

Integrating emotion into behaviourally-based parenting programmes: can this enhance
outcomes for child conduct problems?

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Abstract

The current pilot study aimed to integrate emotion focused elements into an already well-established parenting programme in the hope of improving outcomes for children with conduct problems (CPs). Thirty-six parents of children with conduct problems (aged 3-7 years) were randomly allocated to two versions of the Triple P parenting programme; standard Group Triple P (GTP) or a new Emotion-Enhanced Group Triple P programme (EEGTP) that taught parents to engage in an elaborative, emotion-rich conversational style when discussing past events with their children. As expected, child CPs significantly reduced across both conditions post-intervention. Additionally, parents in the EEGTP condition were using more emotion coaching statements with their children. However, these differences did not translate to changes in children's emotion knowledge and further behavioural improvements. Theoretical implications of these findings, explanations reflecting on the nature by which emotion knowledge develops over time, and recommendations for future studies are discussed.

Integrating emotion into behaviourally-based parenting programs: can this enhance outcomes for child conduct problems?

Imagine living in a world where you have difficulty understanding emotions other than happiness and anger. You do not really understand what causes emotions, nor are you very good at differentiating between similarly valenced emotions such as nervousness, fear, frustration or sadness. How would this impact upon your relationships? Your ability to participate in activities or work? Your self-esteem?

Children who struggle to identify and understand emotions grow up in a world that is difficult to navigate. Feelings may be hard to manage, trying to understand why people respond the way they do may be confusing, and relationships with others may be complicated and at times unsuccessful. Not surprisingly these young people are more likely to experience behavioural difficulties during childhood and other negative consequences later in life, highlighting the importance of early interventions which seek to improve such difficulties.

Given that prior research has suggested a link between emotion knowledge and behavioural difficulties, the current thesis provides an in depth look at each of these concepts, how they relate, and attempts to explore a new method of intervention to address this issue.

Many terms have been used across disciplines to describe behavioural difficulties in young people: oppositional defiant disorder, conduct disorder, challenging behaviour, and emotional and behavioural disturbance. The current study uses the terms ‘oppositional’ and ‘conduct problems’ (CPs), which have been defined by the New Zealand Advisory Group on Conduct Problems as including “*a spectrum of antisocial, aggressive, dishonest, delinquent, defiant and disruptive behaviours*” (Blissett et al., 2009, p. 1).

Although exact prevalence rates of CPs vary, New Zealand studies have reported that

between 5-10% of children and adolescents (3-17yrs) are afflicted by clinically significant CPs - at least 45,000 young people in New Zealand alone (Church, 2003). Australian and other international studies provide similar estimates (approximately 14%) for children with behaviour and emotional difficulties, numbers that more than double when the criteria become parent reported difficulties or concerns about child conduct and emotional problems (Nock, Kazdin, Hiripi, & Kessler, 2007; Sanders, Markie-Dadds, Rinaldis, Firman, & Baig, 2007; Sawyer et al., 2000).

Although some level of noncompliant behaviour is to be expected with children, pervasive and persistent CPs can result in a number of harmful short and long-term consequences. For instance, during childhood and adolescence, CPs increase stress levels experienced by individuals, parents and teachers, and are associated with losses in educational opportunities (Kazdin & Wassell, 2000; Scott et al., 2001). Long-term, major longitudinal studies in New Zealand, such as the Dunedin Multidisciplinary Health and Development Study, have shown that CPs increase the risk of substance use, criminal behaviour and imprisonment, teenage pregnancy, and poor health (Fergusson, Horwood, & Ridder, 2005; Odgers et al., 2007; Woodward & Fergusson, 1999). Growing evidence highlighting the link between internalising and externalising disorders draw our attention to another concern, that children with early CPs are at greater risk of later adjustment difficulties and mental health issues such as anxiety and depression (Egger & Angold, 2006; Kovacs, Paulauskas, Gatsonis, & Richards, 1988; Sofronoff, Dalgleish, & Kosky, 2005).

Conduct problems and their causes

Identifying the cause of child CPs is no simple task. There are multiple causal factors that interact to determine whether or not a child experiences CPs. These factors include the child's genetic makeup and temperament (Kim-Cohen et al., 2006), the nature and quality of

the child's school environment, peer relationships - which tend to be more influential during adolescence, and socioeconomic factors such as poverty and social inequality (e.g. Aneshensel & Sucoff, 1996; Hill, 2002; Hinshaw & Lee, 2003; Loeber, Green, Keenan, & Lahey, 1995).

The quality of parenting that children receive has also been found to significantly impact on their development, with literature suggesting that high quality parenting is essential for children to develop into competent, independent adults (e.g. Chamberlain & Patterson, 1995; Vimpani, Patton, & Hayes, 2002). Caspi et al. (2004) conducted a study interviewing mothers of 565 five-year-old monozygotic twin pairs to investigate the impact of parenting on children's behaviour in a context where genetic influence was controlled for. They found that twins who received more negativity and less warmth from their mothers had more antisocial behaviour problems than their siblings. This supports the view that the quality of parenting, and in this case mothers' expressed emotion towards their children, can play an important role in the later development of behavioural difficulties (Caspi et al., 2004).

