective in reducing disorganised attachment styles compared to interventions that did not focus on caregiver sensitivity. Furthermore, higher caregiver sensitivity was observed in interventions that included video-feedback than interventions without this method (Bakermans-Kranenburg et al., 2003). Thus, it has been well-established that attachment-based interventions are effective at improving caregiver sensitivity, and in turn, enhanced caregiver sensitivity leads to improvements in child attachment security.

By the 2000s, the co-occurrence of attachment difficulties and other mental health concerns grew in recognition. It was recognised that insecure caregiver-child attachment relationships commonly existed in cohorts of children with elevated mental health problems (Greenberg, 1999; Greenberg et al., 1993). This prompted greater focus on targeting mental health problems by either adapting existing attachment-based parenting interventions or developing new ones. For example, CPP targeted co-occurring trauma and mood symptoms, demonstrating improvements in both post-traumatic stress disorder (PTSD) and depressive outcomes (Ghosh Ippen et al., 2011). Similarly, Attachment-Based Family Therapy (ABFT) was specifically designed to repair parent-child attachment ruptures in adolescents experiencing depression or suicidality (Diamond, Asarnow, et al., 2014). Other programs like Video-Feedback Intervention to Promote Positive Parenting (VIPP) integrated attachment theory with social learning theory – VIPP-sensitive discipline (VIPP-SD) – to target both caregiver sensitivity and child externalising problems (Juffer et al., 2008, 2017). Furthermore, the Connect parent program was developed specifically to support parents of older children and adolescents with complex mental health problems (Moretti & Obsuth, 2009). These attachment-based interventions and others aimed to help parents shift how they perceive, understand, and respond to youth behaviour (i.e., work to adapt parent internal working models), as well as shift youth internal working models of their parent.

Over the past 10-20 years, attachment-based interventions have continued to demonstrate promising effects for improving attachment-related outcomes including parent sensitivity, and child attachment security (e.g.,Bakermans-Kranenburg & Oosterman, 2021; Mountain et al., 2017), though more heterogeneous results exist for reflective functioning (e.g., Lo & Wong, 2022). More recently, randomised controlled trials (RCTs) also have demonstrated improvements in secondary mental health outcomes (e.g., Baker et al., 2015; Moretti et al., 2015). Taken together, while attachment-based parenting interventions initially targeted caregiving behaviours and attachment security rather than youth mental health outcomes directly, the established associations between these factors and youth psychopathology suggest these interventions may have broader therapeutic potential.

Historical Origins of Emotion-Focused Parenting Interventions

A third important theoretical lens that has progressed over time and contributed to the current landscape of non-behavioural parenting interventions is emotion socialisation theory. Akin to attachment theory, emotion socialisation theory also recognises the importance of parenting and the parent-child relationship for child socio-emotional development, specifically the bi-directional relationship between children's and parents' emotional experiences (Saarni, 1999).

In the 1980s and 1990s, researchers such as Carolyn Saarni and Susanne Denham advanced the study of emotion socialisation: the process through which children develop understanding of, experience, and regulate emotions (Denham, 1998; Eisenberg et al., 1998; Hastings, 2018; Lewis & Saarni, 1985). Early work drew on classical conditioning and social learning theories, proposing that children learn emotional responses through reinforcement or punishment of emotional expressions, as well as by observing the emotional behaviours of others. These theories helped explain how children develop emotional understanding through interpersonal relationships, particularly with their parents, via verbal and non-verbal communication. In 1999, Saarni proposed an initial theoretical framework for emotional competence as demonstrating self-efficacy in emotion-eliciting encounters. This encompassed awareness, expression, and coping with one's emotions, as well as, empathising with, and responding to others' emotions. Saarni particularly emphasised the affective quality of the parent-child relationship in the development of emotional competence, which provided a foundation for subsequent research.

Eisenberg and colleagues (1988) published an influential heuristic framework for understanding parents' emotion socialisation behaviours within the parent-child relationship. Their work provided support for the effects of parental socialisation practices on children's emotional and social competence, while also recognising the bidirectional nature of these processes. That is, parents' negative emotionality (i.e., tendency to experience higher intensity and frequency of distress emotions such as anxiety) and negative reactions to children's expressions of emotions were associated with children's negative emotionality. This early model described how emotion-related socialisation behaviours are influenced by child characteristics (e.g., age, sex, temperament), parent characteristics (e.g., values, regulation, parenting philosophy), cultural factors (e.g., emotion-related norms, gender stereotypes) and contextual aspects (e.g., situational appropriateness). These emotion-related socialisation behaviours include parent reactions to emotions, discussions about emotions, and expressions of emotions, which in turn affect children's emotional arousal. For example, punitive parental responses to children's emotional expressions may induce anxiety in children, whereas supportive responses may reduce arousal. These responses shape both children's regulation capacity and quality of the parent-child relationship. Furthermore, researchers acknowledge other variables (e.g., consistency of parent behaviour) can moderate the degree of arousal or potential outcomes (Eisenberg, 2020; Eisenberg et al., 1998).

At a similar time to Eisenberg and Saarni, Gottman and his colleagues introduced the concept of meta-emotion philosophy within emotion socialisation theory (Eisenberg et al., 1998; Gottman et al., 1996; Saarni, 1999). Meta-emotion philosophy describes parents' overarching thoughts and feelings about emotions which are presumed to largely stem from their own emotional histories (likely from their parents or significant partners) (Gottman et al., 1996). Parents' meta-emotion philosophies are believed to determine four different emotion-related parenting styles, based on varying balances between empathising with emotions and supporting limit-setting and problem-solving (see Table 2 for a summary of these emotion communication parenting styles). First, a "laissez-faire" parenting style is characterised by freely accepting all emotional expressions from the child, without providing problem-solving or limit-setting. Second, a "dismissing" communication style describes parents who move too quickly to problem-solving or distracting without making space to validate and empathise feelings. Third, "disapproving" parenting styles involve criticising, judging and viewing emotions as a sign of weakness or manipulation. Finally, an "emotion coaching" style illustrates an appropriate balance of validating and making space for children's emotions, while also supporting them with appropriate problem-solving and limit-setting (Gottman et al., 1996; Gottman & DeClaire, 1997; Havighurst et al., 2025). Parental emotion coaching was theorised to lead to stronger emotional competence in children and less externalising and internalising difficulties (Eisenberg et al., 1998; Saarni, 1999). Gottman further proposed five key principles to encourage emotion coaching: (1) becoming aware of children's emotions; (2) recognising emotions as an opportunity for teaching and intimacy; (3) communicating empathy and understanding for children's emotions or validating emotions; (4) facilitating children to find words to verbally label their emotions; and (5) helping children set limits and problem-solve (Gottman & DeClaire, 1997).

Table 2

Emotion Communication Styles (adapted from Gottman, 2004)

	Emotionally Dismissive	Emotionally Disapproving	Laissez Faire	Emotion Coaching
Response to Emotions	Avoidant of emotions, use of distraction	Negative emotions criticised, judged, punished, or perceived as a weakness or manipulation.	Accepting of emotions, shows empathy towards emotions. May show own emotions but unable to resolve them.	All emotions are perceived as okay and healthy. Patient with children's emotional expression and use them as an opportunity to connect. Aware of own emotions
Use of Problem-Solving/Limit-Setting	Jump to problem-solving; "fix-it" response	Criticise/ punish emotions	Does not set appropriate limits or help children problem-solve. Allows the expression without guidance on regulation of behavioural limit setting.	Remains calm and help children problem-solve. All emotions perceived as okay, though not all behaviours.
Example	"You don't need to be sad, there's no reason for you to be unhappy, let's put a smile on"	"Stop crying! Do I need to get dad?"	"That's it, just let your feelings out. You can hit and kick the pillow over there"	"I can see you are feeling upset, I would feel upset too. We cannot hit people though, let's think together about what we can do when you feel this way"

By the early 2000s, one of the first manualised emotion-focused parenting programs – Tuning in to Kids (TIK; Havighurst et al., 2025) – was derived from this early work on emotion coaching principles and emotion socialisation theory. TIK applies principles from emotion socialisation theory to guide parents on how to improve their emotion socialisation behaviours to promote positive child emotional, behavioural, and social outcomes. TIK supports parents' emotional competence by encouraging adaptive modelling of emotional expression and supportive responses to children's emotions, while also building parents' skills to facilitate children's emotional learning and regulation. This occurs through both bottom-up emotion-regulation strategies for when parents are emotionally activated and have reduced access to executive functioning (e.g., deep breathing, sensory stimulation) and top-down cognitive strategies (e.g., re-appraisal of child behaviour, emotional acceptance). Early studies on TIK implementation have demonstrated increases in parents' emotional awareness, regulation, and coaching, as well as improvements in child externalising problems (Havighurst et al., 2010, 2013).

Since the early 2000s, several variants of TIK and other emotion-focused parenting programs (see Appendix A for further details on specific emotion-focused parenting programs) have emerged (Ansar et al., 2022; Havighurst et al., 2020; Katz et al., 2020; Shipman et al., 2025). These programs broadly are designed to focus on four main domains: parents' history of emotions and relational experiences (i.e., parents' past experiences shape their beliefs about emotions and responses to their children's emotions); parents' emotional competence (i.e., when parents have difficulty recognising and regulating their own emotions it increases their risk of providing non-supportive responses to their child); parents' responses when child emotions occur (i.e., when parents respond sensitively it facilitates adaptive emotion learning); and finally, parents' skills to guide their child in emotion coaching skills (i.e., top- and bottom-down approaches) (Havighurst et al., 2020). Emotion socialisation behaviours targeted within these programs have demonstrated significant relationships with both externalising and internalising problems, supporting the importance of integrating emotion socialisation principles into parenting interventions for the treatment of youth mental health problems (Johnson & Schoonenboom, 2016; Suveg et al., 2005). Notably, though the focus of these interventions for improving mental health outcomes are relatively new compared with behavioural programs that have dominated the field (Havighurst et al., 2020, 2025)

While attachment and emotion socialisation theories have been presented separately thus far, reflecting their distinct historical development, researchers have increasingly acknowledged the role attachment plays in emotion socialisation processes and vice versa. That is, how caregivers react to children's emotional cues is considered a component of sensitive caregiving associated with secure attachment. Similarly, teaching parents how to sit with their child's emotions using empathy and co-regulation can also facilitate secure attachment (Chen et al., 2012; Havighurst et al., 2025; Mikulincer & Shaver, 2012). Secure attachment also develops when parents effectively respond to children's distress, which requires higher emotion socialisation skills from parents, that, in turn, encourage children to seek parental support (Eisenberg, 2020). In contrast, children who are insecurely attached and have a history of rejective or nonresponsive caregiving are hypothesised to minimise or maximise their negative emotions during stressful events (Eisenberg, 2020). Additionally, several skills within attachment-based interventions such as caregiver sensitivity, and reflective functioning, rely on parents' capacity for emotion-regulation (Hajal & Paley, 2020). Both attachment- and emotion-focused parenting interventions focus on the integral role of co-regulation between parents and their children, looking beneath children's behaviour to identify the underlying emotional and psychological needs of the child.

In sum, attachment- and emotion-focused parenting interventions were initially developed to target caregiving behaviours and responses to children's emotional and attachment needs – factors now understood to be directly and indirectly associated with youth mental health problems. Thus, these theoretical approaches to parenting interventions did not originally target youth psychopathology as explicitly as behavioural parenting interventions targeted externalising problems. However, their focus on processes within the parent-child relationship – attachment security, caregiver sensitivity, and emotional competence – positions them as potentially valuable approaches for preventing and treating youth mental health difficulties.

Contemporary Implementation of Behavioural and Non-Behavioural Parenting Interventions

Currently behavioural parenting interventions arguably remain the dominant parenting model in the field specifically for the treatment of child externalising problems; however, non-behavioural parenting interventions, including both attachment- and emotion-focused parenting interventions, appear increasingly popular in research and practice (Coyne, 2013; Mingebach et al., 2018; Troutman, 2015). As detailed above, while these various approaches to parenting all recognise the importance of parenting and the parent-child relationship for youth psychological wellbeing, they have largely been independently designed and evaluated in the literature. Interestingly though, the topic of parenting is ever so relevant and at times controversial. Perhaps more recently, social media access has amplified competing views, enabling anyone to weigh in on "best parenting" approaches to foster child wellbeing. In particular, there has been contention about a shift away from behavioural parenting interventions towards non-behavioural approaches, particularly regarding time-out, despite this being counter to current available empirical evidence (e.g., Coyne, 2013; Dadds

& Tully, 2019; Morelli, 2014; Quetsch et al., 2015). While non-behavioural models are gaining traction, evidence for their effectiveness for youth mental health outcomes has received relatively less empirical attention. Furthermore, the comparative effectiveness of these two models of parenting appears to be largely missing in the literature. To champion evidence-based practice (EBP) and ensure youth and their families receive appropriate care, it is critical to have an accurate understanding of the empirical effectiveness, strengths, and challenges of each of the models of parenting interventions.

Strengths and Limitations of Behavioural Parenting Interventions

Behavioural parenting interventions are considered the most established evidence-based treatments for youth mental health problems, with the largest volume of research on the treatment of externalising problems such as oppositional, aggressive, and antisocial behaviour (Kazdin, 2008). These interventions have dominated the evidence-based literature for just over half a century. Numerous meta-analyses support the effects of behavioural parenting interventions on child externalising problems (e.g., see Kaminski & Claussen, 2017; Mingebach et al., 2018). Reviews also support their secondary improvements in internalising problems (Forehand et al., 2013; Zarakoviti et al., 2021), parenting practices (Tellegen & Sanders, 2014); and parent stress (Colalillo & Johnston, 2016). Evidence also extends to their application with children who have been exposed to trauma (Batzer et al., 2018; Warren et al., 2022). Finally, studies have identified parenting behaviours as key mediators of change (e.g., Forehand et al., 2013) and clarified moderators of treatment effectiveness (e.g., higher severity of externalising problems at baseline; McMahon et al., 2021).

While behavioural parenting interventions are considered an empirically-supported treatment, the literature has also acknowledged its limitations. A common criticism of behavioural parenting interventions (though not necessarily specific to just behavioural interventions) is their high drop-out and low attendance rates. Approximately, 26-40% of families do not complete these interventions (Chacko et al., 2016; Nock & Kazdin, 2005; Peters et al., 2005) and 25-33% of families do not benefit from behavioural parenting interventions (Scott & Dadds, 2009). Findings suggest a range of moderating variables that are associated with reduced benefits to these programs including lower socioeconomic status and lack of father engagement (Assemany & McIntosh, 2002). Therefore, behavioural parenting interventions are unlikely to be suitable for every family; and therefore, there is a need to explore different parenting support options for families.

In particular, the need for alternative options for parenting support also seem to be driven by perceptual barriers. Recently, there has been increasing criticisms related to behavioural parenting interventions, particularly related to its inclusion of time-out. Criticisms surrounding time-out typically relate to concerns that the strategy is harmful to children and could create long-term negative consequences for the child and/or the parent-child attachment relationship (Canning et al., 2021; Coyne, 2013; Quetsch et al., 2015). In particular, some practitioners may hold concerns that the short-term separation from a parent during time-out could trigger previous experiences of abandonment or other trauma-related reactions. Interestingly, drawing parallels to the aforementioned historical account of behavioural parenting interventions, some of the perceived criticism around time-out mirror the concerns of corporal punishment (Kaehler et al., 2016; Woodfield, Brodd, et al., 2021). Importantly, unlike when the use of physical discipline was being questioned, there is currently no empirical evidence demonstrating long-term psychological harm from appropriately implemented time-out in childhood (Knight et al., 2020; Larzelere et al., 2018; Morawska & Sanders, 2011). In fact, research shows, not only is it effective for improving child externalising problems (Chorpita & Daleiden, 2009; Larzelere et al., 2020), but it may also lead to improvements in attachment security (O'Connor et al., 2013). As time-out is considered a key component of effective behavioural parenting interventions for youth externalising problems (Barker & Hawes, 2024; Kaminski et al., 2024; Leijten, Gardner, et al., 2018), it appears that myths unsubstantiated by research are becoming widespread, and thereby should be addressed by researchers.

While it is not possible to be certain of where controversy on time-out began, many researchers seem to refer to a magazine article titled "Time-outs are hurting your child" (Siegel & Bryson, 2014). This article was written by an influential neuroscientist, Dr. Dan Siegel, who has written several popular parenting books on child brain development; however, notably the title of this article was reportedly chosen without Dr. Siegel's approval (Morelli, 2014). Within this article, it was discussed that brain imaging for a child experiencing relational pain – like that caused by rejection – looks similar to the experience of physical pain in terms of brain activity (Siegel & Bryson, 2014). Following this article, time-out has been inappropriately equated to the experience of child physical abuse despite the authors later releasing an article to negate this. In this article, Dr. Siegel clarified that when time-out is used appropriately, according to evidence-based parameters (discussed earlier in this chapter), then it is an effective and appropriate strategy (Morelli, 2014). The authors did note, however, that many parents use time-out inappropriately, mirroring available empirical studies on time-out implementation (Lawrence et al., 2021; McLean et al., 2022; Riley et al., 2017). Importantly, when time-out is implemented appropriately it leads to better treatment outcomes as well as parental acceptability (McLean et al., 2022; Riley et al., 2017). It is unsurprising that many parents inappropriately implement time-out, given that information available in non-academic resources largely contradict empirically-supported parameters of time-out. For example, in a review of 102 websites, Drayton and colleagues (2014) found that no website included accurate information about all empirically supported parameters of time-out implementation, and only one parameter (i.e., that time-out duration should be brief) was recommended by most websites. Similarly, Corralejo and colleagues (2018) reviewed websites, books, and parenting program manuals, finding inconsistent information regarding recommendations of appropriate time-out implementation. Thus, it seems both the term time-out and its procedure are often inconsistently understood and applied, potentially perpetuating criticisms of its use with children (Corralejo et al., 2018; Drayton et al., 2014). Overall, while the empirical evidence for time-out, and behavioural parenting interventions remain strong and dominant in the literature, some parents are incorrectly implementing time-out or choosing not to do so at all. Accordingly, while on one-hand these misconceptions require addressing, it is also important to deepen understanding of alternative parenting approaches for families of youth mental health problems.

Strengths and Limitations of Non-Behavioural Parenting Interventions

As discussed earlier, non-behavioural parenting interventions have been building momentum as a potential alternative to behavioural approaches to respond to child dysregulated emotion or behaviour. Attachment- and emotion-focused parenting interventions have been extensively researched in the literature, particularly in the context of children in out-of-home care and/or with children who have experienced maltreatment or disruptions to their attachment relationship (Havighurst et al., 2021; Kerr & Cossar, 2014; Tarabulsy et al., 2008). These interventions have demonstrated improvements in child attachment security, caregiver sensitivity, and emotional competence in parents and children (Bakermans-Kranenburg et al., 2003; England-Mason et al., 2023). Notably, the outcomes targeted by non-behavioural parenting interventions are associated with reduced youth externalising and internalising problems (Dejko–Wańczyk et al., 2020; Groh et al., 2017; Johnson et al., 2017), which may explain the increasing examination of their therapeutic effects for youth mental health outcomes. RCTs examining attachment- and emotion-focused parenting interventions have found improvements in both externalising and internalising problems (Baker et al., 2015; Wilson et al., 2012). However, other studies have failed to find significant improvements in these outcomes (Cassidy et al., 2017; Van Doesum et al., 2008). Thus, while some studies report improvements in youth mental health problems, the evidence is inconsistent and limited. Importantly, without meta-analytic evidence of head-to-head-trials, the effectiveness of non-behavioural parenting interventions for youth mental health problems cannot be ascertained.

Attachment- and emotion-focused parenting interventions are often absent in existing reviews measuring youth mental health problems (Buchanan-Pascall et al., 2018; Kaminski &

Claussen, 2017; Mingebach et al., 2018; Tully & Hunt, 2016). For example, Kaminski and Claussen (2017) conducted a high-quality systematic review of psychosocial treatments for children aged 12 and younger. They pooled 64 RCTs and concluded that individual behavioural parenting interventions showed the most support for reducing child externalising problems; however, no attachment-based interventions, and only one emotion-focused parenting intervention (i.e., TIK) were included. Therefore, initial conclusions could suggest behavioural parenting interventions are superior, though close examination of study design shows that the relative effectiveness of attachment- and emotion-focused parenting interventions remains understudied (Kaminski & Claussen, 2017). Similarly, another meta-analysis that explicitly reported comparing behavioural and non-behavioural parenting interventions did not include any interventions grounded in attachment theory or emotion socialisation theory (Lundahl et al., 2006). Thus, the pooled effectiveness of parenting interventions grounded in attachment or emotion socialisation theory for youth externalising and internalising problems is unknown.

It is possible attachment- and emotion-focused parenting interventions are often excluded from reviews due to eligibility criteria for study design, participant type, and outcome measures. For study design, most parenting intervention reviews include RCTs only (e.g., Tully & Hunt, 2016), which, while considered higher quality, may result in the exclusion of attachment-and emotion-focused parenting interventions. This is because several of these interventions have been developed and broadly implemented in community settings, outside the typical experimental settings in which many behavioural programs were initially tested (e.g., Moretti & Obsuth, 2009). Attachment-and emotion-focused parenting interventions may also be excluded from reviews based on participant eligibility, as many of their programs were initially designed for children in out-of-home care, or children with insecure attachment and trauma histories (e.g., Dozier et al., 2005; Slade et al., 2018). These intervention and participant variables are often reserved for intervention-specific or population-specific reviews rather than broad mental health review papers (e.g., Lindstrom Johnson et al., 2018; Liu et al., 2024). In particular, some of these interventions are aimed at infants and toddlers who may not yet be displaying symptoms of internalising and externalising difficulties. Finally, since many attachment- and emotion-focused parenting interventions were not primarily developed to target youth externalising and internalising problems, these outcomes have likely not been routinely measured at baseline. Whereas often meta-analyses examining youth mental health outcomes, will often require clinically significant elevations of symptoms at baseline (e.g., Bloss et al., 2022). This is particularly distinct to behavioural parenting interventions, which have a longer history with their measurement tools and outcomes (e.g., externalising problems) aligning with their theoretical focus and intervention targets and potentially introducing method variance bias. All up, attachment- and emotion-focused parenting interventions have notable strengths in the literature, and important implications for youth wellbeing, though research on their effectiveness for the treatment of youth mental health problems requires more research attention, including their relative effectiveness compared with behavioural parenting interventions.

Summary

In summary, youth mental health problems are prevalent and cause significant burden on individuals and society, requiring effective treatment. Parenting and the parent-child relationship is considered one of the most proximal and modifiable targets to facilitate child socio-emotional wellbeing, including reducing youth mental health outcomes. Most notably, this chapter has described three distinct theoretical approaches to parenting which acknowledges the crucial role of the parent-child relationship. Namely, behavioural parenting interventions, based on social learning theory, and non-behavioural parenting interventions informed by attachment theory and emotion socialisation theory. While these interventions share the aim of strengthening the parent-child relationship and improving child wellbeing outcomes, they developed along different pathways, with different treatment targets and mechanisms. These interventions have been designed and evaluated by different research groups, which may explain why not much research attention has been placed on their comparative or complementary effects on youth mental health problems.

Behavioural parenting interventions have long dominated the literature regarding the treatment of child externalising problems, though these interventions may not be effective or preferable by all families. Meanwhile, non-behavioural parenting interventions are becoming increasingly popular; however, no systematic review or meta-analysis has examined how these interventions compare to behavioural parenting interventions for the treatment of youth mental health problems. Or even more surprisingly, no systematic review or meta-analysis has examined whether attachment- and emotion-focused parenting interventions are effective for treating youth mental health problems at all. Considering these points, reviewing the current background literature on behavioural and non-behavioural parenting interventions highlighted the first two research gaps which were addressed in this thesis. Firstly, the need for a synthesis of the effectiveness of attachment- and emotion-focused parenting interventions for youth mental health problems. Secondly, the importance of examining the relative effectiveness of behavioural and non-behavioural parenting interventions for youth externalising and internalising problems.

Chapter 2: Practitioners' Acceptability of Behavioural and Non-Behavioural Parenting Interventions

While understanding the effectiveness of parenting interventions is essential for improving youth mental health problems; studying solely what works does not capture the entire picture. Strong research evidence for program effectiveness does not automatically translate into widespread implementation or sustained use in real-world settings. Instead, there is a need to understand other factors that influence successful implementation of an intervention. Implementation science – the scientific study of methods to promote systemic uptake of research findings in routine practice (Bauer et al., 2015) – has addressed challenges in effectively transporting empirically-supported treatments to community settings. These challenges include factors associated with the intervention, provider, and broader societal and structural influences. Implementation science is an emerging field that aims to improve EBP in routine-care settings by identifying and evaluating factors influencing implementation, then developing strategies to overcome barriers and capitalise on facilitators (Kirchner et al., 2020). EBP is considered a model to help bridge the science-practice gap by encouraging psychologists to consider the best available empirically-supported treatment in the context of their own expertise, and the preferences and values of their clients (Lilienfeld et al., 2013). It has been increasingly acknowledged that providers' "acceptability" is a critical and modifiable construct in bridging the gap between research evidence and practice implementation worth further investigation (Bauer et al., 2015; Proctor et al., 2009, 2011, 2023; Sekhon et al., 2017).

Defining and Measuring Acceptability

Acceptability is defined as stakeholders' perceptions that an intervention is "agreeable, palatable, or satisfactory" (Proctor et al., 2011, p67). Acceptability is considered one of eight conceptually distinct implementation outcomes within the broader field of implementation science (see Proctor et al., 2011 for a description of all outcomes). Acceptability is distinct from service satisfaction, such that it is specific to a particular treatment (or set of treatments) and can be measured from the perspective of various stakeholders, including providers, consumers, organisations, and administrators. It is considered a dynamic construct that can change at different stages of implementation (Proctor et al., 2011). Acceptability, according to some researchers can be broken down into the following domains: affective attitude (i.e., feelings towards an intervention), burden (i.e., the perceived effort required by intervention), perceived effectiveness (i.e., extent to which the intervention is perceived as likely to achieve its intended purpose); ethicality (i.e., fit with personal value system); intervention coherence (i.e., understanding of how the intervention works); opportunity costs (i.e., benefits given up to engage in an intervention); and self-efficacy (i.e., confidence to deliver/participate in an intervention) (Sekhon et al., 2017). Acceptability domains have recently become more regularly included as measures of implementation outcomes of empirically-supported treatments (Proctor et al., 2023). Lack of acceptability from stakeholders is linked to underutilisation and/or reduced fidelity of empirically-supported treatments, which can in turn lead to lower intervention effectiveness for youth mental health outcomes (Novins et al., 2013; Sekhon et al., 2017). Accordingly, acceptability has increasingly become a key consideration in the design, evaluation, and implementation of healthcare interventions, and is required from both intervention providers (e.g., practitioners), and recipients (e.g., youth, parents) (Sekhon et al., 2017).

Provider and recipient acceptability can be measured through quantitative and/or qualitative methods. Typically, quantitative methods involve questionnaire or rating scales to assess the anticipated and/or experienced acceptability of intervention recipients or providers. Whereas qualitative design typically involves semi-structured interviews with individuals or focus groups to better understand more nuanced and richer meaning ascribed to participants' experiences (Bauer et al., 2015; Manning & Kunkel, 2014; Sekhon et al., 2017).

Measuring Acceptability Quantitatively

Traditionally, quantitative approaches have been favoured by mental health researchers. These approaches are considered advantageous as they are designed to test clear a priori hypotheses and identify overall trends and frequencies of large groups (Al-Busaidi, 2008; Allen et al., 2024). Quantitative approaches are considered reliable, reproducible, generalisable, and less susceptible to researcher bias relative to other research methods. Quantitative measures of acceptability typically rely on survey designs to achieve efficient, low cost, and large scale-investigations of acceptability, allowing for statistical analysis (Aarons, Miller, et al., 2012; Al-Busaidi, 2008). Several published studies have measured stakeholder acceptability of evidence-based interventions through survey-based designs (Becker et al., 2004; Mejia et al., 2015; Riley et al., 2017). While quantitative methods are valuable and critical to the field of implementation science, they may miss rich contextual information needed to understand how and why interventions work in usual care conditions. Consequently, qualitative research has been growing in recognition, value, and prevalence in published studies (Allen et al., 2024; Thelwall & Nevill, 2021).

Measuring Acceptability Qualitatively

Qualitative design, though relatively new within the field of implementation science and mental health, is gaining increasing respect and recognition as a key tool within EBP, as it sheds light on nuanced details that quantitative methods may overlook (Levitt, 2015). Qualitative research explores individual and group subjective experiences through an iterative process of analysing non-numerical data to improve the understanding of the scientific community. Qualitative design is particularly well placed to explore nuanced psychological factors in depth, allowing for a full range of experiences and affect, rather than limiting participants' experiences to a set of pre-determined questions and responses (Al-Busaidi, 2008; Cleyle & Booth, 2006). This design is used to describe, decode, translate, and otherwise find meaning (rather than frequency) of naturally occurring phenomena within context. It also has capacity to bring light to minority voices that may otherwise be erased in quantitative research that focuses on average experiences. This increases exploration of how the same intervention can be experienced differently (Levitt, 2015). Qualitative design is becoming an increasingly popular method to measure practitioner-level factors, including understanding facilitators and barriers of empirically-supported treatments. The success or failure of empirically-supported treatments depends on understanding the factors impacting stakeholders' decision-making. These designs can be used to not only understand stakeholders' intervention experiences, but also to identify potential improvements, providing valuable problem-solving power (Allen et al., 2024)

Qualitative instruments can include observations, analyses of documents, focus groups, and individual interviews. Individual interviews, particularly semi-structured interviews, are most common as they provide a structure while maintaining flexibility for open-ended questions to explore practitioner experiences and attitudes. Relative to qualitative designs such as focus groups, interviews allow for greater access to stakeholders' sensitive, private, and internal experiences (Ayala & Elder, 2011). This technique also allows for analysis of richer and unanticipated data (Al-Busaidi, 2008). This is because qualitative designs can adopt an inductive (bottom-up) or deductive (top-down) approach, or a combination of the two. This is distinct from a primarily deductive quantitative approach, as there is not necessarily clear hypothesis testing, and some level of openness and exploration is assumed (Al-Busaidi, 2008; Braun & Clarke, 2021).

Qualitative approaches are particularly diverse, complex, and nuanced, and are considered transferable to clinical practice. However, these methods can also be more time consuming to conduct and analyse (Al-Busaidi, 2008). Furthermore, some researchers critique these approaches for not being generalisable or lacking consensus around design standards (Holloway & Todres, 2003).

This has led to qualitative studies frequently being rejected from journals despite them often being the most impactful or viewed articles (Allen et al., 2024). Importantly, this section has highlighted the strengths of qualitative design, not to detract from the value of quantitative design but rather to show how qualitative findings can complement quantitative findings.

Measuring Acceptability through Quantitative and Qualitative Methods

A mixture of qualitative and quantitative methods for the field of implementation science is important to develop a better scientific base for understanding the acceptability of health interventions (Aarons, Fettes, et al., 2012; Wasti et al., 2022). Researchers have suggested that including both quantitative and qualitative designs are particularly critical for implementation studies in mental health to better understand potential facilitators and barriers. Using quantitative methods such as structured surveys on provider attitudes can efficiently reach a larger number of participants and provide overall statistical trends and mean scores. Whereas qualitative research can deepen the understanding and meaning of the variability that makes up the confidence intervals around those mean scores. Qualitative research can be a valuable source of insight into individual experiences and perspectives that may help illustrate why there is a gap between what the research demonstrates as effective, and what may be used in routine practice. The combination of the two can help provide a better, deeper, and fuller picture to enhance understanding of a topic which could in turn potentially facilitate closing the science-practice gap (Aarons, Fettes, et al., 2012; Wasti et al., 2022). While qualitative and quantitative approaches were historically viewed as independent and opposites, their complementary nature has been increasingly recognised. Neither approach is superior as both have their own challenges and strengths, and are necessary to provide an understanding of phenomena (Al-Busaidi, 2008). Thus, both quantitative and qualitative methods are well placed to measure the acceptability of evidence-based interventions for youth mental health problems.

Measuring Acceptability at the Provider Level

In addition to different methods of measurement**,** acceptability can be measured by different stakeholders. Various stakeholder perspectives provide insight into facilitators or barriers of an intervention across different levels including, systematic/organisation, client/recipient, and provider levels (Lilienfeld et al., 2013). A recent scoping review of manuscripts looking at implementation outcomes suggested that while greater than half of the included manuscripts looked at acceptability outcomes, this research was typically aimed at parents and youth (i.e., the recipients of an intervention only) (Proctor et al., 2023). Interestingly, the review found that only 1.4% of manuscripts measured acceptability in practitioners, illustrating a critical area for further research attention (Proctor et al., 2023).

Engaging practitioners when measuring implementation outcomes, particularly acceptability, is crucial to ensure effective delivery of empirically-supported treatments. The existing empirical research suggests several provider-level barriers to successful implementation of empirically-supported treatments, particularly related to components of acceptability such as affective experiences, ethicality, intervention coherence, and self-efficacy (Lilienfeld et al., 2013, 2015). Researchers suggest that a limitation in the field is the assumption that clinicians behave as rational decision-makers and always implement empirically-supported treatments as they are designed (Beidas et al., 2021). Rather, in clinical practice, practitioners often adapt or completely omit evidence-based interventions, creating a research-practice gap (Becker-Haimes et al., 2022; Beidas et al., 2021; Deacon et al., 2013).

Implementation literature focusing on providers has predominantly emphasised examining training and fidelity monitoring – typically conducted by intervention developers – to improve successful implementation and narrow research-practice gaps (Novins et al., 2013). However, several studies have indicated that training alone cannot explain unsuccessful implementation (Frank et al., 2020; Novins et al., 2013). There is some support that while didactic training and reading manuals typically fail to improve implementation; active and experiential training methods with ongoing supervision produce more positive implementation outcomes (Frank, Becker-Haimes, & Kendall, 2020; Herschell et al., 2010; Novins et al., 2013).

In addition to training variables, the implementation field has acknowledged the importance of practitioners' attitudes, particularly towards EBP. Practitioners' negative attitudes towards EBP adversely impacts their use of EBP and empirically-supported treatments (Hamill & Wiener, 2018; Lilienfeld et al., 2013, 2015; Pagoto et al., 2007). Although practitioners generally hold positive attitudes towards EBP, certain beliefs – such as the belief that empirically-supported treatments lack real-world generalisability – are associated with reduced implementation and acceptance of EBP (Lilienfeld et al., 2013). Furthermore, practitioners' affective experiences are also hypothesised to play a role in their use of EBP and empirically-supported treatments. Practitioners are often more likely to trust their own "gut sense" relative to research evidence (Lilienfeld et al., 2015) and some researchers suggest this can be particularly true for empirically-supported treatments that can evoke emotional distress. Becker-Haimes and colleagues (2022) argue that some empirically-supported treatments can cause emotional distress for practitioners which can contribute to a cycle of maladaptive anxious avoidance and suboptimal implementation of these treatments. An exemplar of this in the literature is exposure therapy (Becker-Haimes et al., 2022; Mulkens et al., 2018). Exposure therapy is an empirically-supported technique within cognitive behavioural therapy models for individuals with PTSD or anxiety (Parker et al., 2018; Powers et al., 2010). Despite being considered the gold-standard, practitioners can underestimate the influence of their own anxiety when implementing exposure therapy and instead rely on less effective techniques (Becker-Haimes et al., 2022; Mulkens et al., 2018). For example, in a sample of 217 psychologists working with PTSD clients, 83% did not use exposure therapy with their clients (Becker et al., 2004). While psychologists formally trained in exposure therapy were more likely to report current use, they represented only a small minority of the sample, suggesting that training alone cannot account for the full picture (Becker et al., 2004). Instead, practitioners' affective attitudes may explain the reduced use and controversy surrounding the strategy. Notably, exposure therapy has received harsh criticisms and been attributed to physical pain including in a *New York Times* article titled "The cruellest cure" (Olatunji et al., 2009; Slater, 2003). Clearly, the current knowledge base on empirically-supported treatments, effectiveness findings, and training support is insufficient to ensure delivery of effective treatment. It is also unrealistic to assume practitioners will systematically implement evidence-based manualised treatment with their clients, unaffected by their own affective attitudes or values. Thus, measuring acceptability at the provider level is crucial to successful implementation of evidence-based interventions. This is particularly important when it is concerning the successful treatment of youth mental health problems, given the known negative consequences of leaving these presentations untreated.

Review of Existing Acceptability Research on Behavioural and Non-Behavioural Parenting Interventions

Research investigating acceptability outcomes for parenting interventions has typically ignored the providers' perspectives and focused primarily on parents as the target stakeholders. Studies examining parent acceptability of behavioural parenting interventions broadly find that parents value these interventions and find them acceptable (Butler et al., 2020). Interestingly, a systematic review of qualitative literature suggests that parents often indicate greater acceptability for positive attention strategies typically included in the first phase of behavioural parenting interventions relative to strategies included in the second phase, particularly time-out (Butler et al., 2020). Recent studies with parent populations have specifically focused on the time-out context (Canning et al., 2021; Drayton et al., 2017; McLean et al., 2022; Riley et al., 2017). For example, a sample of 297 parents of 3-to-8-year-olds in Australia completed a questionnaire on their use and acceptability of time-out (Canning et al., 2021). Results indicated that approximately 72% of parents had used time-out, with 58% of the sample considered current time-out users. Within this study, 17 parents who reported not using time-out were engaged in follow-up qualitative interviews to better understand their reasons for not using time-out. Parents reasons for not using time-out was most often around the belief that time-out was harmful or ineffective. Furthermore, some parents believed that science had proven time-out was harmful and ineffective, and that practitioners who used time-out are “lagging behind” the research. Parents also described seeking out practitioners that suggested advice that was consistent with their pre-existing attitudes, values, and general parenting philosophies (Canning et al., 2021). This study showed the impact of parents’ perceptions of a strategy on its implementation outcomes, as well as a clear gap between research and practice that could be influenced by the parent-practitioner relationship. The study suggested that empirical findings in favour of effectiveness of an intervention is insufficient to ensure families are receiving and implementing evidence-based parenting advice. Similar results were found in a larger community sample of 474 parents of 6- to 8-year-olds in Australia (McLean et al., 2022). This study found that greater than 70% of the sample had used time-out, and approximately 60% reported current use of the procedure. Again, the main reasons for not using time-out were preferences for an alternative strategies, or believing time-out was harmful or ineffective. Interestingly, the researchers further found that most parents were not using “appropriate time-out” (i.e., time-out according to the evidence-based parameters described in Chapter 1). Reduced use of appropriate time-out was in turn associated with reduced improvements in child behavioural outcomes and positive parenting practices (McLean et al., 2022). These two studies suggest that while most Australian parents are still using the evidence-based strategy, many are using it ineffectively, which is similar to U.S. samples of parents (Riley et al., 2017). Furthermore, some parents have inaccurate beliefs around the strategy, both of which impacts successful implementation, requiring a greater look at sources of misinformation and other stakeholders involved in the successful implementation of parenting interventions.

Practitioners’ Acceptability of Parenting Interventions

Parents are only one stakeholder involved in the successful implementation of evidence-based parenting interventions. For families to receive evidence-based care, the stakeholders providing parenting interventions for families also need to find them acceptable. The parent-practitioner relationship is central to the successful implementation of any parenting intervention, yet until recently this relationship, and practitioners’ perspectives of parenting interventions have been overlooked. Only in the last decade have qualitative and quantitative methods emerged for studying practitioners’ acceptability of parenting interventions.

Current research with providers of behavioural parenting interventions suggests that broadly there is support for its general acceptability (Christian et al., 2014; Mejia et al., 2015; Niec et al., 2018; Shapiro et al., 2015). Interestingly, some preliminary findings suggest practitioners' views may reflect parent views, such that there seems to be greater acceptability for strategies included in the first phase of parenting interventions relative to the second. For example, in a survey with 80 practitioners in Panama trained in Triple P (Sanders, 1999), practitioners found the program useful and culturally acceptable. However, on average practitioners rated strategies to manage misbehaviour less favourably than those encouraging desirable behaviours (Mejia et al., 2015). Similarly, in a cross-sectional online survey with 76 practitioners trained in PCIT living in Australia or New Zealand, practitioners often perceived that they had fewer skills, confidence, and knowledge related to the second phase of behavioural parenting interventions. Furthermore, 38% of the sample reported adapting PCIT, primarily by adding an emotion coaching component or removing time-out. These researchers found that while time-out concerns were present amongst practitioners trained in PCIT, they were not common, and practitioners overall rated the program as acceptable and effective (Woodfield, Cargo, et al., 2021). Hence, at this stage there is some evidence that practitioners largely accept behavioural parenting interventions, though there may be some concerns around strategies used for managing misbehaviour, particularly time-out; both of which require further investigation.

Given time-out is often introduced within the context of the practitioner-parent relationship, practitioners' own level of comfort with their clients' distress could influence their willingness to implement time-out. Hence, it is imperative to understand practitioners' underlying attitudes and affective experiences with time-out and behavioural parenting interventions. This is particularly true, given research already suggests that other empirically-supported treatments like exposure therapy can create initial distress in the room that impedes utilisation of the approach even when a practitioner is trained in it. Time-out and exposure therapy have similarly received harsh criticisms in media pieces and been attributed to physical pain (Morelli, 2014; Olatunji et al., 2009; Quetsch et al., 2015; Slater, 2003) despite their strong empirical bases. It is possible, then, that similar implementation patterns may occur in the community for time-out, whereby practitioners trained in time-out are reluctant to use the strategy due to the initial anticipated or actual distress it may create for clients or themselves. However, there is no empirical evidence that has specifically investigated the use and acceptability of time-out amongst practitioners working in the community, outside of the scope of specific parenting programs.

Published literature investigating implementation outcomes typically focus on the implementation of a single evidence-based intervention, failing to capture the reality of systems that typically implement the delivery of multiple interventions (Proctor et al., 2023). These studies are often conducted by program evaluators or trainers with vested interests in the successful implementation of the program. This also overlooks the fact that often practitioners in the community are trained in multiple parenting interventions. For example, in the aforementioned study on PCIT, the researchers found that the PCIT-trained practitioners were also trained in a variety of intervention packages which at times were not theoretically consistent. At times this meant practitioners were trained in interventions that could be considered incompatible with PCIT, such as interventions that exclusively focused on positive strategies rather than using time-out. This could mean that some families are not receiving evidence-based care or point towards further areas of research to better understand alternative models of interventions. These authors noted the importance of future research exploring the possibility that practitioners could be integrating components of several parenting interventions in their work, and would be beneficial to understand how this influences their overall decision-making when working with children and families (Woodfield et al., 2020). Given this context, while understanding the program-specific facilitators and barriers to successful implementation is helpful, clinical applicability requires considering how these individual parenting programs fit within practitioners' broader treatment repertoire.

The existing studies looking at acceptability of behavioural parenting interventions have found some preference for the inclusion of non-behavioural interventions such as emotion coaching, or exclusive positive parenting (i.e., approaches that oppose disciplinary consequences such as time-out or removing privileges; Larzelere et al., 2020). However, much less attention has been placed on attachment- and emotion-focused parenting interventions from a practitioner perspective. A few recent studies have generally suggested that practitioners perceive these interventions as effective, relevant, and generalisable, though also unsuitable for some parents. For example, studies suggested that sometimes the concepts within these programs were too complex for parents, or the parents did not have capacity for self-reflection needed to engage in the program (Cooper & Coyne, 2020; McMahon et al., 2016; Reay et al., 2019). Interestingly, most studies on attachment- and emotion-focused parenting interventions with practitioners utilise qualitative methods, though like behavioural parenting programs, they focus on a single parenting program, typically conducted by program developers or facilitators. When studies are conducted by program developers or facilitators, there may be a bias for participants to be more positive towards the intervention. So again, it is important to understand how practitioners trained in various parenting programs, including both behavioural and non-behavioural parenting interventions, are using these programs with families in the community. Moreover, it would be helpful to understand if there are common facilitators or barriers to implementation of behavioural and non-behavioural parenting interventions according to the practitioner perspective.

A systematic review of 13 qualitative studies in routine practice settings of single parenting programs including Triple P, COS, and PCIT, found some patterns of consistent facilitators and barriers regardless of theoretical approach (Cooper et al., 2022). Identified barriers included systemic factors (e.g., funding and resources), program factors (e.g., flexibility), post-training support and supervision, and practitioner factors. Practitioner factors specifically related to skill proficiency, self-efficacy, and perceived fit between the parenting program and their personal or organisational values. According to this review, practitioners may be more likely to accept and implement a parenting program that they feel more comfortable with, perceive as aligned with their values, and believe will benefit their target client population (Cooper et al., 2022). It would be interesting to better identify the nuanced details of how these factors may be commonly or differentially influencing practitioners' use of behavioural and non-behavioural parenting interventions.