A number of other parenting factors that contribute to an increased risk of child behavioural and emotional difficulties have been identified across research. These include parental psychopathology (particularly depression), inadequate involvement in children's lives, low self-efficacy in relation to parenting, and use of a harsh, inconsistent parenting style (Coie, 1996; Sanders et al., 2007). Similarly parenting practices that can 'accidentally' maintain and exacerbate children's CPs over time have been well established. These unintentional actions include having stable, negative attributions towards children (e.g. "you always do this"), having a one-sided focus on problematic rather than prosocial behaviour, parental modelling of antisocial behaviour, and coercion cycles where both parents and children escalate their behaviour until the parent backs off (e.g. Snyder, Cramer, AfFrank, & Patterson, 2005).

Household surveys conducted in various countries have revealed that parenting difficulties are by no means uncommon and have noted that many children are being exposed to unfavourable and ineffective parenting practices. An Australian survey found that in a sample of 4,018 parents with 2-12 year olds, 70% said that they often got angry at their child and yelled at them, and more than half reported using parenting practices such as smacking (Sanders et al., 2007). These figures suggest that many children are being exposed to parenting practices that may contribute to, or maintain, the development of CPs. In the context of research that indicates, a) the high prevalence rates of childhood CPs, b) the numerous negative consequences associated with pervasive behavioural difficulties, and c) the important role that parents play in minimising or exacerbating children's risk, these findings highlight a significant issue that warrants further attention.

Available interventions

The end of the sixties brought with it a drastic change to the way in which children's oppositional behaviours were addressed, moving from interventions that viewed the child as solely responsible for their behaviour, to interventions now centred around helping parents to modify their own parenting behaviours.

Parent training (PT) programmes are interventions which seek to reduce child conduct and emotional problems by teaching parents practical skills to more effectively manage problematic behaviour. Underpinned by social learning theory principles, PT programmes promote behaviour modification and emphasise core principles such as reinforcement and time out to increase or decrease behaviour accordingly (Nixon, 2002).

Whilst the underlying principles of these interventions typically remain fixed, their specific content and the format of their delivery can vary widely. For example, some PT programmes involve therapist interaction with the parent and child simultaneously (e.g.

Parent-child interaction therapy, PCIT; Eyberg, 1988), some have adjunctive interventions (e.g. Sanders, Markie-Dadds, Tully, & Bor, 2000) and often programmes vary in the length and frequency of sessions and delivery modality that is used (see Nixon, 2002). Regardless of these individual differences, results from numerous meta-analyses have reported significant, positive effect sizes, advocating the use of behavioural PT programmes to modify parenting behaviour and prevent or reduce early oppositional behaviours (e.g. Kaminski, Valle, Filene, & Boyle, 2008; Serketich & Dumas, 1996).

Positive Parenting Program

One PT programme which has been found to be particularly effective is the *Positive Parenting Program* (Triple P), developed by Matthew Sanders and colleagues. Like other PT programmes, Triple P is grounded in social learning principles and seeks to enhance parents' knowledge, skills and confidence, ultimately reducing the prevalence of behavioural and emotional problems experienced by children and adolescents (Sanders, 1999). This theoretical approach to treatment and prevention has a strong empirical base and has been recognised as particularly favourable in managing children with early-onset CPs (e.g. McMahon, 1999; Sanders, 1999; Taylor & Biglan, 1998).

The Triple P programme is built around five core positive parenting principles, and draws upon risk and protective factors known to influence positive development and psychopathology in children. These guiding principles include: providing a safe and engaging environment, providing a positive learning environment, using assertive discipline, having realistic expectations and promoting parental self-care (Sanders, 2008, p. 509).

As this programme is designed to produce population level reductions in CPs for children aged 0-16 years, it includes five levels of intervention which exist on a continuum of increasing strength. The first level aims to provide a broad preventative approach, offering information and psychoeducation to interested parents. The next three levels offer active

skills training for parents whose children have mild to severe behavioural difficulties, with the number of sessions provided varying depending on problem severity. Level five interventions are enhanced behavioural family interventions, tailored to meet the needs of families with additional stressors such as parental depression or marital conflict (Sanders, Turner, & Markie-Dadds, 2002).

Outcome evidence

A large body of evidence supporting the efficacy of Triple P has continued to evolve over the last thirty years. Research that began with single-case studies (e.g. Sanders & Glynn, 1981), now comprises of an extensive range of randomised clinical control trials evaluating the effectiveness and efficacy of the different levels of intervention and delivery modalities (e.g. de Graaf, Speetjens, Smit, de Wolff, & Tavecchio, 2008; Zubrick et al., 2005). Recent research also includes studies specifically assessing the dissemination process, service-based field trials (e.g. Morawska & Sanders, 2006), and evaluations conducted at a wider population level (e.g. Prinz & Sanders, 2007). This extensive collection of evidence has drawn attention to the various effects of Triple P which, in addition to reducing behavioural and emotional problems in children (Sanders et al., 2007), include reducing parental distress (Sanders et al., 2004; Sanders & McFarland, 2000), increasing parents' beliefs about their own self-competence (Sanders et al. 2000), and enhancing work performance for parents in the workforce (e.g. Martin & Sanders, 2003).

Thus it is well established that behaviourally-focused interventions such as Triple P are effective in reducing behavioural and emotional difficulties in children, with a number of additional benefits for families. However this method of intervention does not directly target children's emotion competencies and research has yet to look at its effect on a key ability that is crucial for children's successful interactions and on-going positive development – emotion knowledge.

What is emotion knowledge and why is it important?

Having an awareness and understanding of one's own and others' emotional states, expressions and the functions of discrete emotions, are an important set of skills for children that together, constitute emotion knowledge (EK; Denham, 1998; Izard et al., 2011). Denham (1986) proposed that there are four subtypes of EK that develop progressively across early childhood. Receptive knowledge refers to a child's ability to identify a facial expression when given an emotion label (e.g. "which child is sad?"). Expressive knowledge is one's ability to provide emotion labels for particular facial expressions (e.g. "how does this person feel?"). Stereotypical knowledge refers to the ability to determine how someone would typically feel in a particular situation (e.g. most children would feel happy if they were given an ice-cream), and non-stereotypical knowledge is one's ability to identify emotions that may be opposite to what they themselves would feel in a situation (e.g. knowing that seeing a dog may make them feel happy but be scary for somebody else).

EK has been identified as an important aspect of children's development for various reasons. Firstly, research has proposed that increasing EK increases emotion regulation (ER) in young children; that is, the ability to manage their feelings and experiences in order to accomplish desirable goals (Feldman Barrett, Gross, Christensen, & Benvenuto, 2001; Izard, 2002, 2007). Being able to regulate your emotions is an often difficult, but essential task for successful interpersonal and intrapersonal functioning and a skill that is aided by the ability to first identify and understand your emotional experiences (Thompson & Meyer, 2007). Emotion competence, namely a person's ability to understand, manage, express and utilise their emotions effectively, evolves through a combination of EK and ER and is associated with numerous positive outcomes. For example, a significant body of research has identified that higher levels of EK and ER are associated with increased prosocial and empathetic behaviour towards others, better wellbeing and self-esteem, and increased academic and

social competence (e.g. Denham et al., 2003; Gross & Muñoz, 1995; Izard et al., 2001).

In contrast, having poor EK restricts children's ability to recognise and express their own and others' emotions and therefore can have negative repercussions for current and future functioning. In addition to being associated with poorer socioemotional competence, academic competence and lower levels of prosocial behaviour throughout childhood, deficits in EK and regulation are also associated with internalising and externalising difficulties (e.g. Trentacosta & Fine, 2010).

This link between emotion understanding and externalising difficulties has been suggested even from early age. For example Stifter, Spinrad, and Braungart-Rieker (1999) found that poorer ER in infants was associated with more non-compliant behaviour as toddlers. Moreover, Denham et al. (2002) found that preschoolers' deficits in EK, particularly for boys, predicted angry and aggressive behaviour at the age of 4-6 years and was associated with fewer successful social relationships.

In line with these findings, research conducted with 'at risk' samples, namely maltreated children and 'hard to manage' preschoolers, has revealed that these groups of children are less able to provide examples of emotion cues and triggers and have poorer understanding of emotions when compared with other children (e.g. Camras, Sachs-Alter, & Ribordy, 1996; Cook, Greenberg, & Kusche, 1994; Hughes, Dunn, & White, 1998; Shipman & Zeman, 1999). These findings again demonstrate the association between EK and externalising difficulties.

One model which has been used to describe why children with externalising problems have difficulty managing social situations is Crick and Dodge's (1994) social information processing perspective, a model which proposes various steps and cycles that can lead to aggression or oppositional problems (Lemerise & Arsenio, 2000). One explanation this

model provides is that a child's inability to accurately identify and understand another person's emotional signals may cause them to misread the person's intent and react inappropriately. For example a child who assumes that someone is angry in an ambiguous situation may view the person's actions as hostile and respond more aggressively than may be necessary (Schultz, Izard, & Ackerman, 2000).

A second explanation this model provides for the development of disruptive and aggressive behaviour is that poor EK and a child's inability to manage and use emotions to facilitate successful social interactions may lead to anger and frustration, particularly if the child also has high levels of negative emotionality (Crick & Dodge, 1994; Lemerise & Arsenio, 2000). In these instances it is an inability to manage one's own emotions that is the main driving force behind the problematic behaviour, rather than a misinterpretation of someone else's emotional cues. Together these two explanatory pathways highlight the role of both EK and ER in managing behavioural difficulties, again reinforcing the importance of EK as a first stepping stone to appropriate responding.

Although they often attract less attention from adults than externalising problems, anxiety and depression can be associated with a number of harmful consequences and therefore need to be an equally important focus of attention (Zahn-Waxler, Klimes-Dougan, & Slattery, 2000). Longitudinal research has identified that deficits in EK at first grade (6-7 years of age) predict later self-reports of internalising difficulties, with children with poorer EK reporting higher levels of anxiety, depressed emotion and social isolation than their more emotionally enhanced peers (Fine et al., 2003). Although internalising difficulties are not the focus of the current intervention, these findings again highlight some of the negative consequences of poor EK in developing children, emphasising its importance for positive development across multiple domains.