Collectively, there is no empirical support for practitioners' acceptability of time-out, or behavioural and non-behavioural parenting interventions amongst community practitioners who may be trained in multiple programs and adopt different theoretical approaches. Without a better understanding of the practitioner role in the implementation of parenting interventions, an important puzzle piece is missing that could be impacting the successful implementation of these interventions. In turn this may be negatively impacting the effective treatment of youth mental health problems. There is a need to investigate how these two intervention approaches are perceived by practitioners in real-world settings, not to pit the two against one another, but rather to ensure that families are receiving a range of safe and effective techniques to manage their child's mental health. Different children are likely to require different responses from their parents; where an attachment-based approach may be needed for one child, a behavioural approach may be better for another, particularly when considering broader cultural influences and values of clients. At this stage, much of the controversy suggests a perceived dissonance between these paradigms that may be creating misconceptions of empirically-supported treatments among the community that is unhelpful to the successful treatment of youth mental health problems. Furthermore, how the two approaches may integrate or share common goals has received less attention than the polarising views (Coyne, 2013; Troutman, 2015).

Summary

In sum, investigating effectiveness alone is insufficient to ensure the successful implementation of parenting interventions, and instead stakeholder acceptability is a critical implementation outcome to investigate further. Provider perspectives are often missing from implementation research, despite it becoming increasingly apparent that they have a vital role in successful implementation of parenting interventions. Many media and opinion pieces have suspected a possible polarisation between behavioural and non-behavioural parenting interventions, with some suggesting a shift towards attachment- and emotion-focused parenting interventions (Coyne, 2013; Troutman, 2015). However, currently there is not empirical evidence to support this conclusion. At this stage, there are some studies that broadly suggest acceptability of both behavioural and non-behavioural parenting interventions, with minimal evidence suggesting some practitioners may favour positive parenting techniques rather than limit-setting techniques such as time-out. Regardless, there is a need to seek clarity around practitioners' perspectives of these interventions and their nuanced reasons behind it.

Both qualitative and quantitative techniques to measure practitioners' acceptability are likely to be beneficial for understanding general patterns occurring in the community while also understanding the detailed reasons behind these patterns, including perspectives from practitioners who may hold minority views. This practitioner perspective is crucial to consider since practitioners are typically perceived as experts and are often the primary gatekeepers for families accessing evidence-based parenting interventions. Practitioners' perspectives are needed for both behavioural and non-behavioural parenting interventions. In particular, the acceptability of time-out for the treatment of child conduct problems needs to be better understood. Further, given the growing interest in non-behavioural programs, there is a need to understand the overall acceptability of these approaches and how they may compare to behavioural parenting programs more broadly. Finally, it is important that these perspectives are drawn from a more diverse sample of community practitioners, trained in a broader range of parenting interventions, to better capture the ecological validity of parenting interventions.

In conclusion, this chapter identified two further gaps in the literature that this thesis addresses. Firstly, the need for empirical studies directly examining practitioners' acceptability of time-out in real-world settings. Second, the importance of practitioners' relative acceptability of behavioural and non-behavioural parenting interventions outside the scope of a particular branded parenting intervention.

Chapter 3: Overarching Gaps in the Literature and Thesis Aims

Left untreated, youth mental health problems have lasting effects on the individual, their family, and broader systems, compelling the need for early intervention. The importance of targeting these problems is not new; yet treatment effect sizes have not improved over the past 60 years, suggesting a continued need to concentrate research efforts in this area. It is widely recognised that targeting youth mental health problems through parents offers the greatest likelihood of generalised and lasting change. However, how youth mental health problems are understood to have developed, maintained, and be treated vary across theoretical perspectives of parenting interventions.

Behavioural parenting interventions have historically been the treatment of choice for targeting child mental health problems, specifically, externalising problems in children. These interventions rely on the assumption that conduct problems are developed and maintained through coercive parent-child reinforcement traps and hence, aim to break these cycles by shifting parents' attention from undesirable behaviours towards desirable behaviours (McMahon & Pasalich, 2018). Decades of empirical support have confirmed their effectiveness for externalising problems (Hudson et al., 2023; Kaminski et al., 2024); and meta-analytic findings have also demonstrated secondary improvements in youth internalising problems (Bloss et al., 2022), parenting practices (Sanders et al., 2014), and parent stress (Colalillo & Johnston, 2016). Furthermore, results from systematic reviews suggest support for their use with children who have been exposed to trauma (Batzer et al., 2018; Warren et al., 2022). Nevertheless, these interventions are not suitable for every family, often drawing high attrition rates. Additionally, behavioural parenting interventions have attracted recent criticism, particularly concerning time-out, despite a lack of empirical support for these criticisms. This has coincided with speculation of a possible paradigm shift towards non-behavioural parenting interventions, namely attachment- and emotion-focused parenting interventions.

Attachment- and emotion-focused parenting interventions aim to help parents look beneath their child's behaviour to identity underlying emotional and psychological needs of the child and appropriately respond. These interventions can effectively improve child attachment security, caregiver sensitivity, and emotional competence in children and parents (Bakermans-Kranenburg et al., 2003; England-Mason et al., 2023); which are in turn associated with reduced youth externalising and internalising problems (Dejko–Wańczyk et al., 2020; Groh et al., 2017; Johnson et al., 2017). However, limited research attention has been placed on these parenting interventions in the context of treating mental health problems. Furthermore, the comparative advantages of the effectiveness and acceptability between behavioural and non-behavioural parenting interventions within the context of youth mental health problems remains understudied. It is possible there is a measurement bias favouring behavioural parenting interventions due to their longer history in the literature rather than necessarily clinical superiority; however, this remains an empirical question.

In reviewing the literature, this thesis identified three important gaps surrounding the effectiveness and acceptability of behavioural and non-behavioural parenting interventions. First, a quantitative synthesis of attachment- and emotion-focused parenting interventions for the treatment of youth mental health problems is missing. While attachment- and emotion-focused parenting interventions have notable strengths, they have not routinely targeted mental health outcomes, and existing controlled trials indicate mixed findings. Without systematic review and meta-analysis of attachment- and emotion-focused parenting interventions, their effectiveness for treating youth mental health problems is largely unknown, including their relative effectiveness to behavioural parenting interventions. If these non-behavioural parenting interventions are being routinely provided in youth mental health settings, it is imperative to understand whether these families are receiving evidence-based care. Furthermore, if both behavioural and non-behavioural parenting interventions are effective at improving youth mental health problems, this can allow families and practitioners greater flexibility and choice in treatment that aligns with practitioners' expertise and/or families' values in accordance with EBP.

The second important gap is empirical evidence on practitioners' use and acceptability of time-out. A major proposed barrier to the implementation of behavioural parenting interventions is the growing controversy surrounding the use of time-out with children and families. While it is well-established in the literature that time-out is an evidence-based procedure within behavioural parenting interventions (Kaminski et al., 2008; Leijten, Gardner, et al., 2018), there have been increasing concerns that the strategy is harmful to child development, and the parent-child attachment relationship. These concerns are highly sensitive and serious for the field of parenting interventions, requiring careful investigation. The limited existing research suggests broad acceptability of behavioural parenting interventions that include time-out, with some infrequent concerns around time-out. Importantly, this research has been conducted within the constraints of measuring implementation outcomes associated with single parenting interventions rather than looking at the use of time-out in routine practice with practitioners that could be trained in a range of parenting interventions. Therefore, it is important to understand how time-out is being perceived in everyday practice with practitioners who are often the gatekeepers of evidence-based information for families who are otherwise typically limited to non-evidence-based sources of time-out (e.g., Drayton et al., 2014). If practitioners are reluctant to use time-out in practice, it is important to better understand any factors associated with implementation, and what they may be using instead.

Hence, it is important not to only find out the contemporary context of practitioners' use and acceptance of time-out, but also any factors that may influence this. Finally, it would be helpful to better understand alternative interventions practitioners are using for the treatment of child conduct problems.

The third and final overarching gap is the relative acceptability of behavioural and non-behavioural parenting interventions amongst practitioners in clinical practice. There is conjecture that practitioners are moving away from behavioural approaches, perceived as "outdated," toward non-behavioural parenting approaches. However, practitioners' perspectives have largely been overlooked in implementation research. Preliminary evidence suggests general support for behavioural and non-behavioural approaches to parenting interventions, while noting some program-specific barriers. Notably, these studies are typically conducted by program developers or focused on a single parenting program, which while valuable for the implementation field, could encourage biased responses and/or miss how practitioners may integrate other programs they are trained in. Given many practitioners commonly take an eclectic approach in practice, it is also important to investigate parenting intervention acceptability within the context of practitioners' wider therapy repertoires. Understanding practitioners' implementation experiences within this context can support EBP by identifying common themes related to barriers or facilitators for successful implementation of evidence-based interventions. Thus, there is a need to measure practitioner acceptability of behavioural and non-behavioural parenting interventions in typical practice conditions for treating youth mental health problems. Particularly, there is a need for qualitative research to better understand the nuanced and rich reasons behind practitioners' implementation of parenting interventions.

Together this thesis outlines and intends to fill critical gaps in the effectiveness and acceptability of behavioural and non-behavioural parenting interventions for youth mental health problems. This thesis particularly emphasises the provider perspective in real-world settings, as their voices are often forgotten and yet play a key role in the successful implementation of evidence-based care. By considering different approaches to parenting interventions, this could offer families a range of evidence-based options that best suit their needs, preferences, and values overall aligning with an EBP model.

Thesis Aims

For parenting interventions to successfully be implemented in routine practice these interventions need to be both effective and acceptable. Therefore, this thesis overall aims to understand the effectiveness and acceptability of behavioural and non-behavioural parenting interventions for youth mental health problems. Specifically, this thesis asks the following key research question: "how do behavioural and non-behavioural (i.e., attachment- and emotion-focused) parenting interventions compare on: effectiveness in reducing youth externalising and internalising outcomes; and practitioner acceptability for use with youth and their families?”

Behavioural parenting interventions currently demonstrate clear effectiveness for treating youth mental health problems, particularly externalising problems; however, the effectiveness of attachment- and emotion-focused parenting interventions for these problems remains less established. Moreover, the relative effectiveness of these two approaches is unknown. Importantly, even with established effectiveness, successful implementation also depends on acceptability. There has been speculation of a potential paradigm shift away from behavioural approaches towards attachment- and emotion-focused approaches, particularly related to controversy around time-out. Yet, empirical findings on time-out acceptability and the relative acceptability of behavioural and non-behavioural parenting programs, remains limited, particularly from the provider perspective. Accordingly, the studies reported in this thesis have the following specific aims:

1. To measure the effectiveness of attachment- and emotion-focused parenting interventions for reducing youth mental health problems, including their relative effectiveness to behavioural parenting interventions.
2. To understand practitioners’ acceptability of time-out for the treatment of child conduct problems in real-world settings.
3. To explore potential factors involved in practitioners’ acceptability of behavioural and non-behavioural parenting interventions for youth mental health problems.

The above aims are addressed within three empirical studies across Chapters 4, 5, and 6 of this thesis. Chapter 4 comprises of a systematic review and meta-analysis of the effectiveness of attachment- and emotion-focused parenting interventions on youth externalising and internalising outcomes, including in comparison to behavioural parenting interventions. Chapter 5 describes a quantitative analysis of practitioners’ attitudes towards time-out for the treatment of child conduct problems using a questionnaire-based design. This study aims to better understand the contemporary use of the time-out procedure amongst practitioners in routine care settings unaffiliated with a particular program. It also explores factors associated with the use and acceptability of time-out, as well as alternatives to time-out that practitioners are using for the treatment of child conduct problems. Finally, Chapter 6 details a qualitative analysis aimed at understanding psychologists’ broader acceptability of behavioural and non-behavioural parenting interventions for youth mental health problems. This study considers themes on perceived barriers and facilitators to successful implementation of parenting interventions in clinical practice.

Collectively, the findings from these studies have the potential to inform evidence-based care for the treatment of youth mental health problems.

Introduction to Study 1

Study 1 aims to answer the first part of the overall thesis research question: how do behavioural and non-behavioural parenting interventions (i.e., attachment- and emotion-focused parenting interventions) compare in their effectiveness for reducing youth externalising and internalising problems? Through systematic review and meta-analysis, Study 1 aims to evaluate the effectiveness of attachment- and emotion-focused parenting interventions on youth externalising and internalising problems compared with waitlist comparators, behavioural parenting interventions, and other active comparators. Answering this initial question is important for filling a clear gap in the literature and informing whether attachment- and emotion-focused parenting interventions are an evidence-based approach to treating youth mental health problems. These findings have potential to provide practitioners with alternative treatment options for treating youth mental health problems to better suit the individual needs and preferences of families. It is critical to first establish that non-behavioural approaches to parenting interventions are effective for treating these problems before understanding how both behavioural and non-behavioural parenting interventions are received and implemented in real-world settings.

Note. Study 1 has been published in *Clinical Child and Family Review:*

Jugovac, S., O'Kearney, R., Hawes, D., & Pasalich, D. (2022). Attachment- and emotion-focused parenting interventions for child and adolescent externalizing and internalizing behaviors: A meta-analysis. *Clinical Child and Family Psychology Review, 25,* 754-733. https://doi.org/10.1007/s10567-022-00401-8

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Chapter 4: Attachment- and Emotion-Focused Parenting Interventions for Child and Adolescent Externalising and Internalising Problems: A Meta-Analysis

Attachment- and emotion-focused parenting interventions have grown in popularity as an alternative to behavioural parent interventions for youth. Attachment and emotion-focused parenting interventions go beneath behaviour by helping parents understand and respond to their child's underlying attachment and emotional needs. Past reviews have examined their effects on attachment security and caregiver sensitivity, though less is known regarding their effects on youth mental health symptoms. Reported here is the first systematic review and meta-analysis of individual and group attachment- and emotion-focused parenting interventions on externalising and internalising problems for children aged 0–18 years. A search of four databases prior to July 2021 elicited 43 studies that met eligibility criteria. Meta-analysis revealed that attachment- and emotion-focused parenting interventions were superior to waitlist controls for externalising ($SMD = -0.17$) and internalising problems ($SMD = -0.34$). Effects were sustained at follow-up periods of 6 months and greater, and attachment- and emotion-focused parenting interventions considered to target child mental health were significantly more effective than those that did not in reducing externalising and internalising problems. Two studies retrieved directly compared attachment- and emotion-focused parenting interventions to behavioural parenting interventions, which showed no evidence of a difference for follow-up measures of externalising problems. No studies compared attachment- and emotion-focused parenting interventions to behavioural parenting interventions on internalising problems. Attachment- and emotion-focused parenting interventions demonstrated no evidence of superiority compared to controls for parent mental health. Findings support the potential for attachment- and emotion-focused parenting interventions to reduce externalising and internalising problems in youth; however, future research should consider the relative effectiveness of attachment- and emotion-focused parenting interventions.

Introduction

Left untreated, child externalising problems (e.g., noncompliance, aggression) and internalising problems (e.g., anxiety, depression) can lead to significant adverse outcomes across development, including later mental health difficulties, reduced academic achievement, and unemployment (Clark et al., 2017; Goodman et al., 2011; Kim-Cohen et al., 2003). The quality of parenting and parent-child interactions are key risk factors linked to the development and maintenance of these problem behaviours and are modifiable through intervention. For example, reduced parental warmth and sensitivity are associated with both increased externalising (Hoeve et al., 2009) and internalising problems (McLeod, Weisz, et al., 2007; McLeod, Wood, et al., 2007). In this light, much research has focused on examining the effects of parenting interventions on youth externalising and internalising problems.

In the literature, parenting interventions are typically categorised as "behavioural" or "non-behavioural." Accordingly, we first review evidence on behavioural parenting interventions, and then review the growing literature on non-behavioural parenting interventions, with an emphasis on the subcategory of attachment- and emotion-focused parenting interventions. The latter provides the focus of this review, which aims to investigate the effectiveness of individual and group attachment- and emotion-focused parenting interventions on youth externalising and internalising problems compared to waitlist controls, behavioural parenting interventions, and other active comparators.

Behavioural Parenting Interventions

Behavioural parenting interventions have been the predominant model of parenting interventions since the 1960s. Behavioural parenting interventions derived from social learning theory, which stipulates that child behaviours are strengthened and weakened through parent reinforcers (Scott & Dadds, 2009). Externalising problems are thought to be maintained through coercive parent-child reinforcement traps, whereby a child and parent engages in aversive behaviours (e.g., yelling) until either person capitulates, ultimately reinforcing the other's aversive behaviour (Patterson, 1982). Behavioural parenting interventions aims to break coercive cycles by shifting parents' attention from children's problematic behaviours to their desirable behaviours through strategies such as praise, clear instructions, logical consequences, planned ignoring, and time-out from positive reinforcement (McMahon & Pasalich, 2018).

Examples of well-researched behavioural parenting programs include the following: HNC (McMahon & Forehand, 2003), IY (Webster-Stratton, 2005), and Triple P (Sanders, 1999). Behavioural parenting interventions are considered the gold-standard for treating externalising problems, with meta-analytic findings demonstrating its effectiveness across childhood (Kaminski & Claussen, 2017; Mingebach et al., 2018). While behavioural parenting interventions were not originally designed to directly target internalising problems, findings suggest that they may still be effective at reducing internalising problems for youth (Forehand et al., 2013; Zarakoviti et al., 2021)

Although behavioural parenting interventions effectively reduce externalising problems and to a lesser extent, decreases internalising problems, approximately 25 to 33% of children do not appear to benefit from these programs (Scott & Dadds, 2009), with high dropout and low attendance rates reported. For example, a review of behavioural parenting interventions found that 25% of eligible participants did not begin treatment, and 26% dropped out before completing treatment (Chacko et al., 2016). Research is limited on variables that may influence attrition in behavioural parenting programs, or produce barriers to positive treatment outcomes. Notwithstanding this, past findings suggest that baseline variables such as socioeconomic status, parent mental health, family history of trauma or attachment difficulties, and parent attributions may moderate the effect of behavioural parenting outcomes for families (Assemany & McIntosh, 2002; Havighurst et al., 2020; Maliken & Katz, 2013; Scott & Dadds, 2009). Notably, parent mental health problems have been shown to be a moderator of behavioural parenting intervention outcomes (Maliken & Katz, 2013). Accordingly, researchers have highlighted the need to focus on parents' understanding and management of their own emotions in addition to their child's (Havighurst et al., 2020), which is not a key focus in some behavioural parenting programs.

Another potential barrier to participation in or positive treatment outcomes for behavioural parenting interventions includes preference for an alternative theoretical model of intervention. Research in the general field of EBP with health professionals, including clinical psychologists, demonstrates that practitioners' preferred theoretical orientation is a significant barrier to implementation of empirically-supported treatments (Lilienfeld et al., 2013; Pagoto et al., 2007). With regard to behavioural parenting interventions, the use of time-out—i.e., a core component of behavioural parenting interventions, whereby a child is placed in a safe, neutral space for a brief period of time away from parent attention (Kaminski et al., 2008)—has been the source of ongoing debate among practitioners and researchers, with many parents and professionals re-evaluating its strengths and challenges [see Dadds and Tully (2019) for a recent review]. Moreover, a recent community-based study exploring why some parents prefer not to use time-out found that they favour alternative parenting strategies believed to value connection, "attachment," and co-regulation in the parent–child relationship (Canning et al., 2021). In summary, although behavioural parenting interventions have a substantial evidence base and are widely disseminated, there is a timely need to investigate the collective evidence for alternative models of parenting interventions targeting externalising and internalising problems that may be better suited to parents who prefer and value relational and emotion-oriented approaches to parenting.

Attachment- and Emotion-Focused Parenting Interventions

The most researched “non-behavioural” parenting interventions involve programs based on (1) attachment theory and (2) emotion socialisation theory, which are characterised by a focus on affective processes in the parent-child relationship and understanding the meaning of, and/or emotional needs underlying, child behaviour. According to attachment theory, a secure attachment develops when a caregiver sensitively responds to their child’s needs and the child can alleviate their distress by seeking proximity to the caregiver (Ainsworth et al., 1978; Bowlby, 1982). By contrast, when a caregiver inconsistently responds to their child’s needs, the child may develop an ambivalent attachment, which is characterised by an approach and resistance pattern of interaction with the caregiver when distressed. Children whose caregivers are consistently unresponsive to or rejecting of their needs are at risk of developing an avoidant attachment wherein they do not seek proximity to their caregiver when distressed (Ainsworth et al., 1978). Of most concern for the development of psychopathology, a disorganised attachment is evident in children who do not develop a coherent strategy to assuage their distress and is linked to fearful and frightening caregiving (Lyons-Ruth & Spielman, 2004).

Attachment-based interventions such as ABC (Dozier et al., 2011) and COS (Hoffman et al., 2006) focus on improving attachment security through targeting caregiving behaviours. These include caregiver sensitivity (i.e., caregivers’ ability to notice and determine their child’s needs) and reflective functioning (i.e., caregivers’ capacity to understand their own and their child’s mental states including feelings and beliefs) (Kobak, Zajac, et al., 2015). Meta-analytic evidence supports associations between insecure attachment styles and externalising and internalising problems. In particular, disorganised attachment most strongly predicts externalising problems and avoidant attachment is most strongly associated with internalising problems (Groh et al., 2017). In addition to attachment styles, caregiving behaviours including caregiver sensitivity and reflective functioning are associated with both externalising and internalising problems (Carlone & Milan, 2021; Dejko–Wańczyk et al., 2020; Kok et al., 2013; Wang et al., 2013). Given the established links between quality of caregiving and attachment, attachment-based interventions have predominantly focused on evaluating changes in caregiver sensitivity and attachment security (e.g., Bakermans-Kranenburg et al., 2003). However, surprisingly there has been less research attention on other child outcomes such as externalising and internalising problems, which are linked to attachment and associated caregiving behaviours.

Parenting interventions based on emotion socialisation theory — e.g., TIK (Havighurst et al., 2010; Saarni, 1999) — also focus on the parent-child relationship and aim to support parents in understanding and responding to emotional needs related to child behaviour. The rationale for emotion socialisation interventions is based in part on associations between greater emotional competence and less externalising and internalising problems (Saarni, 1999). Emotional competence can be strengthened through parents "emotion coaching." Emotion coaching principles include having awareness of children's emotions and recognising emotional moments as opportunities for teaching and intimacy, listening empathetically, validating feelings, facilitating children to label their emotions, and helping children problem-solve (Gottman & DeClaire, 1997). Parent emotion socialisation behaviours including emotion coaching are significantly associated with both externalising (Johnson et al., 2017) and internalising problems (Shortt et al., 2016; Suveg et al., 2005), and meta-analytic findings show that child emotion-regulation is a protective factor for externalising and internalising problems (Daniel et al., 2020).

Researchers have recently considered the implications of attachment theory for emotion socialisation theory and vice versa, as in part, the attachment relationship develops through caregivers' responses to child emotional cues. For instance, many of the skills within attachment-based interventions (e.g., caregiver sensitivity and reflective functioning) require parents to have capacity for emotion regulation (Hajal & Paley, 2020). Given similarities of theoretical origin and intervention targets between interventions guided by emotion socialisation and attachment theory, for the purposes of this review we combine these two interventions as attachment- and emotion-focused parenting interventions. We define attachment- and emotion-focused parenting interventions as those that go beneath behaviour and aim to strengthen the emotional quality of the parent-child relationship by helping caregivers understand children's attachment and emotional needs expressed through their behaviour.

Emerging evidence of RCTs investigating the effects of individual and group attachment- and emotion-focused parenting interventions on externalising and internalising problems has revealed significant improvements for youth (e.g.., Baker et al., 2015; Havighurst et al., 2019; Moretti et al., 2018) and potentially comparable effects to behavioural parenting interventions (Duncombe et al., 2016; Högström et al., 2017). Furthermore, attachment- and emotion-focused parenting interventions may produce sleeper effects, whereby positive intervention effects may be enlarged at follow-up compared to post-treatment, hence requiring longer follow-up assessments to identify changes (Bakermans-Kranenburg et al., 2003). However, other studies have failed to find statistically significant changes in externalising or internalising problems for attachment- and emotion-focused parenting interventions (e.g., Adkins et al., 2022; Rolock et al., 2021; Van Doesum et al., 2008). Thus, without a systematic review and meta-analysis of pooled RCTs, we cannot be certain of the effectiveness of attachment- and emotion-focused parenting interventions on externalising and internalising problems for youth.

Previous Reviews of Parenting Intervention Effects on Externalising and Internalising Problems

Several prior systematic reviews and meta-analyses have investigated the effectiveness of parenting interventions broadly on both externalising and internalising problems; however, attachment- and emotion-focused parenting interventions appear to be frequently missing. For example, a meta-analysis of past meta-analyses examining the effectiveness of any parenting intervention for the treatment of externalising problems in clinic-referred children aged under 13 (Mingebach et al., 2018) found a significant moderate effect for reduced externalising problems (effect size = 0.46, 95% CI 0.35–0.55); though, only 2 of 26 meta-analyses included non-behavioural interventions (Leijten, Melendez-Torres, et al., 2018; Lundahl et al., 2006). The first meta-analysis compared behavioural to non-behavioural interventions on externalising problems but the non-behavioural studies did not reference attachment or emotion socialisation theory (Lundahl et al., 2006). The second meta-analysis examined the integration of "relationship enhancement" with behavioural parenting interventions in a single intervention for reducing externalising problems; however, it did not consider the isolated effects of attachment- and emotion-focused parenting interventions without behavioural components (Leijten, Melendez-Torres, et al., 2018). Although these past studies increase our understanding of behavioural parenting interventions, the specific effects of attachment- and emotion-focused parenting interventions on child externalising and internalising problems remain unclear.

In addition to the predominant focus on behavioural parenting interventions in past research, it is possible that attachment- and emotion-focused parenting interventions were often excluded from prior reviews of parenting interventions due to participant eligibility criteria. Behavioural parenting interventions programs were specifically developed to treat externalising problems and secondary problem behaviours, whereas many attachment- and emotion-focused parenting interventions were originally developed to primarily strengthen caregiving and the parent–child relationship in targeted populations, such as children exposed to maltreatment and/or in out-of-home care (Dozier et al., 2011; Slade et al., 2018). To illustrate, a systematic review of 64 RCTs of psychosocial treatments in children 12 and younger concluded that group and individual behavioural parenting interventions demonstrated the most support for reducing externalising problems; yet only one emotion-focused intervention and no attachment-based interventions were included

(Kaminski & Claussen, 2017). This was most likely due to the study's inclusion criteria requiring participants to exhibit clinically elevated externalising problems at baseline, which is not typical for attachment and emotion-focused parenting intervention research. Furthermore, children in out-of-home care—who are commonly targeted in attachment- and emotion-focused parenting interventions—were also excluded from this review.

Finally, although a recent narrative review of attachment and emotion-focused parenting intervention research suggests promising intervention effects for youth externalising and internalising problems (Havighurst et al., 2020), this study did not involve a meta-analysis and is limited to studies published January 2019 through June 2020. In summary, previous research examining the effects of parenting interventions on externalising and internalising problems have not comprehensively and systematically examined the effectiveness of attachment- and emotion-focused parenting interventions on youth externalising and internalising problems. This is a significant gap in the literature with considerable importance for research and practice concerning parenting interventions and child wellbeing.

Thus far, we have primarily highlighted the significant gap in the literature on attachment- and emotion-focused parenting interventions effects on child externalising and internalising problems, though there is also limited research around its effects on parent mental health and wellbeing outcomes. Previous reviews of attachment- and emotion-focused parenting interventions have investigated intervention-induced improvements in parent skills (e.g., caregiver sensitivity; Bakermans-Kranenburg et al., 2003) but not parent mental health, which may also be impacted by some attachment- and emotion-focused parenting interventions (e.g., Moretti et al., 2018; Weihrauch et al., 2014), particularly given that attachment- and emotion-focused parenting interventions predominately target parents' behaviour, thoughts, and feelings (Havighurst et al., 2020; Kobak, Zajac, et al., 2015). A meta-analysis on one type of attachment- and emotion-focused parenting interventions—COS—found a medium effect on parent depressive symptoms following intervention; however, only three studies were included (Yaholkoski et al., 2016). In light of these limitations, further research on parent mental health and wellbeing outcomes following attachment- and emotion-focused parenting interventions is needed.

Current Review

This study advances previous research by conducting the first meta-analysis and systematic review on the effectiveness of attachment- and emotion-focused parenting interventions for reducing externalising and internalising problems in youth. We aimed to address research gaps by being broad in our search of existing studies within the scope of examining attachment- and emotion-focused parenting interventions. Specifically, all attachment- and emotion-focused parenting interventions studies that measured an externalising and/or internalising problems outcome were included. To understand the effects of these interventions across youth development, studies included children aged under 18. Furthermore, we aimed to compare attachment- and emotion-focused parenting interventions to the most established parenting intervention model, behavioural parenting interventions, in order to understand whether attachment- and emotion-focused parenting interventions could be a suitable alternative for families presenting in community and clinical settings. To this end, the following study objectives were considered:

1. Are attachment- and emotion-focused parenting interventions more effective than waitlist comparisons in reducing youth externalising and internalising problems?
2. Are attachment- and emotion-focused parenting interventions as effective as behavioural parenting interventions in reducing youth externalising and internalising problems?
3. Are attachment- and emotion-focused parenting interventions more effective than any active comparison in reducing youth externalising and internalising problems?

Given past research on parenting interventions appears to be limited in identifying variables that may impact on what intervention works best for whom, this review also aimed to explore subgroup analyses to consider whether participant characteristics (e.g., age, caregiver type) at baseline may moderate attachment- and emotion-focused parenting interventions outcomes. The review also considered the effect of intervention (e.g., delivery format) and outcome (e.g., length of follow-up) characteristics on treatment outcomes. While research suggests attachment- and emotion-focused parenting interventions may improve parenting skills (e.g., caregiver sensitivity; Bakermans-Kranenburg et al., 2003), less is known about other important parent outcomes. Therefore, as a secondary outcome, we aimed to explore whether attachment- and emotion-focused parenting interventions may improve parents' mental health and wellbeing (i.e., stress, depression, anxiety).

Method

Study Design and Protocol

The protocol for this systematic review and meta-analysis was prepared according to the preferred reporting items for systematic reviews and meta-analyses (PRISMA) guidelines (Moher et al., 2009). The prospectively registered protocol can be retrieved from PROSPERO (CRD42017081873).

Eligibility Criteria

Types of Studies. All studies that measured the effectiveness of attachment- and emotion-focused parenting interventions on externalising problems or internalising problems against a comparator were included. That is, all controlled trials (including quasi-randomised) were included. Cross-sectional, case series, and case report designs were not included. This approach was taken for two main reasons. Firstly, attachment- and emotion-focused parenting interventions research is relatively recent and given this was the first meta-analysis investigating the effects of attachment- and emotion-focused parenting interventions on externalising problems/internalising problems, we were uncertain of the availability of published RCTs and wanted to capture a wider range of studies. Secondly, non-randomised studies are suggested to be more likely to reflect clinical practice, particularly when RCTs may not have been a feasible or practical option due to waitlist times and ethical considerations (Faber et al., 2016). Moreover, some attachment- and emotion-focused parenting interventions rapidly grew in popularity in the community prior to the availability of randomised effectiveness trials (Moretti et al., 2018). Notwithstanding this, we considered the potential bias introduced through the inclusion of non-randomised studies (Reeves et al., 2021) in quality assessment.

Types of Participants. Participants included children under the age of 18 and their parent(s). For the purposes of this paper, parent(s) is defined as the primary caregiver(s) of the child including birth, kinship, adoptive, and foster parents. Studies where participants' average age was above 18, and interventions aimed at pregnant mothers were excluded. Studies that included samples of children diagnosed with autism spectrum disorder and/or an intellectual disability, and parents with substance use disorders were also excluded. Previous published reviews have focused on these particular populations (e.g., see Tarver et al., 2019) and prior reviews on behavioural parenting interventions have typically excluded these populations (e.g., Kaminski & Claussen, 2017; Tully & Hunt, 2016)

Types of Interventions. To be considered for inclusion, the intervention was required to primarily target the parent(s) of the child (i.e., > 50% of the intervention involved therapist-parent contact). At least one intervention arm was required to be an attachment or emotion-focused parenting intervention. That is, the intervention was required to be primarily rooted in attachment theory, informed by principles of emotion coaching or focus on teaching parents skills to link children's emotions to behaviours (including their ability to reflect on their own and their child's emotions). Interventions were focused on improving parents' skills in sensitive responding, emotion coaching, and/or reflecting functioning. Each identified study was assessed by at least two reviewers (always including the lead author, SJ) for eligibility of the intervention as an attachment or emotion-focused parenting intervention. Each reviewer was provided with a predetermined list of interventions (see Appendix B, for example, of interventions) that was created based on expert knowledge and prior literature that has categorised these interventions previously (e.g., Steele & Steele, 2018; Troutman, 2015). Where an intervention was not on this predetermined list, the two reviewers discussed whether it should be included, and if there was no consensus, a third author (DP; expert in development and implementation of attachment- and emotion-focused parenting interventions) was consulted. All authors of this paper (who are trained and experienced in administering various parenting interventions) also reviewed and approved the final list of included interventions for eligibility as an attachment and emotion-focused parenting intervention. If a study included a 'blended' parenting intervention—an intervention that combined more than one theoretical orientation—it was excluded in order to better understand the stand-alone effect of attachment- and emotion-focused parenting interventions. See Leijten et al. (2018) for a previous review that considered the integration of behavioural and attachment theoretical orientations. Although there may be a level of subjectivity in categorising theoretical orientation of parenting interventions, for the purpose of this paper, we based eligibility as an attachment and emotion-focused parenting intervention on the original primary theoretical underpinnings of an intervention. In other words, we included interventions that originated out of attachment theory or emotion socialisation theory without direct influence of social learning theory or alternate theoretical orientations.

Types of Outcomes. Primary outcomes included post-treatment and/or follow-up scores on a measure of externalising problems and/or internalising problems. Given externalising and internalising problems cover a broad range of symptoms, broadband measures such as the Child Behaviour Checklist, which has higher order factors for externalising and internalising problems (CBCL, Achenbach, 1994), and narrowband measures such as the Beck Depression Inventory-II (BDI-II; (Beck et al., 1996), which measures a specific type of internalising problems (i.e., depressive symptoms), were extracted. Any measuring tool or respondent was included (e.g., parent-report, self-report). Secondary outcomes included post-treatment and/or follow-up measures of parent mental health and wellbeing (i.e., stress, anxiety, depression).

Search Strategy

Studies were primarily sourced through electronic databases: Cochrane, Scopus, PsychInfo, and PubMed. See Appendix C for search terms used in databases. Non-English studies were excluded. The first author also scanned reference lists of included studies and relevant published reviews. Studies were included if they were published prior to July 2021. No other limits were placed on the search including no minimum publication date.

Data Collection

Selection of Studies

Two reviewers independently searched electronic databases for relevant titles and abstracts, reviewed full-text articles, and extracted data using a structured electronic data form. At each stage, any disagreements were resolved through discussion between two reviewers, and where needed, a third expert reviewer was consulted. If further data were required, the author of the paper was contacted via email. The first author only re-conducted the electronic search prior to submitting the journal for publication.

Data Extraction and Management

The following data were extracted from full-text articles: eligibility details, study design, participant characteristics (e.g., child age, parent age, and ethnicity), intervention details (e.g., theoretical orientation, attrition details, facilitator experience, and integrity), control details, outcome details (e.g., measure, informant, and length of follow-up), drop-outs, and missing participants. For meta-analysis, means, standard deviations, and sample sizes were collected for intervention and comparison groups at all points of data collection available following treatment. Where there were multiple papers with the same sample, typically the most comprehensive paper was used, though if several papers covered the same sample and assessed different types of outcomes (i.e., one had externalising problems only and one had internalising problems only), both papers were used to extract data. However, only one outcome variable from the study sample was used in any single meta-analysis. Where possible, broadband measures of externalising or internalising problems were used in meta-analysis; however, if a study only included a narrowband measure, this was used. If multiple different measures were available for the same outcome, one measure was chosen to be included in the meta-analysis based on the consensus of two reviewers. Given parent-report was expected to be the predominant informant, this was typically given priority to reduce heterogeneity across studies. In conjunction with this, reviewers considered inclusion of measures for the meta-analysis based on higher reliability and validity.

Risk of Bias Assessment

Risk of bias for individual studies was independently assessed by two reviewers using the Cochrane Risk of Bias Tool (Higgins et al., 2011). This included selection bias, performance bias, detection bias, attrition bias, reporting bias, intervention fidelity, and other bias (i.e., bias within the study that did not fit appropriately into another category). For this study, we were most interested in fidelity of the intervention and attrition bias. Given the nature of psychological intervention outcome studies, blinding of participants and personnel was not given as much weight as other characteristics (Munder & Barth, 2018). Non-randomised studies are likely to be considered 'high' risk of bias as there would be expected baseline group differences; these were removed in sensitivity analyses to monitor any bias on pooled effect sizes.

Analysis and Data Synthesis

Data synthesis was conducted using Review Manager, Version 5.3 (The Cochrane Collaboration, 2014). The estimated intervention effect in each study was calculated using standardised mean difference (*SMD*), otherwise known as Hedges' g, at post or follow-up. This method was chosen as an alternative to pre-post effect sizes in order to provide unbiased outcomes and control for other factors that may account for intervention effects (Cuijpers et al., 2017). For this paper, a *SMD* of 0.2 is considered a small effect, 0.5 is considered a moderate effect, and 0.8 is considered a large effect (Cohen 1988, as cited in Schünemann et al., 2019).

Pooling was considered for all research questions where there were three or more studies available, and heterogeneity was low to moderate. Heterogeneity was assessed using the I-squared (I^2) and chi-squared (χ^2) statistics. Heterogeneity was considered too high if there was a significant χ^2 ($p < .05$) and I^2 value > 59% (Higgins et al., 2011). When heterogeneity was considered low to moderate, random effects were used to pool data in a meta-analysis as it was assumed that the true effect estimate would vary for each study. If heterogeneity was too high or there were too few studies, no pooling was conducted, and individual study results were reported. Further, if individual studies did not include the necessary statistics for externalising or internalising problems (i.e., *M, SD/SE*, and *N*) for each intervention arm, they were excluded from meta-analysis.

Subgroup and Sensitivity Analysis

In addition to the main research questions, additional subgroup and sensitivity analyses were conducted. Planned subgroup analysis included child age (infant/toddler; school-age, adolescence), caregiver type (birth, adoptive, foster, kinship), length of follow-up (post-treatment, 6-month and greater), and clinical levels of externalising problems and/or internalising problems at baseline (elevated versus not elevated). Sensitivity analyses were conducted to examine the impact of individual study risk of bias by removing high-risk studies, and the impact of heterogeneity in results by removing clear outliers (Ryan, 2016). Outliers were observed through visual inspection of funnel plots and/or forest plots and then excluded in a sensitivity analysis if the confidence interval (CI) of the study did not overlap with the pooled effect size. That is, the upper CI of the individual study was lower than the lower bound of the pooled effect size CI (Viechtbauer & Cheung, 2010).

Publication Bias

For each meta-analysis conducted with at least 10 studies, publication bias was assessed through funnel plots, charted by effect size. Higgens et al. (2021) advise against the use of funnel plots for meta-analyses under 10 studies.

Results

Study Characteristics

Electronic database searches yielded 3, 379 records (see Figure 2). Two additional articles were retrieved through hand-searching. After duplicates were removed, 2, 588 records remained, and following screening of title and abstracts, 185 full-text articles were assessed for eligibility. Inter-rater reliability for the initial inclusion of full-text articles was 97%. Forty-three studies (54 papers) met eligibility criteria for qualitative analysis, with 38 included in quantitative synthesis[3]. The references of all included papers are provided in Appendix D.

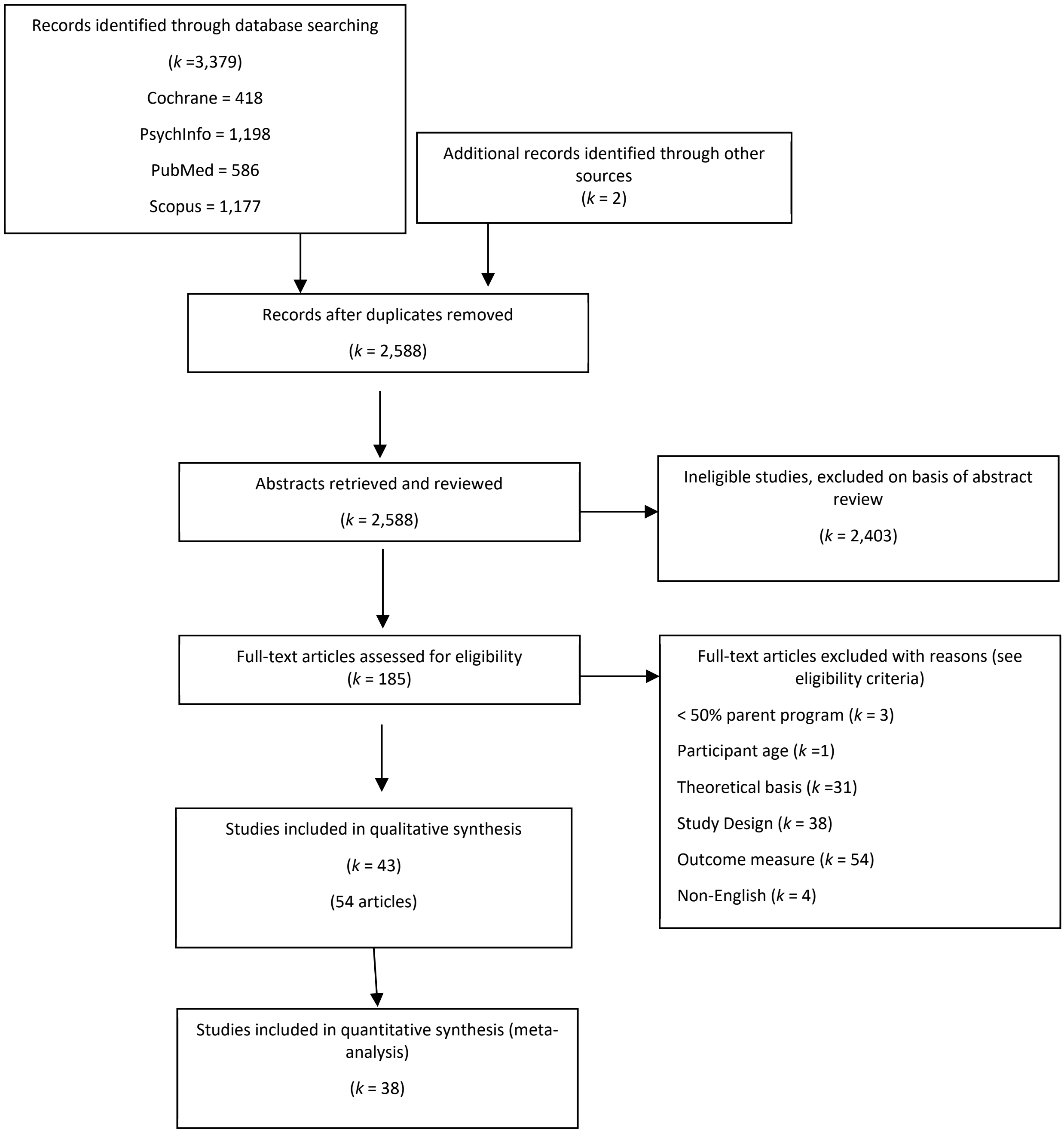
Details of study participants, interventions, comparators, and outcome measures in the 43 included studies are presented in Appendix E. Three studies were quasi-experimental (Becker-Weidman, 2006; Giannotta et al., 2013; Katz et al., 2020), the remaining were RCTs. Studies included 5, 542 children aged from 0 to 18 years (M = 7.14) and their caregivers. The majority of studies (K = 21) included birth parents, though studies also included adoptive (K = 6), foster (K = 2) and mixed samples of caregivers, including kinship caregivers (K = 5). Nine studies did not explicitly report the caregiver relationship to child participants, though they are likely birth parents. Participants were from community (34.88%), clinical (27.91%), maltreatment-exposed (30.23%), and 'other' samples (6.98%; e.g., parent with depression). Studies were conducted in U.S., Australia, Italy, Germany, Sweden, Norway, Netherlands, and Iran. Sixty-five percent of children's ethnicity was unknown, with

[3] Twelve authors were contacted to retrieve the additional data needed to be included in quantitative synthesis; however, only one of these authors was able to provide the necessary data.

the majority known being White (13%) and African American (10%). Fifty-nine percent of parents' ethnicity was unknown, with the majority known also White (29%) and African American (6%).

Figure 2

Flowchart of Included and Excluded Studies



Twenty-one attachment- and emotion-focused parenting interventions were included, with eleven of these in a group format. Length of sessions ranged from 3 to 78 sessions (*M* = 13.74). Facilitators included program developers, psychologists, PhD/Masters level students, allied health professionals (e.g., social workers, occupational therapists, and nurse practitioners), and psychiatrists. It was common for interventions to be delivered by postgraduate students who were supervised by program developers. Some studies provided details on level of training conducted, amount of supervision, and measures used to ensure fidelity. These details were used to provide data to measure intervention fidelity discussed later.