The ability to accurately interpret their own and others' emotional responses enables children to communicate their feelings and understand and respond appropriately to how others are feeling, actions that are often difficult for children with CPs. Thus having a sound knowledge of emotion provides children with a strong foundation for the development of empathetic, prosocial behaviour and successful interpersonal relationships, and highlights implications for broadening the focus of behaviourally driven PT programmes such as Triple P. Given its vital role in children's adjustment, it is important to understand how EK develops over time, and ways in which its development can be nurtured to improve outcomes for children with CPs.

Development of emotion knowledge

Emotion knowledge rapidly develops during the first few years of a child's life. At around 18-months children are beginning to use emotional language and by three to four years of age are often exhibiting a number of key features of EK (Southam-Gerow & Kendall, 2002). These often include being able to recognise and label their own and others' emotions, communicate these with others, and compare what they know about emotion to real world social situations that they are encountering in their daily lives (Pons, Harris, & de Rosnay, 2004).

Although most researchers agree that children come into the world with a willingness to learn about emotions and relationships, the way that these opportunities occur, and how they are represented and evaluated is very much scaffolded through early social interactions with others (see Fivush, Haden, & Reese, 2006). The idea of parents as '*emotion socialisers*' during their children's early years has gained popularity over the last fifteen years, and proposes that there are three central parenting interactions through which children learn key emotion skills and knowledge. These interactions include parental reactions to children's emotions, parental expression and regulation of their own emotions, and parent-child

discourse about emotion experiences (Eisenberg, Cumberland, & Spinrad, 1998).

Firstly, parents' responses to young children's emotions, particularly when these emotions are negative, provide a rich opportunity for children to learn about emotions if implemented in a supportive way (e.g. comforting the child and teaching them ways to manage their feelings). In contrast, critical or dismissive responses to children's emotion experiences are unhelpful reactions and may increase the child's risk of later psychopathology characterised by emotion regulation deficits (Eisenberg et al., 1998; Thompson & Meyer, 2007).

Consistent with social learning theory (Bandura, 1977), parents expressions of their own emotions constitute a second mechanism by which children learn about emotion expression and regulation. This can happen through various pathways such as parental modelling of emotion which is observed then imitated, or by increasing the child's exposure to opportunities to learn about others' emotions and respond appropriately (Eisenberg et al., 1998). Each of these experiences are likely to influence how a child comes to understand and express their emotion, and adaptive or maladaptive strategies they develop for dealing with difficult emotions.

Different parents have different beliefs about the socialisation of emotion. Some feel that negative emotions are bad and should be hidden, whereas others believe that being aware of and able to express your emotions is desirable (Gottman, Katz, & Hooven, 1997). Gottman, Katz, and Hooven (1996) introduced the concept of parents' '*meta-emotion philosophy*' - the organised set of thoughts and emotions that parents have about their own and their children's emotions. This is important as research has shown that the value parents place on teaching their child to talk about emotions and views regarding whether or not they are ready to learn about emotion socialisation, are positively associated with children's

emotion understanding during the preschool years (Dunsmore & Karn, 2001, 2004).

A third rich source by which children learn about emotion is through conversations they have with their parents. In line with Eisenberg's work, John Gottman extends the concept of *emotion socialisers*, describing parents specifically as their children's '*emotion coaches*'. He outlines five guidelines for optimal emotion coaching, namely: parental awareness of children's emotions, viewing children's displays of emotion as an opportunity for intimacy and teaching, empathising with and validating children's feelings, helping children to verbally label their emotions, and setting appropriate limits for behaviour while helping children to problem solve (Gottman & Declaire, 1997). These five principles and the notion of parents as their children's *emotion coaches* provides the foundation for the current intervention and the base upon which the Emotion-Enhanced Group Triple P (EEGTP) manual is constructed.

Parent-child conversations

The current study specifically looks at the role of parent-child conversations as a considerable body of research suggests that the way in which parents converse with their children plays a central role in this socialisation of emotion (e.g. Thompson & Meyer, 2007). This was demonstrated by Dunn, Brown, and Beardsall (1991) who showed that family discussion about feeling-states during the preschool years was associated with children's ability to later identify emotions. In this study, discussions between family members and 36-month old children were observed in the home. Three years later it was found that children from homes with more feeling-state discussion were better able to identify the emotions of an actor than those who had not participated in feeling-state talk as frequently (Dunn et al., 1991). Similar findings have been evident across various studies indicating that parent-child discussions involving emotion, even at a young age, significantly enhance the process by

which children's EK evolves over time (e.g. Denham, 1993; Denham & Grout, 1992).

Interestingly reminiscing conversations, those that take place after an event has occurred, have been identified as a particularly rich context for the development of EK (Fivush, et al., 2006; Laible, 2004a; Wareham & Salmon, 2006). This was demonstrated by Laible (2004a) who directly compared maternal elaboration style across two contexts: reminiscing with their child about a past event and reading them a wordless story book. It was found that only maternal elaborative reminiscing, and not discussion during storybook reading, predicted children's later emotion understanding (Laible, 2004a).

A number of possible explanations have been presented for why this may be the case. One explanation is that providing some reflective distance allows the child to discuss and processes their experience at a time when they are no longer emotionally aroused. Thus the child may be better able to utilise their caregiver's assistance and insight to make sense of the experience without the original emotion interfering in this processing (e.g. Laible, 2004b; Laible & Song, 2006). A second explanation is based on the finding that information discussed after an event tends to be remembered better than before or during an event (McGuigan & Salmon, 2004). This description suggests the benefits of reminiscing for building up a store of knowledge about emotion that the child can then draw on in future emotionally salient situations (see Wareham & Salmon, 2006 for review). Together, these explanations highlight the additional advantages of reminiscing over and above general everyday discourse and support the current study's use of these conversations in the targeted intervention.

In research, two particular dimensions of parent-child reminiscing conversations have been investigated: the style of reminiscing, or more specifically how elaborative discussions are, and the nature of the content that is discussed (Wareham & Salmon, 2006). Some of the

critical elements of a high-elaborative style include discussion about contextual information, the use of open ended “wh” questions (who, what, why, where, and when) to encourage child participation, and a willingness to follow the child’s lead and expand on their contributions where possible. Repetitive or pragmatic mothers in contrast tend to provide little background information of the event being discussed and ask repetitive, closed ended “yes/no” type questions (Nelson & Fivush, 2004).

Early on, a significant body of research set about investigating the influence of maternal elaborative reminiscing on children’s autobiographical memory and recall for past events (e.g. Peterson, Jesso, & McCabe, 1999). This research has continued to evolve over the years and has frequently reported that children between 2.5- and 6-years of age whose mothers engage in elaborative reminiscing, have richer, more accurate memories of past experiences than children of repetitive mothers (Conroy & Salmon, 2006; Fivush et al., 2006; Reese & Newcombe, 2007).

Given that EK simply refers to a child’s store of knowledge in memory, researchers extended this work with the belief that elaborative maternal discussion about previous emotional experiences may not only impact on children’s memory for such events, but also their emotion understanding and socioemotional development. A study conducted by Laible (2004b) investigated the association between children’s socioemotional development and the style and content of mothers discourse when reminiscing about a past event. Consistent with the suggested premise, it was found that elaborative discussions at 30 months of age that included emotion language (e.g. prototypical emotion states: angry, happy; and words indicative of emotion states: screaming, laughing) were associated with more enhanced emotion understanding six months later (Laible, 2004b).

In addition to the advantages of more frequent emotional talk, whether or not mothers explain the causes of emotions has been identified as a stronger predictor of children’s EK.

This finding has been reported by a number of researchers (e.g. Brown & Dunn, 1996; Dunn, Brown, Slomkowski, Tesla, & Youngblade, 1991; van Bergen & Salmon, 2010), and again emphasises the importance of both the style and content of parents' discourse for children's developing EK. Collaboratively, this body of research has acknowledged parent-child reminiscing as a rich source by which children learn about key emotion skills and called attention to the potential benefits of training parents to engage in a high-elaborative, emotion-rich style when discussing past events with their children.

Following experimental research showing that parents can learn to use an elaborative reminiscing style after specific training (Reese & Newcombe, 2007), van Bergen et al. (2009) conducted an experimental study where mothers were taught with their children (3.5-5yrs) to engage in a high-elaborative reminiscing style with a focus on labelling emotions and their causes. This study was novel as it aimed to investigate whether, in addition to increasing parental elaboration, parents could also learn to increase their emotion content, and whether this combination would result in parallel improvements for children's own reminiscing contributions. A second key aim of the study was to investigate whether these changes in reminiscing would significantly impact on children's EK scores.

Forty-four parent-child dyads completed all stages of the study (4 training and 3 assessment sessions), half of whom were allocated to an 'attention time' control condition and trained in using child directed play. Both immediately after, and 6-months following the intervention, mothers and children from the reminiscing condition were using more elaborative utterances and engaging in more emotion talk than those in the control condition. As well as providing more detailed narratives and emotion content, children of mothers in the reminiscing condition also exhibited more advanced emotion cause knowledge than controls, that is, a greater ability to generate explanatory causes of various emotion experiences (van Bergen et al., 2009). The results of this study suggested that 1) parents can be taught to alter

the style and content of their reminiscing conversations (with parallel gains for children's own language contributions), 2) that these benefits are sustainable over time and 3) that these changes subsequently impact on children's understanding of emotion causes.

Interestingly, however, when EK was measured using Denham's Affect Knowledge Task (1986) there were no significant differences in recognition of emotion and emotion situation knowledge between the two groups, findings described as the likely result of ceiling effects during the task. Given the difficulty in recruiting and retaining participants, limitations of measures used and the complexity of factors that shape children's development, mixed results such as these are not uncommon in the small body of existing literature. Emotion discourse at times has not predicted significant increases in EK, or changes have varied as a result of additional factors such as conversational tone and warmth (Laible, 2004a, 2004b; Laible & Song, 2006). Hence, conclusions regarding the exact nature of the interaction between children's EK and the style and content of reminiscing conversations remain somewhat unclear.