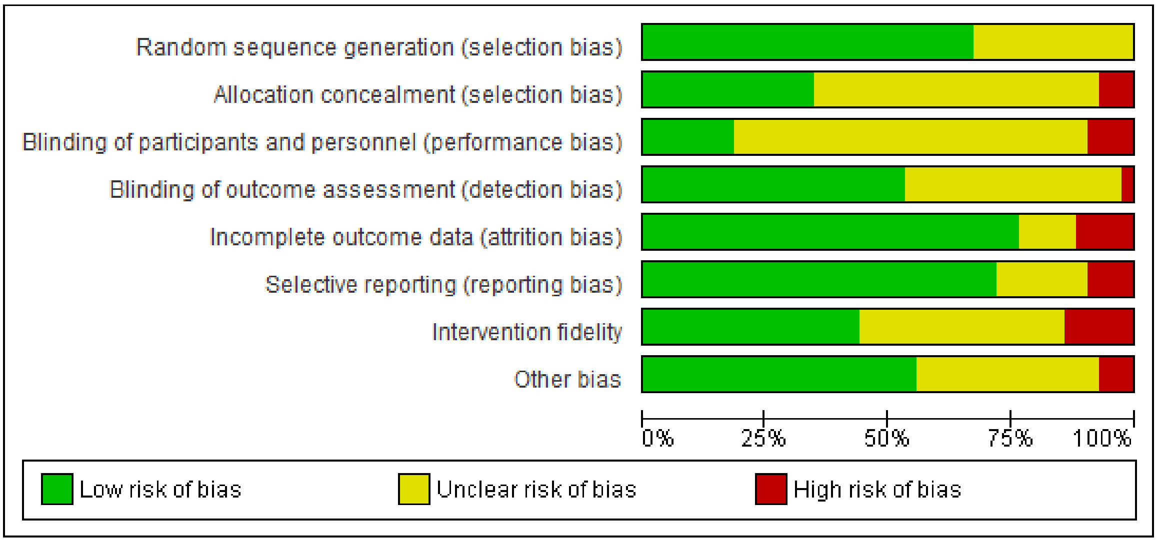
Regarding comparator conditions, 19 studies compared attachment- and emotion-focused parenting interventions against a waitlist control, and 26 studies compared attachment- and emotion-focused parenting interventions against an active control, two of these, behavioural parenting interventions. No studies compared attachment- and emotion-focused parenting interventions against behavioural parenting interventions on internalising problems. The majority (74%) of studies included parent-report; however, child self-report, teacher-report, and clinician-reported outcomes were also included. Follow-up ranged from immediately post-intervention to 8 years. Thirty-one studies included externalising problems and 25 included internalising problems. Most commonly, these measures were broadband measures (e.g., CBCL, Achenbach, 1994), though some studies had more narrowband measures such as the BDI-II (Beck et al., 1996). Three studies (Baker et al., 2015; Opiola & Bratton, 2018; Weihrauch et al., 2014) included a combined externalising problems/internalising problems measure (e.g., CBCL Total Problems) and two studies (Dozier et al., 2006; Lind et al., 2014) did not have the necessary statistics for meta-analysis and hence were only considered for qualitative review.

Risk of Bias

Figure 3 shows risk of bias across included studies according to the Cochrane Risk of Bias Tool (Higgins et al., 2011). Assessment of risk of bias indicated that 13 studies were considered to have low risk of bias, 18 were unclear, and 12 (including the three non-randomised studies) were considered high risk of bias performance bias was unclear in the majority of studies (70%), albeit this was not unexpected (Munder & Barth, 2018). Of most interest, six and five studies represented a high risk of bias for intervention fidelity and attrition bias, respectively. Across risk of bias indicators in Figure 3, intervention fidelity showed the highest risk of bias. This suggests that not all studies may have delivered interventions as intended by program developers or at least assessed and reported whether this was the case. See Appendix F for complete risk of bias details.

Figure 3

Risk of Bias across Studies



Note. Other bias refers to the bias within a study that did not appropriately fit in with one of the other categories. Typically, this referred to studies reporting limited information about participants.

Relative Effects of Attachment and Emotion-Focused Interventions

Waitlist Comparators

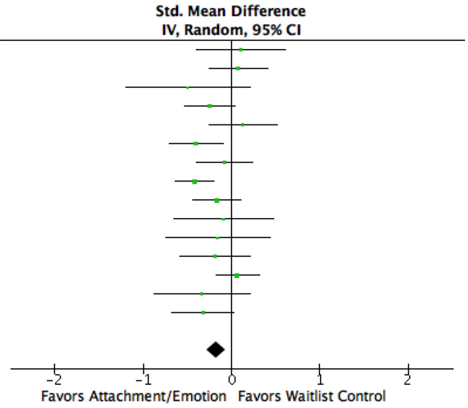
To address the first aims, the effects of attachment- and emotion-focused parenting interventions were compared to waitlist controls on externalising and internalising problems (see Figures 4 and 5 respectively). Fifteen studies were included for externalising problems, resulting in a pooled *SMD* of − 0.17, 95% CI [− 0.27, − 0.06]. Eleven studies for internalising problems pooled a *SMD* of − 0.34 [− 0.51, − 0.17]. This indicated a small effect in favour of attachment- and emotion-focused parenting interventions on externalising problems and a small-moderate effect in favour of attachment- and emotion-focused parenting interventions on internalising problems. Visual inspection of the resulting funnel plots was not suggestive of publication bias for externalising problems. One study (Rezvan et al., 2013) appeared to be an outlier for internalising problems (see Figure 6), though its upper bound was not lower than the pooled lower bound. A sensitivity analysis was conducted with and without this study. Excluding the study resulted in a *SMD* of − 0.30 [− 0.44, − 0.15], still indicating a small-moderate effect in favour of attachment- and emotion-focused parenting interventions.

Figure 4

Forest Plot of Attachment- and Emotion-Focused Parenting Interventions versus Waitlist Controls on Externalising Behaviour

Study or Subgroup	Attachment/ Emotion Mean	SD	Total	Waitlist Control Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Carnes-Holt 2014	57.05	10.5	32	55.9	10.68	29	3.8%	0.11 [-0.40, 0.61]
Cassidy 2017	13.02	6.7368	75	12.53	5.7357	66	7.4%	0.08 [-0.25, 0.41]
Diamond 2002	52.6	10.1	16	57.6	9.7	16	2.1%	-0.49 [-1.20, 0.21]
Duncombe 2016	129.06	38.896	90	138.64	38.9384	105	9.3%	-0.25 [-0.53, 0.04]
Gianotta 2013	83.59	2.97	44	83.23	2.62	66	6.0%	0.13 [-0.25, 0.51]
Havighurst 2010	108.93	24.4425	79	118.76	24.4323	94	8.5%	-0.40 [-0.70, -0.10]
Havighurst 2019	5.29	3.12	82	5.54	3.32	72	7.9%	-0.08 [-0.39, 0.24]
Högstrom 2017	2.8	1	173	3.2	0.9	148	12.4%	-0.42 [-0.64, -0.20]
Kehoe 2020	3.49	3.203	114	4.02	3.18396	99	9.8%	-0.17 [-0.44, 0.10]
Meybodi 2019	117.8	152	25	130.9	138.5995	23	3.1%	-0.09 [-0.65, 0.48]
Ozturk 2019	7.2	3.9	22	7.9	5	22	2.9%	-0.15 [-0.75, 0.44]
Purvis 2015	4.58	2.3	48	5.04	2.67	48	5.6%	-0.18 [-0.58, 0.22]
Razuri 2016	4.09	2.53	128	3.92	2.45	128	11.1%	0.07 [-0.18, 0.31]
Velderman 2006	17.48	8.68	27	20.81	10.85	26	3.3%	-0.33 [-0.88, 0.21]
Wilson 2012	105.35	26.2204	62	113.74	25.7992	65	6.8%	-0.32 [-0.67, 0.03]
Total (95% CI)			**1017**			**1007**	**100.0%**	**-0.17 [-0.27, -0.06]**

Heterogeneity: $Tau^2 = 0.01$; $Chi^2 = 18.88$, $df = 14$ ($P = 0.17$); $I^2 = 26\%$
Test for overall effect: $Z = 3.08$ ($P = 0.002$)



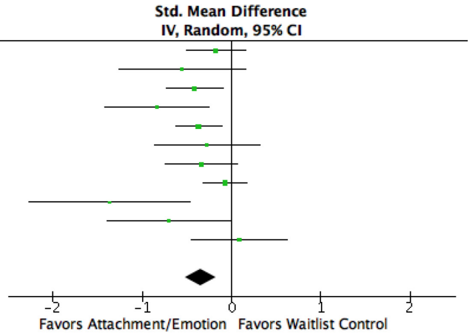
Note. A negative *SMD* (left of forest plot) refers to favouring the intervention condition, whereas a positive *SMD* (right of forest plot) refers to favouring the control condition.

Figure 5

Forest Plot of Attachment- and Emotion-Focused Parenting Interventions versus Waitlist Controls on Internalising Behaviour

Study or Subgroup	Attachment/ Emotion Mean	SD	Total	Waitlist Control Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Cassidy 2017	14.34	6.8672	75	15.8	9.8442	66	12.7%	-0.17 [-0.50, 0.16]
Diamond 2002	56.4	10.8	16	61.9	8.4	16	4.7%	-0.55 [-1.26, 0.15]
Havighurst 2019	2.28	2.57	82	3.46	3.11	72	13.1%	-0.41 [-0.73, -0.09]
Katz 2020	6.82	5.68	23	13.61	9.54	27	6.3%	-0.83 [-1.42, -0.25]
Kehoe 2020	10.94	9.0755	114	14.45	9.9297	114	15.5%	-0.37 [-0.63, -0.11]
Ozturk 2019	4	3.8	22	4.95	3.1	22	6.1%	-0.27 [-0.86, 0.32]
Purvis 2015	3.25	2.33	48	4.06	2.45	48	10.3%	-0.34 [-0.74, 0.07]
Razuri 2016	3.53	2.56	128	3.7	2.36	128	16.2%	-0.07 [-0.31, 0.18]
Rezvan 2013	24.08	3.5	12	28.83	3.21	12	3.1%	-1.37 [-2.27, -0.46]
Stams 2001	-0.45	0.57	17	0.17	1.07	18	4.9%	-0.70 [-1.39, -0.02]
Velderman 2006	5.81	5.17	27	5.38	4.3	26	7.1%	0.09 [-0.45, 0.63]
Total (95% CI)			**564**			**549**	**100.0%**	**-0.34 [-0.51, -0.17]**

Heterogeneity: $Tau^2 = 0.03$; $Chi^2 = 17.15$, $df = 10$ ($P = 0.07$); $I^2 = 42\%$
Test for overall effect: $Z = 3.97$ ($P < 0.0001$)



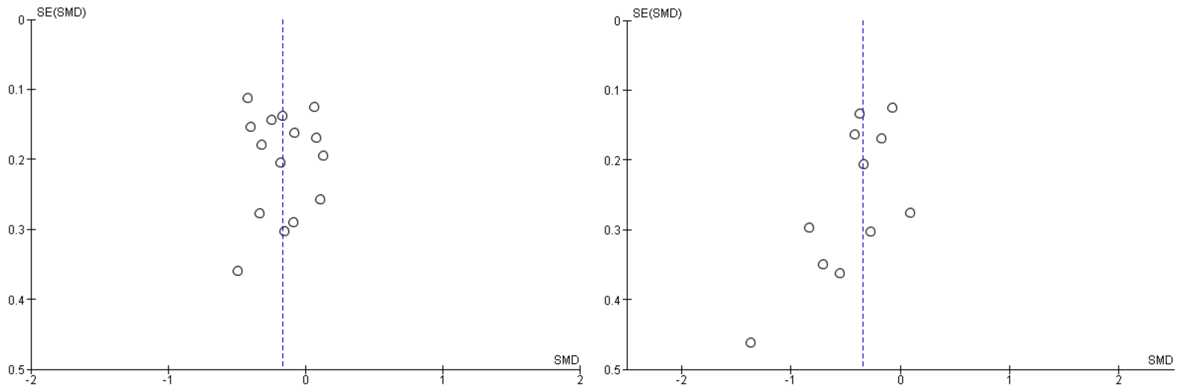
Note. A negative *SMD* (left of forest plot) refers to favouring the intervention condition, whereas a positive *SMD* (right of forest plot) refers to favouring the control condition.

Behavioural Interventions as Comparators

Next, we aimed to examine the effectiveness of attachment- and emotion-focused parenting interventions for externalising and internalising problems compared to behavioural parenting interventions. This aim could not be investigated using quantitative synthesis as there were only two studies that compared attachment- and emotion-focused parenting interventions to behavioural parenting interventions on externalising problems (Duncombe et al., 2016; Högström et al., 2017) and no studies on internalising problems. Thus, we report on the findings of these two papers through qualitative synthesis.

Figure 6

Funnel Plots for Externalising and Internalising Outcomes when Attachment- and Emotion-Focused Parenting Interventions are Compared to Waitlist Controls



Note. Left funnel plot shows studies with externalising outcomes and the right funnel plot shows studies with internalising outcomes**.**

In a sample of 320 4- to 9-year-olds (M = 7, SD = 1.0) with clinical levels of behavioural difficulties, Duncombe et al. (2016) compared TIK (i.e., an emotion-focused parenting intervention; (Havighurst et al., 2010) to Triple P (i.e., behavioural parenting intervention; Sanders, 1999). Results demonstrated that both programs showed significantly reduced externalising problems at 6-month follow-up compared to a waitlist control; however, the two interventions did not significantly differ in their reduction of externalising problems, SMD = 0.10 [− 0.17, 0.38]. Moreover, child age moderated the link between intervention type and externalising problems. That is, children 8 or older showed greater reductions in externalising problems at follow-up, than those 7 and younger for the emotion-focused intervention. Conversely, for behavioural parenting interventions, children aged 7 and younger showed greater reductions in externalising problems at follow-up than the older children. The study also found that gender and severity of initial behaviour did not moderate the link between the interventions and externalising problems (Duncombe et al., 2016).

Stattin et al., (2015) compared four parenting interventions in a group of 907 children with externalising problems aged 3–12 years. Three of these interventions were considered behavioural parenting interventions: Comet (Kling et al., 2010), COPE (Cunningham et al., 1995), and IY (Webster-Stratton, 2005); and one, an attachment-based intervention, Connect (Moretti et al., 2018). Comet and COPE included all ages, whereas IY included under 8 only, and Connect included 9- to 12-year-olds. At post-treatment, between-group effects sizes indicated that Connect showed significantly less reductions in externalising problems to Comet, *SMD* = 0.40 [0.21, 0.59]; though, they did not demonstrate differences in reductions of externalising problems compared to COPE, *SMD* = 0.00 [− 0.19, 0.19]. We did not estimate between-group differences in this review between Connect and IY due to participant age differences (Stattin et al., 2015). This Cohort was then followed for an additional 2 years, with a final sample of 749 3- to 12-year-olds (Högström et al., 2017). The authors indicated that after 1 year, group differences no longer existed, and at 2-year follow-up children who received the Connect group were the only group to demonstrate additional significant reductions in externalising problems. Between-group effects reduced to non-significance for Connect compared to Comet at 2-year follow-up, *SMD* = − 0.05 [− 0.21, 0.11], and non-significant effects were sustained compared to COPE, *SMD* = − 0.04 [− 0.2, 0.12]. Hence, at 2-year follow-up, there was no evidence of a difference between the attachment parenting intervention and behavioural parenting interventions.

Active Comparators

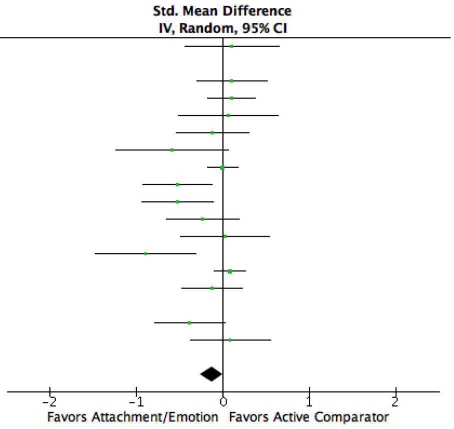
Finally, we aimed to compare attachment- and emotion-focused parenting interventions against any active interventions for externalising and internalising problems (see Figures 7, 8, and 9). These included treatment as usual (TAU), case management, and psychoeducation. Statistical heterogeneity was considered too high to synthesise data quantitatively for externalising problems (I^2 = 80%, and χ^2 = 86.43, p < .001) and internalising problems (I^2 = 60%, and χ^2 = 34.69, p < .005). However, when sensitivity analyses were used to remove outliers, heterogeneity reduced for both externalising problems (I^2 = 48%, χ2 = 29.10, p = .02) and internalising problems (I^2 = 1%, χ2 = 13.16, p = 0.44). The resulting *SMD*s for attachment- and emotion-focused parenting interventions versus active comparators are as follows: $SMD_{externalising\ problems}$ = − 0.13 [− 0.26, − 0.00, $SMD_{internalising\ problems}$ = − 0.08 [− 0.20, 0.02]. This indicated that against active comparators, there were borderline statistically significant (p = .05) small effects in favour of attachment- and emotion-focused parenting interventions for externalising problems, though there was no evidence of a statistically significant effect in favour of attachment- and emotion-focused parenting interventions for internalising problems. Note, the two studies (Becker-Weidman, 2006; Sprang, 2009) removed from these analyses were in favour of attachment- and emotion-focused parenting interventions and when included in synthesis resulted in larger effect sizes for externalising problems (*SMD* = − 0.30) and internalising problems (*SMD* = − 0.17). These studies were considered clinical populations, non-birth parents and unclear or high risk of bias. Given the clinical heterogeneity among the group of active comparators, these results should be interpreted with caution.

Figure 7

Forest Plot of Attachment- and Emotion-Focused Parenting Interventions versus Active Comparators on Externalising Behaviour

	Attachment/ Emotion			Active Comparator				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Adkins 2021	6.91	2.26	32	6.68	2.08	22	4.2%	0.10 [-0.44, 0.65]
Becker-Weidman 2006	55	4.5	34	68	9.4	30	0.0%	-1.78 [-2.36, -1.19]
Bernstein 2019	57.34	9.7	80	56.29	9.73	33	6.1%	0.11 [-0.30, 0.51]
Duncombe 2016	129.06	38.896	90	125.05	38.7338	112	8.9%	0.10 [-0.17, 0.38]
Firk 2020	13.9	6.4	27	13.5	5.5	20	3.8%	0.07 [-0.51, 0.64]
Guild 2021	1.83	1.06	42	1.98	1.38	46	5.9%	-0.12 [-0.54, 0.30]
Havighurst 2012	141.26	23.79	23	157.46	31.3	16	3.2%	-0.59 [-1.24, 0.07]
Högstrom 2017	2.8	1	173	2.8019	0.8055	425	11.7%	-0.00 [-0.18, 0.17]
Lind 2019	-0.26	0.78	45	0.21	0.98	55	6.2%	-0.52 [-0.92, -0.12]
Lind 2020	-18.5	1.967	43	-17.2	2.8284	50	5.9%	-0.52 [-0.94, -0.11]
Liu 2021	0.24	0.16	54	0.28	0.19	37	5.9%	-0.23 [-0.65, 0.19]
Moss 2011	57.85	9.84	30	57.54	12.61	29	4.5%	0.03 [-0.48, 0.54]
Ordway 2014	41.4	7.62	24	48.2	7.4	26	3.7%	-0.89 [-1.48, -0.31]
Rolock 2021	11.42	10.78	327	10.56	10.54	189	11.6%	0.08 [-0.10, 0.26]
Spieker 2012	12.87	8.55	59	13.94	8.35	70	7.3%	-0.13 [-0.47, 0.22]
Sprang 2009	49.13	4.79	26	69.08	14.82	27	0.0%	-1.77 [-2.41, -1.13]
Tobon 2020	47	9.5	43	51	11	54	6.1%	-0.38 [-0.79, 0.02]
Van Doesum 2008	0.6	0.39	35	0.57	0.3	36	5.1%	0.09 [-0.38, 0.55]
Total (95% CI)			**1127**			**1220**	**100.0%**	**-0.13 [-0.26, -0.00]**

Heterogeneity: $Tau^2 = 0.03$; $Chi^2 = 29.10$, $df = 15$ ($P = 0.02$); $I^2 = 48\%$
Test for overall effect: $Z = 1.97$ ($P = 0.05$)



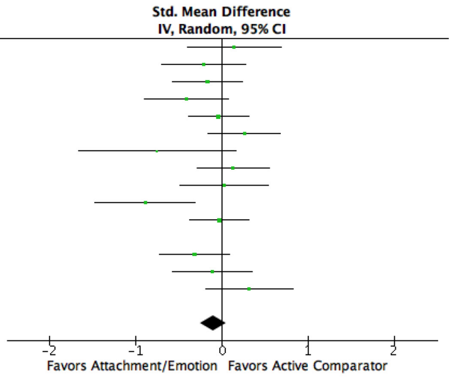
Note. A negative *SMD* (left of forest plot) favours the attachment- and emotion-focused parenting intervention condition, whereas a positive *SMD* (right of forest plot) favours the active comparator condition. Two outliers were removed (Becker-Weidman, 2006; Sprang, 2009). When these outliers were included, *SMD* = -0.30, 95% CI [-0.51, -0.10], $I^2 = 80\%$.

Figure 8

Forest Plot of Attachment- and Emotion-Focused Parenting Interventions versus Active Comparator on Internalising Behaviour

	Attachment/ Emotion			Active Comparator				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Adkins 2021	7.78	2.23	32	7.45	2.23	22	5.7%	0.15 [-0.40, 0.69]
Becker-Weidman 2006	58	8.1	34	60	10.3	30	6.6%	-0.21 [-0.71, 0.28]
Bernstein 2019	57.3	10.62	80	59.14	11.84	33	8.5%	-0.17 [-0.57, 0.24]
Diamond 2010	12.6	13.3911	35	18.5	15.2671	31	6.7%	-0.41 [-0.90, 0.08]
Diamond 2019	15.5	14.2374	66	16	11.912	63	10.2%	-0.04 [-0.38, 0.31]
Guild 2021	2.62	1.21	42	2.28	1.35	46	8.1%	0.26 [-0.16, 0.68]
Israel 2012	22.8	12	11	31.2	8.8	9	2.4%	-0.75 [-1.67, 0.17]
Liu 2021	0.1	0.08	54	0.09	0.07	37	8.2%	0.13 [-0.29, 0.55]
Moss 2011	57.85	9.84	30	57.54	12.61	29	6.3%	0.03 [-0.48, 0.54]
Ordway 2014	41.4	7.62	24	48.2	7.4	26	5.2%	-0.89 [-1.48, -0.31]
Spieker 2012	7.39	5.85	59	7.55	4.88	70	10.1%	-0.03 [-0.38, 0.32]
Sprang 2009	45.39	6.49	26	64.36	15.34	27	0.0%	-1.58 [-2.20, -0.95]
Tobon 2020	48.6	10.1	43	51.8	9.9	54	8.6%	-0.32 [-0.72, 0.09]
Van Doesum 2008	0.45	0.26	35	0.48	0.26	36	7.1%	-0.11 [-0.58, 0.35]
Waraan 2021	17.81	1.34	30	17.36	1.45	30	6.3%	0.32 [-0.19, 0.83]
Total (95% CI)			**575**			**516**	**100.0%**	**-0.10 [-0.25, 0.05]**

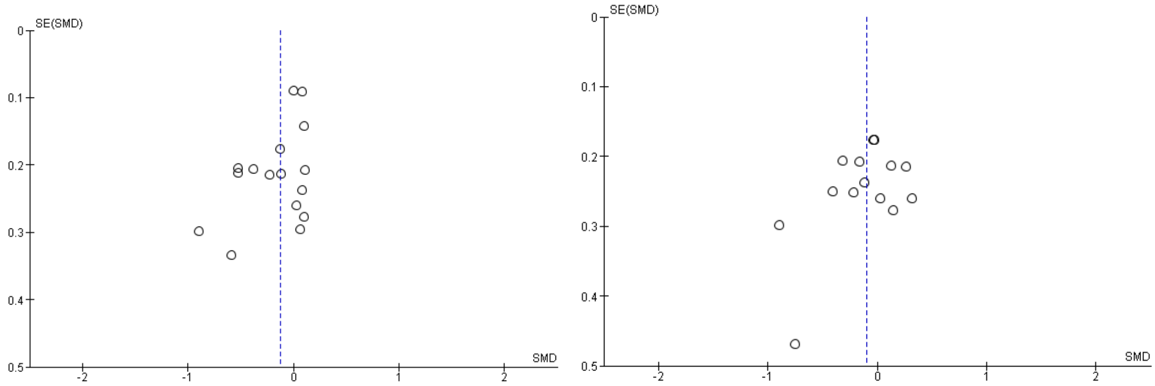
Heterogeneity: $Tau^2 = 0.03$; $Chi^2 = 19.84$, $df = 13$ ($P = 0.10$); $I^2 = 34\%$
Test for overall effect: $Z = 1.29$ ($P = 0.20$)



Note. A negative *SMD* (left of forest plot) favours the attachment- and emotion-focused intervention condition, whereas a positive *SMD* (right of forest plot) favours the active comparator condition**.** Sprang (2009) was removed from analyses as an outlier. When included, *SMD* = -0.19, 95%CI [-0.40, 0.01], $I^2 = 66\%$

Figure 9

Funnel Plots for Externalising and Internalising Outcomes when Attachment- and Emotion-Focused Parenting Interventions are Compared to Active Comparator



Note. Left funnel plot shows studies with externalising outcomes and the right funnel plot shows studies with internalising outcomes**.**

Sensitivity Analysis

In addition to examining heterogeneity, sensitivity analysis was used to examine whether removing high of bias risk studies impacted study results. When the first aim was conducted with low risk studies only, the effect size increased for externalising problems: $SMD_{externalising\ problems}$ = -0.30 [-0.42, -0.18]. However, only two studies were considered low risk of bias for internalising problems, so high risk studies only were removed to produce a similar result, $SMD_{internalising\ problems}$ = -0.30 [-0.46, -0.15]. Similar results were also found when high risk studies were removed for attachment- and emotion-focused parenting interventions against active comparators: $SMD_{externalising\ problems}$ = -0.09, [-0.22, 0.03]; $SMD_{internalising\ problems}$ = -0.10 [-0.25, 0.04]. For both these comparisons, one study was removed as an outlier that was not considered high risk of bias and was in favour of attachment- and emotion-focused parenting interventions and produced a higher pooled effect size when included, $SMD_{externalising\ problems}$ = -0.20, [-0.38, -0.01]; $SMD_{internalising\ problems}$ = -0.25, [-0.51, 0.01]

Subgroup Analyses

We conducted subgroup analyses to consider whether intervention effects changed according to length of follow-up. We also investigated the effects of child age, type of caregiver, baseline clinical severity, delivery method, and sample type; however, there were insufficient studies or heterogeneity was considered too high to consider these factors quantitatively across comparators. Hence, the main analyses were rerun using length of follow-up, while the remainders were considered qualitatively. When age was examined qualitatively, there were mixed findings across studies, such that there was no distinct pattern that emerged to suggest younger or older children showed more favourable treatment outcomes. It is possible that preschool and school-aged children may have benefited more, though there were disproportionate numbers of studies targeting various age groups. The majority of studies included in the review targeted young children (i.e., aged from 3 to 12), with the majority (approximately 82%) of these reporting significant improvements in externalising or internalising problems. Adolescents appeared to have a low proportion of studies that reported significant outcomes in externalising (33%) and internalising problems (14%) following an attachment and emotion-focused parenting intervention, though there were only seven studies with adolescent participants. Similarly, only one of seven studies targeting infants under the age of 3 reported a significant improvement (in externalising problems) following an attachment and emotion-focused parenting intervention. Qualitative review indicated that more studies with non-birth parents (75%) than birth parents (57%) showed significant reductions in externalising problems or internalising problems; however, there were only 9 out of 43 studies that reported non-birth parents. Nineteen papers reported baseline elevations in externalising or internalising problems, of which the majority reported significant reductions in externalising or internalising problems. Seventy-five percent of papers where children were reported to have clinically elevated externalising problems, and 60% of papers where children were reported to have clinically elevated internalising problems at baseline, reported a significant change post-treatment. No clear pattern was observed for delivery method, with neither group nor individual delivery of intervention appearing to fare better on treatment outcomes. Sample type suggested that 75% of clinical samples reported a significant improvement in externalising problems or internalising problems, while 69% of maltreatment-exposed and 60% of community samples reported a significant improvement in externalising problems or internalising problems. In particular, there appeared to be substantially more clinical samples compared to community samples that reported significant reductions in externalising problems (83% versus 45%).

Eighteen studies investigated the effects of attachment- and emotion-focused parenting interventions at 6-month follow-up or longer. The main analyses were re-run examining follow-up measures only. When attachment- and emotion-focused parenting interventions were compared to waitlist controls for externalising problems assessed 6 months or longer after treatment, the effect size was larger: *SMD* = -0.26 [-0.38, -0.13], though this increase was not statistically significantly different from post-treatment effects (p = .19). For internalising problems, results remained unchanged at 6-month or greater follow-up: *SMD* = -0.35 [-0.56, 0.13], p = .89. In comparison to active comparators, effects at follow-up increased for externalising problems to statistical significance, *SMD* = -0.16 [-0.31, -0.01], $p < .05$; though, test of subgroup difference confirmed there was no statistically significant change between post-intervention and follow-up effects ($p = .61$). There was also no subgroup difference between post-treatment and follow-up for internalising problems compared to active comparators ($p = .39$), with the *SMD* remaining not statistically significant at 6-month follow-up, -0.18 [-0.45, 0.09].

In addition to planned subgroup analyses, we conducted an exploratory subgroup analysis on attachment- and emotion-focused parenting interventions that specifically targeted child mental health difficulties compared to those that did not (see Appendix G). For attachment- and emotion-focused parenting interventions that were considered to target mental health, compared to waitlist control, a *SMD* = − 0.23 [− 0.34, − 0.11] was observed for externalising problems, whereas those that did not target mental health, a *SMD* = − 0.01 [− 0.18, 0.16] was observed. The difference between these subgroups was statistically significant ($p < .01$). The same pattern was found for internalising problems, the pooled *SMD* was statistically significantly ($p < .01$) greater for interventions designed to target child mental health outcomes, *SMD* = 0.49 [− 0.71, − 0.28] from those that did not *SMD* = − 0.17 [− 0.35, 0.01]. Heterogeneity was considered too high within subgroups to examine active comparators for externalising problems, and subgroup analysis for internalising problems demonstrated no statistically significant difference ($p = .56$). See Appendix H for complete details of subgroup and sensitivity analyses conducted.

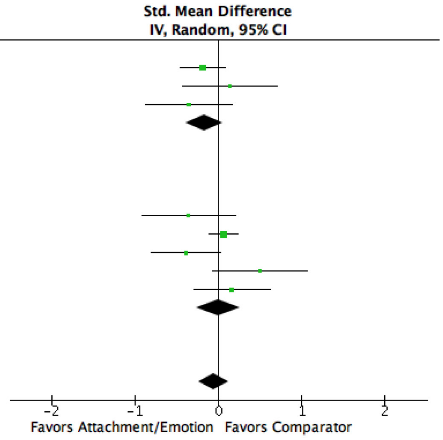
Secondary Outcomes

Our final analysis investigated attachment- and emotion-focused parenting interventions effects on secondary parent outcomes. Two main categories were of relevance: parent mental health—i.e., anxiety and/or depressive symptoms—($k = 7$) and parent stress ($k = 7$) outcomes. Parent mental health outcomes were pooled into a meta-analysis by subgroup of waitlist and active comparators (see Figure 10). A synthesis of three studies against waitlist controls indicated non-statistically significant effects on parent mental health outcomes, *SMD* = − 0.16 [− 0.38, 0.06]. Similarly, four studies against active comparators also indicated no effect of attachment- and emotion-focused parenting interventions on parent mental health outcomes, *SMD* = 0.09 [− 0.19, 0.33]. Due to limited studies and high heterogeneity, we were unable to pool parenting stress outcomes through meta-analysis. Five of these studies were in favour of attachment- and emotion-focused parenting interventions in reducing parenting stress (Adkins et al., 2022; Baker et al., 2015; Firk et al., 2021; Opiola & Bratton, 2018; Sprang, 2009) and two found no statistically significant difference between attachment- and emotion-focused parenting interventions and the comparator condition in reducing parenting stress (Ozturk et al., 2019; Spieker et al., 2012).

Figure 10

Forest Plot of Attachment- and Emotion-Focused Parenting Interventions versus Waitlist and Active Comparators on Parent Mental Health Outcomes

	Attachment/Emotion			Comparator				Std. Mean Difference
Study or Subgroup	**Mean**	**SD**	**Total**	**Mean**	**SD**	**Total**	**Weight**	**IV, Random, 95% CI**
42.1.1 Waitlist Comparator								
Kehoe 2020	5	5.7656	114	6.08	5.9699	99	19.1%	−0.18 [−0.45, 0.09]
Meybodi 2019	24.4	11.75	25	22.87	9.5917	23	7.9%	0.14 [−0.43, 0.71]
Weihrauch 2014	0.52	0.2971	26	0.65	0.416	32	9.0%	−0.35 [−0.87, 0.17]
Subtotal (95% CI)			**165**			**154**	**36.0%**	**−0.16 [−0.38, 0.06]**
Heterogeneity: Tau² = 0.00; Chi² = 1.60, df = 2 (P = 0.45); I² = 0%								
Test for overall effect: Z = 1.46 (P = 0.14)								
42.1.2 Active Comparator								
Bernstein 2019	0.49	0.61	27	0.74	0.79	23	8.1%	−0.35 [−0.91, 0.21]
Högstrom 2017	0.8	0.6	173	0.7619	0.6006	425	25.0%	0.06 [−0.11, 0.24]
Lind 2020	−10.2	2.184	53	−9.3	2.498	39	12.1%	−0.38 [−0.80, 0.03]
Ordway 2014	11.7	7.9	24	8.4	4.85	26	8.0%	0.50 [−0.06, 1.06]
Van Doesum 2008	18.9	11	35	17.2	9.3	39	10.8%	0.17 [−0.29, 0.62]
Subtotal (95% CI)			**312**			**552**	**64.0%**	**−0.00 [−0.27, 0.26]**
Heterogeneity: Tau² = 0.05; Chi² = 8.71, df = 4 (P = 0.07); I² = 54%								
Test for overall effect: Z = 0.03 (P = 0.97)								
Total (95% CI)			**477**			**706**	**100.0%**	**−0.06 [−0.24, 0.13]**
Heterogeneity: Tau² = 0.03; Chi² = 12.23, df = 7 (P = 0.09); I² = 43%								
Test for overall effect: Z = 0.60 (P = 0.55)								
Test for subgroup differences: Chi² = 0.82, df = 1 (P = 0.37), I² = 0%								



Note. A negative *SMD* (left of forest plot) favours the attachment- and emotion-focused intervention condition, whereas a positive *SMD* (right of forest plot) favours the comparator condition.

Discussion

To date, behavioural parenting interventions have been by far the most established model of parenting intervention for reducing child mental health problems, particularly externalising problems, and the predominant focus of treatment outcome research in the area. Notwithstanding this, the popularity of attachment- and emotion-focused parenting interventions appears to have grown among clinicians, researchers, and parents. This systematic review and meta-analysis aimed to conduct the first examination of the effectiveness of attachment- and emotion-focused parenting interventions on externalising and internalising problems compared to (1) waitlist comparators, (2) behavioural parenting interventions, and (3) any active comparators. We also conducted additional planned analyses on risk of bias and length of follow-up, as well as analysed parent mental health as a secondary outcome.

Meta-analytic findings supported our first aim and suggest that attachment- and emotion-focused parenting interventions are more effective at reducing externalising and internalising problems compared to waitlist conditions. Although we were unable to test our second aim using meta-analysis, findings from our narrative review of two RCTs suggest that attachment- and emotion-focused parenting interventions may produce comparable effects to behavioural parenting interventions for decreasing externalising problems. No retrieved studies directly compared attachment- and emotion-focused parenting interventions to behavioural parenting interventions on internalising problems; thus, it is unknown how the two interventions compare in this regard.

Attachment and emotion-focused parenting interventions did not show to be more effective than active comparators for externalising or internalising problems, not supporting our third aim. However, additional analyses found that at 6-month follow-up or greater, effects for internalising problems were sustained and non-significantly increased for externalising problems, such that at 6-month follow-up, attachment- and emotion-focused parenting interventions showed a significant small effect relative to active comparators for externalising problems. Sensitivity analyses also found that when high risk of bias studies were removed, effect sizes for externalising problems increased relative to waitlist comparators and remained consistent for internalising problems across comparators. Interestingly, no statistically significant effect was observed between attachment- and emotion-focused parenting interventions and any comparator for parent mental health outcomes.

The current findings both concur with and diverge from results from previous meta-analyses investigating intervention effects on externalising and internalising problems. A meta-meta-analysis of various parenting interventions for clinic-referred children 13 and under found an effect size of 0.46 for externalising problems, which is higher than the effect size observed in our study. This difference in effect size could be a true estimate, though it could also relate to several other factors. First, our review paper spans across birth to 18, whereas this prior meta-analysis only looked at preadolescence, missing an additional 6 years where problem behaviours can increase (Moretti et al., 2018). Second, considerable heterogeneity (I^2 = 84.56%) was observed in the Mingebach et al. (2018) study, whereas we did not conduct a meta-analysis if heterogeneity was considered high (I^2 > 59%). Third, we included both community and clinical samples, rather than only clinical samples, and past research demonstrates larger effect sizes in clinical samples as higher baseline levels are subject to greater room for change post-treatment (Leijten et al., 2013; McMahon et al., 2021). Fourth, although attachment- and emotion-focused parenting interventions derive from similar theoretical orientation, they are more heterogeneous than models of behavioural parenting interventions, which may have led to more varied effects on externalising and internalising problems, reducing the overall effect size. As behavioural parenting intervention research on mental health outcomes is far more extensive than attachment and emotion-focused parenting intervention research, we did not have the same degree of flexibility to consider various subgroup and sensitivity analyses to tease apart differences. Therefore, caution needs to be applied when comparing effect sizes to previous review papers; the only way to truly compare these interventions is for participants to be randomly allocated to behavioural parenting interventions or attachment- and emotion-focused parenting interventions within the same study.

Conversely, previous meta-analytic research on parenting interventions for internalising problems, which analysed studies of children from birth to 18 and excluded effect sizes with high levels of heterogeneity, found an overall effect size of 0.12 for internalising problems (Yap et al., 2016). This effect size is smaller than the one observed in our study and appears comparable in terms of population and statistical method. Hence, this suggests that attachment- and emotion-focused parenting interventions could be a more promising choice of parenting intervention for reducing internalising problems in youth. Nevertheless, without directly comparing attachment- and emotion-focused parenting interventions to behavioural parenting interventions—or other parenting interventions—through a meta-analysis of high-quality RCTs, we cannot assume attachment- and emotion-focused parenting interventions are less effective for externalising problems or more effective for internalising problems.

Considering our findings within the context of past reviews on behavioural parenting interventions, both attachment- and emotion-focused parenting interventions and behavioural parenting interventions may effectively reduce externalising and internalising problems; however, there may be unique mechanisms underpinning these different intervention approaches. It is suggested that proximal targets of attachment- and emotion-focused parenting interventions, such as attachment security, reflective functioning, caregiver sensitivity, and parent emotional awareness, may be mechanisms accounting for improvements in externalising and internalising problems (Carlone & Milan, 2021; Havighurst et al., 2020; Kobak, Zajac, et al., 2015; Kok et al., 2013; Wang et al., 2013). For example, individual studies included in the review found that parent sensitivity post-intervention mediated the effect of attachment- focused parenting interventions on child externalising problems (Lind et al., 2020); and improvements in parent emotion socialisation mediated youth internalising problems following an emotion-focused parenting intervention (Havighurst et al., 2020). Further research should shed light on these and other mechanisms accounting for the effects of attachment- and emotion-focused parenting interventions on externalising and internalising problems, as has been done for behavioural parenting interventions with regard to behavioural parenting practices (Forehand et al., 2014). If attachment- and emotion-focused parenting interventions and behavioural parenting interventions continue to produce comparable results in future RCTs akin to the two observed in this paper, researchers and clinicians may also consider the extent to which attachment- and emotion-focused parenting interventions and behavioural parenting interventions are compatible and complementary. For example, it is theorised that individual differences in attachment patterns may be in part learnt through behavioural principles of classical and operant conditioning (Bosmans et al., 2020), and behavioural parenting interventions has been shown to improve attachment-based parenting domains such as caregiver sensitivity (O'Connor et al., 2013). Although there have been recent attempts by researchers to integrate these theoretical models in parenting interventions, they have not always found superior effects on externalising problems (Leijten, Melendez-Torres, et al., 2018; O'Hara et al., 2019) and are yet to be examined for internalising problems. Thus, the current review highlights several research directions to examine both possible underlying mechanisms of attachment- and emotion-focused parenting interventions as well as their compatibility with other parenting interventions.

Our review explored several possible factors that may influence or moderate the effectiveness of attachment- and emotion-focused parenting interventions on externalising and internalising problems. Firstly, follow-up analyses demonstrated a non-statistically significant increase in externalising problems from post-treatment to 6-month follow-up or greater, and effects at post-treatment held at follow-up for internalising problems. This suggests that at minimum, meta-analytic evidence demonstrates that the effects of attachment- and emotion-focused parenting interventions remain beyond immediate post-intervention for both externalising and internalising problems. Previous research suggests that attachment- and emotion-focused parenting interventions may produce sleeper effects (Bakermans-Kranenburg et al., 2003). For example, a study in our review that compared an attachment and emotion-focused parenting intervention (Connect; Moretti et al., 2018) to several behavioural parenting interventions found that while behavioural parenting interventions showed the greatest effect post-treatment, the attachment parenting intervention continued to show improvements at 2-year follow-up such that there were no longer differences in effect sizes between behavioural parenting interventions and attachment parenting intervention (Högström et al., 2017). If future research confirms sleeper effects, this could be unique to attachment- and emotion-focused parenting interventions relative to the broader parenting intervention literature. For example, a review of 40 RCTs found that behavioural parenting interventions had sustained effects—effects sizes remained the same—for up to 3 years without further improvements (van Aar et al., 2017). Regardless, at present, our meta-analysis of 38 studies supports comparable sustained effects at follow-up for attachment- and emotion-focused parenting interventions.

Secondly, study risk of bias appeared to impact attachment- and emotion-focused parenting interventions outcomes, such that low-risk studies produced results that are more favourable for attachment- and emotion-focused parenting interventions compared to waitlist comparators on externalising and internalising problems. Only 13 studies within this review were considered low risk of bias indicating an important limitation in the existing literature, which may also understate the overall effects of attachment- and emotion-focused parenting interventions on externalising and internalising problems.

The current review also attempted planned subgroup analyses including sample type, age, caregiver type, delivery method, and baseline levels of externalising and internalising problems;

however, heterogeneity and/or limited studies prevented consistently quantitatively synthesising results. Individual study findings suggested trends toward clinical samples and higher baseline levels of externalising problems/internalising problems showing greater change following attachment- and emotion-focused parenting interventions relative to comparators. These trends are comparative to previous research that has found that parenting interventions are more effective in decreasing problem severity when initial problem severity is higher (Leijten et al., 2013; McMahon et al., 2021). A greater proportion of studies with non-birth parents relative to birth parents showed more favourable results, though there were limited studies to determine a pattern. Previous research has been inconclusive as to whether socioeconomic characteristics are potential moderators of intervention effectiveness (McMahon et al., 2021). Regarding our qualitative results, it appeared that attachment- and emotion-focused parenting interventions may have showed more favourable treatment outcomes for preschool and school-aged children relative to infants and adolescents. However, we are cautious in interpreting this potential pattern of results as there were limited studies with children aged under 3 or over 12 years. Thus, this is an important area for further research. It is also important to note that previous research has been mixed on whether age is a moderator on psychosocial interventions for youth (e.g., McMahon et al., 2021). Finally, no clear patterns emerged for the impact of delivery method on treatment outcomes.

In addition to planned analyses, exploratory subgroup analyses found that attachment- and emotion-focused parenting interventions specifically developed to target youth mental health outcomes showed more favourable outcomes for externalising and internalising problems. These attachment- and emotion-focused parenting interventions tended to include components or modules that focused on parent–child conflict and/or parenting skills to manage difficult child behaviour. Future research should investigate which specific strategies included in attachment- and emotion-focused parenting interventions may fuel greater reductions in externalising or internalising problems, in addition to understanding what mechanisms may explain these effects. Micro-trials of common components in attachment- and emotion-focused parenting interventions to isolate mechanisms of effects could be utilised to this end (e.g., see Leijten et al., 2015).