Nevertheless, the growing body of available research has acknowledged that parent-child discussions do play an important role in children's developing EK and has shown that parents can be taught to engage in elaborative, emotion-rich reminiscing conversations, with parallel benefits for children's own emotion contributions. Additionally, research has hinted at possible correlations between EK, parental discourse and childhood disruptive behaviour, suggesting that reminiscing conversations about negative emotion may be associated with less parent reported aggression and enhanced emotion regulation and coping strategies (e.g. Laible & Song, 2006; Ramsden & Hubbard, 2002; Sales & Fivush, 2005). Despite these findings, however, the application of this information in tailored interventions is still very much in its infancy, with behavioural approaches grounded in social learning theory remaining the most prominent approach to early intervention for CPs.

One study which did attempt to integrate both behaviour and emotion-focussed components in an intervention for child CPs was conducted by Salmon, Dadds, Allen and Hawes (2009), who investigated the effects of training parents of children (M age = 4.7 years, $SD = 1.3$ years) in elaborative, emotion reminiscing as an adjunct to parent management training (PMT). In their pilot study, 38 parents and children individually took part in an abbreviated six-session course of PMT - another well-established parenting programme that emphasises operant conditioning principles and seeks to reduce maladaptive parent-child interactions (Feldman & Kazdin, 1995). Half the participants received additional training in elaborative reminiscing using emotion labels and causes, while the other half were trained in child-directed play as an active control condition.

Although there was some difficulty with high attrition rates, post-intervention assessments revealed significant reductions in CPs across both conditions, with additional benefits for those in the emotion reminiscing condition (Salmon et al., 2009). As hypothesised, both parents and children in this condition were engaging in more elaborative and emotion utterances during conversations together than control dyads. These findings suggest that this conversational style can be taught to parents in the context of a PT programme even within a relatively brief amount of time. Although a promising first step, experimental research remains limited and somewhat inconclusive regarding the direct effects of parental reminiscing training on outcomes for children. Future longitudinal studies in this area are needed 1) to establish whether improvements seen in parent's and children's reminiscing discourse remain over time, 2) to directly assess whether these changes in parent-child reminiscing conversations lead to increases in children's EK and 3) whether this combination of programme elements can improve behavioural outcomes for children with CPs.

The Current Study

The current pilot study aimed to extend the findings of Salmon et al. (2009), integrating behaviour and emotion focused elements to assess whether we could boost EK in children in the context of an already established parenting programme, and whether this would have subsequent impacts on child disruptive behaviour. This integration, rather than extension to an already established programme, was an important step for minimising parental demands given that dropout rates from parenting programmes can be high (e.g. Salmon et al., 2009). The application of this content in a group, rather than individually administered format, was also unique to the current study with the aim of increasing programme efficiency and minimising resource demands. Parents of children with oppositional behaviour problems (aged 35-83 months) took part in a new Emotion-Enhanced Group Triple P Programme (EEGTP) where, in addition to learning core PT principles, they were trained to discuss past events with their child using an emotion-rich, elaborative reminiscing style. A second group of parents participated in the standard Group Triple P Programme (level 4; GTP) as a control condition. The style and content of parent-child discussions were coded shortly before and after the intervention and, extending Salmon et al.'s research, tasks assessing children's EK and measures of oppositional behaviour were administered.

Given the nature of PT programmes and their efficacy, it was expected that children in both groups would show significant reductions in oppositional behaviours following the intervention. Over and above this finding, a number of additional benefits were predicted for parents and children in the emotion-enhanced condition. Firstly, that in addition to using a more elaborative reminiscing style post-intervention, these participants would use more emotion language (labels and causes) and parental emotion coaching statements during reminiscing conversations than those in the control condition; secondly, that these children would show greater increases in EK post-intervention; and thirdly, that greater reductions in

oppositional problems would be evident for this group given the proposed link between EK and externalising problems (e.g. Denham et al., 2002).

Method

Design

The current study used a mixed design, looking at participants scores pre- and post-intervention, with intervention group (GTP or EEGTP) as a between participants factor. The study collected data from two different sites (Wellington and Auckland) and was part of a larger longitudinal experimental investigation conducted with Matthew Sanders and colleagues during which parent and child data was collected at three time points (pre-intervention, post-intervention, and four-month follow up; see Figure 1). It should therefore be noted that although data was collected at all three time points, the current study is only focussing on pre- (assessment 1) and post- intervention (assessment 2) findings.