In addition to child externalising and internalising problems, our review investigated secondary parent mental health and wellbeing outcomes, which included depression, anxiety, and stress. Parent mental health outcomes—most typically, depression—were quantitatively synthesised, though surprisingly, no statistically significant effects were observed for attachment- and emotion-focused parenting interventions against any comparators. This is inconsistent with a previous meta-analysis of an attachment- and emotion-focused parenting interventions that found reductions in parent depressive symptoms (Yaholkoski et al., 2016); however, other attachment and emotion-focused parenting intervention studies and parenting program research have also found null findings (Baradon et al., 2018; Jeong et al., 2021). Previous research suggests that parent training programs may significantly improve parent variables that are most proximal to the intervention such as parenting stress and perceived parenting competence rather than distal outcomes such as depression (Colalillo & Johnston, 2016). Hence, it could be hypothesised that if interventions more closely targeted parent mental health and wellbeing, greater changes may be observed. Connect is one example of an attachment and emotion-focused parenting intervention that considered mental health outcomes in its development and has shown positive improvements in this domain (Osman et al., 2017).

Although there were insufficient studies to pool parent stress quantitatively, five of seven studies were in favour of attachment- and emotion-focused parenting interventions reducing parental stress relative to comparators, suggesting potential benefits for improving parental stress. This also highlights an important gap in attachment- and emotion-focused parenting interventions research, in that similar to child outcomes, parent measures are usually focused on attachment-related constructs such as caregiver sensitivity (Steele & Steele, 2018), and effects on parental mental health are scarcer.

Limitations

To the best of our knowledge, this is the first quantitative synthesis of the effectiveness of attachment- and emotion-focused parenting interventions for youth externalising and internalising problems. Our review overcomes shortcomings of previous studies by taking a comprehensive and inclusive approach to ensure all controlled trials of published attachment- and emotion-focused parenting interventions that assessed externalising and internalising problems post-treatment were included. We were intentionally broad in our included presentations, caregivers, age range, and other demographic variables.

Notwithstanding these strengths, this study has several important limitations. First, many studies we included did not require participants to have baseline clinical levels of externalising or internalising problems. Previous research has demonstrated that baseline externalising problems moderates treatment effects, such that greater reductions in externalising problems are linked to higher baseline externalising problems (Leijten et al., 2013; McMahon et al., 2021). Due to insufficient studies, missing baseline data, and heterogeneity, our review was unable to quantitatively investigate whether baseline clinical level was a moderator across comparators. Second, five studies meeting inclusion criteria for this review were unable to be used in quantitative analysis due to missing data that were not provided by authors when requested. Third, 12 included studies were considered to have a high risk of bias, which is a limitation of intervention research. In our study, removing studies with high risk of bias, including non-randomised studies, did not appear to reduce overall effect sizes; however, this is still a potential issue that should be considered in future research. In particular, intervention fidelity was rated the highest risk of bias meaning that we were unsure of the extent to which some studies may have delivered the intervention as program developers intended it. Fourth, the current review chose a common recommended statistical approach for meta-analysis that relies on the assumption that the control and intervention groups have similar baseline characteristics (Cuijpers et al., 2017). Given the risk of bias found, this may not have consistently been the case and could have affected the pooled effect sizes. Since lower risk of bias studies showed more favourable outcomes, it is possible that treatment effects in this review are underestimated. Fifth, while this meta-analysis did not report results if statistical heterogeneity was high, there was clinical heterogeneity among types of active comparators. We followed planned protocol by pooling all active comparators, though there were insufficient studies to comprehensively investigate subgroups by type of active comparator. Further research needs to consider relative efficacy of attachment- and emotion-focused parenting interventions to other treatments, including behavioural parenting interventions as more RCTs are published. Finally, this meta-analysis primarily relied on parent-report outcomes (75% of included studies), though child-report, teacher-report, or observational data may have shown different results (e.g., see Fearon et al., 2010).

Research and Clinical Implications

Findings from this review offer new and important insights to inform both research and clinical practice in working with families. Prior results support attachment- and emotion-focused parenting interventions in improving caregiver sensitivity, reflective functioning, and child attachment security, with a particular emphasis on children who have been exposed to maltreatment (Bakermans-Kranenburg et al., 2003; Dozier et al., 2011). Building on this evidence base, our results provide strong support for attachment- and emotion-focused parenting interventions as an appropriate intervention approach for effectively reducing externalising and internalising problems in youth. While there is still limited understanding regarding the relative efficacy of attachment- and emotion-focused parenting interventions to other intervention programs, the current findings may help inform evidence-based clinical decision making regarding the type of parenting intervention that may best suit families' needs and preferences (Lilienfeld et al., 2013; Spring, 2007).

Future research would benefit from additional comparative trials, directly examining the relative effects of attachment- and emotion-focused parenting interventions against behavioural parenting interventions on child externalising and internalising problems, as well as possible child and family characteristics that may moderate attachment and emotion-focused parenting intervention effects on these outcomes. Moreover, where attachment and emotion-focused parenting intervention research is undertaken, mental health outcome measures should be regularly incorporated, and specifically, independent measures of externalising and internalising problems are recommended (see Achenbach et al., 2016). In addition to analysing effectiveness, we also strongly recommend investigating practitioner and client acceptability of attachment- and emotion-focused parenting interventions. While this meta-analysis demonstrates statistically significant reductions in externalising and internalising problems following attachment- and emotion-focused parenting interventions, it is unknown what mechanisms may explain this. Future research should investigate this topic in addition to exploring the extent to which attachment- and emotion-focused parenting interventions and behavioural parenting interventions may be compatible or superior as an integrated approach versus alone.

Summary

In summary, this study provides initial meta-analytic evidence for the effectiveness of attachment- and emotion-focused parenting interventions for reducing youth externalising and internalising problems. Significant small-to-moderate effects were found overall for attachment- and emotion-focused parenting interventions that held for 6-month follow-up and onwards. The current findings provide a significant and timely overview and update for research and practice in parenting interventions. Evidence regarding the relative efficacy of attachment- and emotion-focused parenting interventions to behavioural parenting interventions, however, remains limited in the absence of sufficient head-to-head RCTs. Future research is needed to directly investigate the relative effectiveness and acceptability of these two interventions as well as consider the inclusion of externalising and internalising problems more regularly in attachment- and emotion-focused parenting interventions research.

Introduction to Study 2

The findings from Study 1 partially answered the overall thesis research question. Specifically, Study 1 demonstrated meta-analytic evidence supporting the effectiveness of attachment- and emotion-focused parenting interventions in reducing youth externalising and internalising problems. Notably, only two studies directly compared attachment- and emotion-focused parenting interventions with behavioural parenting interventions, preventing quantitative synthesis. While these studies suggested that the two approaches to parenting interventions may be comparable, at least for externalising problems, more head-to-head trials are needed to establish relative effectiveness, including the relative effectiveness of components within broader models of parenting interventions. In addition, as highlighted in Study 1's conclusion, more research is needed on the relative acceptability of these two parenting intervention approaches.

Studies 2 and 3 aim to answer the second part of the overall thesis question: How do behavioural and non-behavioural parenting interventions compare on practitioner acceptability for use with youth and their families? As detailed in Chapter 2, investigating effectiveness alone is insufficient to ensure successful implementation of parenting interventions. Provider perspectives are a vital – yet often missing – perspective required for successful implementation of parenting interventions. Currently, providers' relative acceptability of behavioural and non-behavioural parenting interventions is largely unknown. There has been speculation of a recent paradigm shift, from behavioural parenting interventions towards attachment- and emotion-focused parenting interventions, largely attributed to concerns around time-out. Thus, before investigating practitioners' overall attitudes towards different intervention approaches, it is important to first understand if these concerns about time-out are reflected in practitioners currently working with children and families. Study 2 therefore aims to understand practitioners' use and acceptability of time-out for the treatment of child conduct problems in real-world settings.

Note. Study 2 was first published in *Child Psychiatry and Human Development* (2024) by Springer Nature:

Jugovac, S., Hawes, D., Tully, L., & Pasalich, D. (2024). Practitioners' use and acceptability of time-out. *Child Psychiatry and Human Development.* https://doi.org/10.1007/s10578-024-01798-9

It is reproduced here with permission from Springer Nature. The version presented here has been slightly edited, including changes to British English spelling, and Table/Appendix numbering for consistency with the thesis. Additional exploratory data that was not published from Study 2 is available in Appendix I.

Chapter 5: Practitioners' Use and Acceptability of Time-Out

Time-out is an empirically supported component of parenting interventions for child conduct problems; however, it is receiving increasing criticism among parents and some practitioners. This study aimed to investigate practitioners' use and acceptability of time-out for child conduct problems; examine whether perceived effectiveness and knowledge of evidence-based parameters of time-out implementation influence use and acceptability of time-out; and explore practitioners' perceptions about alternatives to time-out. One hundred and ten Australian and New Zealand practitioners who have worked with children and families completed an online survey investigating their use and acceptability of time-out for children with conduct problems. Results showed that 55.5% of the sample have used time-out, with 38.0% considered current time-out users. Acceptability of the strategy varied, with some practitioners critical of time-out. Increased knowledge of evidence-based parameters of time-out implementation was associated with increased frequency of time-out use and acceptability, while perceived effectiveness was associated with increased acceptability only. Practitioners perceived a number of other parenting strategies as effective alternatives to time-out. These findings have important implications for improving practitioners' implementation of time-out with parents of children with conduct problems.

Introduction

Time-out – short for time-out from positive reinforcement – involves a parent temporarily placing a child in a minimally reinforcing setting (e.g., minimal parent attention) for a brief duration in response to defiant and/or aggressive child behaviour. Time-out is not considered a stand-alone strategy, rather it is part of a set of procedures in which strengthening the parent–child relationship through positive reinforcement and building a warm and responsive caregiving context (i.e., time-in), are critical first steps (Dadds & Tully, 2019). Time-out is a pre-planned strategy included in evidence-based parenting interventions, namely, BPT, which are predominantly based on social learning theory (Scott & Dadds, 2009). BPT aims to reduce child conduct problems (e.g., noncompliance, aggression) and strengthen the parent–child relationship by training parents in applying positive attention techniques for desirable child behaviour and neutral consequences (e.g., time-out) for undesirable child behaviour (McMahon & Pasalich, 2018). Commonly implemented BPT include IY (Webster-Stratton, 2005), PCIT (Eyberg, 1988), and Triple P (Sanders, 1999).

The literature on time-out has examined the effectiveness of time-out itself and within BPT. BPT is the predominant model for reducing child conduct problems (Hudson et al., 2023; Mingebach et al., 2018) and is also linked to reductions in broader child mental health difficulties such as internalising behaviours, as well as improvements in parenting practices (Batzer et al., 2018; Bloss et al., 2022; Hudson et al., 2023). Time-out itself is an effective procedure for reducing conduct problems (Chorpita & Daleiden, 2009; Larzelere et al., 2020) and meta-analytic reviews examining components of parenting interventions shows that the inclusion of time-out within BPT leads to stronger treatment effects (Kaminski et al., 2008; Leijten et al., 2019; Leijten, Gardner, et al., 2018). Furthermore, the positive effects of time-out in childhood may even extend into adulthood by way of improved mental health, attachment, and emotion-regulation (Xu et al., 2024). Taken together, there is substantial support for the effectiveness of time-out for child conduct problems, and to a lesser extent, for other child and parent wellbeing outcomes.

The Time-Out Debate

Despite the substantial empirical support for time-out, there has been growing controversy for its use amongst practitioners and parents (Dadds & Tully, 2019; Quetsch et al., 2015; Siegel & Bryson, 2014). Those against time-out hold personal beliefs that the strategy can harm child development, trigger trauma reactions; rupture the parent–child attachment-relationship; ignore the underlying needs of children; shame children or make them uncomfortable (Canning et al., 2021; Dadds & Tully, 2019; Quetsch et al., 2015). Many researchers relate the initial shift away from time-out to the *Time magazine* article, “Time-outs are hurting your child” (Siegel & Bryson, 2014). This article discussed how brain imaging for relational pain—presumed by the authors to be experienced by children while in time-out—looked similar to physical pain. Following this article, time-out began to be incorrectly equated with physical abuse by some, despite a lack of empirical evidence. In fact, Siegel later clarified that when used appropriately, time-out is a reasonable approach for children (Morelli, 2014). There is also no current empirical evidence to suggest long-term harm from time-out for children (Knight et al., 2020; Larzelere et al., 2018; Morawska & Sanders, 2011). Furthermore, recent findings suggest that BPT that included time-out showed equivalent, if not better therapeutic outcomes for children with higher versus lower levels of adverse experiences (Roach et al., 2022), and BPT delivered in populations of maltreated children have shown reduced externalising behaviours and negative parenting practices (Batzer et al., 2018). Nevertheless, articles debating time-out have continued to surface, pushing a need to research the current state of time-out use and acceptability in the community.

Research on Parents’ Use and Acceptability of Time-Out

There are decades of research regarding parents’ time-out use (e.g., Everett et al., 2010). Recent estimates indicate that greater than 70% of parents have used time-out and the majority reported recent or current time-out use (Canning et al., 2021; McLean et al., 2022; Riley et al., 2017). Studies that have investigated current time-out use (i.e., whether time-out was used at the time of surveying) have found use by approximately 60% in samples of Australian parents (Canning et al., 2021; McLean et al., 2022) and 75% in U.S. parents (Riley et al., 2017). Similarly, time-out is generally accepted by parents, with relatively higher mean acceptability ratings in U.S. than Australian parents (Brodd, 2018; Canning et al., 2021). Research on time-out acceptability in parents has shown that the main reasons for not using time-out is the belief that it is harmful for children or a preference for alternative strategies (Canning et al., 2021; McLean et al., 2022). In a qualitative study of Australian parents who preferred not to use time-out, the following strategies were suggested as potentially effective alternatives to time-out: time-in, talking strategies, rewards and consequences, and emotion coaching (Canning et al., 2021). It is important to note that participants seemed to be referring to the term “time-in” with a different conceptualisation than the behavioural perspective, that is, where parents maintain proximity with their child when they are showing challenging behaviours, with the goal of supporting their child’s emotional and behavioural regulation through co-regulation and connection. However, according to the existing literature, only rewards (i.e., positive reinforcement, praise) and natural/logical consequences are considered key to parenting programs for effectively treating child conduct problems (Leijten et al., 2019), and are typically used alongside time-out within BPT.

The use and acceptability of time-out amongst parents has been found to be related to parents' perceived effectiveness of time-out and their knowledge of evidence-based parameters of time-out implementation or "appropriate" time-out. In fact, lower parent perceived effectiveness and knowledge of appropriate time-out implementation has been found to be associated with reduced time-out use and lower levels of acceptability (Brodd, 2018; Canning et al., 2021; McLean et al., 2022). Importantly, surveys with parents have found that less appropriate time-out use was associated with poorer perceived effectiveness for reducing child mental health outcomes (McLean et al., 2022; Riley et al., 2017). These findings may also be reflective of time-out implementation being a complex procedure that requires careful adherence to evidence-based parameters.

Research has established the following implementation parameters of time-out: consistency; immediacy; a reinforcing environment when not in time-out; the removal of reinforcers during time-out; brief duration (i.e., ≤ 5 min); time-out in response to deliberate, inappropriate child behaviour (e.g., physical aggression) but not fear or distress; and that release from time-out is signalled by a parent when the child is calm (e.g., Corralejo et al., 2018; Everett et al., 2010; McLean et al., 2022). However, studies often report parents tend to implement time-out counter to these parameters (Lawrence et al., 2021; McLean et al., 2022; Riley et al., 2017). For example, Riley et al., (2017) reported that 84.9% of 308 parents who used time-out described implementing TO counter to empirical parameters. This is unsurprising given that sources of information on time-out publicly available to parents such as books and websites are often inconsistent with empirical evidence (Corralejo et al., 2018; Drayton et al., 2014), and to a lesser extent, some parenting programs do not teach all of these parameters (Corralejo et al., 2018). Nevertheless, several widely disseminated BPT programs provide evidence-based and practical instructions on time-out implementation consistent with these parameters (e.g., Webster-Stratton, 2005).

In sum, findings from parent research on time-out suggest that while most parents use time-out, many are using it counter to empirical evidence. Considering that many knowledge sources currently available to parents may also be further exacerbating the spread of time-out misinformation, it is essential to consider the role of practitioners' use and acceptability of the strategy in clinical practice since successful implementation of evidence-based treatments like BPT require high levels of acceptability from intervention deliverers (Sekhon et al., 2017; Woodfield, Brodd, et al., 2021; Woodfield, Cargo, et al., 2021).

Practitioners' Use and Acceptability of Evidence-Based Treatments

There is extensive evidence in the literature to support the underutilisation of evidence-based treatments in clinical practice (Becker-Haimes et al., 2022). Research with practitioners in several professions has consistently demonstrated that practitioners can often adapt or completely omit evidence-based treatments from their treatment repertoire (Becker-Haimes et al., 2022; Beidas et al., 2021; Deacon et al., 2013) and it is possible that similar patterns could be true for parenting interventions for conduct problems. Emerging literature has investigated practitioners' attitudes towards BPT that include time-out, in particular, Triple P and PCIT. Overall, these programs have generally been rated as effective and acceptable by practitioners; however, the components of intervention that typically include time-out have been rated less favourably (Mejia et al., 2015; Woodfield, Cargo, et al., 2021). For example, in a sample of 80 practitioners trained in Triple P, mean acceptability scores on positive reinforcement strategies were rated higher than mean acceptability scores on strategies to manage misbehaviour (Mejia et al., 2015). Similarly, in a sample of 76 practitioners trained in PCIT although 80% of the sample reported no significant concerns with time-out, 38% adapted the intervention, most commonly by removing time-out or adding emotion-regulation components (Woodfield, Cargo, et al., 2021). Practitioners also reported less confidence on the parent-directed interaction phase (69.4%) of treatment that includes time-out relative to the child-directed phase (90.7%) without time-out (Woodfield, Cargo, et al., 2021), although time-out specific concerns were rarely reported across studies (Christian et al., 2014; Niec et al., 2018; Woodfield et al., 2020). Hence at present it appears there is general acceptance by practitioners for BPT programs and limited concerns about time-out in the literature. However, without empirical evidence directly investigating time-out specifically, we do not know how much this evidence-based strategy is used or accepted among intervention deliverers.

Research has suggested several factors that could be associated with practitioner use and acceptability of evidence-based treatments, some of which resemble factors that influence parent use and acceptability of time-out. For instance, research on cognitive behaviour therapy has demonstrated that greater perceived effectiveness and knowledge of the intervention characteristics are associated with greater acceptability and intention to use the intervention (Peris Barquero et al., 2022). Given the pattern of disconnect between science and practice amongst practitioners with regard to other evidence-based treatments, it is possible that similar patterns could be observed for time-out. Studies thus far measuring practitioners' use and acceptability of time-out have been limited to practitioners trained in specific models of BPT. Hence, further research is needed to better understand practitioners' use and acceptability of time-out in the community, including those who deliver a range of interventions to parents. Practitioners are a key source of information for parents of children with conduct problems and are in a significant position to empower parents to access evidence-based treatments. However, the involvement of practitioners in effective implementation of evidence-based treatments, including time-out, is often overlooked (Beidas et al., 2021; Woodfield et al., 2020). Overall, it is unknown whether current levels and predictors of time-out use and acceptability among community practitioners are similar to the pattern of findings reported in recent research with parents.

Current Study

To better understand practitioners' use and acceptability of time-out in practice, this study had three aims. First, to investigate the current use and acceptability of time-out amongst practitioners working with children and families in Australia and New Zealand. Time-out use and acceptability were conceptualised as two independent yet related constructs, as previous research with practitioners has shown that increased use of interventions, including parenting interventions, is associated with increased acceptability and vice versa (Mejia et al., 2015; Peris Barquero et al., 2022; Woodfield, Cargo, et al., 2021). Second, this study aimed to examine factors associated with use and acceptability of time-out, namely perceived effectiveness and knowledge of empirically supported parameters of time-out implementation. Previous research on parents' time-out use and acceptability has established a positive association with perceived effectiveness and knowledge of empirically supported parameters of time-out implementation (Canning et al., 2021; Deacon et al., 2013; McLean et al., 2022). Furthermore, in research involving other evidence-based psychological treatments, perceived effectiveness and knowledge of the intervention have been linked to its use and acceptability amongst practitioners (Peris Barquero et al., 2022). Finally, the study aimed to explore practitioners' beliefs about effective alternatives to time-out for child conduct problems in order to understand the breadth of parenting strategies currently being recommended to parents.

Method

Participants and Recruitment

Participants included Australian and New Zealand practitioners who had worked with children and families in a mental health setting, including practitioners with experience delivering parenting programs. Australia and New Zealand were considered sufficiently similar, in terms of professional training pathways, employment, and healthcare systems as cited in previous similar research (Woodfield, Cargo, et al., 2021). Practitioners were excluded if they had no prior experience providing mental health services to children and families and/or were not English speaking. Participants were recruited via emails to relevant service agencies, professional websites, and Facebook groups; as well as via "snowballing", wherein participants were asked to share study details with colleagues. Between November 2020 and February 2023, 146 responses were recorded, although 36 participants who did not complete the survey were considered to have withdrawn their consent and hence were removed from the study. The final number of practitioners was 110 (see Table 3 for participant demographic characteristics and professional experience).

Practitioners were mainly aged between 25 and 34 years (41.8%) and female (87.3%). Nearly all practitioners were living in Australia (96.4%) and the majority identified as European Australian (80.9%). Most practitioners had attained a postgraduate degree (87.3%) and were psychologists (67.7%). Eighty-seven percent of participants reported working with children and families at the time of completing the survey and total duration of experience working with children and families ranged from one month to 45 years (*M* = 9.96 years, *SD* = 9.94 years). Participants reported most commonly working with parent–child relationship difficulties (78.2%), parenting behaviours (72.7%), child conduct problems (64.6%), and child anxiety/depressive disorders (77.3%). Nearly all participants reported working with birth parents (95.5%), and 49.1% reported working with non-birth parents.

The majority of practitioners reported receiving training in at least one specific branded parenting intervention (58.2%) and there was variety amongst the interventions practitioners were trained in (see Appendix J, Table J1 for further details). Twenty-five percent of participants reported formal training in a BPT that included time-out, though 52.7% of participants reported training in social learning theory which underpins BPT and time-out. All participants had training in at least one theoretical orientation, though most commonly, participants were trained in three (25.5%). The most common theoretical orientations participants were trained in were cognitive behaviour (83.6%) and attachment theory (76.4%) (see Appendix J, Table J2 for more details).

Measures

Participants were invited to complete a 10–15-min online survey anonymously via Qualtrics Software (Qualtrics, 2024). The survey included questions about demographics (i.e., gender identity, age, ethnicity, and country born), professional experience (i.e., highest qualification, current occupation, current work setting, and primary presentations), as well as their training in parenting programs and theoretical orientations. For the main aims of the study, a number of established measures were adapted for use in this study, along with new questions that were developed specifically to address the aims of the study.

Table 3

Demographic Characteristics and Professional Experience of Participants

Characteristic	*n*	%
Gender Identity		
Female	96	87.3
Male	14	12.7
Age		
18-25	7	6.4
25-34	46	41.8
35-44	28	25.5
45-54	18	16.4
55+	11	10.0
Country		
Australia	106	96.4
New Zealand	4	3.6
Ethnicity		
Aboriginal/Torres Strait Islander/ Indigenous Peoples	1	0.9
Asian Australians	12	10.9
Latin American	1	0.9
European Australian	89	80.9
Other	8	7.3
Highest Qualification		
Diploma/TAFE	1	0.9
Undergraduate	13	11.8
Honours	27	24.5
Masters	53	41.2
Doctorate	6	5.5
PhD	10	9.1
Current Occupation		
Psychologist	40	36.4
Clinical psychologist	28	25.5
Provisional psychologist	7	6.4
Psychiatrist	2	1.8

Characteristic	*n*	%
Mental health clinician	3	2.7
Student	8	7.3
Social work	4	3.6
Academic	3	2.7
Counsellor	2	1.8
Therapeutic assessor	3	2.7
Other	14	12.7
Professional Registration		
Social worker	6	5.5
Medicine	1	0.9
Occupational therapy	3	2.7
Psychology	87	79.1
Current Work Setting		
Community	34	30.9
Private practice	64	58.2
Education	19	14.6
Government	4	3.6
Hospital	3	2.7
Other	6	5.5
Primary Presentations of Clients		
Neurodevelopmental disorders	58	52.7
Child behavioural difficulties/disorders	71	64.6
Child anxiety/depressive disorders	85	77.3
Parenting behaviours	80	72.7
Parent-child relationship difficulties	86	78.2
Enuresis/Encopresis	18	16.4
Children who have been exposed to abuse, neglect, and/or other trauma	54	49.1
Family/relationship conflict resolution including divorce and separation	41	37.3
Other	10	9.9

Note. N = 110. Percentages exceed 100% for current occupation, professional registration, work setting, and client presentations as participants could select multiple response options.

Time-out Use

To measure current time-out use, practitioners were asked, "do you currently use time-out in your work with families (i.e., have you encouraged parents to remove a child from a situation when they are misbehaving and have them go somewhere else?)." Practitioners were presented with a dichotomous yes or no response option and those who reported no were asked about their previous time-out use and reasons for not currently using time-out. Participants were provided with a list of potential options (e.g., "parents disagree with the use of time-out," "only work with adolescents or adults") as well as an "other" option where they could provide an open-ended answer. In addition, all participants were asked to respond on a Likert scale from never to always on how often they "recommend the use of time-out when working with families of children with conduct problems" (i.e., "time-out use frequency"). To capture greater variance in scores, time-out use frequency was used in regression analyses rather than the dichotomous yes/ no response option. Appendix K shows items on time-out use, acceptability, and perceived effectiveness.

Time-Out Acceptability

To measure practitioners' acceptability of time-out, they were provided with five items on a 5-point Likert scale from strongly disagree (1) to strongly agree (7). For example, "time-out is an acceptable way of dealing with children's problem behaviour." The five item scores were summed to form a total "acceptability" score ranging from 5 to 25 with higher scores indicating higher acceptability and was used for regression analyses. These items were informed by Canning et al. (2021) who adapted a parent acceptability measure for time-out from the Treatment Evaluation Inventory-Short Form (Kelley et al., 1989). Canning et al. removed two items from the original measure and reworded the remaining to suit the study aims. The current study removed an additional item to Canning et al., "I believe time-out is likely to be effective" as it was considered to overlap too closely with perceived effectiveness. Cronbach's alpha in the current study was excellent (α = .98). Further, to complement the generic acceptability scale, practitioners were asked to respond to seven additional exploratory items also presented on a 5-point Likert scale. These items were made up of common criticisms of time-out in the literature (e.g., time-out hurts child emotional development, time-out triggers trauma reactions) (Quetsch et al., 2015). Acceptability items were prefaced by a more comprehensive definition of time-out that was designed by the study authors in collaboration with experts in the field and with reference to empirical literature:

> Often the term "time-out" can be used differently across professional contexts. For the following questions please describe your beliefs towards time-out as implemented

within behavioural parenting programs. That is, time-out from positive reinforcement, where a child is removed from a situation and placed in a safe space without their caregiver for a small amount of time.

Perceived Effectiveness

Perceived effectiveness was first measured with a single-item response yes or no to a statement regarding whether practitioners believed that time-out could effectively increase desired behaviours and reduce conduct problems in 3–8-year-olds. This question was used to provide a general frequency count on whether practitioners believed time-out was an effective strategy. In addition, a perceived effectiveness scale was developed to provide a dimensional assessment of this construct. This scale included 4 items informed by Canning et al., (2021) who adapted a pre-existing subscale from the Multidimensional Adolescent Satisfaction Scale by rewording items to suit the current context (i.e., time-out for child conduct problems) (Garland et al., 2000). Items were adapted to suit the context of the current survey (i.e., time-out for child conduct problems) and participants were asked to rate their responses on a 5-point Likert scale from strongly disagree (1) to strongly agree (5). Scores ranged from 4-20, with higher scores indicating higher perceived effectiveness. Internal consistency was strong ($\alpha = .84$). The survey also included three additional exploratory questions that measured participants' perceived effectiveness of time-out for presentations of conduct problems in the context of trauma, internalising difficulties, and emotion-regulation.

Knowledge of Evidence-Based Parameters of Time-out

Eighteen items were developed for this study to assess practitioners' knowledge of evidence-based parameters of time-out. This variable was constructed using items that aligned with six evidence-based parameters of time-out implementation: minimal parent attention and lack of reinforcing stimuli in time-out; reinforcing environment when a child is not in time-out; contingencies to time-out release; immediacy; release when a child is calm and signalled by a parent; and consistency (Corralejo et al., 2018; McLean et al., 2022; Riley et al., 2017). The average item scores within each parameter were summed for a total "time-out knowledge" score ranging from 0 to 6, with higher scores indicating higher knowledge of evidence-based parameters of time-out implementation. There was good reliability ($\alpha = .80$). All practitioners were also asked to select where they sourced their knowledge of time-out implementation from a list of potential options (e.g., research studies, training in specific parenting programs) or an "other" response.

Beliefs About Time-Out Alternatives

In the final section of the survey, all practitioners were asked to report on what alternative strategies instead of time-out they "believe are effective in improving child conduct problems (e.g., defiance and aggression)" in an open-ended response. All practitioners were also given the option to provide further general comments in an open-ended response at the end of the survey. Finally, practitioners were asked additional exploratory questions on their broader preferences on theoretical approaches (see Appendix I).

Analytic Plan

Aim 1 was analysed using frequency counts of practitioners' responses to current and/or previous time-out use. In addition, we repeated frequency counts on current time-out use, excluding participants who reported not currently seeing child conduct problem cases to gain a more accurate understanding of practitioners specifically working in this area at the time of surveying. Descriptive statistics were collected and reported on for current time-out use, previous time-out use, and time-out use frequency. Similarly, descriptive statistics were also collected and reported on for the acceptability scale. Finally, frequency counts on additional exploratory items on criticisms of time-out were reported. Time-out use frequency and the acceptability scale were used as both independent and dependent variables in the regression models to identify associations with each other as well as other variables.

Two regression models were used to address Aim 2. First, using ordinal logistic regression, acceptability, perceived effectiveness, and time-out knowledge were regressed on time-out use frequency. Second, a hurdle model was employed to regress time-out use frequency, perceived effectiveness, and time-out knowledge on acceptability. A hurdle model was used as 24% of participants gave the lowest possible score on acceptability (i.e., lower acceptability of time-out). Hence, the lowest possible acceptability score of 5 was dummy coded with a score of 1 and all other scores were coded as 0. A binary logistic regression was run on the dummy variable, while a multiple linear regression was run on the remaining "other scores." For each regression model, potential covariates were included in analyses when they were statistically significantly associated with the dependent variable. Covariates considered included: gender, ethnicity, age, previous training, highest qualification, occupation, years of experience, and presentations practitioners were working with. Sensitivity analyses were used to repeat regression analyses with and without covariates. See Appendix L for data screening and cleaning.

To address Aim 3, frequency counts of reoccurring responses on time-out alternatives were coded into categories using an inductive content analysis approach. The first author initially familiarised themself with all responses, then developed preliminary categories through iterative reading. These categories were refined in consultation with the last author, who reviewed all final codes and examples of coded text. General comments from the end of the survey were reviewed by the first author and categorised into similar groups in consultation with the last author, and their frequencies were reported on similarly analysed and categorised, with frequencies reported.

Results

Table 4 provides descriptive statistics of main study variables and their associations according to spearman's rank order correlation.

Table 4

Descriptive Statistics and Correlations of Main Study Variables

Variable	M	SD	Range	1	2	3	4
1. Time-out Use Frequency	2.03	1.07	1-5				
2. Acceptability	12.78	6.64	5-25	.68**			
3. Time-out Knowledge	3.17	1.57	0.4-6	.57**	.72**		
4. Perceived Effectiveness	11.04	4.41	4-20	.56**	.84**	.72**	

Note. ** $p < .001$.

Use and Acceptability of Time-Out in Practitioners

Regarding Aim 1, 30% of participants reported current time-out use in their work with children and families, and a further 25.5% had used it previously, giving a total of 55.5% of participants reporting time-out use. The most common reason for practitioners currently not using time-out was personal preference for an alternative strategy (59.2%), followed by, "I feel strongly against the use of time-out" (40.8%). Five percent of participants selected "parents disagree with the use of time-out," 10.5%, reported not knowing "how to implement time-out," 8.9% of participants reported that they "don't see cases involving child conduct problems where time-out could be implemented," 6.5% reported only currently working "with adolescents or adults (not children)," and 22.4%, selected "other." Other reasons included clients having trauma backgrounds (3.6%). When only participants who reported currently seeing child conduct problems were analysed, 38.0% reported currently using time-out. On average, participants sometimes recommended using time-out when working with conduct problems (see Table 4). Time-out use frequency was positively skewed, such that with each increase in category on the scale, from never ($n = 44$) to always ($n = 2$), there was a reduction in participant votes.

On average, practitioners neither agreed nor disagreed on acceptability for time-out (see Table 4). Item level means for time-out criticisms ranged from 2.85 –3.29. The highest frequency counts on strongly agree for practitioners were items: "time-out hurts children's emotional development" ($n = 28$) and "time-out is shaming to children" ($n = 29$). Seventy-four percent of practitioners somewhat or strongly agreed that time-out can trigger trauma reactions; 54.5% of practitioners somewhat or strongly agreed that time-out makes them feel uncomfortable; and 50.9% somewhat or strongly agreed that time-out strategies are manualised and not individualised. See Appendix M, Table M1 for frequency counts on criticisms of time-out.

Factors Associated with Time-Out Use and Acceptability

Considering Aim 2, variables associated with our two dependent variables: time-out use frequency, and acceptability were examined. These included perceived effectiveness, time-out knowledge, and socio-demographic variables. All main study variables demonstrated significant bivariate correlations (Table 4). The following covariates were identified for the dependent variable, time-out use frequency: BPT trained (yes/no) ($r_{pb} = 0.30$, $p < .001$), psychologist (yes/no) ($r_{pb} = 0.24$, $p < .05$), and seeing a current conduct problem case (yes/no) ($r_{pb} = 0.19$, $p < .05$). Furthermore, the following variables were associated with the dependent variable, time-out acceptability, and hence were included as covariates: BPT trained ($r_{pb} = 0.26$, $p < .001$), psychologist ($r_{pb} = 0.34$, $p < .001$), practitioner age ($r_{pb} = -0.25$, $p < .001$), and the number of years practitioners worked with children and families ("years worked," $r_{pb} = -0.31$, $p < .001$). Although bivariate correlations indicated strong associations between main study variables, in particular acceptability and perceived effectiveness, multi-collinearity for each regression model was assessed and did not appear present according to variation inflation factors (< 3) and tolerance indices (> 0.1) (Garland et al., 2000).

Perceived Effectiveness of Time-Out

Fifty-seven percent of practitioners endorsed yes to time-out effectively increasing desirable behaviour and decreasing conduct problems in children aged 3–8 years. Responses to additional exploratory questions regarding perceived effectiveness (see Appendix M, Table M2) demonstrated that most practitioners strongly disagreed that time-out is an effective strategy for reducing conduct problems in children who have been exposed to trauma (55.6%) and for reducing child internalising difficulties (55.5%). Half the practitioners somewhat or strongly disagreed that time-out is effective for improving emotion-regulation skills.

Knowledge of Evidence-Based Parameters of Time-Out

The Kolmogorov–Smirnov statistic indicated that time-out knowledge was approximately sampled from the normal distribution (p = .51). Time-out information was most commonly sourced from other practitioners working with children and families (64.6%) and research studies (48.2%). Practitioners also reported receiving time-out information from clinical experience (43.6%); evidence-based websites (32.7%); parenting blogs and podcasts (20%); textbook/treatment manuals (40.9%); and university training programs (30.9%).

Factors Associated with Frequency of Time-Out Use

A cumulative ordinal logistic regression with proportional odds was run to examine effects of acceptability, perceived effectiveness, knowledge, seeing a current conduct problem case, psychologist, and BPT trained on time-out use frequency (see Table 5). The final model was statistically significant, $\chi2$ (6) = 89.74, p < .001. The odds of higher time-out use were 1.36 times higher for practitioners with higher levels of acceptability (95% CI [1.20, 1.54]; Wald $\chi2$ = 23.79, p < 0.001) and 1.53 times higher for practitioners with higher knowledge scores (95% CI [1.02, 2.30]; Wald $\chi2$ = 4.24, p = .039). The odds of recommending time-out more often were 3.14 times higher if practitioners were seeing a current child case with conduct problems (95% CI [1.28, 7.73]; Wald $\chi2$ = 6.20, p = .013). Perceived effectiveness was not associated with time-out use (p = .263). There was also no statistically significant difference in time-out use for practitioners who were psychologists (p = 0.844) or BPT trained (p = .282).

Table 5

Ordinal Logistic Regression on Time-Out Use Frequency

	B	SE	Wald	*df*	*p*	Odds Ratio	95% CI for odds Ratio	
							Lower	Upper
Acceptability	0.31	0.06	23.79	1	< .001	1.36	1.20	1.54
Perceived Effectiveness	-0.10	0.09	1.25	1	.263	0.91	0.76	1.08
Knowledge	0.43	0.21	4.24	1	.039	1.53	1.02	2.30
Current CP Case	1.14	0.46	6.20	1	.013	3.14	1.28	7.73
Psychologist	-0.12	0.59	0.04	1	.844	0.56	0.28	2.80
BPT Trained	0.52	0.48	1.16	1	.282	1.67	0.65	4.31

Note. CP = conduct problems; BPT = behavioural parent training.

A sensitivity analysis without covariates (i.e. current conduct problem case, psychologist, and BPT trained) was conducted. The overall model remained statistically significant [$\chi2$ (3) = 80.36, $p < .001$] and the same pattern of results was observed. Similarly, an additional exploratory sensitivity analysis was conducted swapping BPT trained for practitioners trained in social learning theory. While only a quarter of participants were trained in BPT, approximately half of practitioners were trained in social learning theory. Again, the overall model remained statistically significant and training in social learning theory was not significantly associated with time-out use frequency.

Factors Associated with Time-Out Acceptability

A hurdle model was run regressing time-out acceptability on: time-out use frequency, perceived effectiveness, knowledge, BPT trained, psychologist, practitioner age, and years worked. First, a binary logistic regression (see Table 6) was run on the lowest possible score of acceptability (i.e., strongly disagree) and second, a multiple linear regression (see Table 7) was run for all other scores.

Table 6

Logistic Regression for Lowest Possible Score of Acceptability

	B	SE	Wald	*df*	*p*	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Time-out Use Frequency	0.58	0.77	0.57	1	.451	1.79	0.40	8.05
Perceived Effectiveness	-0.66	0.18	12.79	1	<.001	0.52	0.36	0.74
Knowledge	-0.46	0.43	1.17	1	.280	0.63	0.27	1.45
Years Worked	0.14	0.07	3.70	1	.055	1.15	1.00	1.33
Psychologist	1.24	0.91	1.86	1	.173	3.44	0.58	20.34
BPT Trained	0.35	1.12	0.10	1	.755	1.42	0.16	12.70
Age			1.01	4	.908			
25-34	1.45	3.00	0.23	1	.629	4.25	0.12	1515.80
35-44	1.31	1.61	0.67	1	.415	3.72	0.16	87.10
45-54	1.31	1.39	0.89	1	.345	3.71	0.24	56.18
55+	0.56	1.49	0.14	1	.710	1.74	0.09	32.56
Constant	1.73	2.12	0.67	1	.413	5.66		

Note. BPT = behavioural parent training.

Table 7

Multiple Linear Regression for Acceptability 'Other' Scores

	B	95% CI for *B*		*SE B*	β	R^2	ΔR^2
		Lower	Upper				
Model							
Constant	-2.47	-6.47	1.53	2.01		0.72	0.69
Time-out Use Frequency	2.22**	1.40	3.05	0.41	0.44		
Perceived Effectiveness	0.64**	0.36	0.92	0.14	0.39		
Knowledge	0.81*	0.06	1.55	0.37	0.19		
Years Worked	-0.10	-0.24	0.03	0.07	-0.14		
Psychologist	0.83	-1.45	3.10	0.96	0.04		
BPT Trained	0.55	-1.37	2.47	0.96	0.04		
Age	0.60	-0.41	1.61	0.51	0.11		

Note. BPT = behavioural parent training.

**p* < .05, ***p* < .001.

The binary logistic regression was statistically significant, χ2 (14) = 79.33, *p* < .001. The model explained 77.5% (Nagelkerke R2) of the variance in time-out acceptability. Of the seven predictors, only perceived effectiveness of time-out was statistically significant. Lower perceived effectiveness was associated with an increased likelihood of selecting the lowest possible acceptability score (OR = 0.52, 95% CI [0.36, 0.76]). No other variables were statistically significant. The model was repeated without covariates (years worked, psychologist, BPT trained, and age) and results remained consistent.

All assumptions for multiple linear regression on the remaining 82 scores of acceptability apart from two high leverage points were met. The final multiple linear regression model (Table 7) was statistically significant, $F(7, 75) = 27.122$, $p < .001$, adj $R^2 = 0.69$. Three of seven variables were significantly associated with acceptability; namely, time-out use frequency (β = 2.22, 95%CI [1.40, 3.05], $p < .001$); perceived effectiveness (β = 0.64, 95% CI [0.36, 0.92], $p < .001$); and time-out knowledge (β = 0.81, 95% CI [0.06, 1.55], $p = .034$).

A sensitivity analysis was conducted without the two high leverage points and all assumptions were met for multiple linear regression. The overall model remained statistically significant, (F (7, 75) = 30.197, $p < .001$, adj $R^2 = 0.72$), as did the main three study variables: time-out use ($p < .001$), perceived effectiveness ($p < .001$), and time-out knowledge ($p = .045$). However, "years worked" also became statistically significant, such that an increase in years worked was negatively associated with acceptability scores, β =—0.22, 95%CI [−0.367, −0.071], p = .004. A second sensitivity analysis was conducted on the original model without covariates and again all assumptions were met, and the model and main study variables remained statistically significant. Finally, regression models on acceptability were repeated in exploratory analyses with the covariate social learning theory trained instead of BPT trained, and results remained unchanged.

Beliefs About Time-Out Alternatives

To explore Aim 3, one-hundred and three practitioners (i.e., 93.6% of total sample) provided a response on their beliefs on effective time-out alternatives for child conduct problems. Practitioners' responses were coded into ten categories using an inductive approach. These categories, their descriptions, and the associated frequencies can be found in Table 8. The most frequent alternatives endorsed by practitioners were "emotion coaching and regulation" (68.0%) followed by "time-in and connection in the parent–child relationship" (41.7%).

Thirty-eight practitioners provided an optional general comment at the end of the survey about time-out. Five categories arose in these comments. First, 12 practitioners reflected that there is a role for time-out when working with children and families; however, it depends on how time-out is used and what it is used in conjunction with. For example, one practitioner responded: "I do believe when done incorrectly (i.e., not informed by evidence-based parameters), then time-out could be potentially harmful for families […] however, when implemented according to evidence-based parameters, time-out provides huge benefits to families with disruptive behaviour disorders" (female, master's qualification, community and university settings). Second, 11 practitioners reflected comments that training and knowledge in time-out is needed. For example, "I also believe that structured training is required to effectively learn how to implement this technique" (female, master's qualification, private setting). Third, seven practitioners commented on there being preferable alternatives to time-out. Fourth, three practitioners commented on time-out's effectiveness and evidence-base. Finally, the highest proportion of comments (n = 15) described time-out as being harmful or ineffective (e.g., "I believe there is enough research to strongly suggest that "time-out" is detrimental for the parent child relationship and for the child's developing brain and impact of self-worth and emotion-regulation" [female, master's qualification, private setting]).

Table 8

Practitioners' Perceived Alternatives to Time-Out for Child Conduct Problems

Alternatives[a]	Description	n	%
Emotion Coaching and Regulation	Emotion coaching or regulation principles including co-regulation, relaxation, modelling.	70	68.0
Time-in[b] and Connection in Parent-Child Relationship	Relationship enhancement strategies such as parental warmth and quality time with child independent of responding to desired behaviours.	43	41.7
Positive Reinforcement	Positive reinforcement strategies (e.g., praise, rewards)	38	36.9
Other Negative Reinforcement strategies	Negative reinforcement strategies (e.g., planned ignoring, removal of privileges)	33	32.0
Rule Development and Boundaries	Rule development, boundary setting, problem-solving, and clear commands.	19	18.4
Underlying Causes	Understanding and identifying underlying causes (e.g., functional analysis, identifying trauma triggers)	11	10.7
Specific Interventions or Models	Names of specific interventions (e.g., CBT, PCIT)	10	9.7
Active Listening and Communication Style	Listening and communicating techniques (e.g., speaking kindly, empathetic listening)	8	7.4
Parent Self-Regulation	Suggestions to help regulate the parent (e.g., parent time-out).	7	6.8
Other	Other responses that did not fit one of the above categories (e.g., distraction, social stories).	32	31.1

Note. n = 103. CBT = cognitive behaviour therapy. PCIT = parent child interaction therapy.

[a]Alternatives refers to *practitioners' perceptions* on effective alternatives to time-out for child conduct problems.

[b]Most participants reported the term "time-in" and explicitly described this in the context of BPT programs, referring to the initial phase of BPT programs that focus on strengthening the parent-child relationship (e.g., through child-led play). However, the term 'time-in' was reported by 15 participants without any context. These items were included in this category. Alternatively, some psychologists referred to "time-in" as a co-regulation strategy, whereby parents sit with their child for a period of time following misbehaviour. These responses were included in the emotion coaching and regulation category.

Discussion

To the best of our knowledge, this is the first empirical study to explicitly examine time-out use and acceptability amongst community-based practitioners working with children and families. We found that 55.5% of practitioners in our sample have used time-out, with 38% considered current time-out users. Further 57% of practitioners perceived the strategy as effective for managing child conduct problems. Time-out acceptability varied across practitioners with practitioners on average neither agreeing or disagreeing with acceptability items on time-out; however, some practitioners endorsed criticisms of time-out, including 74.6% of the sample somewhat or strongly agreed that time-out can trigger trauma reactions and 43.6% somewhat or strongly agreed that time-out hurts child development. Two factors were significantly associated with increased frequency of time-out use: knowledge of evidence-based parameters of time-out implementation and time-out acceptability. Moreover, an increase in time-out acceptability was significantly associated with greater knowledge of evidence-based parameters of time-out, perceived effectiveness, and time-out use frequency. Perceived effectiveness was also the only variable associated with practitioners providing the lowest possible rating of time-out acceptability versus any other rating. Finally, practitioners believed emotion coaching, "time-in," and negative reinforcement strategies were effective alternatives for child conduct problems.

In line with Aim 1, we gathered empirical evidence on practitioner use and acceptability of time-out. Just over half our sample had used time-out with parents, yet only 38% of the relevant sample who were working with child conduct problems reported currently using time-out. This low rate of time-out use was surprising given that time-out is considered a key component of treatment for child conduct problems (Hudson et al., 2023). This finding is contrary to research with parents that has shown 60 to 75% use time-out (Canning et al., 2021; McLean et al., 2022; Riley et al., 2017). However, it supports the literature that suggests an underutilisation of evidence-based treatments in clinical practice (Becker-Haimes et al., 2022; Canning et al., 2021; McLean et al., 2022; Riley et al., 2017). Of those who did not use time-out, practitioners' most commonly endorsed reasons were consistent with parents, that is, a preference for alternative strategies or strong feelings against its use (Brodd, 2018; Canning et al., 2021; Riley et al., 2017). The results of this study may indicate concerns about time-out use, although it is also possible that this study engaged practitioners who are not currently using parent training (i.e., doing child-focused work only), which may have decreased the proportion who endorsed using time-out. It is also possible that the study attracted practitioners who are more likely to rate time-out less favourably, given that the advertisement for the study clearly indicated that it was a study about time-out use. In a recent expert review regarding parenting practitioner competencies, experts reached consensus that time-out is a core competency for interventions on child conduct problems (Barker & Hawes, 2024). Nonetheless, it is an important finding that many practitioners working with children and families are not using time-out in their practice.

There was variability among practitioners on time-out acceptability, with the overall sample neither strongly in favour nor against time-out; although, some practitioners endorsed criticisms against time-out. This is inconsistent with previous practitioner research on BPT which has generally found acceptance for the broader intervention as a whole; albeit these studies did note some infrequent concerns around components of BPT that included time-out (Mejia et al., 2015; Woodfield, Cargo, et al., 2021). This finding is however consistent with ideas proposed in practitioner reviews that have noted anecdotal concerns from practitioners about time-out (Dadds & Tully, 2019; Quetsch et al., 2015; Troutman, 2015). Specifically, some practitioners endorsed that time-out hurts children's emotional development, is shaming to children, and makes practitioners feel uncomfortable. Notably, almost three quarters of participants in the current study at least partly agreed that time-out triggers trauma reactions. This contrasts with recent findings that a BPT program using time-out was equally effective, if not greater, in reducing conduct problems for children experiencing high versus low levels of adversity (Roach et al., 2022). Similarly, a study on PCIT found significant reductions in child trauma symptoms along with behaviour problems from pre- to post-treatment (Pearl et al., 2012). In addition, time-out appears to already be a standard procedure within some evidence-based interventions for child trauma symptoms (Dadds & Tully, 2019). While we are cautious about the interpretation of this finding as it was not a specific aim of our study, a barrier to practitioner use of time-out could be that many children in clinical settings have been exposed to trauma and expert review has emphasised the need for time-out implementation to be carefully informed by theory and evidence when considering the trauma context (Barker & Hawes, 2024). Clearly there is a need for more research and better dissemination of research findings regarding time-out for vulnerable children, especially when the findings challenge key concerns held by practitioners.

Regarding Aim 2, two important factors had a role in frequency of practitioner use and acceptability of time-out, namely, perceived effectiveness of time-out and knowledge of evidence-based parameters of time-out implementation. More than half of our sample perceived that time-out was effective for reducing child conduct problems, and perceived effectiveness was associated with increased time-out acceptability. Perceived effectiveness was also the only predictor of participants providing the lowest possible acceptability rating on time-out versus all other ratings. This finding is consistent with previous research with parents that has found increased perceived effectiveness of time-out is associated with increased acceptability (Canning et al., 2021) as well as research with practitioners where perceived effectiveness was related to increased acceptability of an evidence-based treatment (Peris Barquero et al., 2022). In contrast, perceived effectiveness was not associated with increased frequency of time-out use when examining alongside acceptability and time-out knowledge. This was in contrast to previous research that has indicated that parents' non-use of time-out is related to a lack of perceived effectiveness (McLean et al., 2022). However, given perceived effectiveness was associated with increased acceptability of time-out, and increased acceptability was associated with increased time-out use (in the same model with perceived effectiveness), acceptability could have accounted for the variance in explaining time-out use contributed by perceived effectiveness. This is consistent with previous research that has conceptualised perceived effectiveness as part of acceptability (Sekhon et al., 2017). Alternatively, it is possible that perceived effectiveness of time-out facilitates its acceptability, though is insufficient to encourage actual regular use of time-out. Hence, other factors may play a more important role in time-out use, including knowledge of time-out implementation parameters.

Practitioners who had higher knowledge of evidence-based implementation parameters of time-out were more likely to use time-out more frequently and rate it as more acceptable. This finding is consistent with research in parents where greater knowledge of time-out implementation was associated with increased use and acceptance of time-out (Brodd, 2018; McLean et al., 2022). It is also consistent with practitioners regarding their knowledge of other evidence-based treatments increasing their use and acceptance of these treatments (Peris Barquero et al., 2022). It may be the case that improving time-out implementation and acceptability in practitioners could be facilitated by dissemination of information on evidence-based implementation parameters, and these could be prioritised in training programs for practitioners.

Interestingly, although it was not part of the main aims of our study, our findings suggested that formal training in BPT was not associated with greater use and acceptability of time-out. While surprising, this finding is not uncommon to evidence-based treatment literature (e.g., Becker et al., 2004) and two possible explanations could be considered. First, practitioners could be receiving accurate knowledge from sources outside of formal training programs, indeed, in our study, practitioners reported obtaining time-out information from multiple avenues including other practitioners and treatment manuals. Hence, practitioners could be upskilling in time-out through workplace practices, colleagues, supervisors or reading other manuals that include time-out in the context of a modular intervention for child mental health problems (e.g., Chorpita & Daleiden, 2009). Second, there could be issues with training quality not ensuring correct information or competencies in time-out are being retained by practitioners. Previous research has found that parenting programs can be inconsistent with empirical evidence of time-out (Corralejo et al., 2018) and other research has suggested that training requires active learning skills to improve knowledge of, and adherence to, evidence-based interventions (Frank, Becker-Haimes, Rifkin, et al., 2020). That is, previous research has found greater improvements in practitioners' skills in an intervention following training that includes experiential learning and ongoing consultation, rather than training alone (Beidas et al., 2012; Frank, Becker-Haimes, Rifkin, et al., 2020). Similarly, research with practitioners following training in BPT, including time-out, emphasised the need for supervision post-training (Christian et al., 2014; Niec et al., 2018). Nevertheless, training in time-out does not ensure time-out use or acceptability, however, better understanding of how to implement time-out may increase its use and acceptability.

Concerning the final aim of our study, practitioners perceived several alternatives to time-out as effective for treating child conduct problems. The most common alternatives reported included: emotion coaching and regulation, and time-in and connection in the parent–child relationship. These are consistent with time-out alternatives suggested by parents (Canning et al., 2021). While time-in and strengthening the parent–child relationship is commonly conceptualised with an attachment-based framework, these strategies or principles are also integral to interventions with a behavioural framework. As time-out means "time-out from positive reinforcement," time-out is only one part of a set of procedures and should only be implemented in the context of "time-in" where a parent is spending time with their child and emotionally investing in the relationship (Dadds & Tully, 2019; McMahon & Pasalich, 2018). However, it is possible that some participants in our study may have conceptualised the specific term "time-in" as a co-regulation strategy whereby parents sit with their children for a period of time following misbehaviour (Johns & Levy, 2013). To the best of our knowledge, this particular strategy is yet to be empirically evaluated in the treatment of conduct problems.

Practitioners did, however, suggest alternatives common to BPT programs, including negative reinforcement strategies that are considered key components of parenting programs for conduct problems such as planned ignoring and logical consequences (Leijten et al., 2019). It is also important to note that practitioners were asked to list alternative strategies for treating child conduct problems, rather than discuss their relative preference for alternative strategies to time-out, so this should not be interpreted that the listed strategies are more preferred over time-out. Thus, practitioners could be using other BPT strategies in combination with time-out as is intended by BPT programs, or it could be that practitioners may use BPT strategies while omitting time-out. Nevertheless, it is clear that most practitioners encourage parents to use parenting practices that foster connection in the parent–child relationship, and researchers have suggested that both relational and behavioural management strategies are essential to improving child conduct problems (e.g., Dadds & Tully, 2019; Hutchings et al., 2023; Troutman, 2015).

Strengths and Limitations

Regarding the strengths of this study, to our knowledge, it is the first to directly examine time-out use and acceptability in a diverse sample of community practitioners who have worked with families and do not subscribe to the same manualised parenting intervention model.

Notwithstanding this, the findings should be interpreted in light of several study limitations. First, while the sample size was similar or higher than other recent publications with practitioners (e.g., Hamill & Wiener, 2018; Mejia et al., 2014; Woodfield, Cargo, et al., 2021), a larger sample size would enhance the generalisability of the findings. Second, we did not specifically recruit practitioners who were currently delivering parenting interventions for child conduct problems and only 25% of practitioners were formally trained in BPT. While within our regression models, training in BPT was not associated with time-out use or acceptability, preliminary analyses suggested significantly higher mean scores on time-out use for practitioners trained in BPT than those that were not trained in BPT. Therefore, it is possible that our findings could differ in a sample that includes only those delivering parenting interventions for conduct problems and/or a higher percentage of practitioners trained in BPT. It is important to note that in sensitivity analyses we found the same pattern of findings when we accounted for the 52.7% of practitioners who had training in social learning theory (which underpins BPT). Third, the definition of time-out in this study could have been improved, in particular, how it fits as a part of a broader complex set of strategies that is premised by “time-in” including positive reinforcement and warm parenting practices, especially given practitioners may conceptualise the term “time-in” differently. Finally, as this study relied on practitioner self-report, responses are subject to bias, and we cannot be certain of practitioners’ actual use of appropriate time-out implementation or their use of reported alternatives to time-out.

Implications for Future Research and Practice

The current findings offer a range of important research and clinical implications. Future research is needed to clarify whether our findings on the proportion of time-out users is representative of the general population of practitioners. Including a larger number of practitioners trained in BPT who are currently delivering parenting interventions for conduct problems would ensure a greater range of time-out attitudes are captured. Further research would benefit from using a standardised tool for knowledge of time-out implementation to replicate the current link between knowledge of appropriate time-out implementation and the use and acceptability of time-out. For example, McLean et al. (2022) developed the “Implementation of Time-Out Scale” with parents which could be adapted for practitioner use. Future studies might also consider practitioner anxiety as a potential implementation barrier, or factor implicating time-out use and acceptability, given that many practitioners endorsed that time-out made them feel uncomfortable, and that practitioner anxiety has previously hindered the use of evidence-based treatment techniques, such as exposure therapy (Becker-Haimes et al., 2022; Beidas et al., 2021). Additionally, as practitioners have suggested alternative approaches to treating conduct problems in line with attachment- and emotion-focused parenting frameworks, this could be an important area of research. Although recent meta-analytic data suggests attachment-and emotion-focused parenting interventions can effectively reduce youth mental health problems (Jugovac et al., 2022), these interventions have not received the same level of empirical examination as BPT in regard to treating child conduct problems. Accordingly, future research should continue to investigate the effectiveness of non-behavioural strategies to reduce conduct problems, including the alternative approaches practitioners described in this study. This line of research would help narrow the gap between research and practice on this specific topic of parenting interventions. We also suggest that researchers consider conducting qualitative research with practitioners to better understand the nuanced attitudes and perspectives towards time-out in clinical practice. Finally, knowledge of evidence-based parameters and appropriate use of time-out with families is likely to be determined by the training and supervision received by practitioners, so further examination of amount and perceived quality of training and ongoing support in use of time-out, is a priority.

The findings of this study have important implications for future practice. Knowledge of appropriate time-out implementation was linked to greater time-out use and acceptability. Thus, there should be more attention on how practitioners can effectively acquire appropriate knowledge on time-out implementation, and this could be a focus of future practitioner training programs. Previous research has found that experiential training, follow-up consultations, and active learning strategies that include reflective processes of acquiring knowledge, including role-plays, can be helpful for increasing knowledge and use of intervention strategies (Frank, Becker-Haimes, Rifkin, et al., 2020). It may also be important to consider the quality and accessibility of professional supervision for early career practitioners working with children and families given most practitioners reported peers to be their main source of time-out information. Practitioners providing supervision who are not using time-out and/or have negative attitudes towards time-out that misalign with research, may be at risk of spreading inaccurate information on time-out. In addition, there is a clear need for greater dissemination of research findings regarding time-out to practitioners, especially where findings may challenge their concerns about use of the strategy. It is important to note that the effect sizes for child mental health interventions have not improved in the last 50 years, and for conduct problems, the mean effect sizes have actually reduced over time (Weisz et al., 2019). Although there are many explanations for this, one possible explanation offered by Weisz et al. (2019) is that practitioners may be moving away from strategies that have strong empirical support such as time-out.

Summary

Our findings shed new light on the use and acceptability of time-out amongst practitioners working with children and families. Just over half the practitioners in our sample have used time-out. However, despite research establishing time-out as a key component of parenting programs for child conduct problems, only 38% of practitioners working with these cases reported current use, and some endorsed criticisms against time-out. Notably, greater practitioner knowledge of appropriate time-out implementation was related to greater acceptability and use of time-out, which reiterates the need for dissemination of evidence-based parameters of time-out. Practitioners also commonly perceived strategies such as emotion coaching and connection in the parent–child relationship as effective alternatives for managing child conduct problems. The insights gained from this study have important implications for future research and clinical practice for the treatment of child conduct problems.

Introduction to Study 3

The findings from Study 2 provided a contemporary account of the use and acceptability of time-out among practitioners in routine practice settings. Results from Study 2 suggested that while most practitioners in the sample had used time-out, only a minority (38%) reported current use. Moreover, some practitioners endorsed criticisms about time-out that have been circulating in media pieces, despite these concerns being largely unsubstantiated by research. Notably, practitioners who had greater knowledge of empirically-supported parameters of time-out were more likely to use and accept the strategy. Finally, practitioners commonly endorsed strategies from non-behavioural programs as effective alternatives for managing child conduct problems. Importantly, within Study 2, the relative acceptability of behavioural and non-behavioural strategies among practitioners was not measured. Thus, while this study provides novel contributions to the field of parenting interventions, it remains unknown whether some of the concerns for time-out pertain to broader behavioural parenting interventions, and how these attitudes may compare to attitudes regarding non-behavioural parenting interventions.

Study 3 aims to explore practitioners' acceptability of behavioural and non-behavioural parenting interventions for youth mental health problems more broadly, including any factors that may influence practitioners' acceptability and implementation of these interventions. Study 3 builds on Study 2, to answer the overall research question on how behavioural and non-behavioural parenting interventions compare on practitioner acceptability for use with youth and their families. Specifically, Study 3 uses qualitative design to better understand the nuanced perspectives of practitioners delivering parenting interventions in real-world settings.

Note. Study 3 has been published in *Child Psychiatry and Human Development:*

Jugovac, S., & Pasalich, D. (2025). Psychologists' perspectives on behavioral versus attachment- and emotion-focused parenting interventions. *Child Psychiatry and Human Development.* https://doi.org/10.1007/s10578-025-01946-9

 The version presented here, has been slightly edited, including changes to British English spelling and use of acronyms for consistency with the overall thesis.

Chapter 6: Psychologists' Perspectives on Behavioural Versus Attachment- and Emotion-Focused Parenting Interventions

Objective: Behavioural and non-behavioural (i.e., attachment- and emotion-focused) parenting interventions are both evidence-based approaches for reducing youth mental health problems and have been widely disseminated across many countries. Notwithstanding this, popular media suggests a potential implementation drift from behavioural approaches, though there is a lack of empirical research supporting this claim. Given that providers are often gatekeepers to the quality and types of programs available to parents, this study aimed to provide an updated account of psychologists' perspectives and attitudes regarding behavioural and non-behavioural parenting interventions. **Method:** Twenty-four psychologists, with various levels of training in parenting interventions, participated in semi-structured interviews. Interviews explored psychologists' use and acceptability of behavioural and non-behavioural parenting interventions for treating youth mental health problems, including potential factors that may influence their acceptability. **Results:** Through reflexive thematic analysis, we identified six main themes influencing psychologists' implementation of parenting interventions. These included their professional training; affective experiences; values of safety and parent-child connection; societal parenting trends; beliefs about research and treatment tailoring; and systemic barriers. **Conclusions:** These findings provide a contemporary understanding on psychologists' perceptions of behavioural and non-behavioural parenting interventions. Although participants described an awareness of a perceived polarisation between behavioural and non-behavioural parenting interventions amongst psychologists in practice, many participants did not personally hold this view. Our results highlight the importance of considering provider-level factors – such as attitudes, affective experiences, and values – in future research and training on parenting interventions.

Introduction

Parenting has a significant influence on the development and maintenance of child mental health problems (Pinquart, 2017a, 2017b; Sanders & Turner, 2018), hence parenting interventions are often considered the first line approaches to reducing these difficulties (Hudson et al., 2023). Behavioural parenting interventions have traditionally been the treatment of choice for child externalising problems (e.g., aggression, noncompliance) over the past 60 years (Hudson et al., 2023; Mingebach et al., 2018). These interventions are rooted in social learning theory and aim to reduce coercive parent-child interactions and ineffective parenting practices by coaching parents in applying positive reinforcement techniques for desirable behaviours and neutral consequences for undesirable behaviours (McMahon & Pasalich, 2018). Examples of well-researched behavioural parenting interventions include Triple P (Sanders, 1999), PCIT (Eyberg & Funderburk, 2011), and PMTO (Forgatch & Patterson, 2010). Behavioural parenting interventions may also have generalisable effects beyond improving externalising problems; for example, they have demonstrated improvements in child internalising (e.g., anxiety, depression) and attachment-related outcomes (e.g., sensitive caregiving) (Bloss et al., 2022; O'Connor et al., 2013).

More recently, non-behavioural parenting interventions, in particular attachment- and emotion-focused parenting interventions, have become more prominent in research and practice for targeting youth mental health problems. Attachment- and emotion-focused parenting interventions focus on strengthening the emotional quality of the parent-child relationship by helping parents better understand and sensitively respond to children's emotional needs expressed through their behaviour (Havighurst et al., 2020; Jugovac et al., 2022; Steele & Steele, 2018). Interventions based on attachment theory (e.g., COS, Hoffman et al., 2006) and emotion socialisation theory (e.g., TIK, Havighurst et al., 2010) have demonstrated meta-analytic support for improving youth externalising and internalising problems, emotional competence, attachment security, and sensitive caregiving (Bakermans-Kranenburg et al., 2003; England-Mason et al., 2023; Jugovac et al., 2022).

Behavioural and non-behavioural parenting interventions are both evidence-based and widely disseminated approaches to reducing youth mental health problems. Interestingly, speculation in recent popular media and opinion pieces surrounding parenting interventions suggest a growing popularity in non-behavioural approaches and increasing criticism regarding aspects of behavioural parenting strategies (Coyne, 2013; Dadds & Tully, 2019). The latter relates to the widespread controversy on time-out, a core parenting practice in behavioural parenting interventions, empirically linked to stronger treatment effects (Leijten et al., 2019). Although time-out (i.e., time-out from positive reinforcement) should only be implemented alongside other parenting practices focused on strengthening the parent-child relationship (Dadds & Tully, 2019; McMahon & Pasalich, 2018), critics of time-out have voiced concerns that it is harmful to the parent-child attachment relationship. Notably, at present there is no empirical evidence to suggest long-term harm of time-out on children (Dadds & Tully, 2019; Quetsch et al., 2015). In fact, recent studies continue to support the effectiveness of time-out, even in populations considered most at-risk for harm (e.g., children exposed to trauma; Batzer et al., 2018; Roach et al., 2024). However, if there is growing concern for time-out, or behavioural parenting interventions more broadly, then this would have important implications for the type and variety of therapeutic support offered to parents and families. As providers play a pivotal role in the uptake and adoption of parenting interventions, developing a deeper and more contemporary understanding of practitioners' acceptability of behavioural and non-behavioural parenting interventions has significant implications for clinical practice.

Existing research that has explored practitioners' acceptability of behavioural and non-behavioural parenting interventions has indicated general acceptance for both overarching models of parenting interventions. Specifically, findings from survey research on empirically-supported behavioural parenting interventions, including Triple P, PCIT, and PMTO have indicated that practitioners largely accept and encourage parent participation of these programs (Christian et al., 2014; Mejia et al., 2015; Shapiro et al., 2015). However, behavioural intervention strategies, like time-out, seem to have been rated less favourably. For example, in a survey in Panama with 80 practitioners trained in Triple P, practitioners on average reported higher acceptability ratings regarding strategies for increasing positive relationships than strategies to manage misbehaviour (Mejia et al., 2015). Similarly, in another survey with 76 practitioners in New Zealand trained in PCIT, 38% reported adapting the protocol, most commonly by removing time-out or adding emotion-regulation (Woodfield et al., 2020). Finally, a recent study on time-out with 110 practitioners in Australia found only 38% of the practitioners working with cases of child externalising problems reported using time-out (Jugovac et al., 2024). Moreover, regarding effective alternatives to time-out, 68% of practitioners endorsed emotion coaching and regulation strategies, and 41.7% endorsed relationship enhancement strategies; however, the latter are routinely used in combination with time-out in behavioural parenting interventions. These strategies are also common features of non-behavioural parenting interventions, though, this study did not directly compare practitioners' preference for time-out versus non-behavioural strategies (Jugovac et al., 2024). Thus, relative preferences remain unknown. Taken together, the current body of evidence suggests practitioners generally accept behavioural parenting interventions, with some resistance to time-out specifically despite its robust empirical support. Still, there is a need for a more nuanced and rich understanding of practitioners' perspectives on these interventions which may be difficult to access through survey research.

Research on non-behavioural parenting interventions (e.g., COS and TIK) have also demonstrated promising acceptability amongst practitioners (Ambrosi et al., 2023; A. M. Maxwell et al., 2021; Reay et al., 2019). While practitioners regard these interventions positively, they have also noted barriers. For example, in a focus group study with Australian practitioners trained in COS (*N* = 8), they described the intervention as effective and non-judgmental. In other instances, practitioners reported implementation barriers including incompatibility for severe presentations, time-intensiveness, and lack of concrete application (Reay et al., 2019). Similarly, in a mixed-method study (*N* = 15), TIK facilitators in Australia described the intervention as rewarding and enjoyable, while expressing concerns around time commitments and suitability for some populations (Reay et al., 2019). Notably, the researchers declared a potential response bias due to their dual role as program co-facilitators, a limitation commonly reported in acceptability research involving practitioners who implement parenting interventions (Ambrosi et al., 2023). Hence, additional qualitative research exploring acceptability and implementation of non-behavioural parenting interventions would benefit the field. Particularly, there is a need to interview psychologists on a greater range of non-behavioural parenting programs, and by researchers that were not directly associated with their training or implementation of the intervention.

Clearly, a more nuanced and deeper understanding of practitioners' acceptability of both behavioural and non-behavioural parenting interventions is needed, including factors that may influence their perceptions of the usefulness of these interventions. Existing research exploring implementation barriers of parenting interventions has indicated several areas that could be important to explore. First, training is often raised as an implementation barrier; however, training in an intervention does not seem to consistently improve the acceptability or implementation of a program (Jugovac et al., 2024; Lyon et al., 2011). Instead, active post-training support including supervision has been an important facilitator (Cooper et al., 2022; Weisenmuller & Hilton, 2021). Second, practitioners have noted practical constraints to implementing parenting interventions, including time, finances, and workplace structures (Cooper et al., 2022). Third, practitioners' attitudes, affective experiences, and values may influence the acceptability and implementation of parenting interventions (Cooper & Coyne, 2020; Cooper et al., 2022; Klein et al., 2024). Thus, continuing to understand the various factors involved in practitioners' experiences, specifically their acceptability of different theoretical approaches could have important implications for closing potential gaps between science and practice and ensure families are receiving evidence-based care.

In summary, existing findings on practitioners' perceptions of parenting interventions have indicated their general acceptance of both behavioural and non-behavioural parenting interventions (Cooper et al., 2022). However, limited empirical evidence suggests some practitioners may have concerns around specific components of behavioural parenting interventions that warrants further empirical investigation. Notably, the relative acceptability of these distinct theoretical frameworks is largely unknown. Further, existing research on provider-level acceptability of behavioural and non-behavioural parenting interventions has relied on post-training evaluations conducted by program developers or trainers. This approach risks bias towards a certain pattern of findings and may limit generalisability to the broader practitioner community. Hence, there is a significant gap in our understanding of acceptability and implementation of parenting interventions amongst practitioners working in real-world settings who may be trained in multiple approaches or practice more flexibly across parenting interventions. Understanding the views of practitioners with various training backgrounds, has important implications for the availability of evidence-based parenting support for families of children with mental health problems.

Current Study

This study used qualitative design to explore potential factors involved in practitioners' acceptability of behavioural and non-behavioural parenting interventions for youth mental health problems. As implementation of parenting interventions appears to be heavily influenced by provider attitudes and experiences, a qualitative design is particularly well placed to explore these nuanced psychological factors in depth (Cleyle & Booth, 2006). Qualitative analysis allows for detailed descriptions of experiences and is an increasingly popular method to investigate practitioner-level factors (Levitt, 2015).

Method

Design and Participants

Psychologists who had experience working with youth and families participated in semi-structured interviews concerning their perspectives on parenting interventions. Ethical approval was granted by the ethics committee at The Australian National University (Protocol 2019/949). Eligible participants included registered psychologists who had experience working with parents of children under 18, and were English-speaking. Psychologists (relative to other mental health professionals) were specifically recruited in this study due to the emphasis on evidence-based practice frameworks within their professional training programs, which was a focus in this study. Additionally, focusing on a single professional group allowed for greater depth of analysis while maintaining a manageable scope for this initial investigation.

We employed purposive snowball sampling to recruit psychologists with diverse experience delivering parenting interventions. Initial recruitment involved emailing participants who provided consent to follow-up research on a previous study on practitioners' attitudes towards time-out (Jugovac et al., 2024). Once this list was exhausted, additional recruitment involved emailing relevant service agencies and posting on professional Facebook groups. Participants recruited through all methods were asked to share study details with colleagues who met eligibility criteria. Throughout recruitment, we actively monitored sample characteristics to ensure variation in career stage and training backgrounds. Our initial recruitment resulted in a predominance of early-career psychologists with less formal training in parenting interventions, thus additional recruitment specifically targeted psychologists with greater experience delivering parenting interventions. Participants were offered a $45 voucher for their time.

The first author (SJ) interviewed 24 psychologists (see Table 9). Psychologists were aged between 27 and 56 years (M = 35.88, SD = 8.44) and on average had 8.4 years experience working with families (SD = 5.62 years). Most psychologists identified as female (n = 21), were born in Australia (n = 16), had a master's qualification (n = 12), held professional endorsement in clinical psychology (n = 12), and were formally trained in a parenting intervention (n = 18). Two psychologists were trained in behavioural programs, six were trained in non-behavioural programs, and five psychologists were trained in both behavioural and non-behavioural programs. Psychologists described seeing various client presentations, most commonly anxiety and externalising problems. Many psychologists also reported working with neurodivergent youth or youth who have experienced trauma.

Procedure

We developed a semi-structured interview based on our research aims and previous literature. All interviews began with a broad question: "I am curious to hear generally about your experience with and attitudes towards parenting interventions?" The direction of the interview then varied based on follow-up questions though remained within the scope of the research aims by following a checklist throughout the interview. Questions broadly addressed psychologists' reasons behind their treatment choices, perception of training, views on science-practice gaps, and their position on behavioural and non-behavioural parenting interventions. All psychologists regardless of their prior formal training experience were explicitly asked about their views on behavioural, attachment, and emotion-focused parenting interventions. If psychologists described limited exposure to or understanding of a theoretical model of parenting intervention, the interviewer provided a brief definition of the intervention model which aligned with relevant literature, including example(s) of a specific program known to be implemented locally. See Appendix N for the full interview guide.

Participants were given the option to complete the interview via face-to-face (*n* = 9), video conference (*n* = 13), or telephone (*n* = 2). The interviews lasted 45 minutes on average. SJ digitally recorded and transcribed all interviews via NVivo Transcription software (Lumivero, 2024). Potential identifying details were omitted and all participants were given pseudonyms to ensure confidentiality and anonymity. For transcription notation, "[…]" indicates omitted data.

Table 9

Characteristics of Participants

Participant Pseudonym	Age	Birth Country	Gender	Highest Qualification[a]	Psychologist Registration	Formal Parent Training	Setting	Training in Time-Out	Years Worked with Children
Zoe	28	Australia	Female	Honours	Provisional	None	Academia	N	3
Amiyah	32	India	Female	Masters	Clinical	Behavioural	Private	Y	8
Bethany	32	South Africa	Female	Masters	Clinical	None	Private	Y	4
Connie	31	Australia	Female	PhD	Clinical	Attachment / Emotion	Private & Education	N	5
Charlotte	39	Australia	Female	Masters	Registered	Both[b]	Community	Y	17
Harriet	38	Australia	Female	Masters	Registered	Both	Community	Y	15
Cynthia	56	Australia	Female	Masters	Registered	Both	Community	Y	10
Deesha	27	Sri Lanka	Female	Masters	Clinical	Attachment / Emotion	Private	N	3
Andrea	49	Australia	Female	Doctorate	Clinical	None	Private	N	7
Doris	36	Australia	Female	Masters	Registered	Attachment / Emotion	Private	N	9
Deepti	29	India	Female	Masters	Clinical	None	Private and Public	N	6.5
Eisha	35	India	Female	Masters	Registered	None	Private	N	12
Frances	40	UK	Female	Masters	Registered	Attachment / Emotion	Private	N	16
Gabriella	54	Australia	Female	Postgraduate Diploma	Registered	Both	Community	Y	24
Hazel	41	U.S.	Female	Honours	Registered	Both	Private	Y	8
Eloise	30	Australia	Female	Honours	Registered	None	Education	N	6
Ella	30	Australia	Female	PhD	Clinical	None	Private	Y	12
Eben	36	Australia	Male	Postgraduate Diploma	Registered	Behavioural	Private	Y	14
Georgia	31	Australia	Female	Masters	Clinical	Attachment / Emotion	Private	N	5
Harry	29	Australia	Male	Honours	Registered	None	Community	N	1
Isabella	49	Australia	Female	Postgraduate Diploma	Clinical	Attachment / Emotion	Private	N	5
Amy	28	Australia	Female	Honours	Registered	Both	Private & Academia	N	4
Bruno	31	Italy	Male	Masters	Clinical	None	Private	N	4
Claire	30	Australia	Male	Honours	Registered	Attachment /Emotion	Public	N	3

[a]In Australia, psychologists can obtain general registration as a psychologist through several pathways, including a master's degree, PhD, postgraduate diploma, or internship following honours in psychology. Psychologists who reported honours as their highest degree were typically PhD candidates who had not yet conferred on their degree.

[b] Practitioners who have trained in at least one behavioural and one non-behavioural parenting intervention (e.g., attachment-based parenting intervention).

Analysis

Reflexive thematic analysis (Braun & Clarke, 2006) was used to identify meaningful patterns, complexities, and considerations across the dataset. We undertook our analysis within a critical realist ontology (Maxwell & Mittapalli, 2011) to centre the perspectives and lived experiences of psychologists while acknowledging the wider context in which these experiences exist (Braun & Clarke, 2021; Pilgrim, 2019). With this approach we were able to explore psychologists' acceptability or resistance towards parenting interventions while recognising the limitations imposed by contextual structures on individual attitudes. As such, thematic analysis from a critical realist approach provided access to participants' perceptions of their reality shaped by their social and cultural context (Braun & Clarke, 2021). Braun and Clarke (2006) specifically highlights six phases (1) data familiarisation; (2) generating initial codes; (3) generating initial themes; (4) reviewing themes; (5) defining and naming themes; and (6) writing up.

For the initial phase of analysis, SJ read and re-read transcripts to familiarise herself with the data. This initial phase included making initial observational notes on individual transcripts as well as actively identifying patterns across the entire dataset. SJ then engaged in coding in a recursive manner, switching between NVivo and coding by hand. Codes were clustered together to identify candidate themes which were determined by patterns across the data set. Theme development used a combination of inductive and deductive approaches. Early theme development relied primarily on prior theoretical hypotheses from the literature; however, this seemed to create themes that were primarily based on semantic meaning, closely resembling topic-summaries related to interview questions. Hence, SJ returned to coding with a deeper focus on analysing latent meanings.

Theme development continued in a recursive manner by SJ moving between Braun and Clarke's (2006) phases and engaging in regular reflexive discussions with AD and DP. Throughout theme development stages, SJ engaged in regular reflexive discussions with additional researchers AD and DP. AD also read a portion of the transcripts to facilitate critical engagement with different interpretive perspectives. Theme development was also informed by knowledge gained from available literature. Additionally, we reflected on our own positions in relation to the data, given our subjective understandings as at least partially insider researchers – psychologists who had worked with youth and families. SJ and DP had formal training and experience in both behavioural and non-behavioural parenting programs, while AD had primarily trained in an attachment-based parenting program. Final themes were reviewed by both authors to ensure coded extracts within these themes formed a coherent pattern. Analysis was not completed until the final write-up (Braun & Clarke, 2006).

Results

Our final analysis resulted in six themes related to psychologists' acceptability of parenting interventions (see Table 10). Each theme offered insight into an important factor influencing psychologists' clinical decision-making, though together they illustrate that many of these factors work in combination to influence acceptability and implementation of parenting interventions.

Table 10

Themes for Psychologists' Use and Acceptability of Parenting Interventions

Theme	Description	Example quote
My Earliest Influences (or Lack Thereof) are Lasting	Psychologists discussed how their training context influenced their future clinical-decision making. They particularly highlighted the value of their supervisors, and a perceived gap in psychologists' university training.	"We need to start early […] focus on these interventions at every university. […] it really depends on who your professors are, sometimes you get trained in it and sometimes you don't." (Amiyah, clinical psychologist)
Experiential Learning Fundamental to Practice: "I *See* that it Works"	Psychologists conveyed that experiencing an intervention for themselves influenced their use and acceptability of it. This was particularly evident for interventions that initially evoked negative affect (e.g., anxiety, distress)	"Seeing time-out and doing it with kids, When I first started looking at it, I thought, whoa […] but through clinical practice I have seen a difference […] it's empowering for some carers that they have a rote response […] they feel confident in it." (Harriet, registered psychologist)
Which Way to Safety? Shared Values for Targeting Emotional Needs	Psychologists shared values for creating safety, recognising children's behaviour as a form of communication and strengthening the parent-child relationship.	"To me, it's about children feeling safe […]and […] recognising their behaviour again is communication" (Isabella, clinical psychologist)
"Good" and "Bad" Parenting Trends	Psychologists – while not necessarily in favour of it - perceived a dichotomy between different theoretical models of parenting interventions with some perceived as "good" and others as "bad."	"I'll hear people […] speak negatively about certain interventions and think […] that's a bad one and the other ones are good […] why is it bad? Just because that's what everybody is saying, there's fashions with it" (Cynthia, registered psychologist)
Research "Does Not Capture the Complexity of Real Life"	Psychologists believed that research and parenting interventions did not accurately capture reality and that there is a need for greater tailoring for minority populations or co-occurring presentations. Notably, psychologists reflected on the neurodivergent population and children exposed to trauma.	"Research protocols are often so confined to making sure that there's no potential confounding variables, that it's actually just a really unrealistic kind of setting" (Ella, clinical psychologist)
"The Way the System is Set-Up"	Within this theme, psychologists discussed system limitations (e.g., time, cost, workplace structures) that they believe prevents access to effective parenting interventions for children and families.	"Public funding goes towards [non-for-profit organisation name], but you [...] cannot see parents without children […]. So that is where public funding is going and that doesn't support the evidence in the research and that doesn't help you to help the relationships." (Hazel, registered psychologist)

My Earliest Influences (or Lack Thereof are Lasting)

This theme highlighted how psychologists' initial trainers (e.g., supervisors, university professors) significantly shape their clinical decisions when working with parents.

> Start early […] focus on these interventions at every university. […] it really depends on who your professors are, sometimes you get trained in it and sometimes you don't. And that just means that you have a cohort […] with inconsistent […] exposure to these parenting practices (Amiyah, clinical psychologist).

While psychologists reported varying levels of parenting intervention training, they often discussed a gap at university-level preparation. For example, parenting interventions were considered as "not something that I've had a lot of training in from the beginning, even during Master's" (Deesha, clinical psychologist). Despite feeling underprepared by their university training, psychologists emphasised the necessity of parenting interventions in youth mental health treatment and advocated for enhanced training in this area.

> Parenting skills is one of the most important things you can do as a country. […] But [it was] never talked about explicitly during any of the undergrad, masters […]. It seems like something that should be in all our wheelhouses […] If you're working with kids, you're going to be doing parenting stuff. And if working with adults you are going to be dealing with what […] happened when they were parented (Bethany, clinical psychologist).

Psychologists across the dataset believed that learning to work with parents and deliver parenting interventions was a crucial yet often missing part of their professional training.

Instead, psychologists often recounted their supervisor as the greatest influence on their use and acceptability of parenting interventions: "if a supervisor I respect likes the approach, then I'm going to be like, okay, well that works for me" (Connie, clinical psychologist). Furthermore, their treatment preferences often reflected those of their supervisors, including preferences for behavioural and non-behavioural parenting interventions. For example, "my supervisor was more attachment-based and so, I pretty quickly let go of [time-out] and moved into time-in and other ways of managing behaviour." (Georgia, clinical psychologist). Thus, those who trained psychologists early in their career appeared to influence psychologists' selection of parenting interventions. "Whatever [name], my supervisor taught me, would be what I felt more competent in learning." (Zoe, provisional psychologist).

Generally, psychologists who held specific preferences for either behavioural or non-behavioural parenting interventions described formal training and/or guided supervision in this category of intervention following their postgraduate psychology training. Similarly, psychologists who had formal training in, and exposure to multiple theoretical approaches beyond their university training, typically expressed acceptance of more than one parenting model.

Taken together, this theme emphasised psychologists' value of supervision and the need to improve early training in parenting interventions.

Experiential Learning Fundamental to Practice: "I See that it Works"

A key factor that influenced psychologists' implementation and acceptability of parenting interventions was their experiential learning. Psychologists described continued use of parenting interventions where direct experience demonstrated clinical improvements and satisfying therapeutic experiences for themselves and their clients. While this pattern was observed across parenting interventions, it was most pronounced for interventions that initially evoked negative affect such as anxiety, distress, and uncertainty. Psychologists expressed initial intimidation when working with parents, though reported shifting to positive attitudes following successful experiences in their work: "I remember being daunted at the beginning, […] how can I have the audacity to offer expert opinion, […] once you are able to flip that […], it was very pleasurable working with parents and very rewarding." (Bethany, clinical psychologist).

This pattern was particularly prominent in the time-out context. Psychologists who initially attempted implementing time-out but then stopped, conveyed uniquely negative experiences with the procedure: "when I was a brand-new psychologist, I was teaching time-out and parents were really resistant […]. People were doubting whether it was a good thing to do […] it wasn't really working […] so I pretty quickly let go" (Georgia, clinical psychologist). While there were several reasons for psychologists' preferences, central to this theme was a pattern of psychologists' own experiential learning influencing their acceptance. Psychologists who continued to use time-out, acknowledged the initial discomfort; however, reported that persistence with appropriate implementation led to effective outcomes:

> It's a bit like exposure response for […] anxiety. […] I don't enjoy the distress that it can initially create for a client. But I really believe in the principle, so that helps me stick to it. And I often find if you are really calm on the outside and because I've done this for a while, I'm calm on the inside as well (Amiyah, clinical psychologist).

Furthermore, psychologists reflected that the distress dissipated with time and the procedure could evoke positive emotions such as excitement and empowerment: “When I first started looking at it, I thought, whoa […] but through clinical practice I have seen a difference […] it’s empowering for some carers that they have a rote response […] they feel confident in it (Harriet, registered psychologist).”

Non-behavioural interventions, particularly attachment-based, seemed to elicit initial positive experiences and were considered to resonate more easily with some psychologists: “I find it really resonates, […] intuitively works, and I've had the same feedback from parents […] I've seen the benefits. And so that's why I keep using that approach” (Doris, registered psychologist). This experience was shared by several psychologists who favoured attachment-based programs; however, if psychologists had negative experiences with these programs, this too impacted future implementation:

> I’ve just had such positive results using [behavioural program], they’ve been able to see the changes versus […] when I’ve tried to use attachment processes with parents in the past […] we’ve just always got stuck. […] I do tend to bias towards what’s worked in the past with the evidence that I’m already aware of and the supervisors that I’ve […] resonated with (Connie, clinical psychologist).

Hence, regardless of intervention type, it was clear psychologists were “guided by what [they] see in practice, what seems to work” (Deesha, clinical psychologist). Similarly, psychologists reflected a need for training to include practice-based components and/or follow-up supervision to increase their confidence to use the intervention in future. That is, “not just like here’s what you should do; here’s what you should do, now show me that you’re doing it” (Charlotte, Registered Psychologist). In sum, this theme captured the crucial role psychologists’ own affective experience in the implementation of parenting interventions.

Which Way to Safety? Shared Values for Targeting Emotional Needs

Beyond their own affective experiences, psychologists perceived their client’s affective experiences and emotional needs as crucial to their acceptance of parenting interventions. Despite differing theoretical preferences, psychologists shared core values centred on targeting children’s emotional and safety needs and developing positive parent-child relationships. For example, “to me, it’s about children feeling safe and also them recognising their behaviour again is communication” (Isabella, clinical psychologist).

Psychologists often favoured attachment-based interventions as they believed they effectively improved youth mental health outcomes through developing a secure attachment and helping parents to identify underlying needs behind children's behaviour: "the foundation of that secure relationship is going to help with the child's emotional wellbeing" (Doris, registered psychologist). Similarly, many psychologists were concerned that other programs were harmful, damaging to the parent-child relationship or did not consider the children's emotional needs. Thus, practitioners' concerns for alternative approaches often conflicted with their underlying values of promoting safety and connection. Notably, time-out was perceived as misaligned with these values for some psychologists:

> you're abandoning an emotionally overwhelmed child […] telling them to deal with them by themselves [..] behaviour is […] communicating a feeling and a need […]. If we are placing the child then in time-out, we're saying that we're not willing to listen to your feelings and your needs and we're not being there to regulate and to hold and to understand (Frances, Registered Psychologist).

To a lesser extent, this concern was present for behavioural programs:

> here's big political ideas, but I think they are perpetuating a society of people controlling other people […] on the surface level, they can look effective because like you train a dog, they can change a behaviour. […] I don't think it promotes a good relationship between the parent and child (Andrea, clinical psychologist).

Alternatively, psychologists who described behavioural programs positively, expressed that a safe and secure parent-child relationship can be maintained through time-out (e.g., "it's never an unfair surprise […] it's all done in a very controlled setting and only ever in the context of like the safe, stable secure relationship that you've spent developing in the first component of that intervention" [Charlotte]); and behavioural programs overall (e.g., "it was exciting helping parents reverse their style of parenting from, order and control and, obedience […] and in return […] let's think about the relationship with your child" [Bethany, clinical psychologist]). Psychologists implementing behavioural approaches believed boundaries "promote safety" (Isabella, clinical psychologist) and are a healthy and important part of parent-child relationships. Through safe, neutral implementation techniques such as time-out, they believed there were improvements in children's behavioural outcomes as well as the parent-child attachment relationship:

> There is that focus on having clear boundaries and being able to manage behaviours […] which I think kids need and I think they need that safety. But there's also the really strong emphasis on positive attention and making sure kids are […] having that positive relationship with their parents. […] it's a really beautiful approach because it

> frames […] boundaries in a really positive way and it makes it about creating a safer relationship (Connie, clinical psychologist).