Participants

To recruit participants with oppositional difficulties details of the study were broadcast through national media, and posters and letters were sent out to schools, kindergartens and crèches around the Wellington and Auckland region. A 15-item Eyberg Child Behaviour Questionnaire-screener (ECBI; Eyberg & Ross, 1978), a standard screening tool used in Triple P studies, was then administered to interested participants via telephone. Given concerns that attention deficit items on the ECBI (5-items) may lead to the inclusion of children with specific attention difficulties rather than predominantly CPs, the usual inclusion criteria were adjusted to include only the first ten (behavioural items) of the shortened ECBI with a cut off score of 36. Parents were excluded from the research if they were already receiving professional assistance for child CPs or if their child had a developmental or

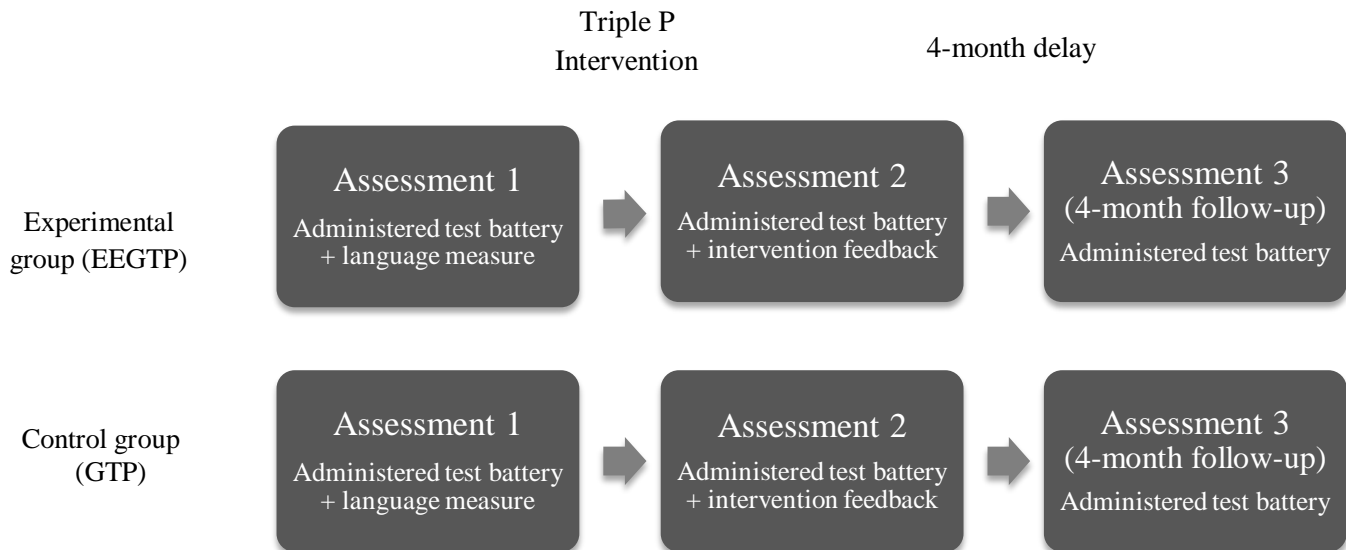


Figure 1. Structure of the study and measures administered. Note that assessment 3 information is not included in the current investigation.

intellectual disability. Ethical approval for the study was granted by both the Victoria School of Psychology Human Ethics Committee and the University of Auckland Human Participants Ethics Committee. Information about the purpose of the study was sent out to parents and informed consent was gained for all parents and children that participated (see Appendix A and B).

Across both sites 43 parent-child dyads met the inclusion criteria and, as in Salmon et al.'s (2009) study, were randomly allocated to either the GTP ($n=24$), or EEGTP ($n=19$) condition. Three parent-child dyads did not complete the intervention and four dropped out of the study before post-intervention assessments were conducted. The final sample consisted of 36 parent-child dyads (20 mother-son, 14 mother-daughter, and two father-son) evenly distributed across conditions (GTP: $n=18$, EEGTP: $n=18$). All children were aged between 38- and 83-months ($M=58.92$, $SD=12.79$) and were predominantly NZ European.

Materials

At each time point, parents and children engaged in reminiscing conversations and

completed the battery of tasks outlined below. Given that this study was part of a larger investigation additional measures were also administered to participants. As these measures were not the focus of the current study, they will not be discussed in this thesis.

Parent-child conversations. Following a similar procedure to that employed by Laible (2004b), mothers selected two past events to discuss with their child, one positive and one negative in tone. Parents were instructed that they should be novel events occurring within the past month that the child had shown interest in and were asked to “*discuss each event with your child as you would normally, in an everyday conversation.*” Researchers then started the audio-recorder and exited the room, leaving the parent and child alone to complete the task. The length of conversations were recorded (positive events: $M=32.40$, $SD=14.46$ conversational turns; negative events: $M=30.74$, $SD=13.45$ conversational turns) and the order in which parents were asked to discuss positive and negative events were counterbalanced. Parent-child dyads discussing the negative event second were encouraged to end with a brief positive discussion to lighten the mood before subsequent tasks were administered.

Coding of parent-child conversations. Reminiscing conversations were transcribed and coded separately for positive and negative events (see Appendix C). The number of *prototypical emotion label's* used by children and parents (e.g. happy, angry, sad) and the frequency of *emotion cause* discussion (e.g. “you were angry because daddy didn’t let you play” or “why were you scared”) were recorded.