Finally, psychologists who had experience and training with both behavioural and non-behavioural parenting interventions often discussed how the integration of relationship and behavioural practices create safety and strengthen the parent-child relationship:

> attachment-based interventions are very helpful and important for any child […] they're not particularly helpful when you've got really extreme top of the pyramid sort of behaviour […]. But […] fundamentally, any behavioural strategy needs to involve building relationships, […] it's always necessary […] to build the attachment, to build the connection […] you can't do the consequence and boundary setting stuff if you haven't got the attachment base. (Gabriella, registered psychologist).

Therefore, irrespective of psychologists' personal position on interventions, it was clear that psychologists prioritised children's emotional and safety needs.

While psychologists shared values, their responses also point to the next theme. Often psychologists' perceptions on how to target children's safety needs appeared to be shaped by broader fashions in society of perceived "good" or "bad" parenting interventions.

"Good" and "Bad" Parenting Trends

A meaningful pattern observed across the dataset was a perceived dichotomy between "good" and "bad" parenting interventions, often shaped by societal trends of interventions perceived as "in fashion" versus "outdated."

> I'll hear people […] speak negatively about certain interventions and think […] that's a bad one and the other ones are good […] why is it bad? Just because that's what everybody is saying, there's fashions with it […]. There's a real trend away from the more behavioural ones, and I don't think that's helpful because some problems are behavioural (Cynthia, registered psychologist).

Psychologists – while not necessarily in favour of the dichotomy – described behavioural interventions on one side and attachment-based interventions typically on the other: "definitely attachment theory, definitely not behavioural theories. […] they're the main two [...], one is one side, and the other is the other side" (Andrea, clinical psychologist). In particular, time-out was frequently labelled as a "bad" intervention: "I would think we're not allowed to do time-out […] I'm sure a lot of people would still do it but like psychologically informed people that should know" (Zoe, provisional psychologist). Psychologists reported a predominant shift from behavioural approaches (particularly time-out) to attachment-based programs, though others maintained a clear preference for behavioural interventions, highlighting a continuing divide.

> Attachment goes too far sometimes; my colleagues go too far the other way of trying to [...] be there and support kids all the time [...] they say discipline is [...] aversive [...] and something that gets in the way of the relationship but it's not. From my experience that has been done better by the behavioural approach [...] I think I'll be very controversial for thinking this [...] but I do think there needs to be a shift away from attachment, trauma is the answer to all problems (Connie, clinical psychologist).

The dichotomy often meant psychologists had a preferred parenting intervention that they broadly used with most clients. For example, "I really only offer [attachment-based program] just because I'm trained in that. But I do think that is one of the better ones because it doesn't just teach […] strategies. It teaches a way of being" (Cynthia, registered psychologist).

The above excerpt reflects another pattern present across the dataset of polarising preferences between interventions perceived as a framework versus structured strategies. Psychologists again had individual perceptions of what was considered "good" or "bad." For example, a framework approach was discussed as a strength for some: "they can take it and apply it to whatever they need to […] a framework rather than a set of instructions" (Frances, registered psychologist). Whereas for others, it was perceived as a criticism: "I think there's a level of attachment programs […] this is going to sound judgmental but […] they can be a bit airy fairy for people in that they can come up with like a lot of understanding and a lack of practical solutions" (Bruno, clinical psychologist); or a consideration, "they're not as clear-cut strategies, and people want damn strategies […]. And you're like, no, it's more of a way of life" (Georgia, clinical psychologist). Hence, psychologists detected a dichotomy regardless of their individual preferences.

While psychologists typically exhibited a preference for one intervention and held negative beliefs or limited understanding of the other; some psychologists perceived a false dichotomy. That is, some psychologists described that interventions were often promoted differently to maintain societal trends while holding similar underlying principles: "It's quite popular amongst practitioners who work with trauma to say [behavioural program] is terrible. But then I see some strategies that are lifted straight out of [behavioural program] and used in trauma-based interventions" (Cynthia, registered psychologist). Interestingly, psychologists described greater client acceptance when clinical language aligned with current parenting trends.

> If parents wish to call it time-in, we call it time-in. […] I'm not changing anything about it. […] We just used the term time-in […] I reckon it's the word time-out. It's really funny. I just think people react to it immediately (Gabriella, registered psychologist).

Taken together, psychologists described a dichotomy between parenting interventions; however, some psychologists "wish they would stop pitting attachment and behaviour against each other" (Connie, clinical psychologist).

Research "Does Not Capture the Complexity of Real Life"

Regardless of psychologists' position on theoretical preference, all psychologists described a perceived gap between science and practice when working with parenting interventions. Psychologists agreed that "humans are messy and so complex" (Andrea, clinical psychologist) and "one size doesn't fit all" (Eisha, registered psychologist). Thus, psychologists often discussed the importance of tailoring parenting interventions to suit child and family needs, which at times was believed to require integration of different theoretical underpinnings. "Sometimes people need to have more behavioural […] or attachment […] we need to be able to offer them something that fits with what they need" (Frances, registered psychologist). Psychologists expressed a need for future research to better consider how to adapt existing programs for various presentations. For example, "here's the […] worried well version and here is how we can change it for […] ADHD or trauma" (Charlotte, registered psychologist).

In particular, psychologists often shared the need for tailored intervention for neurodivergent youth and youth affected by trauma.

> The gap feels the biggest between the neurodivergent population and parenting approaches. And I think there's been a lot of groundswells of advocacy […] in terms of a behavioural intervention not being in the best interests for neurodivergent kids […] that's […] a good example of where there is a big gap between the research and what actually works in practice (Doris, registered psychologist).

Many psychologists working with neurodivergent youth and youth exposed to trauma preferred interventions they considered trauma-informed and neuro-affirming. While psychologists often preferred non-behavioural interventions, particularly attachment-based, they also commonly endorsed behavioural interventions that had been explicitly adapted for these populations. For example, psychologists who were trained in PCIT noted that: "research around PCIT has shown that there's a really strong evidence base with the trauma population because it does stress about relationship and attachment" (Harriet, registered psychologist). This quote also highlights a pattern whereby psychologists who supported behavioural parenting interventions often referred to relevant research, whereas some (though not all) psychologists opposing these interventions seemed either unfamiliar with the research, expressed scepticism about its relevance, or held the misconception that neuroscience and trauma-informed evidence showed behavioural interventions were harmful.

In addition to tailoring treatment according to trauma backgrounds and neurodivergence, psychologists discussed tailoring interventions to suit other client factors including age, cognitive capacity, and cultural diversity. For example, psychologists considered behavioural or practical strategies as useful for school-aged children or parents with cognitive impairments, whereas perceived emotion-focused parenting programs as suitable for parents of teens. Furthermore, a handful of psychologists perceived that existing parenting interventions had limited cultural considerations. Psychologists reflected that greater cultural flexibility is needed to suit families' cultural norms, values, and language. An example of this barrier in an emotion-focused program was described:

> In the four languages that I speak, there are no words to describe, anxiety […] to differentiate depression […] from sadness and in one language from grief. The only way that you can find a picture of sadness is with loss […] we're just assuming that everybody […] speaks the same language as us or […] that it's okay to talk to your children about emotions (Eisha, registered psychologist).

Psychologists conveyed a consistent concern that research and parenting interventions did not accurately capture the complexity of reality, particularly for complex presentations and minority groups. Psychologists expressed feeling "disillusioned by academia" (Ella, clinical psychologist), and voiced limited trust in quantitative research findings.

> Participants in research they're not necessarily always real clients […]. Practitioners should be a bit better to follow research. But I think part of the reason they don't feel they can is, that research does not capture the complexity of real life […] it's never that controlled environment where you do it the same way every time, it is always going to be […] tailoring things to meet the needs of that person (Bruno, clinical psychologist).

In summary, this theme described psychologists' perceptions that research on parenting interventions does not translate to real-world settings and hence propose more tailored parenting interventions to suit family's complex needs.

“The Way the System is Set-Up”

The final theme captured the broader context psychologists work within and feel limited by. Psychologists discussed limitations regarding Australian systems that are designed to improve accessibility of evidence-based interventions to parents of youth with mental health problems, though are perceived to fall short. Psychologists described barriers including funding, time, cost, incentives, accessibility to research and training, and workplace settings.

Several psychologists commented on how their workplace shaped their use of EBP. A particular differentiation was drawn between private practice settings or settings dependent on the Better Access Initiative Medicare benefits (Australian Government Department of Health and Aged Care,[DHAC] 2025) versus settings non-reliant on Medicare benefits. The Better Access system in Australia allows for any Australian resident with an eligible mental health condition to receive a maximum of 10 subsidised individual and group appointments for allied mental health services (e.g., psychologists) funded by the government (i.e., Medicare) each calendar year (DHAC, 2025). While this initiative was set up to improve access to mental health care, many psychologists working under this model described it as a barrier for implementing evidence-based parenting interventions. They discussed that families often remain disadvantaged and unable to access sufficient support. Alternatively, psychologists who worked in community (i.e., non-private practice) settings with more flexible limits on sessions did not exhibit these concerns.

> In private practice, you don't get to do what I do because you can't be paid for it unless you're working with populations that have plenty of money. But where we need to be working is with people who've experienced a lot of disadvantages, who can't afford to pay. And if you're in private practice, you can't do that because you also need to eat, pay your bills […] I think the bigger barrier in private practice is […] the way the system is set up. […] I've got friends who work even for NGOs [non-government organisations], but they're under Medicare, and they just churn through (Cynthia, registered psychologist).

The topic of Medicare when working with children and families often evoked strong emotions in psychologists who passionately voiced how the current system is unconducive to evidence-based care. “If the government could make changes so that, parent sessions were in addition to children's sessions and more than […] two because two […] is not evidence-based and that is not helpful (Hazel, registered psychologist).” Here the psychologist referred to Medicare’s recent change allowing for two parent sessions under a mental health treatment plan. However, these sessions count towards the total ten sessions permitted for the child, rather than additionally (DHAC, 2025). Psychologists discussed the unfeasibility of delivering evidence-based parenting interventions under this model, as many evidence-based parenting interventions exceed 10 sessions. For example, PCIT ranges between 12-20 sessions (Eyberg & Funderburk, 2011; see Appendix A for further exammples). Further many parenting interventions are designed to be delivered without the child present in the room which is not supported by the current model.

Psychologists expressed motivation to implement or train in evidence-based parenting interventions; however, they also discussed how time and financial barriers for themselves, and their clients do not afford them to, particularly within the private practice setting. While psychologists working independent to Medicare discussed the costs and time associated with upskilling, it was not a concern for them: “as a service, we do have quite a lot of training offered to us” (Harriet, registered psychologist). Alternatively, psychologists in private practice believed that “there isn’t that much incentive to keep upskilling yourself. If anything, it costs time and money to upskill” (Eben, registered psychologist). Furthermore, cost was considered a barrier to accessing journal articles. Hence, psychologists in private practice settings often described seeking more affordable and accessible information sources such as manuals, books, peer consultation, or professional development workshops, rather than relying on journal articles of accredited formal parenting programs. Finally, psychologists perceived the accreditation process of some parenting interventions as a barrier: “If you want to run this program, you have to run it under this title and […] branding […] there's all this kind of gatekeeping, […] I don't know […] what I'd get out of a four-day […] training that I can't get from reading the manual” (Ella, clinical psychologist).

Collectively, psychologists emphasised systemic issues as limiting their implementation of evidence-based parenting interventions. Psychologists discussed the need for improved accessibility to training and research to deliver these interventions. Further, psychologists believed that the current Medicare model was insufficient to deliver effective intervention. For effective change in mental health outcomes, psychologists considered parenting interventions as essential: “working with children, you are working with the parents. And there's no point if you can't work with both” (Isabella, clinical psychologist).

Discussion

The results provide insight into potential psychological, social, and systemic factors influencing psychologists’ acceptability and implementation of behavioural and non-behavioural parenting interventions for child mental health problems. Importantly, all psychologists shared the view that parenting interventions are valuable for providing effective mental health treatment to children. However, psychologists varied in their theoretical preferences of parenting interventions, such that some psychologists favoured behavioural parenting programs, some favoured non-behavioural parenting programs, and some advocated for a combination of these approaches. Interestingly, psychologists discussed a perceived polarization in the field between behavioural and non-behavioural approaches, even when they did not personally hold this view themselves. Reflexive thematic analysis identified six main themes illustrating common factors influencing psychologists' acceptability and implementation of parenting interventions: professional training, affective experiences, values of safety, social norms on parenting, beliefs about real-world translation; and broader systematic influences.

Psychologists who had formal training and experience in implementing behavioural and/or non-behavioural parenting interventions generally described them as effective and acceptable, aligning with previous acceptability research (e.g., Ambrosi et al., 2023; Maxwell et al., 2021; Shapiro et al., 2015). However, our findings suggested a perceived polarisation between approaches, with some psychologists viewing behavioural parenting interventions, particularly time-out, as "bad" or "outdated," and instead favouring non-behavioural approaches, particularly attachment-based parenting interventions, which appeared to resonate more easily for some. Some researchers have previously speculated a shift away from behavioural parenting interventions (e.g., Coyne, 2013; Dadds & Tully, 2019); though here we present initial empirical findings to suggest that this shift, or rather "polarisation," is being experienced by some psychologists and perhaps families. Importantly, while psychologists noted the presence of this polarisation, not all were in favour of it. In fact, many highlighted the strong research support for behavioural parenting interventions – particularly those with formal training - for child mental health problems (e.g., Kaminski et al., 2024) and expressed positive and empowering experiences with these interventions. Moreover, some psychologists were actively against this polarisation and called for an integration of theoretical orientations. Researchers have also provided support for the integration of relational and behavioural intervention strategies (Dadds & Tully, 2019; Hutchings et al., 2023; McMahon & Pasalich, 2018). Nevertheless, psychologists' differing viewpoints on parenting interventions could have meaningful flow on effects for families receiving evidence-based care.

In utilising qualitative analysis, we were able to better understand and interpret the nuanced reasons behind psychologists' preferences for different programs. We found that psychologists' acceptability and implementation of parenting interventions were influenced by a combination of factors consistent with those reported in previous studies with practitioners implementing specific parenting programs. In line with our first two themes, elements of psychologists' professional training experiences with parenting interventions impacted their future acceptability and implementation. That is, often, psychologists who had prior formal training and experience in a particular theoretical model of parenting intervention were typically more accepting of it and likely to implement the program. However, as evidenced in this study and previous ones (Cooper et al., 2022; Lyon et al., 2011), attending training workshops alone were described as insufficient to improve acceptability or effective implementation. Instead, psychologists described learning from active experiences and supervision from other trusted psychologists (Cooper et al., 2022; Weisenmuller & Hilton, 2021). This was particularly important for interventions that initially evoked anxiety, as without it, practitioners described avoidance of evidence-based approaches. Klein et al., (2024) previously found that time-out evoked anxious distress in therapists, and if left unresolved it was related to greater avoidance and reduced intention to use the strategy in the future. We found this pattern extended beyond time-out to other aspects of parenting interventions, including broader parenting programs, and the process of working with parents themselves. Psychologists often described initial discomfort when working with parents which appeared resolved with supervised, positive exposure.

Psychologists commonly discussed that to continue using an intervention they needed to “see it works,” which seems to be a typical pattern in implementation research (Cooper et al., 2022; Lilienfeld et al., 2015). At times this meant psychologists relied on this perception or their own intuition over research evidence. Some researchers have referred to this phenomenon as a form of “naïve realism” – the assumption that the world is as we perceive it, instead of recognising that perception is subject to interpretation bias and contextual structures (Lilienfeld et al., 2013). According to this view, psychologists who are using interventions not informed by evidence may believe a treatment works due to spurious therapeutic effectiveness (e.g., placebo effects, spontaneous remission), mistaking change *following* therapy for change *because* of therapy.

Despite these potential biases, the need “to see it works” can also be understood through implementation frameworks including the COM-B model (see Michie et al., 2011 for further details) and the Theoretical Domains Framework ([TDF] see Atkins et al., 2017). When psychologists “see” an intervention work, this may increase psychologists’ reflective motivation (i.e., conscious internal processes influencing decision-making and behaviour), particularly through strengthening their beliefs about their own capabilities or confidence in delivering parenting interventions (Atkins et al., 2017; Michie et al., 2011). Moreover, as discussed earlier, psychologists’ emotional response also played a crucial role in future implementation behaviour and attitudes. Psychologists described negative emotions associated with parenting interventions as barriers to successful implementation, while describing positive emotions related to interventions, they were more accepting of. This suggests that both reflective motivation and automatic motivation (i.e., *unconscious* processes driving behaviour/decision-making) may be necessary for psychologists to accept and deliver an intervention (Atkins et al., 2022; Michie et al., 2011). In particular, it may be important to provide supervised experiential learning of evidence-based interventions, allowing practitioners to observe treatment effects and process their emotional responses.

Theme three illustrated that psychologists' personally held values also played a significant role in shaping their clinical decision-making, consistent with previous qualitative research (Cooper & Coyne, 2020; Lundström & Lundström, 2023). The current findings emphasise the common value of client safety across behavioural and non-behavioural parenting interventions that was also found in a recent focus group study comparing two different research-informed parenting programs: Comet (i.e., behavioural) and COS (i.e., non-behavioural) (Lundström & Lundström, 2023). It is understandable that safety is commonly valued by psychologists as it is a core feature of their professional code of ethics (Australian Psychological Society, 2007). More distinctively, through the richness of qualitative data, we were able to understand how this applies to the behavioural and non-behavioural parenting context. Psychologists using behavioural interventions often conceptualised boundaries as integral to healthy attachment relationships, consistent with recent research that has found improvements in attachment-related outcomes following implementation of behavioural parenting programs (e.g., Blizzard et al., 2018; O'Connor et al., 2013). Alternatively, psychologists preferring non-behavioural perspectives described how these interventions directly targeted children's underlying emotional and safety needs (Havighurst et al., 2020; Steele & Steele, 2018), which explicitly aligned with practitioners' values of safety and parent-child connection. Furthermore, those against behavioural approaches had direct concerns around harm to the child or the parent-child relationship, that while consistent with concerns in popular media or perceived societal trends (Coyne, 2013), are inconsistent with well-documented empirical research (Kaminski et al., 2024; Leijten et al., 2019) and expert practitioner review (Barker & Hawes, 2024). Importantly, regardless of their preferred theoretical orientation, psychologists had the intention of improving child safety and strengthening the parent-child relationship.

Psychologists' beliefs about how well each intervention model addressed child safety needs and strengthened the parent-child relationship can also be understood through multiple mechanisms outlined in the COM-B and TDF implementation frameworks mentioned above (Atkins et al., 2017; Michie et al., 2011). First, reflective motivation again may be implicated, whereby psychologists' beliefs about consequences – whether behavioural or non-behavioural approaches lead to positive parent-child outcomes versus potential harm – could directly impact their implementation decisions (Atkins et al., 2017; Michie et al., 2011). Additionally, these interventions may conflict with psychologists' social/professional role and identity. That is, when practitioners perceive an intervention as potentially harmful, this likely conflicts with their core professional identity as safe, ethical clinicians.

This internal mechanism may also interact with external social factors, aligning with our fourth theme. This theme highlighted psychologists' perception of social norms that certain interventions are "good" or "bad," particularly regarding time-out, which may reflect social opportunity mechanisms influencing implementation (Atkins et al., 2017; Michie et al., 2011). Interestingly, a similar pattern was observed in Woodfield et al. (2023), wherein practitioners with knowledge and training in PCIT remained concerned about the views and endorsement from their peers who may not be trained in PCIT or may view what they are doing as harmful. Thus, psychologists are likely simultaneously influenced by internal values about parenting interventions, as well as external social pressures from colleagues and broader cultural debates about parenting approaches for child mental health. While previous research has typically focused on time-out, our study found this pattern extended to other elements of parenting interventions or overall models. For example, one participant described how behavioural parenting interventions were the "norm" where she trained, making adoption of an attachment-based program challenging. Consequently, there may be greater motivational and social opportunities for interventions that are widely accepted and endorsed within professional psychologist communities (Atkins et al., 2017; Michie et al., 2011; Woodfield et al., 2023). Hence, these findings could suggest that implementation strategies need to simultaneously address practitioners' internal beliefs and values while also working to shift professional community norms and access to social support.

Our fifth theme described psychologists' beliefs around research and parenting programs failing to capture reality. This aligns with previous findings suggesting psychologists often assume that research in controlled settings cannot be applied to individual cases (Lilienfeld et al., 2013, 2015). Within our study, although psychologists recognised that RCTs and systematic reviews represent the highest tiers of research, they did not necessarily believe this had clinical utility. On the other hand, meta-analytic findings from the implementation science literature show that actuarial prediction is equivalent if not superior to clinical prediction (Lilienfeld et al., 2013). Hence, the current study shares concerns highlighted in past research regarding provider-level biases impacting practitioners' acceptability and effective implementation. These findings may also emphasise a need for increased research in applying various moderating client factors to existing programs (Lilienfeld et al., 2013, 2015). It is also possible that in accordance with other implementation frameworks, this again relates to social/professional role and identity. Specifically, psychologists may see themselves as adaptive clinicians rather than followers of manualized protocols or believe that certain interventions may be incongruent with their identity as neuro-informed or trauma-informed practitioners (Atkins et al., 2017; Michie et al., 2011).

Finally, within our sixth theme, practitioners described several practical and systematic issues consistent with other parenting intervention literature and broader implementation frameworks, including time and financial constraints (Atkins et al., 2017; Cooper et al., 2022; Michie et al., 2011). This study expanded on previous literature by describing specific barriers to the parenting context within Australia, particularly related to the main funding body (i.e., Medicare) supporting access to mental health services. This finding aligns with a recent study involving 206 Australian practitioners working in child mental health services, which found that approximately 70% were dissatisfied with the current child mental health system and described concerns about the allocation of caregiving sessions (Kan et al., 2025). Similar concerns have been reported in U.S. studies; for example, even when families have access to private insurance or "Medicaid" (i.e., U.S. funding body for low-income families), not all providers of evidence-based parenting interventions accept these funding options, or funding is insufficient to allocate appropriate intervention dosage (Weisenmuller & Hilton, 2021). The current Australian providers' views are also consistent with other Western countries around the cost of training itself (Christian et al., 2014; Weisenmuller & Hilton, 2021). Overall, it seems that psychologists' physical opportunity or environmental context including cost intensiveness of training and implementation of parenting interventions are barriers to preventing access to evidence-based treatment for families across different countries.

Strengths and Limitations

To the best of our knowledge, this is the first qualitative study to interview psychologists – who were unaffiliated with a particular parenting program – to share their broader views on implementation. Further, through thematic analysis we were able to gather nuanced information about relevant factors involved in psychologists' acceptability and implementation of behavioural and non-behavioural parenting interventions. Notably though, several psychologists we interviewed had not received formal parent intervention training. While recruiting psychologists generally working with parents of youth with mental health problems helps inform us of what is currently offered in clinical practice, different data may have been obtained if all psychologists had formal training or greater expertise in the area. This could be possible given professional training experience formed a theme influencing acceptability in this study. Furthermore, practitioners considered experts in parenting interventions have reached greater consensus on core parenting skills and theoretical orientation (Barker & Hawes, 2024). Additionally, while there was diversity in participants' cultural backgrounds and consistency with international findings, all psychologists were working in Australia, and hence, transferability to other contexts should be carefully considered. Finally, it is important to note that most participants were recruited from a previous study regarding attitudes towards time-out or referred through purposive snowballing; thus, these psychologists may have held particular motivations or interests in this topic.

Implications for Policy, Practice, and Research

Our findings suggest several important implications for future research and implementation of evidence-based parenting interventions for youth mental health problems. First, our results offer insight into how psychologists' early training experiences may shape their future parenting intervention preferences. It is well established that didactic methods are less impactful than active learning regarding improving adherence to and acceptance of evidence-based interventions. For example, some training seminars for parenting interventions include experiential components and ongoing coaching support (Lyon et al., 2011). However, the current findings emphasise the specific role of providers' own emotions and values in their uptake of behavioural and non-behavioural parenting interventions, particularly concerning interventions that may be perceived as carrying controversy or uncertainty. Consistent with emerging research (Becker-Haimes et al., 2022; Klein et al., 2024), our findings highlight the need to mitigate maladaptive anxious avoidance that can arise when conducting clinical work, including working with parents. Psychologists are likely to benefit from experiential learning opportunities under the supervision of trusted, practice-oriented psychologists who can help navigate implementation issues, provide social support, normalise emotional experience, model psychological practice, and potentially scaffold emotion-regulation (Atkins et al., 2017; Becker-Haimes et al., 2022; Woodfield et al., 2023). This may be especially important for psychologists who are being trained in time-out to help resolve ambivalent personal feelings and encourage evidence-based implementation. Furthermore, as psychologists share strong values in safety and connection, a further way to support training in these interventions could be to emphasise how particular intervention components are utilised to enhance child safety and strengthen parent-child relationships. This could potentially target psychologists' beliefs about consequence of interventions and increase congruence with their professional/ social role and identity (Atkins et al., 2017). This could potentially prevent further misconceptions of evidence-based parenting interventions, particularly related to the widening polarisation of behavioural and non-behavioural programs.

Importantly, psychologists' preferences were often developed early in their professional training, prior to any specific training in manualised parenting programs. This suggests it may be important to address preconceived ideas within the university context. In line with other implementation research, early professional training of psychologists may benefit from exposing psychologists to common biases that arise when delivering EBP. This may involve more explicitly targeting psychologists' potential for an overreliance on clinical intuition or belief that we see things "as they really are" (Klein et al., 2024; Lilienfeld et al., 2013). Professional training could also be strengthened by exposing psychologists to a wider range of theoretically distinct and evidence-based parenting interventions.

A second important area for future research and practice in parenting interventions is the need to better understand how existing parenting programs apply to various presentations and client variables. It is apparent from the current study and previous research that psychologists are concerned about the applicability of research and manualised parenting programs to real-life settings (Cooper & Coyne, 2020; Cooper et al., 2022). In part this could be addressed in training efforts on common misconceptions as detailed above. Alternatively, including moderating client variables more regularly in research may facilitate bridging science-practice perspectives (Lilienfeld et al., 2013, 2015). While various client factors were mentioned, two contexts seemed to be emphasised in our study: namely, applying parenting interventions for neurodivergent youth and youth exposed to trauma. Currently there is existing literature that considers trauma-informed practice within parenting interventions, including how behavioural programs (and time-out) and non-behavioural programs can be effective in reducing youth mental health problems and trauma-related symptoms in youth with high levels of adversity (Havighurst et al., 2021; Roach et al., 2024; Tarabulsy et al., 2008). On the other hand, there has been less direct investigation of how current parenting interventions can best support neurodivergent youth in reducing mental health problems (Hudson et al., 2023). Future research might also consider targeting potential social/professional role and identity by involving senior peer supports who also identify as neuro-affirming or trauma-informed to encourage implementation of evidence-based parenting interventions.

Finally, the current findings highlight potential areas for policy change that may affect families' access to evidence-based parenting support. Evidence-based parenting interventions often require many sessions (e.g., 12-20), parent-only sessions, and delivery by an accredited provider. This point could relate to non-behavioural parenting interventions that are typically designed to require more sessions and may have sleeper (i.e., delayed or dormant) effects on youth outcomes (Bakermans-Kraenburg et al., 2003). These aspects make it difficult for psychologists to implement these interventions under common medical models, that may incentivise short-term compliance strategies. Psychologists raised that families in Australia often require Medicare subsidies to access mental health care; however, Medicare only permits 10 individual sessions, including only two delivered to a caregiver without a child present. Similar findings have been found in Australia (Kan et al., 2025) and other Western countries. For example, psychologists in the U.S. have described their system as under-resourced to meet families' needs for behavioural parenting interventions, due to training costs, affordability of services, and access to providers that accept Medicaid or private health insurance (Weisenmuller & Hilton, 2021). Clearly, system and policy barriers related to time and finances are recognised internationally, hence these barriers should be important targets to improve families' access to evidence-based care. Particularly, given psychologists agreed that targeting parenting practices yield the greatest therapeutic gains.

Summary

Overall, this study provides rich and novel insights into psychologists' attitudes toward and experiences in delivering evidence-based parenting interventions. Notably, psychologists' early professional training, affective experiences, and personal values – which at times may misalign with research findings – appear to influence their understanding and implementation of behavioural and non-behavioural parenting interventions. Consequently, this suggests a need to update training and knowledge dissemination surrounding evidence-based parenting interventions, particularly regarding the spread of misinformation on time-out and behavioural parenting interventions. In particular, psychologists' social and motivational opportunities should be considered as a target for improving implementation. Simultaneously, given the growing acceptance and perceived effectiveness of non-behavioural parenting interventions amongst psychologists, this approach warrants further empirical investigation for its broader applications for improving youth and family mental health. Inevitably, clients' values and preferences will not always align with a single theoretical or philosophical approach to parenting support; thus, our field needs a range of different, research-informed approaches.

Chapter 7: General Discussion

This thesis investigated the effectiveness and acceptability of behavioural and non-behavioural parenting interventions for youth mental health problems. The included studies address several important gaps in the literature by examining i) the effectiveness of attachment- and emotion-focused parenting interventions for reducing youth mental health problems; ii) practitioners' acceptability of time-out for the treatment of child conduct problems in real-world settings; and iii) potential factors involved in practitioners' use and acceptability of behavioural and non-behavioural parenting interventions. Together, the findings from these studies have important implications for evidence-based care when working with youth and their families.

This chapter will first provide a summary of key findings from the three empirical studies. Second, these findings will be contextualised within existing literature on behavioural and non-behavioural parenting interventions. Third, the chapter will highlight key strengths and limitations of the research. Finally, this section will discuss implications for future research, practice, and policy concerning the implementation of parenting interventions for the treatment of youth mental health problems.

Overview of Key Findings

Study 1: Attachment- and Emotion-Focused Parenting Interventions for Child and Adolescent Externalising and Internalising Problems: A Meta-Analysis

Study 1 provides the first systematic review and meta-analysis of attachment- and emotion-focused parenting interventions for youth externalising and internalising problems. This study aimed to understand the effectiveness of attachment- and emotion-focused parenting interventions against waitlist comparators, behavioural parenting interventions, and any other active comparators. Meta-analytic findings revealed that attachment- and emotion-focused parenting interventions were superior to waitlist controls for externalising and internalising problems post-treatment, and effects were sustained at 6-month follow-up or greater. Notably, the relative efficacy of attachment- and emotion-focused parenting interventions to behavioural parenting interventions was unable to be compared using meta-analysis as there were only two studies that directly compared these interventions on externalising outcomes, and no studies measuring internalising outcomes. The two studies directly comparing behavioural and non-behavioural approaches showed that both interventions reduced externalising problems and there were no significant differences between approaches at follow-up. Finally, when compared with other active comparator conditions (e.g., TAU, psychoeducation), there was a borderline statistical difference in favour of attachment- and emotion-focused parenting interventions for externalising outcomes, and no statistical difference for internalising outcomes. This suggested that attachment- and emotion-focused parenting interventions were no more or less effective than other active comparators for either mental health outcome.

This study also conducted planned and exploratory sub-group analyses, as well as analyses on secondary parent outcomes. Planned subgroup analyses around client characteristics such as age could not be synthesised quantitatively due to heterogeneity or insufficient studies. Exploratory analysis revealed that attachment- and emotion-focused parenting interventions designed to directly target mental health problems were significantly more effective than those not designed to target these problems (see Appendix G for details on attachment- and emotion-focused parenting interventions designed to target mental health outcomes). These program often included components on parent-child conflict and/or parenting skills to manage challenging child behaviour. For secondary parent outcomes, quantitative synthesis of parent mental health outcomes (depression, anxiety) showed no statistically significant effects for attachment- and emotion-focused parenting interventions compared to any comparators. There were insufficient studies to quantitatively synthesise parent stress outcomes, though qualitative analysis suggested potential benefits for reducing parent stress.

Overall, Study 1 provides meta-analytic support for attachment- and emotion-focused parenting interventions beyond post-intervention for both externalising and internalising youth outcomes. However, without further head-to-head RCTs, their relative efficacy compared with behavioural parenting interventions remains largely unknown.

Study 2: Practitioners' Use and Acceptability of Time-out

Study 2 provides the first empirical findings of time-out use and acceptability in a diverse, community sample of practitioners who do not subscribe to the same model of parenting interventions. One-hundred and ten practitioners with experience working with children and families completed an online questionnaire regarding their perspectives on time-out for families of children with conduct problems. Findings suggested that 55.5% of practitioners in Study 2 have used time-out, with 38% reporting active use at the time of surveying. Practitioners who reported not currently using time-out in their practice, mostly attributed this to a preference for alternative strategies (59.2%) or feeling strongly against time-out (40.8%). On average, practitioners neither agreed nor disagreed that time-out is an acceptable strategy for managing child conduct problems. However, some practitioners indicated concerns that the strategy could harm child development, shame children, or trigger trauma responses. Importantly, practitioners with increased knowledge of empirically-supported parameters of time-out reported higher time-out use and acceptability. Finally, while time-out was not directly compared to other alternatives, practitioners commonly endorsed using non-behavioural strategies such as emotion coaching, emotion-regulation, and time-in within their practice.

Findings from this study suggest an underutilisation of time-out among at least some practitioners and a potential preference for non-behavioural alternatives according to the current sample. However, as behavioural and non-behavioural approaches were not directly compared, it remained unclear whether concerns with time-out reflected practitioners' broader attitudes towards behavioural approaches. Thus, Study 3 aimed to examine more closely the nuanced perceptions that psychologists held towards both behavioural and non-behavioural parenting interventions.

Study 3: Psychologists' Perspectives on Behavioural Versus Attachment- and Emotion-Focused Parenting Interventions

Study 3 is the first qualitative study to interview psychologists who work with parents across various settings, regardless of specific program affiliations on their broader views on implementation of behavioural and non-behavioural parenting interventions. Qualitative data from 24 Australian psychologists provided initial findings indicating that some practitioners perceived a polarisation between behavioural and non-behavioural parenting interventions. At the same time, findings demonstrated that many practitioners do not support this polarisation. Collectively, psychologists in this study agreed that parenting interventions were critical for effectively treating youth mental health problems, though they discussed a range of factors affecting their acceptability and implementation of these interventions.

Regardless of their preferred theoretical approach, practitioners discussed various topics related to their use and acceptability of parenting interventions. Reflexive thematic analysis determined six key themes. First, *My Earliest Influences (or Lack Thereof) Are Lasting,* referred to psychologists' discussions around how their early training context influenced their future clinical decision-making when working with youth and families. Within this theme, psychologists particularly highlighted the crucial role of their supervisors and need for early exposure to parenting interventions. The second theme, *Experiential Learning Fundamental to Practice: "I see that it works,"* referred to psychologists' reflections on how experiential learning impacts treatment decisions, particularly when interventions initially evoke anxiety or distress, like in the case of time-out. Psychologists' responsiveness to their own and their client's emotional experiences and needs also generated a third theme, *"Which Way to Safety? Shared Values for Targeting Emotional Needs.*" This theme described how psychologists shared common values for creating safety and strengthening the parent-child relationship. Psychologists' perceptions of how well interventions could meet these needs often shaped their adoption of parenting programs. In accordance with the fourth theme, this sometimes involved perceiving *"Good" and "Bad" Parenting Trends.* Within this theme psychologists described experiencing a dichotomy between parenting intervention approaches, even when they personally did not endorse this division. The fifth theme, *Research "Does not Capture the Complexity of Real Life,"* reflected practitioners' observations of a perceived gap between research and implementation of parenting programs, and the need for program tailoring for minority populations and/or co-occurring presentations. Psychologists particularly were concerned with populations exposed to trauma and neurodivergent children. Finally, the last theme, *"The Way the System is Set-Up,"* characterised the broader context psychologists were working in and felt limited by, including practical constraints such as time and cost associated with training and implementing parenting interventions. In sum, Study 3 helps clarify the importance of examining provider level factors in the acceptability and implementation of both behavioural and non-behavioural parenting interventions and suggests initial findings around a perceived polarisation between these interventions, that many psychologists are in disfavour of.

The combined findings of these three studies help shed light on how behavioural and non-behavioural parenting interventions compare on effectiveness and acceptability. Specifically, results indicate that attachment- and emotion-focused parenting interventions are evidence-based approaches for treating youth mental health problems, though more RCTs directly comparing them to behavioural approaches are needed to establish relative efficacy. Qualitative analysis suggests that there is a perceived dichotomy between behavioural and non-behavioural approaches that not all psychologists favour. Notably, quantitative analysis on time-out specifically suggests that at least some practitioners working with children and families are not using time-out and hold concerns about the strategy that are unsubstantiated by research. Moreover, regardless of preferred theoretical approach, the findings suggest specific facilitators and barriers at the provider level that affect successful implementation of parenting interventions.

Situating Findings within Contemporary Research on Behavioural and Non-Behavioural Parenting Interventions

Effectiveness of Attachment- and Emotion-Focused Parenting Interventions

The studies in this thesis contribute important findings relevant to the field of implementation science, pertaining to behavioural and non-behavioural parenting interventions. The first major finding is the meta-analytic support for the effectiveness of attachment- and emotion-focused parenting interventions in reducing youth mental health problems. Study 1's small effect size for externalising problems (*SMD* = -0.17) and small-to-moderate effect size for internalising problems (*SMD* = -0.34) vary in similarity to existing meta-analyses on parenting interventions. Specifically, the effect sizes for externalising problems are slightly lower than the moderate effect sizes found in other parenting interventions (e.g., 0.46; Mingebach et al., 2018), though this study focuses on young children. Conversely, the effect sizes for internalising outcomes in Study 1 appear higher than another similar meta-analysis which examined parenting interventions for the same age group and found small effect sizes (i.e., 0.12; Yap & Jorm, 2015). Furthermore, a more recent meta-analysis on behavioural parenting interventions found higher small-to-moderate effect sizes (i.e., -0.41) for internalising outcomes than Study 1, though this meta-analysis only examined children aged 2-12, an age group that qualitatively showed the highest treatment effects in Study 1 (Bloss et al., 2022). Notably, since the publication of Study 1, further meta-analyses have examined emotion-focused parenting interventions and found additional support for these interventions for both externalising and internalising outcomes (England-Mason et al., 2023; Zahl-Olsen et al., 2023). This further supports the growing interest and emergence of effectiveness studies for attachment- and emotion-focused parenting interventions. However, according to a recent meta-meta-analysis that included Study 1 there is still only limited emerging evidence for non-behavioural interventions for children (Hudson et al., 2023). The paper concluded that behavioural parenting interventions remain the most evidence-based parenting intervention for youth mental health difficulties (Hudson et al., 2023). Therefore, without further evidence on the effectiveness of attachment- and emotion-focused parenting interventions for youth mental health problems, particularly direct RCT comparisons with behavioural approaches, behavioural parenting interventions remain the most established.

Since Study 1 was published, two additional studies have compared a behavioural and non-behavioural parenting program (Kohlhoff et al., 2024; Zargarinejad et al., 2025). Firstly, Kohlhoff and colleagues (2024) conducted a RCT with parents of 90 toddlers with behavioural concerns, and compared individual PCIT-T (PCIT with Toddlers) to group COS-P and a waitlist control (Kohlhoff et al., 2024). Importantly, the researchers noted that they did not aim to directly compare behavioural and attachment-based approaches, as they described PCIT-T as attachment-informed. Specifically, PCIT-T is distinct from standard PCIT as it is informed by both attachment-theory and social-learning theory parenting techniques while excluding the use of time-out. They also noted that PCIT-T was specifically designed to target conduct problems through individual sessions, whereas COS-P was a group program aimed at enhancing caregivers' capacity to understand and respond to their children's needs to improve attachment security. Nevertheless, results showed that both PCIT-T and COS-P demonstrated significant improvements in externalising problems, while only PCIT-T showed significant improvements in internalising problems (Kohlhoff et al., 2024). Thus, this study provided further for support behavioural (excluding time-out) and non-behavioural approaches for reducing externalising problems, but the program informed by attachment theory only was not effective for internalising problems.

Secondly, in a sample of parents of 59 school-aged children diagnosed with ADHD, children were randomised to either "The Emotions Program," Triple P, or a control group (Zargarinejad et al., 2025). Both the emotion-focused and behavioural parenting interventions led to significant improvements in conduct problems relative to the control group. Interestingly though, the two active approaches differed in other effects. The emotions group was particularly effective at decreasing non-supportive maternal reactions, alleviating parent stress, and improving parent-emotion regulation, while the Triple P group showed the greatest improvements on ADHD rating scales and child emotion-regulation (Zargarinejad et al., 2025).

Findings from these recent RCTs (Kohlhoff et al., 2024; Zargarinejad et al., 2025), combined with the two RCTs analysed in Study 1 (Duncombe et al., 2016; Högström et al., 2017), suggest behavioural and non-behavioural parenting interventions may be comparable in effectiveness for reducing youth mental health problems, though likely through different mechanisms. Thus, it may be particularly important to understand the mechanisms behind each of these parenting approaches, to more appropriately target maintaining factors occurring within families. While research on behavioural parenting interventions has considered how shifts in parenting practices can help explain changes in externalising problems (Forehand et al., 2014), more research is needed to understand the mechanisms behind the effects of attachment- and emotion-focused parenting interventions on youth mental health outcomes (Hutchings et al., 2023). It is suggested that proximal targets of attachment- and emotion-focused parenting interventions, such as attachment-security, reflective functioning, caregiver sensitivity, and parent emotion socialisation behaviours may explain reductions in externalising and internalising problems (Carlone & Milan, 2021; Havighurst et al., 2020; Kok et al., 2013; Wang et al., 2013). Furthermore, it is hypothesised that non-behavioural approaches may have sleeper effects (Bakermans-Kranenburg et al., 2003), with improvements continuing post-intervention. This was illustrated anecdotally by some practitioners in Study 3, and observed in one RCT included in Study 1 (i.e., Högstrom et al., 2017), though more research is needed to confirm this hypothesis.

Study 1 contributes to the emerging evidence suggesting the effectiveness of attachment- and emotion-focused parenting interventions for youth mental health problems, though much more research is needed to understand the mechanisms behind these interventions and their relative effectiveness to the current most established, behavioural parenting interventions. At minimum, the current findings support the use of attachment- and emotion-focused approaches as an alternative model for youth mental health treatment, particularly when coupled with family's needs and preferences in the context of EBP. Importantly, successful transfer of parenting interventions into real-word settings also requires considering the acceptability of these interventions.

Practitioners' Acceptability of Time-out and Behavioural Parenting Interventions in Real-World Settings

Practitioners' Underutilisation of Time-Out

Until recently, there has been speculation that practitioners are moving away from time-out and behavioural parenting interventions, though there has been no empirical support for this conjecture. The second key finding in this thesis, according to Study 2's sample is that some practitioners working in routine practice settings with children and families are not implementing time-out. The low percentage of practitioners using time-out was surprising and inconsistent with recent research investigating parents' time-out use and acceptability. Within community samples of parents of young children, findings have suggested that most (approximately 60-75%) use time-out (Canning et al., 2021; McLean et al., 2022; Riley et al., 2017). Practitioners' relatively lower use of time-out also misaligned with the strong research support for the efficacy of time-out (Chorpita & Daleiden, 2009; Leijten et al., 2019) and expert recommendations when working with children with conduct problems (e.g., Barker & Hawes, 2024). Conversely, these results are consistent with the broader EBP literature that suggests practitioners often omit or adapt empirically-supported treatments in clinical practice (Becker-Haimes et al., 2022; Beidas et al., 2021; Deacon et al., 2013). Practitioners' reasons for not using time-out were consistent with parents' reports, commonly describing a preference for alternative strategies (such as emotion coaching or time-in) or feeling strongly against the procedure (Canning et al., 2021).

While overall acceptability for time-out was relatively neutral, some psychologists endorsed common criticisms circulating around time-out, including that time-out can trigger trauma responses (Quetsch et al., 2015). This concern was also raised in Study 3, where many practitioners reported concerns around implementing parenting interventions within the context of children who have experienced trauma. Interestingly, a handful of practitioners who were aware of the research base for families exposed to trauma discussed the appropriateness of behavioural parenting interventions for these populations. Indeed, as this concern has been previously raised, there has been growing attention in the recent literature on the use of time-out in the context of trauma and attachment (Belanger et al., 2023; Dadds & Tully, 2019; Roach et al., 2022). Recent findings suggest that behavioural parenting interventions including time-out have shown equivalent, if not better therapeutic outcomes for children with higher versus lower levels of adverse life experiences (Roach et al., 2022, 2024). Moreover, review evidence of PCIT suggests it is an appropriate treatment in the context of trauma, with improvements in child behaviour problems, trauma symptoms, and negative parenting strategies, as well as reductions in the potential risk of abuse and neglect recidivism (Warren et al., 2022). Retrospective evidence has also suggested the positive effects of time-out in childhood may extend into adulthood by way of improved mental health, attachment, and emotion regulation (Xu et al., 2024). Importantly, it is well-established that time-out use within the trauma context needs to be carefully informed by theory and evidence (Barker & Hawes, 2024).

In sum, while concerns about time-out have been proposed, Study 2 was the first to demonstrate that some of these circulating criticisms are endorsed by practitioners working in community settings. Likewise, at least some practitioners working with children and families with presentations suitable for time-out are not using the strategy. A key finding was that higher knowledge of empirically-supported parameters of time-out was associated with increased use and acceptability; though, it is also possible some practitioners may be aware of the knowledge base yet elect to use other strategies due to their own preferences/ values. Nevertheless, criticisms regarding time-out are likely contributing to a widening gap between research and practice, as well as between behavioural and non-behavioural parenting approaches.

Polarisation Between Behavioural and Non-Behavioural Approaches

The third core finding in this thesis relates to practitioners' broader acceptability of behavioural and non-behavioural approaches to parenting. While many researchers have suggested a *shift* away from behavioural towards non-behavioural parenting interventions (Coyne, 2013; Troutman, 2015), psychologists in Study 3 instead described a perceived *polarisation* between behavioural and non-behavioural parenting interventions when working with youth and families. That is, practitioners described that these distinct approaches to parenting were often perceived as a dichotomy, with some practitioners leaning heavily towards either intervention approach, believing they hold opposing overarching values on how to respond to and treat child behaviour.

Notably though, many practitioners were not in favour of this polarisation and called for an integration. Researchers have similarly provided support for the integration of relational and behavioural strategies by combining them into a single parenting program (e.g., PCIT-T, HNC-Emotion coaching; Katz et al., 2025; Kohlhoff et al., 2022); as well as considering the extent to which behavioural and non-behavioural approaches may be compatible theoretically (Dadds & Tully, 2019; Hutchings et al., 2023; Troutman, 2015). For example, researchers have proposed the "learning theory of attachment" whereby attachment processes are understood through behavioural principles of classical and operant conditioning (Bosmans et al., 2020). This theory proposes that secure attachment develops from parents' consistent positive reinforcement of children's support-seeking behaviour; whereas children who experience little to no reward from support-seeking are more likely to develop an avoidant attachment strategy. Finally, if provided with intermittent positive reinforcement, from a learning perspective this is hypothesised to heighten proximity-seeking behaviour and in turn influence the emergence of an ambivalent attachment strategy (Bosmans et al., 2020; Hutchings et al., 2023).

Furthermore, researchers have suggested that insecure parent-child attachment relationships and behavioural problems often co-occur in clinical cohorts of children and can influence one another. For example, repeated parent-child coercive escalation cycles impact the attachment relationship; and increased, untreated attachment problems typically increase behavioural problems (Greenberg, 1999; Greenberg et al., 1993; Speltz et al., 1990). More specifically, researchers have found that rather than a direct effect, early insecurity increases susceptibility to coercive parent-child interactions, which in turn leads to the development of child conduct problems (Kochanska et al., 2009). Interestingly, despite clear links between parent-child attachment relationships and social learning theory perspectives on parent-child interactions, behavioural parenting interventions have traditionally measured mental health outcomes while attachment-based programs focus on developmental outcomes such as secure attachment and caregiver sensitivity. However, growing evidence suggests that both approaches may produce secondary benefits beyond their primary targets (Bosmans et al., 2020; Hutchings et al., 2023).

As already demonstrated in this thesis, attachment- and emotion-focused parenting interventions show reductions in youth mental health problems. On the other hand, behavioural parenting interventions have also demonstrated improvements in attachment-related caregiving domains (Blizzard et al., 2018; O'Connor et al., 2013). In terms of emotion socialisation behaviours, some researchers suggest that behavioural parenting programs facilitate self-regulation (Sanders & Mazzucchelli, 2013), while others are concerned that behavioural programs alone overlook the importance of improving parent-regulation (Maliken & Katz, 2013). In the latter case, researchers have recently experimented with integrating emotion-focused components into evidence-based behavioural parenting interventions, though this area is still developing (e.g., Chronis-Tuscano et al., 2016; Katz et al., 2025). Taken together, while a polarisation between these paradigms is perceived by some psychologists, there is perhaps also growing recognition that the two theoretical approaches could have shared implications or be beneficial when combined for treating youth mental health problems. Nevertheless, it is important to explicitly address the perceived polarisation between these valuable theoretical approaches to parenting interventions and the particular controversy surrounding time-out that exists for some practitioners.

Provider-Level Variables Influencing the Implementation of Parenting Interventions

Importantly, while it is valuable to understand practitioners' use of time-out, and behavioural and non-behavioural parenting interventions more generally, this thesis also aimed to identify factors influencing their use and acceptability of these interventions. Findings from Studies 2 and 3 emphasised the importance of provider-level factors in the successful implementation of evidence-based parenting interventions. While much of the existing implementation research has focused on training variables and adherence to fidelity, this thesis highlighted that training alone may be insufficient to explain successful implementation of parenting interventions. It is important to consider practitioners actual learnt knowledge of evidence-based parameters for time-out implementation, their affective experiences, and values when implementing parenting interventions.

The finding in Study 2 that training in time-out or parenting interventions was insufficient to explain use and acceptability of time-out is consistent with previous research on other evidence-based interventions. Researchers suggest that there is a need for experience-based and active training, with follow-up consultation to encourage implementation and acceptability of evidence-based interventions (Becker et al., 2004; Frank, Becker-Haimes, & Kendall, 2020; Weisenmuller & Hilton, 2021). This appears particularly true for intervention components that elicit initial distress or discomfort in the practitioner and/or client, such as exposure therapy (Becker et al., 2004; Deacon et al., 2013; Farrell et al., 2016).

Practitioners in Study 2 reported discomfort with time-out (54.5%); and practitioners in Study 3 described how their own and their client's emotional responses to implementing time-out influenced their future use of it. Notably, practitioners who persevered with time-out, typically with a supervisor coaching them through the discomfort, were more likely to speak favourably of time-out in the long-term. This pattern of findings is consistent with prior hypotheses about maladaptive anxious avoidance exhibited by some practitioners. Becker-Haimes and colleagues (2022) proposed that practitioners engage in avoidant behaviour of interventions where there is actual or anticipated fear of harm to their clients or themselves. Aligned with avoidance theory, omitting these interventions may reduce short-term distress but ultimately reduces practitioner's self-efficacy, perpetuates negative beliefs about the intervention, and leads to long-term avoidance. These authors discussed the implications of this theory for exposure therapy, conducting risk-assessments, and time-out (Becker-Haimes et al., 2022), which the current thesis supports. Klein and colleagues (2024) recently found this pattern of responding to time-out implementation in a study with 198 practitioners completing a vignette-based survey. Findings suggested that increased anxious distress in relation to time-out was associated with increased probability of avoiding time-out delivery in the future (Klein et al., 2024). Thus, with growing evidence, it is likely that practitioners' anxious distress when implementing time-out is an important barrier to address.

Furthermore, Study 3 extended beyond the implementation of time-out, and found that practitioners often initially wanted to avoid working with parents all together, due to initial discomfort. Typically, though in the case of general parenting work, practitioners described active coaching support from their supervisors that encouraged continued use. Psychologists described how increased experience working with parents shifted their initial anxieties into positive emotions such as joy and empowerment. This pattern was also described among practitioners who continued using time-out. Practitioners generally described needing to "see" that interventions work before adopting them, a pattern commonly cited in implementation literature (Cooper et al., 2022; Lilienfeld et al., 2013). These findings suggest that continued experience with an intervention is likely to reduce discomfort and encourage ongoing implementation, while also highlighting supervisors' crucial role in supporting psychologists' use of parenting interventions consistent with broader implementation research (Cooper & Coyne, 2020; Shapiro et al., 2012).

In addition to practitioners' affective and experiential learning influences, results from Study 3 indicated the importance of considering practitioners' values. It is important to note that some practitioners may not be selecting interventions based on their confidence, lack of knowledge, or affective experience; rather, their decisions may be based on the degree of perceived alignment between the intervention and their values. Regardless of preferred theoretical approach, practitioners commonly discussed the importance of safety and strengthening the parent-child relationship as paramount to their clinical work. Previous qualitative research similarly suggests that psychologists' personally held values can shape their clinical decision-making (Cooper & Coyne, 2020; Lundström & Lundström, 2023). Hence, it may be important to make more explicit how parenting interventions can target important psychological and emotional needs for child, including how they can strengthen their relationship with their caregiver. As anticipated, practitioner acceptability plays a key role in the successful implementation of parenting interventions and fills an important gap in implementation science research, where practitioners' perspectives are typically measured infrequently (Proctor et al., 2023).

Research-Practice Gap for Parenting Interventions

Overall, the findings of this thesis indicate a clear gap between research and practice for the implementation of behavioural and non-behavioural parenting interventions for youth mental health problems. The gap between what is considered most evidence-based and what practitioners are using in practice within the context of parenting interventions is consistent with the broader implementation field. It is well-known that evidence-based treatments are often underutilised in practice, and that efficacy within research trials does not ensure successful delivery in real-world settings (Becker-Haimes et al., 2022; Beidas et al., 2021). The collective findings of this thesis support that this can also be the case in the context of behavioural and non-behavioural parenting interventions. Furthermore, common facilitators and barriers of other evidence-based treatments such as negative attitudes or beliefs, values, affective experiences, and practical constraints are also relevant within the context of parenting interventions (Lilienfeld et al., 2013, 2015; Weisenmuller & Hilton, 2021).

Specifically, behavioural approaches are currently considered to be the "gold-standard" for parenting interventions for child behavioural problems, though these are not always used or preferred. On one hand, a preference for non-behavioural programs provides valuable insight that warrants continued investigation of these interventions for treating mental health problems – particularly now that there is meta-analytic evidence to support its effectiveness. However, at times, it is possible that practitioners are using interventions that are inconsistent with theoretical understandings of how particular child behaviours are maintained. For example, within some parenting programs, there is exclusive use of positive parenting strategies without time-out, which may be appropriate for some child presentations, though has been found as counterproductive in the case of child conduct problems (Larzelere et al., 2020).

Sometimes, the concept of "time-in" was suggested as a common alternative in Study 2, and in similar research with parents (Canning et al., 2021). Time-in, from a behavioural perspective (as outlined in Chapter 1), refers to any time outside of time-out, including relationship enhancement strategies such as quality time and positive reinforcement. Whereas, for others, time-in may refer to a co-regulation strategy involving parents sitting with their child for a period of time following misbehaviour (Johns & Levy, 2013). This strategy, when used directly in response to misbehaviour, has not been empirically evaluated, and through the lens of social learning models, could accidentally reinforce misbehaviour. This is because the misbehaviour is responded with increased attention from a parent (i.e., positive reinforcement if it increases future misbehaviour). Importantly, this should not detract from the well-supported role of co-regulation for healthy child development outcomes, including within evidence-based treatments (Havighurst et al., 2025; Verhagen et al., 2024). Thus, it is important to better understand what the target of intervention is, and accordingly what appropriate treatment options are available. This necessitates further investigation of non-behavioural programs more within the research trials. At the same time, practice-level barriers to behavioural parenting interventions must be addressed, particularly the spread of misconceptions.

Moving away from specific theoretical models of intervention, practitioners also described barriers in practice to effectively delivering parenting interventions at the wider system level. Practitioners described that parenting interventions were cost and time-intensive, echoing findings from other implementation studies (Cooper et al., 2022; Weisenmuller & Hilton, 2021). Particular attention was placed on implications of the Australian medical system for the implementation of parenting interventions. For example, most parenting programs require greater than the permitted subsidised sessions within Australia’s Medicare system, meaning families are required to pay out-of-pocket costs to access some of these interventions but are often unable to afford this. In particular, Medicare subsidies only permit two sessions to be delivered to a caregiver without the child present. A recent study with 206 Australian practitioners working in youth mental health services further supported these concerns (Kan et al., 2025). These researchers found that approximately 70% of practitioners reported being dissatisfied with the current youth mental health systems in Australia, with the highest endorsed barrier being around affordability. Practitioners in this study – like those in Study 3 – shared the belief that working with parents is critical for youth mental health treatment, though they noted that the current two Medicare-subsidised services for parent-only appointments per calendar year are insufficient and not aligned with research (Kan et al., 2025). These barriers within the Australian systems are also akin to those in U.S.-based practitioner studies (Christian et al., 2014; Weisenmuller & Hilton, 2021). Furthermore, practitioners discussed that accessing evidence-based parenting interventions, including relevant literature or formal training programs is often costly, and hence perceived as a barrier to implementation. Practitioners broadly perceived that routine care settings for youth mental health intervention, particularly private practice settings, were not conducive to evidence-based implementation of parenting interventions. It is interesting that despite the strong empirical support for parenting interventions (Kaminski et al., 2024; Hudson et al., 2023) and superior effects on youth mental health outcomes when parents are included in treatment (Line et al., 2023), that current funding systems in Australia are not conducive to supporting parenting intervention work.

Inevitably, while a science-practice gap within the context of professional support for parenting will exist, there are also areas identified in this thesis that may require modification. Study 3 identified that some of this gap exists due to "parenting trends" of what is perceived as "good" or "bad." These trends are not unfamiliar to historical accounts of parenting interventions, though this time they are not evolving in response to evidence. That is, in the past, behavioural programs grew out of challenges to psychodynamic approaches that did not consider the role of the parent or observable, measurable behaviour (Grusec, 2020; Reitman & McMahon, 2013). Similarly, time-out developed as an alternative to spanking when spanking was found to be harmful to child development and parent-child relationships. However, at present, behavioural parenting programs remain a dominant approach in the literature, including the use of time-out. While this dominance could be in part due to bias in research methodology, it is important to recognise the significant contributions of its' evidence and that many concerns about its safety have grown out of public misconceptions rather than empirical support, requiring explicit attention in implementation efforts. Notwithstanding this, the growing popularity and emerging evidence for attachment- and emotion-focused parenting interventions demonstrates the importance of providing families with different options for evidence-based support.

Strengths and Limitations

This thesis makes important contributions to understanding both the effectiveness and acceptability of behavioural and non-behavioural parenting interventions. Using mixed-methods including meta-analysis, quantitative questionnaire-based design, and qualitative interviews with practitioners; it addresses critical gaps in the literature on parenting interventions for youth mental health problems. Each study represents a novel contribution to the field and considers real-world applications of evidence-based parenting interventions. Nonetheless, several limitations warrant consideration.

First, Study 1 was limited by high heterogeneity or high risk of bias within included studies, warranting caution in interpreting results. Importantly, though, removing high risk studies increased overall effect sizes, suggesting that the effect sizes reported may be conservative estimates. Second, this thesis typically employed relatively liberal inclusion criteria for the studies in this thesis as they represented initial explorations of topics. Specifically, eligible studies in Study 1 did not require participants to have clinical levels of externalising or internalising problems at baseline, and previous research has demonstrated that higher baseline levels are linked to greater treatment effects (Leijten et al., 2013; McMahon et al., 2021). Additionally, practitioners in Study 2 and Study 3 were not required to be trained in parenting interventions or currently working with a specific population.

Rather, to be eligible to participate practitioners were required to have experience working in a mental health setting and delivering treatment to families. This approach was chosen to establish naturalistic environments representative of families seeking mental health services; however, results would likely differ if practitioners specifically trained in parenting interventions were recruited.

A third limitation was related to study size, generalisability, and transferability. While Study 2's sample size was equivalent to other published studies in the field (e.g., Mejia et al., 2015; Woodfield et al., 2021), recruiting more practitioners would likely enhance generalisability. For Study 3, while there was diversity in practitioners' cultural backgrounds, all psychologists were working in Australia and hence transferability to other contexts should be carefully considered. Fourth, potential bias may have arisen due to recruitment and study design. While careful consideration was taken to monitor heterogeneity among participants, given the nature of snowball recruitment, Studies 2 and 3 may have attracted psychologists who held particular motivations or interests in this topic, including a potential bias towards participants who were critical about behavioural parenting interventions or time-out. Additionally, both studies relied on self-report methods, which may be subject to response biases. In particular, while common to qualitative methods, practitioner identities in Study 3 could not be concealed from the interviewer during video or face-to-face interviews, potentially introducing additional social desirability effects.

Finally, improved definitions of "time-out" and "acceptability" within Studies 2 and 3 could have benefited this thesis. Given the controversy around time-out, a careful and detailed definition that described how it fits within a broader complex set of strategies including "time-in" is critical. Furthermore, "acceptability" was often used as an all-encompassing term, with perceived effectiveness treated as a different implementation outcome despite some researchers considering perceived effectiveness as a component of acceptability (Sekhon et al., 2017). Therefore, more precise specification of acceptability outcomes would have likely benefited the design and evaluation of these studies. For example, studies may have focused specifically on subcomponents of acceptability including affective attitudes, perceived effectiveness, and ethicality.

Implications for Future Research, Practice, and Policy

Support for the Effectiveness of Attachment- and Emotion-Focused Parenting Interventions

The findings from this thesis shed light on several important implications for future research and implementation of evidence-based parenting interventions for youth mental health problems. Most notably, the thesis supports the use of attachment- and emotion-focused parenting interventions for the treatment of youth mental health problems. This facilitates evidence-based decision-making regarding the type of intervention that may best suit families' needs and preferences, overall aligning with an EBP model.

Behavioural parenting interventions remain the most extensively-researched parenting interventions (Kaminski et al., 2024) and one of the most overall established psychosocial models for child mental health problems (Hudson et al., 2023). However, these interventions do not work for every family and may not align with families' cultural preferences or values. Therefore, having an option for another evidence-based parenting approach is likely to allow practitioners more flexible application to a client's personal preferences or case formulation. For example, while social-learning approaches are considered best practice for the treatment of conduct problems – given they are typically developed through coercive parent-child interactions – an attachment-based approach may potentially be better suited if conduct problems stem from a history of caregiver insensitivity or neglect, poor reflective functioning skills, and/or several changes in primary caregiving or living situations. Alternatively, findings have suggested that attachment-based programs are not always suitable for families with complex needs, or who prefer concrete parenting skills (Cooper & Coyne, 2020; McMahon et al., 2016; Reay et al., 2019). Regardless, it is important that in clinical practice, practitioners consider how to best meets their client's needs, and having options for evidence-based approaches allows this tailored and client-centred approach. Notably though, practitioners who are opting against a behavioural parenting intervention in particular, should be cautious that this decision is driven by case formulation, rather than avoidance due to underlying anxious affect or unsubstantiated myths about time-out. Early training about common cognitive biases and ongoing supervision could also be an avenue to support this (Lilienfeld et al., 2013, 2015). Nevertheless, these attachment- and emotion-focused parenting interventions demonstrate effectiveness and practitioner acceptance, as shown by this research and other studies on attachment-based interventions, positioning them as viable options for youth mental health treatment (Ambrosi et al., 2023; Reay et al., 2019).

Importantly, while there is now support for both types of parenting approaches, further research is needed on attachment- and emotion-focused parenting interventions, including the relative efficacy compared to behavioural or integrated approaches for youth mental health outcomes. First, there is a particular need for additional RCTs directly examining these approaches to parenting interventions on externalising and internalising outcomes. RCTs may also consider the compatibility or superiority of behavioural or non-behavioural approaches alone, versus when integrated. While some studies that have attempted to integrate these approaches have found superiority for treatment, they were inferior in prevention trials, and more research is needed to better understand combined program effects (Leijten, Melendez-Torres, et al., 2018). It would be beneficial to measure mental health outcomes of these approaches longitudinally and alongside measuring parenting and child-related outcomes common to each theoretical approach (e.g., parenting skills, parent emotion socialisation, reflective functioning, and child attachment security).

Second, further research would benefit from understanding both mediators and moderators of the isolated and combined effects of behavioural and non-behavioural approaches. While typically, mechanisms of change for youth mental health outcomes are fairly well understood in the context of behavioural programs (i.e., through parenting skills; Forehand et al., 2013); these are mostly presumed in the case of attachment- and emotion-focused parenting interventions. That is, in non-behavioural parenting interventions it is assumed that youth externalising and internalising problems are improved by enhancing more proximal targets such as caregiver sensitivity, reflective functioning, and emotional competence (Carlone & Milan, 2021; Havighurst et al., 2020, 2025; Kobak, Cassidy, et al., 2015). Furthermore, it is crucial to better understand which components from each theoretical approach to parenting work best for different clients.

Finally, practitioners within this study and broader research have acknowledged that a "one-size-fits-all" approach does not work for everyone, and there is a clear preference for treatment tailoring and conducting moderator analyses (Lilienfeld et al., 2013; Scott, 2008). Evidence from Studies 2 and 3 suggest that many practitioners adopt eclectic approaches to the treatment of youth mental health, which is consistent with other literature with practitioners (Behan, 2022). While at times this can result in an implementation drift it can also be adaptive and needed (Lilienfeld et al., 2013, 2015; Scott & Dadds, 2009). For example, Scott and Dadds (2009) discuss the usefulness of an eclectic approach when working clinically with externalising problems, such that when standard behavioural parenting interventions are not working, other theoretical approaches can be incorporated as needed (Scott & Dadds, 2009). Thus, it would be useful to continue research in understanding the isolated effects of components within each of these broader parenting interventions. At this stage, meta-analytic evidence suggests that positive reinforcement, praise, natural/logical consequences, and time-out are key parenting components for treating child externalising problems (Leijten et al., 2019). However, further evidence from microtrials with various populations are likely of benefit, particularly extending beyond just externalising problems and school-aged children (Leijten et al., 2015).

Given the concerns pertaining to neurodivergent populations and populations exposed to trauma, these contexts may be particularly beneficial. Currently, existing literature considers trauma-informed practice within parenting interventions, including how behavioural programs (and time-out) and non-behavioural programs can be effective in reducing child mental health problems, and trauma-related symptoms in children with high levels of adversity (Dadds & Tully, 2019; Havighurst et al., 2021; Roach et al., 2022). On the other hand, there has been less direct investigation of how current parenting interventions can best support neurodivergent youth in reducing mental health problems, with some preliminary investigation for the appropriateness of existing parenting interventions (Hudson et al., 2023; McInnis et al., 2020). Thus, there are several important practice and research implications regarding understanding and implementing tailored interventions for moderating client variables.

Narrowing the Science-Practice Gap at the Provider and System Levels

The findings within this thesis further support the importance of not assuming that practitioners routinely implement evidence-based parenting interventions unaffected by their own affective attitudes, values, or experiences (Beidas et al., 2021). Previous research attention has typically focused on training efforts to increase fidelity in existing interventions (Novins et al., 2013); however, the findings of this thesis and other studies have indicated that training alone cannot explain successful implementation (Frank, Becker-Haimes, & Kendall, 2020; Novins et al., 2013). Future practice would likely benefit from ensuring practitioners' early training experiences in parenting interventions include active training components, and ongoing coaching with practice-oriented supervisors. This is likely particularly needed where parenting interventions may elicit maladaptive anxious avoidance from practitioners, like in the case of time-out. Results from Study 2 also suggested that targeting efforts at improving practitioners' knowledge of evidence-based parameters of time-out could be beneficial to improve implementation and acceptability of the strategy. Misconceptions regarding time-out and behavioural parenting interventions are circulating in real-world settings, so to prevent continued widespread misinformation it is imperative that supervisors and academics training future psychologists are aware of common cognitive biases than can occur within this parenting work. Trainers in parenting programs may also benefit from communicating and contextualising how parenting interventions from different theoretical approaches consider children's psychological and emotional safety needs.

In addition to implications for practice, there are several future research directions related to practitioners' acceptability of parenting interventions. First, future research needs to continue to understand the practitioner role in the implementation of parenting interventions. The findings from this thesis suggest that practitioners are key stakeholders in the successful implementation of parenting interventions; therefore, implementation studies would benefit from regularly including their perspectives. It would be particularly beneficial to see if findings related to practitioners' maladaptive anxious avoidance of time-out, and knowledge of empirically-supported parameters of time-out are replicated in future studies. Notably, researchers may also consider the role of practitioners' values and alignment with social and professional identity. Future quantitative studies could benefit from larger sample sizes of practitioners, including outside of the Australian context, to see if these findings are transferable and representative of the general population of practitioners. Future research should use mixed-method designs to efficiently reach these larger samples and provide more generalisable trends; while incorporating qualitative studies to provide a deeper, fuller, picture that overall enhances our understanding of the implementation of parenting interventions (Aarons, Fettes, et al., 2012; Wasti et al., 2022).

Barriers to Evidence-Based Information at the System Level

Accompanying implications at the provider-level, findings within this thesis have potential implications for policy change at the system-level. In particular, psychologists reflected that Australia's youth mental health system creates barriers for both families seeking evidence-based treatment and practitioners seeking evidence-based resources. Practitioners in Studies 2 and 3, consistent with other research (Lilienfeld et al., 2015; Tunnecliff et al., 2015), reported often relying on non-evidence-informed sources, such as social media or books. They attributed this to time and cost barriers, specifically describing costs associated with accessing peer-reviewed articles and the time- and cost- intensive nature of accreditation processes for delivering manualised parenting interventions.

If practitioners are finding it difficult to source evidence-informed resources, this is likely even more troublesome for families. Indeed evidence-based parenting interventions often require many sessions (e.g., 12-20 sessions), parent-only sessions, and delivery by an accredited provider. These conditions make it difficult for psychologists to implement these interventions under common public health models, and thus impact families successfully receiving evidence-based care. Within the Australian context, this particularly relates to Medicare subsidies that only permit 10 individual sessions, and two delivered to a caregiver without a child present. This is now particularly evident given support from a broader survey with practitioners working in youth mental health settings in Australia (Kan et al., 2025). This survey found most practitioners are dissatisfied with the current youth mental health system in Australia, with particular concerns around the current Medicare subsidies for parenting work. In addition, only 0.25% of government research budgets in Australia are provided to parenting intervention research despite parenting being one of the most cost-effective and modifiable methods for supporting child wellbeing outcomes (Havighurst et al., 2022). Thus, it seems there is substantial mismatch between the amount of funding allocated to both research and treatment in parenting interventions and what is required in practice, which warrants crucial attention.

Together, the effectiveness and acceptability findings in this thesis demonstrate the value of both behavioural and non-behavioural parenting interventions. These results have important implications for future research, practice, and policy in implementing parenting interventions for treating youth mental health problems. Researchers and practitioners alike agree that targeting parents yields the greatest therapeutic gains for youth mental health problems.

Conclusions

Overall, this thesis contributes to filling important gaps in the literature on the effectiveness and acceptability of behavioural and non-behavioural parenting interventions for the treatment of youth mental problems. First, it provides initial meta-analytic findings to support the effective use of attachment- and emotion-focused parenting interventions for youth externalising and internalising mental health problems. Second, it offers empirical evidence that some practitioners in routine care are not regularly implementing time-out with families of children with conduct problems, though knowledge of appropriate time-out implementation improves use and acceptability of the strategy. Third, this thesis shares qualitative insights from psychologists working in clinical practice on factors involved in their implementation and acceptability of behavioural and non-behavioural parenting interventions. Together, these findings suggest that while behavioural parenting interventions remain the most established, non-behavioural parenting interventions are growing in evidence and acceptability for their effective use for youth mental health treatment. This provides practitioners and families with treatment options to best support individual family needs, preferences, and values aligning with an EBP approach.

Findings from this thesis highlight a perceived polarisation between behavioural and non-behavioural parenting interventions for some practitioners. Where practitioners demonstrate strong preferences for non-behavioural over behavioural parenting interventions, this sometimes appears to be attributed to beliefs that behavioural interventions will cause harm, and that alternatives are perceived to better meet children's psychological and safety needs. Whereas, practitioners who endorse behavioural parenting interventions, discuss witnessing how these interventions empower and strengthen the parent-child attachment relationship. Importantly, many practitioners perceive this polarisation as unhelpful and there seems to be a call for better understanding of how these approaches can be integrated and understood together to improve evidence-based care for families.

Inevitably, clients' values and preferences, and clinician's expertise will not always align with a single theoretical or philosophical approach to parenting support; thus, continuing research in both behavioural and non-behavioural parenting interventions is needed. While science communication could be improved to challenge any misconceptions around time-out and behavioural parenting interventions where these may exist; research also needs to continue examining non-behavioural parenting interventions that are already being accepted into routine care for supporting families. Perhaps future research and practice efforts could benefit from not "pitting attachment and behaviour against each other" (Study 3 participant) but rather considering how each of these parenting models have strong historical and theoretical underpinnings relevant to youth mental health treatment. Hence, future research efforts may benefit from examining which intervention approaches or components best suit different family needs and presentations. Parenting interventions have evolved significantly over the past 60 years, with various approaches now available, though one principle remains consistent: working with parents provides meaningful and lasting change to youth's mental health trajectories.

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Appendix A

Examples of Behavioural and Non-Behavioural Parenting Programs

	Program Name	Age of Children	Session Length (Typical)	Delivery Target	Delivery Method	Key Components
Behavioural Parenting Programs	1-2-3 Magic (Phelan, 2016)	2-12 years-old	90 minutes; 4-8 sessions	Parents	Group	Three main learning steps: to stop misbehaviour; encourage good behaviour; and strengthen relationship.
	Helping the Noncompliant Child (McMahon & Forehand, 2003)	3-8-years-old	60-90 minutes; 8-10 sessions	Parents and children	Individual	Two main phases: differential attention; compliance training.
	The Incredible Years (Webster-Stratton, 2005)	3-5-years-old	120-190 minutes; 14-20 sessions	Parents (Teacher/School versions available)	Group	Two phases: positive parenting skills; reducing problematic behaviours through video vignettes and home activities.
	Parent-Child Interaction Therapy (PCIT; Eyberg, 1988)	2-7-year-olds	60 minutes; 10-20 sessions	Parents and children (Therapist coaches parent through 'bug in the ear' and one-way mirror)	Typically, individual (group available)	Two phases: child directed interaction; parent directed interaction.
	Parent Management Training Oregon Model (PMTO; Forgatch & Patterson, 2010)	4-12-year-olds	60 minutes; 10-25 sessions	Parents	Group	Core components include teaching positive behaviour; mild consequences for negative behaviour; monitoring and supervision; interpersonal problem-solving; and positive involvement.
	Triple P – Positive Parenting Program (Sanders, 1999)	0-16 years-old	Various options	Parent	Individual or group	Five key parenting principles to support parents in: engaging in positive reinforcement, managing misbehaviour with assertive discipline, relationship building, and problem-solving.

	Program Name	Age of Children	Session Length (Typical)	Delivery Target	Delivery Method	Key Components
Attachment-Focused Parenting Programs						
	Attachment-Based Family Therapy (ABFT; (Diamond et al., 2014)	12-25 year-olds	60-90 minutes; 12-16 sessions	Parent(s) and adolescent	Individual	Family therapy for depressed and suicidal adolescents built around five key tasks: relational reframe; adolescent alliance; parent alliance; repairing attachment; and promoting autonomy.
	Attachment and Biobehavioral Catch-up (ABC; Dozier et al., 2005)	0-4-years-old	60 minutes; 10 sessions	Parents (though observation of parent-child dyad)	Individual	Home-visiting program with three key targets: providing nurturance to distress; following the child's lead; providing nonfrightening care.
	Child- Parent Psychotherapy (CPP; Lieberman & Van Horn, 2005)	0-5-year-olds	60-90 minutes; 20-32 sessions	Parent and child	Individual	Trauma and attachment-informed program with principal goals of creating safety in parent-child relationship; expanding parental responsiveness; promoting parental capacity to balance needs; and modifying maladaptive parent-child perceptions.
	Circle of Security (Cassidy et al., 2017)	0-5-years-old	90 minutes; 8-10 sessions	Parent	Designed for groups but can be delivered individually	Manualised, video-based program dividing into eight chapters to help caregivers promote secure attachment.
	Connect (Moretti & Obsuth, 2009)	8-9-year-olds (*Note.* Adaption for younger age group in development)	90 minutes; 10 sessions	Parent	Group	Structured, strengths-focused, trauma-informed, relational perspective that engages parents in experiential learning and skill development through nine program principles.
	Promoting First Relationships (PFR; Spieker et al., 2012)	0-5-years-old	60 minutes; 10 sessions	Parent or parent and child	Individual and group	Relationship and strength-based home-visiting program for families who have faced adversity by increasing caregivers' awareness of their children's needs.
Emotion-Focused Parenting Programs						

Program Name	Age of Children	Session Length (Typical)	Delivery Target	Delivery Method	Key Components
Emotion-Focused Skills Training (EFST; Ansar, 2024)	6-13-years-old	Typically, 2 day group workshop followed by individual sessions	Parents	Individual and group	Initially developed for eating disorders, though become transdiagnostic approach for broad range of child mental health difficulties. Primarily focuses on guiding parents to coach their children in identifying and regulating their emotions.
Emotion-coaching parenting intervention for survivors of intimate partner violence (IPV; Katz et al., 2020)		12 weeks	Parents	Group	Skills based group focusing on increase parent emotional awareness, emotion-regulation skills, emotion-coaching skills, and psychoeducation on trauma and anger.
Let's Connect (Shipman et al., 2025)	3-17 years-old	60-90 minutes; 8-16 sessions	Parent and child	Individual and group	Focuses on increasing parents' emotional awareness and emotional skills. Skills are taught through discussions, videos, role-plays, and live coaching.
Tuning in to Kids / Tuning in to Teens (Havighurst et al., 2025)	3-12 years-old/ 10-18-years-old	120 minutes; 6 sessions (plus booster sessions)	Parent	Typically Group though can be individual.	Targets emotion socialisation processes to in turn impact the parent-child relationship and child outcomes. Sessions focus on helping parents learn 5 steps of emotion coaching.

Note. This list is not exhaustive.

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Appendix B

Parenting Interventions Categorised as Attachment- and Emotion- Focused, Behavioural, or Blended

Attachment/Emotion	Behavioural	Blended
Circle of Security (Hoffman et al., 2006) Tuning in to Kids (Havighurst et al., 2010) Tuning in to Teens (Havighurst et al., 2015) Connect (Moretti et al., 2018) Attachment and Biobehavioral Catch-up (Dozier et al., 2011) Minding the Baby (Slade et al., 2018)	Helping the Noncompliant Child (Forehand & McMahon, 1981) Parent-Child Interaction Therapy (Herschell et al., 2002) Parent Management Training- Oregon Model (Forgatch & Patterson, 2010) Triple P- Positive Parenting Program (Sanders, 1999) Hitkashrut' (Somech & Elizur, 2012) Strong Families Smart Website intervention – Internet assisted parent-training (Sourander et al., 2016)	The Parenting your Hyperactive Preschooler Program (Herbet et al., 2013) 1-2-3 Magic with emotion coaching (Porzig-Drummond et al., 2014) Parent Management Training + emotional reminiscing (Salmon et al., 2009) Video-Intervention Feedback for Promoting Positive Parenting and Sensitive Discipline (Juffer et al., 2018).

Note. This table is not exhaustive and only provides some examples of each of the above intervention categories.

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Appendix C

Final Search Terms for Systematic Review

Pubmed

((((((child[mh] OR child[tw] OR children[tw] OR adolescent[mh] OR infant[mh] OR boy[tw] OR boys[tw] OR girl[tw] OR girls[tw]) AND (parent-child relations[mh:noexp] OR mother-child relations[mh:noexp] OR father-child relations[mh] OR parent[mh] OR parent[tw] OR parenting[tw] OR paternal[tw] OR maternal[tw] OR caregiver[tw] OR caregivers [tw] OR carer[tw] OR family[tw] OR families[tw]))) AND (emotion coaching[tw] OR emotion socialiali*[tiab] OR emotion-regulation[tw] OR emotion-focused[tw] OR emotion-based[tw] OR attachment*[tw] OR maternal sensitivity[tw] OR parental sensitivity[tw] OR reflective-function*[tiab] OR non-behavio*[tiab] OR nonbehavio*[tiab] OR video feedback[tw])) AND (Intervention[tw] OR prevention[tw] OR treatment[tw] OR therapy[tw] OR training[tw] OR program*[tiab])) AND (externalising[tw] OR externalizing[tw] OR psychopathology[mh] OR problem behavior[tw] OR attention deficit and disruptive behavior disorders[tw] OR oppositional[tw] OR conduct behavio*[tiab] OR conduct problem*[tiab]OR antisocial behavio*[tiab] OR prosocial behavio*[tiab] OR delinquen*[tiab] OR non-complian*[tiab] OR noncomplian*[tiab] OR aggressi*[tiab] OR child behavio*[tiab] OR internalising[tw] OR internalizing[tw] OR affective symptom[mh] OR anxiety disorders[mh] OR depressive disorder[mh] OR depression[mh])) AND (trial[tw] OR effect*[tiab] OR treatment outcome[mh:noexp] OR random*[tiab] OR influence[tw] OR predict[tiab])

Cochrane

Population

child OR adolescent OR infant OR teen OR teenager OR toddler OR youth OR “young person” OR “young people” OR juvenile OR boy OR girl

Parent OR mother OR father OR paternal OR maternal OR caregiver OR family OR families OR carer

Intervention

attachment or reflective-function or reflective-functioning or non-behavioural or non-behavioral or nonbehavioural or nonbehavioral OR emotion-regulation OR emotion-based OR emotion-focused OR sensitive-responding OR maternal-sensitivity OR parental-sensitivity OR emotion-coaching OR emotion-socialization OR video-feedback

Comparator

Intervention OR treatment OR training OR program* OR prevention OR therapy

Outcome

externalizing OR psychopathology OR internalizing OR aggressi*

(conduct OR antisocial OR prosocial OR non-compliance OR non-compliant OR noncomplian* OR aggressi* OR child OR affective OR depressi*) near/1 (behavior OR symptom OR disorder OR problem)

Problem Behavior; attention deficit and disruptive behavior disorders;" anxiety disorder OR depression; affective symptom

Scopus

((TITLE-ABS-KEY(child OR children OR adolescent OR infant OR boy OR girl OR juvenile OR teen OR teenager OR youth OR "young person" OR "young people") AND TITLE-ABS-KEY(parent OR mother OR father OR carer OR caregiver OR family OR families) AND TITLE-ABS-KEY(intervention OR prevention OR treatment OR therapy OR program) AND TITLE-ABS-KEY(trial OR effect* OR "treatment outcome" OR random* OR influence OR predict*))) AND ((TITLE-ABS-KEY(attachment OR "maternal sensitivity" OR "parental sensitivity" OR "sensitive responding" OR "video feedback" OR "non behavioural" OR "non behavioral" OR nonbehavio*) OR TITLE-ABS-KEY((emotion OR emotional) PRE/1 (coaching OR sociali?ation OR focused OR based)))) AND ((TITLE-ABS-KEY(externali*ing OR psychopathology OR aggressi* OR noncompliance OR "non compliance" internali*ing OR defian*) OR TITLE-ABS-KEY((problem OR disruptive OR oppositional OR "non compliant" OR conduct OR antisocial OR prosocial OR child OR behavior OR anxiety OR depressi* OR affective) PRE/1 (disorder OR problem OR symptom OR behavior))))

Psychinfo

Population

Child or children or adolescent or infant or boy or girl or juvenile or teen or teenager or youth

AND

Parent or mother or father carer or caregiver or family OR families

Intervention

(attachment or "maternal-sensitivity" or "parental-sensitivity" or "sensitive-responding" or "video-feedback" or "non-behavioural" or "non-behavioral" or nonbehavio*

OR

(emotion or emotional) adj1 (coaching or sociali?ation or focused or based)

Comparator

(intervention or prevention or treatment or therapy or program)

Outcome

((disruptive or oppositional or "non compliant" or "noncompliant" or conduct or defiant or antisocial or prosocial or child or anxiety or depressi* or affective) adj1 (disorder or problem or symptom or behavior))

OR

(externali$ing or psychopathology or aggressi* or noncompliance or "non-compliance internali$ing"

OR

(behavio$r adj1 problem)

Note. Search terms were identified based on PICOS according to PRISMA 2009 checklist. For PsychInfo and Cochrane each category was combined with ‘AND.’

Appendix D

References of Included Studies for Systematic Review

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Appendix E

Characteristics of Included Studies

Study Details				Participant Details				Intervention Details				Comparator Details		Outcome Details	
Study First Author (Year)	N	Child Age (Yrs.)	% Girls	% Mothers	Caregiver	Population Sample	Intervention Name	Group /Individual	# Sessions (Session length)	Setting	# arms	Comparator Type	Outcome Measure (Informant)	Follow-up Period	*SMD* (95% CI)
Diamond (2002)	32	13-17	78	-	Birth	Clinical	ABFT	Group	12 (1-1.5)	-	2	WL	YSR – Externalising	Post	-0.49 [-1.20, 0.21]
													YSR – Internalising		-0.55[-0.26], 0.15)
													BDI (child self-report)		-0.75[-1.47, -0.03]*
													HAM – D (clinician)		81% no longer met criteria for MDD vs. 47% of control
Diamond (2010)	66	12-17	83	-	Birth	Clinical	ABFT	Group	12 (1-1.5)	Hospital/Medical	2	Enhanced Usual Care	BDI-II (child self-report)	Post	-0.41[-0.90,0.08]
														6 months	-0.26[-0.75, 0.22]
Diamond (2019)	129	12-18	74	-	Birth	Clinical	ABFT	Group	16 (-)	Hospital/Medical	2	Active family-enhanced nondirective supportive therapy (FE-NST)	BDI-II (child self-report)	Post	-0.04[-0.38,0.31]
Israel (2012)	20	13-17	55	-	-	Clinical	ABFT	Individual	12-17 (-)	Hospital/Medical Setting	2	TAU	BDI-II (child self-report)	Post	-0.75[-1.67,0.17]
													HAM-D (clinician)		-1.03[-1.99, -0.08]*
Waraan (2021)	60	13-18	86.7	57	Unclear (Likely birth)	Clinical	ABFT	Individual	16	Community	2	TAU	HAM-D (clinician)	Post	0.32[-0.19, 0.83]

Study Details		Participant Details					Intervention Details				Comparator Details		Outcome Details		
Study First Author (Year)	N	Child Age (Yrs.)	% Girls	% Mothers	Caregiver	Population Sample	Intervention Name	Group /Individual	# Sessions (Session length)	Setting	# arms	Comparator Type	Outcome Measure (Informant)	Follow-up Period	*SMD* (95% CI)
Rezvan (2013)	24	10-12	100	100	Birth	Clinical	“Attachment-Based Intervention”	Individual	8 (1)	Hospital/ Medical	2	WL	CY-BOCS (clinician)	Post 1-month	-1.37[-2.27,-0.46]** -2.29[-3.35, -1.22]**
Stams (2001)	35	7 - 7	54	100	Adoptive, Birth	Community	“Attachment-Based Intervention”	Individual	3 (-)	Home	2	“Control Group” (non-active)	CBCL - Internalising (parent)	6 years	-0.70[-1.39, -0.02
Dozier (2006)	60	0.30-3.28	50	93	Foster	Community	ABC	Individual	10 (1)	Home	2	Active (Developmental Education Group)	PDR or PDR/IT (parent)	-	-
Lind (2014)	117	10-13	47	93	Birth	Maltreatment exposed	ABC	Individual	10 (-)	Home	2	Active (Developmental Education Group)	‘Emotion Expression’ (clinician)	Post	-*
Lind (2019)	101	0.28 – 2.15	49	100	Birth	Maltreatment exposed	ABC	Individual	10 (-)	Home	2	Active (Developmental Education Group)	Child Compliance (clinician)	Approx. 29 months	-0.52 [-0.92, -0.12]*
Lind (2020)	131	2-5	59	96	Adoptive	Maltreatment exposed	ABC	Individual	10 (1)	Home	2	Active (Developmental Education Group)	BITSEA (parent) DB- DOS-examiner present (clinician) DB-DOS - examiner busy DB-DOS – parent context	Post 2 years	-0.52 [-0.94, -0.11]* -0.53 [-0.95, 0.11]* -0.40 [-0.82, 0.25] -0.38 [-0.80, 0.03]
Sprang (2009)	53	0-5	49	-	Foster/ Adoptive	Maltreatment exposed	ABC	Individual	10 (-)	Home	2	Active (WL + Support)	CBCL – Externalising (parent) CBCL – Internalising	Post	-1.77[-2.41, -1.33]** -1.58[-2.20, -0.95]** -3.47[-4.34, -2.60]**

Study Details				Participant Details				Intervention Details				Comparator Details		Outcome Details	
Study First Author (Year)	N	Child Age (Yrs.)	% Girls	% Mothers	Caregiver	Population Sample	Intervention Name	Group /Individual	# Sessions (Session length)	Setting	# arms	Comparator Type	Outcome Measure (Informant)	Follow-up Period	*SMD* (95% CI)
													(parent) PSI (parent self-report)		
Cassidy (2017)	141	3.32 – 5.30	58	100	Birth	Community	COS	Group	10 (1.5)	Community Centre	2	WL	CBCL – Externalising CBCL – Internalising (parent)	Within 2 months	-0.08 [-0.25, 0.41] -0.17 [-0.50, 0.16]
Bernstein (2019) (same sample – Lieberman, 2005; 2006)	113	2-6	48	100	Birth	Maltreatment exposed	CPP	Individual	50 (1)	-	2	Active (TAU + Case Management) SCL-90-R	CBCL – Externalising CBCL – Internalising (parent)	Post	0.11 [-0.30,0.51] -0.17 [-0.57,0.29]
Guild (2021)	135	9-10	47	100	Birth	Other (Mothers with depression)	CPP	Individual	30-75 (-)	Home	3	'Depressed Control'(TAU) 'Non-Depressed Control' (not included)	SCIPD - Child Oppositionality/Defiance SCIPD – Child Withdrawal (clinician)	Approx. 6 years post-intervention	0.11 [-0.3, 0.51] 0.26 [-0.16, 0.68]
Carnes-Holt (2014)	61	2.0 – 10.0	-	64	Adoptive	Community	CPRT	Group	10 (2)	Community Centre	2	WL	CBCL – Externalising (parent)	Post	0.11 [-0.40, 0.61]
Opiola (2018)	49	2-9	49	61	Adoptive	Clinical	CPRT	Group	10 (2)	Community Centre	2	TAU	CBCL- Total (parent) PSI (parent self-report)	Post (within week)	-0.57 [-1.14, 0.00] -0.73 [-1.31, -0.15]*

Study Details		Participant Details					Intervention Details				Comparator Details		Outcome Details		
Study First Author (Year)	N	Child Age (Yrs.)	% Girls	% Mothers	Caregiver	Population Sample	Intervention Name	Group /Individual	# Sessions (Session length)	Setting	# arms	Comparator Type	Outcome Measure (Informant)	Follow-up Period	*SMD* (95% CI)
Giannotta (2013)	147	11-14	50	100	Birth	Community	Connect	Group	10 (1)	-	2	WL	ECBI Intensity (parent)	Post	0.13 [-0.25, 0.51]
Högström (2017) (Same sample - Stattin, 2015)	749	3-12	37	85	Birth	Clinical	Connect	Group	10 (1.5)	'Regular care setting'	5	WL Active (Comet, Cope, Incredible Years)	ECBI Intensity (parent)	Post	Connect vs. Waitlist = -0.42[-0.64, -0.20]** Connect vs. Active = -0.00[-0.18, 0.17]
														2 years	Connect vs. active = -0.09 [-0.21, 0.03]
													ECBI – Problem	Post	Connect vs. WL = 0.00 [-0.22, 0.22]
														2 years	Connect vs. Active = 0.28 [0.11, 0.46] 0.08 [-0.08, 0.24]
													CES-D (parent self-report)	Post	Connect vs. Waitlist = -0.17 [-0.39, 0.05] Connect vs. Active = 0.06 [-0.11, 0.24]
														2 years	0.17 [0.02, 0.33]
													CGSQ (parent self-report)	Post	Connect vs. Waitlist = 0.00 [-0.22, 0.22] Connect vs. Active =0.38 [0.20, 0.56]**
														2 years	0.15 [-0.00, 0.31]
Ozturk (2019)	44	- M=15 (1.4)	34	75	Birth	Community	Connect	Group	10 (1.5)	Community Centre	2	WL	SDQ – Externalising (parent)	Post	-0.15[-0.75, 0.44]
													SDQ-Internalising		-0.27[-0.86, 0.32]
													SIPA- Parent Domain (parent self-report)		0.48 [-0.12, 1.08] -0.45[-1.05, 0.15]
													SIPA – Adolescent Domain		-0.06 [-0.65, 0.53]

Study Details		Participant Details					Intervention Details				Comparator Details		Outcome Details		
Study First Author (Year)	N	Child Age (Yrs.)	% Girls	% Mothers	Caregiver	Population Sample	Intervention Name	Group /Individual	# Sessions (Session length)	Setting	# arms	Comparator Type	Outcome Measure (Informant)	Follow-up Period	*SMD* (95% CI)
													SIPA – APR Domain		
Baker (2015)	15	2.67 – 3.83	40	80	Adoptive	Community	Emotional Attachment and Emotional Availability	Individual	7 (1)	Home	2	WL	CBCL – Total (parent) PSI (parent self-report)	2 weeks	-1.62[-2.84, -0.04]** -0.28 [-0.30, 0.74]
Katz (2020)	50	6-12	53	100	Unclear (Likely Birth)	Maltreatment exposed	Emotion Coaching Parenting Intervention for Intimate Partner Violence-Exposed Families	Group	12 (-)	Community Centre	2	WL	CDI (child self-report)	Post	-0.83 [-1.42, -0.25]**
Becker-Weidman (2006)	64	5.30 – 16.20	41	-	Adoptive / Foster	Clinical	Dyadic Developmental Psychotherapy	Individual	~23 (2)	Outpatient	2	TAU	CBCL – Aggressive Behaviours (parent) CBCL – Anxious/ Depressed	1.1 years	-1.78 [-2.36, -1.19]** -0.21 [-0.71, 0.28]
Adkins (2021)	89	0.08-17.5	56.7	69	Foster	Maltreatment exposed	Family Minds	Group	4-6 (3)	Unclear	2	4hr Foster Training Class	SDQ – Conduct (parent) SDQ- Emotion PSI-SF - Difficult Child (parent self-report)	Post 6-months	0.10[-0.44, 0.65] 0.15[-0.40, 0.69] -0.12[-0.68, 0.48] -

Study Details				Participant Details				Intervention Details				Comparator Details		Outcome Details	
Study First Author (Year)	N	Child Age (Yrs.)	% Girls	% Mothers	Caregiver	Population Sample	Intervention Name	Group /Individual	# Sessions (Session length)	Setting	# arms	Comparator Type	Outcome Measure (Informant)	Follow-up Period	*SMD* (95% CI)
Liu (2021)	91	0.33 - 3	41.8	98.9	Unclear (likely birth)	Maltreatment exposed	FIND	Individual	10	Home	2	TAU	CBCL/1.5-5/ BITSEA - Externalising (parent)	Post	-0.23 [-0.65, 0.19]
													CBCL/1.5-5/ BITSEA – Internalising		0.13 [-0.29, 0.585]
Moss (2011)	67	1.0 – 5.9	39	94	Birth	Maltreatment exposed	Home Visiting	Individual	8 (1.5)	Home	2	'Control – Monthly Visit from Child welfare caseworker "Standard Agency Care"	CBCL – Externalising (parent)	Post (approx. within 2 weeks)	0.03[-0.48, 0.54]
													CBCL – Internalising		-0.12 [-0.63, 0.39]
Ordway (2014)	50	3-5	44	100	Birth	Community	MTB	Individual	24+ (-)	Home	2	Routine Health Care	CBCL – Externalising (parent)	1 to 3 years	-0.89[-1.48, -0.31]
													CBCL – Internalising		-0.35 [-0.91, 0.21]
													CES-D (parent self-report)		0.50 [-0.06, 1.06]
Tobon (2020)	97	4-10	47	100	Unclear (Likely Birth)	Maltreatment exposed	MTB	Individual	78 (-)	Home	2	TAU	CBCL – Externalising (parent)	2 to 8 years	-0.38 [-0.79, 0.02]
													CBCL – Internalising		-0.32 [-0.72, 0.09]
Van Doesum (2008)	71	0.43 – 1.85	39	100	Birth	Other (parents with depression)	MTB	Individual	8-10 (1-1.5)	Home	2	Telephone Calls	ITSEA – Externalising	6 months	0.09[-0.38, 0.55]
													ITSEA - Internalising		-0.12[-0.59, 0.34]
													BDI (parent self-report)	Post	0.17 [-0.29, 0.62]
														Follow-up	0.18[-0.27, 0.64]
Weihrauch (2014)	58	-	-	100	Birth	Community	PALME	Group	20 (1.5)	Community Centre	2	WL	SDQ total (teacher report)	Post	-0.21 [-0.73, 0.31]
														6 months	-0.27 [-0.79, 0.25]
													SCL-90-R-General Severity Index	Post	-0.35 [-0.87, 0.17]
														6 months	0.13[-0.39, -0.65]

Study Details			Participant Details				Intervention Details				Comparator Details		Outcome Details		
Study First Author (Year)	N	Child Age (Yrs.)	% Girls	% Mothers	Caregiver	Population Sample	Intervention Name	Group /Individual	# Sessions (Session length)	Setting	# arms	Comparator Type	Outcome Measure (Informant)	Follow-up Period	*SMD* (95% CI)
													(parent self-report)		
Spieker (2012) (Same sample - Oxford, 2016; Pasalich, 2016)	210	0.8 - 2	44	-	Birth Foster, & Kinship	Community	Promoting First Relationships	Individual	10 (1-1.25)	Home	2	Education Support	CBCL – Externalising (parent)	6 months	-0.13[-0.47, 0.22]
													CBCL – Internalising		-0.03[-0.38, 0.32]
													PSI-SF (parent self-report)	Post 6 months	0.17[-0.13, 0.46] -0.05[-0.39, 0.30]
Firk (2020)	56	0.25-0.5	48	100	Birth	Other (adolescent mothers)	Steps Towards Effective and Enjoyable Parenting (STEEP-b)	Individual	12-18	Home	2	Publicly funded health care	BITSEA (parent)	Post 6 months	0.07[-0.51, 0.64] -0.01[-0.59, 0.58]
													PSI – Total Scale (parent self-report)	Post	-0.53 [--1.12, 0.05]
Purvis (2015)	96	- M = 7.88	38	97	Adoptive	Maltreatment exposed	TBRI	Group	4 (6)	-	2	WL	SDQ – Conduct Problems	2 weeks	-0.18[-0.58, 0.22]
													SDQ – Emotional Problems (parent)		-0.34 [-0.74, 0.07]
Razuri (2016)	256	- M ~8	50	-	Adoptive	Maltreatment exposed	TBRI	Individual	18 (0.5)	Online	2	WL	SDQ – Conduct Problems	2 weeks	0.07[-0.18, 0.31]
													SDQ – Emotional Problems (parent)		-0.07 [-0.31, 0.18]

Study Details				Participant Details				Intervention Details			Comparator Details		Outcome Details		
Study First Author (Year)	N	Child Age (Yrs.)	% Girls	% Mothers	Caregiver	Population Sample	Intervention Name	Group /Individual	# Sessions (Session length)	Setting	# arms	Comparator Type	Outcome Measure (Informant)	Follow-up Period	*SMD* (95% CI)
Duncombe (2016)	320	4.9-9.9	26	93	-	Clinical	TIK	Group	8 (2)	-	3	WL Triple P Positive Parenting Program	ECBI Intensity (parent) SDQ Conduct Problems (teacher)	6 months	TIK vs. Waitlist = -0.25 [-0.53, 0.04] TIK vs. Triple P = 0.10 [-0.17, 0.38] TIK vs. Waitlist = -0.17 [-0.28, -0.06]** TIK vs. Triple P = -0.05 [-0.32, 0.23]
Havighurst (2010) (same sample – Havighurst, 2009)	216	3.83-5.67	48	96	-	Community	TIK	Group	6 (2) + 2 Booster sessions	Community Centre	2	WL	ECBI intensity (parent) ECBI (teacher)	Post 6 months 6 months	-0.40[-0.70, -0.10] -0.34 [-0.64, -0.04]* -0.25 [-0.57, 0.06]
Havighurst (2013)	54	4.00-5.92	76	100	-	Clinical	TIK	Group	6 (2) + 2 Booster sessions	Hospital/Medical Setting	2	TAU/WL “Usual Pediatric Care”	ECBI Intensity (parent) ECBI Problem (parent) ECBI Intensity (teacher) ECBI Problem (teacher)	Post 6 months Post 6 months	-0.59[-1.24, 0.07] -0.00 [-0.62, 0.62] -0.20 [-0.87, 0.46] -0.07 [-0.71, 0.57] -0.80 [-1.58, -0.01] - 0.76 [-1.54, 0.02]
Meybodi (2019) (Same sample - Meybodi, 2017)	54	3-6	41	100	Birth	Clinical	TIK	Group	6 (2) + 2 booster sessions	-	2	WL	ECBI Problem (parent) ECBI Intensity (parent) GHQ-28 (parent self-report)	Post 3 months Post 3 months Post 3 months	-0.55 [-1.13, 0.03] -0.87 [-1.47, -0.28]** -0.09[-0.65, 0.48] -0.18 [-0.75, 0.39] 0.14[-0.43, 0.71] -0.1[-0.57, 0.56]
Wilson (2012)	128	4.0-5.11	50	92	Birth	Community	TIK	Group	6 (2)	Community Centre	2	WL	ECBI Intensity (parent)	7 months	-0.32[-0.67, 0.03]

Study Details		Participant Details					Intervention Details				Comparator Details		Outcome Details		
Study First Author (Year)	N	Child Age (Yrs.)	% Girls	% Mothers	Caregiver	Population Sample	Intervention Name	Group /Individual	# Sessions (Session length)	Setting	# arms	Comparator Type	Outcome Measure (Informant)	Follow-up Period	*SMD* (95% CI)
Havighurst (2019) (Same sample - Wilson, 2016)	162	3.05 – 6.34	46	0	Birth	Community	Dads TIK	Group	6 (2) + 2 booster sessions	Community Centre	2	WL	SDQ – Externalising SDQ – Internalising (parent)	Post 6 months Post 6 months	-0.08[-0.39, 0.24] -0.22 [-0.55, 0.10] -0.41 [-0.73, -0.09]* -0.41 [-0.73, 0.09]*
Kehoe (2020) (Same sample - Havighurst, 2015; Kehoe, 2014)	225	10-13	51	89	Birth	Community	TINT	Group	6 (2)	Community Centre	2	WL	SDQ Externalising (parent) SCAS (parent) SCAS (child self-report) SDQ Externalising (child self-report) GHQ-28 (parent self-report)	10-12 months post-baseline	-0.17[-0.44, 0.10] -0.37[-0.63, -0.11]** -0.33 [-0.60, -0.06]* -0.24[-0.51, 0.33] -0.18 [-0.45, 0.09]
Rolock (2021)	769	10-13	49	-	Adoptive & Kinship	Maltreatment-Exposed	TINT	Group	7 (2)	Community Centre	2	TAU	BPI (parent)	6-8 months post-intervention	0.08 [-0.10, 0.26]
Velderman (2006)	77	0.58 – 0.83	53	100	-	Community	Video-Feedback	Individual	4 (1.5)	Home	3	Active (VIPP-R ‘Control (No Intervention)’	CBCL – Externalising CBCL- Internalising (parent)	3.25 years	-0.33 [-0.88, 0.21] 0.09 [-0.45, 0.63]

Note. ABFT = Attachment-Based Family Therapy; ABC = Attachment- and Biobehavioral Catch-up; APR = Adolescent-Parent Relationship; BPI = Behavioural Problem Index; BITSEA = Brief Infant Toddler Social Emotional Assessment; CBCL = Child Behaviour Checklist; CDI = The Child Depression Inventory; CES-D = Centre of Epidemiological Studies – Depression Scale; CGSQ = Caregiver Strain Questionnaire; CPP = Child Parent Psychotherapy ;CPRT = Child Parent Relationship Therapy; CY-BOCS = Children’s Yale-Brown Obsessive Compulsive Scale; DB-DOS = Disruptive Behaviour Diagnostic Observation Schedule; ECBI

= Eisenberg Child Behaviour Inventory; FIND = Filming Interactions to Nurture Development; HAM-D = Hamilton Depression Rating Scale; HADS = Hospital Anxiety and Depression Scale; HIWC = Home Interview with Child; GHQ-28 = The General Health Questionnaire; MDD = Major Depressive Disorder; MTB = Minding the Baby; PDR/ IT= Parent Daily Report/ Infant-Toddler; PSI= Parenting Stress Index; PSI- SF= Parenting Stress Index – Short Form ; SCL-90-R = The Symptom Checklist-90-Revised; SCIPD = System for Coding Interactions in Dyads; SIPA = Stress Index for Parents of Adolescents; SDQ = Strengths and Difficulties Questionnaire; TAU = Treatment as Usual; TBRI = Trauma-Based Relationship Intervention; TIK = Tuning in to Kids; TINT = Tuning in to Teens; YSR = Youth Self-Report from Strengths and Difficulties Questionnaire; VIPP-R = Video-Feedback intervention to Promote Positive Parenting with a Representational Focus; WL = Waitlist.

*$p < .05$

**$p < .01$

Appendix F

Risk of Bias of Studies Included in Systematic Review

Study ID	Random Sequence Generation	Allocation Concealment	Blinding of Participants and personnel	Blinding of outcome Assessment	Incomplete Outcome Data	Selective Reporting	Fidelity	Other	Overall Risk of Bias
Adkins 2021	Low	Low	High	High	Low	High	High	Low	High
Baker 2015	Unclear	Unclear	High Risk	Unclear	Low Risk	Low Risk	Low Risk	Unclear	Unclear
Becker-Weidman 2006	Unclear	Unclear	Unclear	Unclear	Unclear	Low	High	High	High
Bernstein 2019	Low	Unclear	Unclear	Unclear	Low	Low	Unclear	Low	Unclear
Carnes-Holt 2014	Low	Unclear	Low	Low	Low	Low	Low	Low	Low
Cassidy 2017	Unclear	Unclear	Unclear	Low	Low	Low	Low	Low	Unclear
Diamond 2002	Low	Unclear	Unclear	Low	Low	Low	Low	Low	Low
Diamond 2010	Low	Low	Unclear	Unclear	Low	Low	Unclear	Unclear	Unclear
Diamond 2019	Low	Low	Low	Low	Low	Low	Low	Low	Low
Dozier 2006	Low	Low	Low	Low	Low	Low	Low	Unclear	Unclear
Duncombe 2016	Unclear	Unclear	Low	Low	Low	Low	Low	Low	Low
Firk 2020	Low	Low	Low	Low	Unclear	Low	Unclear	Low	Unclear
Gianotta 2013	Unclear	High	Unclear	Unclear	Low	Low	Unclear	Low	High
Guild 2021	Low	Unclear	Unclear	Low	Low	Unclear	Unclear	Unclear	Unclear
Havighurst 2010	Low	Low	Unclear	Low	Low	Low	Low	Low	Low
Havighurst 2012	Low	Unclear	Unclear	Low	Low	Low	Low	Low	Low
Havighurst 2019	Unclear	Unclear	Unclear	Unclear	Low	Low	Low	Low	Unclear
Hogstrom 2017	Low	Low	Low	Unclear	Low	Low	Low	Low	Low
Israel 2012	Low	Low	Unclear	Low	Low	Low	Unclear	Unclear	Unclear
Katz 2020	Unclear	High	High	Unclear	Unclear	Unclear	High	Unclear	High
Kehoe 2020	Low	Low	Unclear	Low	Low	Low	Low	Low	Low
Lind 2014	Low	Low	Low	Low	Low	Low	Unclear	Low	Low
Lind 2019	Low	Unclear	Unclear	Low	Low	Unclear	Unclear	Low	Unclear

Study ID	Random Sequence Generation	Allocation Concealment	Blinding of Participants and personnel	Blinding of outcome Assessment	Incomplete Outcome Data	Selective Reporting	Fidelity	Other	Overall Risk of Bias
Lind 2020	Low	Low	Unclear	Unclear	Low	Unclear	Unclear	Unclear	Unclear
Liu 2021	Unclear	High	High	Unclear	High	Unclear	Low	Unclear	High
Meybodi 2019	Low	Unclear	Unclear	Unclear	Low	Low	Unclear	Unclear	Unclear
Moss 2011	Low	Low	Unclear	Low	Low	Low	Unclear	Low	Low
Opiola 2018	Low	Unclear	Unclear	Low	Low	Low	Low	Low	Low
Ordway 2014	Unclear	Unclear	Unclear	Low	Unclear	Low	High	Low	High
Ozturk 2019	Low	Unclear	Unclear	Unclear	Low	Low	Low	Unclear	Unclear
Purvis 2015	Unclear	Unclear	Unclear	Unclear	High	High	Unclear	Unclear	High
Razuri 2016	Low	Unclear	Unclear	Unclear	High	Unclear	Low	Unclear	High
Rezvan 2013	Low	Unclear	Unclear	Unclear	Low	Unclear	High	Unclear	High
Rolock 2021	Unclear	Unclear	Low	Unclear	Low	Unclear	Unclear	Unclear	Unclear
Spieker 2012	Low	Unclear	Unclear	Low	Low	Low	Low	Low	Low
Sprang 2009	Low	Unclear	Unclear	Low	Low	Low	Low	Unclear	Unclear
Stams 2001	Low	Unclear	Unclear	Low	Unclear	High	High	High	High
Tobon 2020	Unclear	Unclear	Unclear	Unclear	Low	Unclear	Unclear	Low	Unclear
Van Doesum 2008	Low	Low	Unclear	Low	Low	Low	Unclear	Unclear	Unclear
Velderman 2006	Unclear	Unclear	Unclear	Low	Low	Low	Unclear	Low	Unclear
Waraan 2021	Low	Low	Unclear	Low	High	High	Unclear	Low	High
Weihrauch 2014	Unclear	Unclear	Unclear	Unclear	High	Low	Unclear	High	High
Wilson 2012	Low	Low	Unclear	Unclear	Low	Low	Low	Low	Low

Appendix G

Table of Attachment- and Emotion-Focused Parenting Interventions Considered to Target Child and Adolescent Mental Health Outcomes

Targets Mental Health Outcomes	Does not Target Mental Health Outcomes
Attachment-Based Family Therapy (Diamond et al., 2002; Diamond et al., 2010; Diamond et al., 2019; Israel and Diamond, 2012; Waraan et al., 2021)	"Attachment-based intervention in adoptive families" (Stams et al., 2010)
Attachment-based intervention for pediatric obsessive-compulsive disorder (Rezvan et al., 2013)	Attachment and Biobehavioural Catch-up (ABC) (Dozier et al., 2011; Lind et al, 2013, 2019, 2020; Sprang, 2009)
Child Parent Relationship Therapy (CPRT) (Carnes-Holt & Bratton, 2014; Opiola & Bratton, 2018)	Circle of Security (Cassidy et al. 2017)
Connect (Gianotta et al., 2013; Högström et al., 2017; Ozturk et al., 2019).	Child Parent Psychotherapy (Bernstein et al., 2019; Guild et al., 2021)
Emotion Coaching Parenting Intervention for Intimate Partner Violence- Exposed Families (Katz et al., 2020)	Dyadic Developmental Psychotherapy (Becker-Weidman et al., 2006)
Promoting First Relationships (PFR) (Spieker et al, 2012)	Emotional attachment and emotional availability tele-intervention for adoptive families (Baker et al. 2015)
Tuning in to Kids (Duncombe et al., 2016; Havighurst et al., 2010, 2013, 2019; Kehoe et al., 2020; Meybodi et al., 2019; Wilson, 2012)	Family Minds (Adkins et al., 2021)
Tuning in to Teens (Havighurst et al., 2015; Kehoe et al., 2014; 2020; Rolock et al., 2021)	Filming Interactions to Nurture Development (FIND, Liu et al., 2021)
Dads Tuning in to Kids (Havighurst et al., 2019)	Home-Visiting Program (Moss et al., 2011)
	Minding the Baby (Ordway et al., 2014; Tobon et al., 2020; Van Doesum, 2008)
	PALME (Weihrauch et al., 2014)
	Step Towards Effective and Enjoyable Parenting Brief (STEEP-b) (Firk et al., 2020)
	Trauma-Based Relationship Intervention (TBRI) (Purvis et al., 2015; Razuri et al., 2016)
	"Video-Feedback" (Velderman et al., 2006)

Appendix H

Meta-Analyses of Studies Examining Effects of Attachment- and Emotion-Focused Parenting Interventions on Reducing Child and Adolescent Externalising and Internalising Outcomes: Overall Findings Including Subgroup and Sensitivity Analyses

Outcome	Details		*K*	*SMD*	95%CI	I^2
Externalising						
	Waitlist Controls		15	-0.17	-0.27, -0.06	26
		0 to 5	6	-0.19	-0.35, -0.03	13
		6 to 12	6	-0.17	-0.34, 0.00	49
		13 to 17	3	-0.07	-0.41, 0.27	19
		Birth parents	9	-0.17	-0.31, -0.03	28
		Non-birth parents	3	0.02	-0.18, 0.21	0
		Excluding high risk of bias	12	-0.23	-0.33, -0.13	3
		Low risk only	7	-0.30	-0.42, -0.18	0
		Immediate post only	11	-0.13	-0.27, -0.02	42
		Follow-up only (6 months +)	7	-0.26	-0.38, -0.13	0
		Clinical sample	4	-0.34	-0.50, -0.18	0
		Community sample	9	-0.14	-0.27, -0.01	12
		Designed to target child mental health	11	-0.23	-0.34, -0.11	12
		Not designed to target child mental health	4	-0.01	-0.18, 0.16	0
		Baseline clinically elevated	7	-0.20	-0.34, -0.05	32
		Baseline not elevated	7	-0.17	-0.34, -0.00	19
	Active Comparators		18	-0.30	-0.51, -0.10	80*
		Without outliers	16	-0.13	-0.26, -0.00	48
		0 to 5	11	-0.36	-0.64, -0.09	74*
		6 to 12	6	-0.27	-0.59, 0.06	87*
		0 to 5 (without outlier)	10	-0.24	-0.44, -0.04	46
		6 to 12 (without outlier)	5	-0.00	-0.13, 0.13	21
		Birth Parents	9	-0.06	-0.20, 0.08	24
		Excluding high risk of bias	13	-0.09	-0.22, 0.03	41
		Low risk of bias only	5	-0.02	-0.15, 0.11	2
		Immediate post-only	9	-0.27	-0.57, 0.03	77*
		Follow-up (6 months +)	13	-0.28	-0.48, -0.07	78*
		Immediate post-only without outliers	8	-0.10	-0.27, 0.07	27
		Follow-up (6 months +) without outliers	12	-0.16	-0.31, -0.01	54
		Maltreatment-exposed sample	8	-0.16	-0.37, 0.04	57
Internalising						
	Waitlist Controls		11	-0.34	-0.51, -0.17	42
		Without outlier	10	-0.30	-0.44, -0.15	23
		0 to 5	3	-0.22	-0.48, 0.03	27
		Birth Parents	6	-0.38	-0.57, -0.19	22
		Non-Birth Parents	3	-0.26	-0.57, 0.05	44
		Excluding high risk of bias	6	-0.30	-0.46, -0.15	0
		Immediate post only	8	-0.38	-0.59, -0.15	48
		Follow-up (6 months +)	4	-0.35	-0.56, -0.13	19
		Community sample	6	-0.31	-0.46, -0.15	0
		Designed to target child mental health	6	-0.49	-0.71, -0.28	23
		Not designed to target child mental health	5	-0.17	-0.35, -0.01	11
		Baseline clinically elevated	6	-0.30	-0.56, -0.05	55
		Baseline not elevated	4	-0.37	-0.61, -0.13	25

Outcome	Details		*K*	*SMD*	95%CI	I^2
	Active Comparators		15	-0.17	-0.36, 0.02	60*
		Without outlier	14	-0.08	-0.20, 0.05	1
		Birth parents	7	-0.15	-0.39, 0.08	49
		Excluding high risk of bias studies and outlier	9	-0.11	-0.25, 0.04	1
		Low risk of bias only	3	-0.02	-0.24, 0.20	0
		Immediate post only	9	-0.22	-0.54, 0.09	73*
		Follow-up (6 months +)	6	-0.10	-0.45, 0.09	55
		Immediate post only without outliers	5	-0.05	-0.23, 0.12	11
		Clinical Sample	5	-0.14	-0.42, 0.14	37
		Maltreatment-exposed sample	6	-0.29	-0.70, 0.13	78*
		Maltreatment-exposed sample (without outlier)	5	-0.09	-0.29, 0.11	0
		Designed to target child mental health	5	-0.09	-0.35, 0.17	36
		Not designed to target child mental health	10	-0.20	-0.47, 0.06	68*
		Not designed to target child mental health (without outlier)	9	-0.08	-0.23, 0.08	0

Note. If there were less than three studies available to conduct a subgroup analysis/sensitivity analysis it was not carried out and will not appear in this table.

*Heterogeneity considered too high, interpret with caution.

Appendix I

Additional Exploratory Unpublished Data from Study 2

The main focus of Study 2 was to investigate practitioners' use and acceptability of time-out for the treatment of child conduct problems. However, in addition to questions about time-out, further exploratory questions were asked around practitioners' broader theoretical preferences to gather some preliminary data before conducting Study 3. At the end of the online survey, participants were asked a series of questions related to their preferred theoretical orientation. Practitioners were asked whether they had a preferred theoretical orientation; whether they believed theoretical orientation is important to consider for assessing and treating clients; their theoretical preferred theoretical orientation when working with child externalising/internalising problems; whether they believed behavioural and non-behavioural theories or interventions can be integrated when working with families; and how they ranked theoretical orientation relative to other decision-making factors (e.g., research, case formulation, personal values).

Practitioners Preferred Theoretical Orientation

Seventy percent (*n* = 77) of practitioners reported "yes" to having a preferred theoretical orientation when working with children and families. In an open-ended response, practitioners most commonly reported their preferred theoretical approach as "attachment" (*n* = 45). This was followed by "behavioural" (n =15), "cognitive behavioural" (*n* = 14), and "family systems" (*n* = 10). See Table I1 for overview. Most participants (49.09%) somewhat agreed that theoretical orientation is important to consider for client assessment and treatment (*M* = 3.94, *SD* = 0.97 [1-5]). Theoretical orientation was most commonly positioned fifth out of seven rankings for informing practitioners' professional decisions. Typically, case formulation, research findings, families preferences, and professional experiences were rated higher (See Figure I1).

Practitioners' Preference for Externalising and Internalising Problems

Similarly, practitioners' preferred theoretical orientation for externalising and internalising problems was attachment; however, behavioural approaches were rated relatively higher for externalising than internalising problems; and cognitive behavioural approaches were rated relatively higher for internalising problems. See Table I1 for overall frequencies.

Practitioners Preference for Integrating Behavioural and Non-Behavioural Approaches

Most practitioners (85.45%) believed that behavioural and non-behavioural approaches can be integrated when working with children and families; with only two participants believing they should be used independently of one another. The remaining practitioners reported an indifference (11.82%).

Table I1

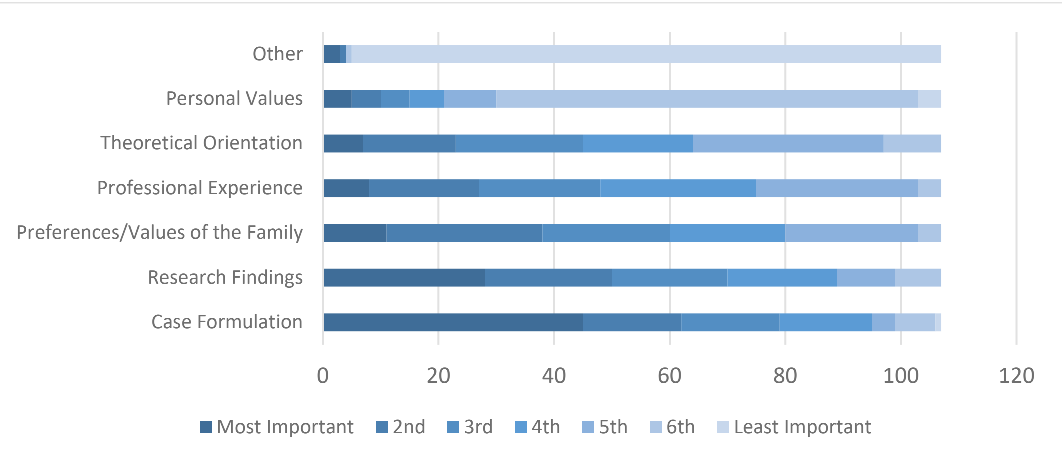
Practitioners' Preferred Theoretical Orientation

	Overall n (%)	Externalising n (%)	Internalising n (%)
Attachment	45 (40.91)	97 (88.18)	85 (77.27)
Behavioural	15 (13.64)	66 (60.0)	36 (32.73)
Cognitive Behavioural	14 (12.73)	49 (44.55)	74 (67.27)
Mindfulness-Based Therapies	2 (1.82)	30 (27.27)	52 (47.27)
Family Systems	10 (9.09)	61 (55.45)	54 (49.09)
Psychodynamic	3 (2.73)	12 (10.91)	18 (16.36)
Other	20 (6.36)	11 (10.0)	10 (9.09)

Note. Preferred overall theoretical orientation was coded form a free response text; and 33 participants reported no preferred theoretical orientation. Alternatively, preferred theoretical orientation when working with externalising and internalising problems was based on pre-determined categories, and they were able to select more than one. "Other" preferred theoretical orientation included: neurosequential/brain-based , humanistic, emotion-focused, schema, and "sensory-integrated" approaches.

***Figure* I1**

Practitioners' Most Important Factor for Informing Professional Decisions



Note. N = 110. This figure displays practitioners' rankings from most to least important for informing their professional decision-making. "Other" included: prior intervention, client-centred approaches, preferences/values of the child, world view, needs of all family members, and "what the system wants."

Appendix J

Parenting Interventions and Theoretical Approaches Practitioners Trained in

Table J1

Parenting Interventions Practitioners Reported Formal Training

Program Name	n	%
1-2-3 Magic	9	8.2
Circle of Security	28	25.5
Incredible Years	2	1.8
Integrated Family Intervention for Child Conduct Problems[a]	5	4.5
Parent-Child Interaction Therapy	7	6.4
Parent Effectiveness Training[a]	7	6.4
Triple P Positive Parenting Program	18	16.4
Tuning in to Kids/ Tuning in to Teens	17	15.4
Other	8	7.3
None	48	43.6

Note. *N* = 110. Percentages do not sum to 100% as participants could endorse multiple categories.

[a]Category not provided in survey; nominated by participants in open-ended response.

Table J2

Theoretical Orientations Practitioners Reported Formal Training

Theoretical Orientation	n	%
Attachment	84	76.4
Psychodynamic	20	18.2
Behavioural/ Social Learning	58	52.7
Cognitive Behavioural	92	83.6
Mindfulness-Based	63	57.3
Family Systems	42	38.2
Other	14	12.7

Note. *N* = 110. Percentages do not sum to 100% as participants could endorse multiple categories.

Appendix K

Survey Questions Measuring Practitioners' Use, Perceived Effectiveness, and Acceptability

Time-Out Use

- Do you currently use time-out in your work with families (i.e., have you encouraged parents to remove a child from a situation when they are misbehaving and have them go somewhere else?)
  - Yes
  - No
- Have you previously used time-out in your work with families?
  - Yes
  - No
- How often do you recommend the use of time-out when working with children and families of children with behavioural difficulties?
  - Never
  - Rarely
  - Sometimes
  - Most of the Time
  - Always
- What is/ are the reasons you do not currently use time-out in your work with families?
  - Personal preference towards alternative strategies
  - Parents disagree with the use of time-out
  - I only work with adolescents or adults (not children)
  - I don't see cases involving child behaviour problems where time-out could be implemented
  - I do not know how to implement time-out/ have not been trained in using behavioural parenting programs
  - Other (please specify)

Practitioners Attitudes towards Time-Out

Often the term 'time-out' can be used differently across professional contexts. For the following questions please describe your beliefs towards time-out as implemented within behavioural parenting programs. That is, time-out from positive reinforcement, where a child is removed from a situation and placed in a safe space without their caregiver for a small amount of time.

Perceived Effectiveness

- Do you believe time-out can effectively increase desirable behaviour and decrease behavioural problems (e.g., noncompliance and aggressive behaviours) in children aged 3-8 years?
  - Yes
  - No

Rate how much you agree with the following statements (*strongly agree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree).*

- Perceived Effectiveness Scale Items (adapted from the Multidimensional Adolescent Satisfaction Scale [Garland et al., 2000])
  - Time-out is effective in immediately decreasing inappropriate behaviours (e.g., hitting) in children
  - Time-out is effective in immediately increasing appropriate behaviours (e.g., following instructions) in children
  - Time-out is effective in increasing appropriate behaviours (e.g., following instructions) in children in the long term
  - Time-out is effective in decreasing inappropriate behaviours (e.g., hitting) in children in the long term
- Additional exploratory items
  - Time-out is an effective strategy for decreasing inappropriate behaviours (e.g., hitting) for children who have been exposed to trauma
  - Time-out is an effective for improving child Internalising difficulties (e.g., anxiety, depression)
  - Time-out is an effective strategy for improving emotion-regulation skills

Acceptability

Rate how much you agree with the following statements (*strongly agree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree).*

- Acceptability Scale Items (adapted from The Treatment Evaluation Inventory-Short Form [Kelley et al., 1989])
  - Time-out is an acceptable way of dealing with children's problem behaviour

- I am willing to encourage the use of time-out if I believe parents have to change their children’s problem behaviour
- I like the procedures used in time-out
- Time-out is likely to result in lasting improvement in children's behaviour
- Overall, I have positive views towards time-out

- Additional exploratory items
    - Time-out hurts children's emotional development
    - Time-out strategies are manualised and not individualised
    - Time-out can trigger trauma reactions
    - Time-out skills should not be taught to parents because they could use them incorrectly
    - Time-out is shaming to children
    - Time-out makes me feel uncomfortable
    - Time-out is likely to result in lasting harm

Appendix L

Additional Data Screening and Cleaning Information

Data Screening and Cleaning

Missing data was observed consistently for one participant across Likert scales measuring perceived effectiveness and acceptability and hence was deleted from the main regression analyses. Three points of missing data were observed on the number of years practitioners worked with children and families ("years worked"), hence median imputation was chosen as the variable was skewed (Berkelmans et al., 2022). Major assumptions of ordinal, logistic, and multiple linear regression analyses were met. Additional details of each regression analysis are provided below.

Ordinal Logistic Regression on Frequency of Time-Out Use

Proportional odds were found as assessed by a full likelihood ratio test comparing the fitted model to a model with varying parameters $\chi2$ (18) = 197.888, p = 1.00. The Pearson and deviance goodness-of-fit-test indicated that the model was a good fit to the observed data $\chi2$ (422) = 376.17, p = .947 and $\chi2$ (422) = 200.595, p = 1.00, respectively. Most cells were sparse with zero frequencies which was not unexpected given the inclusion of continuous variables; however, results should be interpreted with caution.

Binary Logistic Regression on Lowest Possible Score of Acceptability

Percentage accuracy classification (PAC) was 91.7%; sensitivity was 84.6%, specificity was 94.0%; positive predict value was 81.5%; and negative predictive value was 95.1%. It is important to note that four outliers (i.e., studentised residuals -2.46, 2.04, -2.12 and 2.06) within 3 *SD* were retained in the analysis.

Multiple Linear Regression on Acceptability

All assumptions for multiple linear regression on the remaining 82 scores of acceptability with the exception of two high leverage points were met. That is, there was linearity as assessed by partial regression plots and plot studentised residuals against predicted values and independence of residuals (Durbin-Watson = 1.96). Homoscedasticity was present as assessed by visual inspection of a plot of studentised residual versus unstandardised predicted values. Multi-collinearity did not appear to be present according to VIF (< 3) and tolerance (> 0.1) values despite high correlations between the original acceptability variable and TO use (r_{pb} = 0.68, p < .001) and perceived effectiveness (r_{pb} = 0.84, p < .001) (Kim, 2019; Thompson et al., 2017). The assumption of normality was met as assessed by Q-Q plot. Studentised residuals were < 3 and Cooks' distance was < 1; however, two high leverage points (> 0.2) were observed.

References

Berkelmans, G., Read, S. H., Gudbjörnsdottir, S., Wild, S., Franzen S., van der Graaf Y., Eliasson B., Visseren F., Paynter N., & Dorresteijn. (2022). Population median imputation was noninferior to complex approaches for imputing missing values in cardiovascular prediction models in clinical practice. *Journal of Clinical Epidemiology, 145,* 70-80. https://doi.org/10.1016/j.jclinepi.2022.01.011

Kim, J. H. (2019). Multicollinearity and misleading statistical results. *Korean Journal of Anesthesiology, 72*(6), 558-569. https://doi.org/10.4097/kja.19087

Thompson, C., Kim, R., Aloe, A.. & Becker, B. (2017). Extracting the variance inflation factor and other multicollinearity diagnostics from typical regression results. *Basic and Applied Social Psychology, 39*(2), 81-90. http://dx.doi.org/10.1080/01973533.2016.1277529

Appendix M

Frequency Counts for Practitioners' Criticisms of Time-Out and Additional Perceived Effectiveness Items

Table M1

Frequency Counts for Practitioners' Criticisms of Time-Out

	M (SD)	Strongly Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Strongly Agree
Time-Out Hurts Children's Development	3.29 (1.31)	9	26	27	20	28
Time-Out Strategies are Manualised and Not Individualized	3.38 (1.24)	7	25	22	32	24
Time-Out Can Trigger Trauma Reactions	3.96 (0.97)	2	7	20	44	37
Time-Out Skills Should Not Be Taught to Parents Because They Could Use Them Incorrectly	3.10 (1.44)	17	30	14	23	26
Time-Out is Shaming to Children	3.28 (1.39)	14	22	23	22	29
Time-Out Makes Me Uncomfortable	3.28 (1.35)	12	20	18	31	29
Time-Out is Likely to Result in Lasting Harm	2.85 (1.37)	22	25	27	17	18

Note. N = 110. Table includes frequency counts for additional seven acceptability items made up of common time-out criticisms in the literature. These items were not included in the main acceptability variable for regression models. Higher mean score indicate lower acceptability of time-out and higher endorsement of time-out criticisms (Range = 1 - 5).

Table M2

Frequency Counts for Additional Items on Practitioners' Perceived Effectiveness of Time-Out

	M (SD)	Strongly Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Strongly Agree
Time-Out is Effective for Decreasing Inappropriate Behaviours (E.g., Hitting) for Children Who Have Been Exposed to Trauma.	2.82 (9.40)	60	18	16	8	7
Time-Out Is Effective for Improving Child Internalising Difficulties (E.g., Anxiety, Depression)	2.57 (9.32)	61	24	21	3	0
Time-Out is an Effective Strategy for Improving Emotion-Regulation Skills	3.41 (9.30)	38	17	17	32	5

Note. N = 110. These items were additional exploratory items and were not included in the main measure of perceived effectiveness used for regression models. Higher mean scores indicated lower perceived effectiveness (Range = 1 - 5).

Appendix N

Practitioner Interview Template

Participant ID: ____________________ Date of Interview: __________________

Observations:

General Preamble:

- Thank participant for their time.
- Check that participant has read information sheet and whether they have any questions
- Remind participant that the interview will be audio recorded and transcribed and that any identifying information will be removed.
- Remind participant of their right to withdraw their consent or decline to answer any questions they are not comfortable with.
- Check consent form is signed (sign if not already complete)
- Check ready for recording
- Begin recording

Demographics:

These first set of questions will help us identify some general demographic questions to describe broadly who participates in the study. You are free to say "pass" if you do not want to answer any.

Age:

Gender Identity:

Born in Australia? Yes/ No, if No,____

Currently Working? Yes/ No, if Yes, specify _______________________________________

Highest Qualification

Number of Years Working with Children and Families Total

- Number of years with under 12

What presentation do you typically work with?

What presentations have you worked with in children specifically?

Formal Training:

- Specific Parenting Interventions? Yes/ No, if Yes ________________________(ask if attachment/behavioural if not clear)
- Time-out Training? Yes/No (ask if not clear).

Okay thank you, that completes the demographic part of the interview, we will now move into the main questions.

Aim 1: Reasons for Perceived Effectiveness and Acceptability of Parenting Interventions

General comments:

So, to start, I am curious to hear generally about your experience with and attitudes towards parenting interventions?

Intervention specific comments:

- **Effective/Acceptability comments:**
  - *Do you believe X is effective at reducing child mental health difficulties?*
  - *Do you believe there is research evidence to support X?*
  - *Do you believe that X is an acceptable intervention choice for children and families?*
  - *What does it feel like in the room for you?*
- **Reasons to use:**
  - *What do you believe are the main reasons for choosing to use X?*
- **Barriers to use:**
  - *Do you perceive any barriers to using X?*
  - *What do you think prevents you from using Y in your practice?*

Attachment Interventions
Emotion-Focused Interventions
Behavioural Parent Training
Other Parenting interventions

Aim 2: Scientist-Practitioner Gap/ Potential Factors to Increase Acceptability

What guides treatment decisions?

(Sources of information, self-efficacy, case conceptualisation, affective attitude, supervision, research)

Scientist-Practitioner Gap:

(Do you believe there is a gap between what the research is telling us and what is being done in practice? do you think there is a way to change that for psychologists?)

Training:

(Is there any further training you would like to have in parenting interventions, or believe would be beneficial generally for psychologists? Do you believe training would increase acceptability or use of an EBT?)

Time-out outdated?

Do you believe there is a place for time-out and behavioural parenting interventions in working with children and families moving forward?

Research ideas

Is there anything you wish research would look into regarding parenting interventions for children and families?

General Comments

Do you have any further comments overall you would like to add?

Interview Checklist

Consent Form	
Demographics	
Attachment	
• Perceived effectiveness	
• Acceptability	
• Reasons for	
• Barriers	
Emotion-Focused	
• Perceived effectiveness	
• Acceptability	
• Reasons for	
• Barriers	
Behavioural	
• Perceived effectiveness	
• Acceptability	
• Reasons for	
• Barriers	
Other parenting intervention comments	
Treatment Decisions	
Scientist-practitioner gap	
Training	
Time-out outdated? (Time-out only or Time-out + BPT)	
Research ideas	
General comments	

Interview Length: ____________________mins.