Secondly, the frequency of emotion coaching statements was recorded. These included *constructive emotion interpretations*, parent’s references to children’s body cues indicating that the child felt a particular way (e.g. “I knew you were feeling scared because you screwed up your eyes”); *future emotion response prompts*, suggested future coping

strategies discussed in the Triple P Programme (e.g. “Next time you could use your big breaths to get a little calmer”); and *praising past emotion responding*, statements praising specific, desirable past emotion responses (e.g. “I like the way that you got yourself calm and used you 10 big breaths”). These scores were combined to produce a total emotion coaching score for each participant at each time point.

Finally, *parental elaborative style* was scored using a 5-point scale reflecting the level of elaboration observed within parent-child conversations. Following Laible (2004), a score of 1 was assigned if parents provided little or no background material and asked closed-ended questions. Scores of 5 were allocated to parents who provided high levels of background material, asked predominantly open-ended questions, and used minimal repetition (see Appendix C). Coding started when the event itself was introduced and off-topic utterances were not included in the analyses.

Following previous research by Salmon et al. (2009), a second researcher independently coded 25% of the transcripts to establish inter-rater reliability. The Cohen’s Kappas showed suitable inter-rater reliability (*K*s ranged from .79-.86) and any disagreements were discussed and consensus reached.

Emotion Knowledge

Denham’s Affect Knowledge Task. Children’s EK was measured in two ways; first, through the widely used Affect Knowledge Task (Denham, 1986). This measure is often used with children between 2- and 5-years of age (e.g. Denham et al., 1994; Laible, 2004a, 2004b) and has good internal reliability (Chronbach’s $\alpha=.95$; Denham, 1986). It begins by assessing children’s *emotion recognition*. Children are shown four cloth faces each with a different emotion expression drawn on it (happy, sad, angry, scared). One by one they are asked to identify each emotion as the researcher points to it (e.g. “*how does [she/he] feel?*”-

expressive emotion). After the faces have been rearranged, children are then asked to point to each of the target faces identified by the researcher (e.g. “*show me the [happy/scared] face*” – *receptive emotion*). For each task children received 2 points for a correct response, 1 point for an incorrect response of the right valence (e.g. picking the angry face rather than the correct sad one), and 0 points for an incorrect response of the wrong valence. Any initial incorrect responses were corrected during a teaching phase where the researcher named and expressed each emotion (using appropriate facial, vocal and body language). This ensured that all children were able to accurately identify each emotion before engaging in the task.

A *perspective taking task* followed where faceless dolls were used to act out 18 vignettes accompanied by visual and vocal cues from the researcher (e.g. inhaling, lifting brows up and opening eyes wide to indicate that the doll was scared). Eight of the vignettes were *stereotypical stories* where the doll was shown to feel the same way most people would feel in that scenario (e.g. angry that a sibling just knocked down their tower), and 10 were *non-stereotypical stories* where the doll was shown to feel the opposite to what the child was likely to feel in that scenario. Correct responses for this task were determined based on answers from a forced-choice questionnaire that parents had filled out prior, predicting how the child would likely feel in each of the 10 situations. After each of the 18 vignettes the child was asked “*how does Jenny/Tom feel?*” and asked to “*give her/him a face,*” selecting from one of the available faces and attaching it to the front of the doll’s head.

The basic structure of the vignettes used were the same as Denham’s (1986) original vignettes. However, some minor changes were made to ensure that stories were culturally relevant (e.g. one item which involved a mother smacking her child was removed due to the implementation of the ‘Anti-Smacking Bill’ in 2009). Responses were scored identical to the previous task, with 2 points for a correct response, 1 point for an incorrect response of the right valence, and 0 points for an incorrect response of the wrong valence. Scores from the

emotion recognition task and the emotion perspective taking task were added together to produce an overall EK score out of 52.

Emotion Cause Knowledge task. The second measure of children's EK was the Emotion Cause Knowledge task used by van Bergen et al. (2009). This measure is also used with children between 2.5- and 6-years of age and whilst there is currently no measure of validity available, it has been found to produce results consistent with other measures of EK (e.g. Denham's Emotion Knowledge task and an Emotion Judgment Task; Wang, 2003) and have good inter-rater reliability across studies (Cohen's Kappa range 0.66-1.00; see Hughes and Dunn, 1998; Wang, Hutt, Kulkofsky, McDermott, & Wei, 2006).

In this task children were asked for each doll "*what do you think made [name] feel that way?*" A single prompt "*what else do you think made him/her feel that way?*" was given to encourage children to continue providing as many causes as possible. When out of ideas, the researcher asked "*What do you think might make YOU feel that way?*" Again the prompt was given until children were no longer able to generate causes or were starting to provide implausible responses. The same method was repeated for each of the dolls until children had completed all four emotion conditions (happy, sad, angry, scared). Plausible, independent reasons provided within each emotion were scored as 1, with total scores being collapsed across the two parts (doll and self) for each emotion (see Appendix D). Scores were then added across all 4 emotions to give a total emotion cause knowledge score.

Again 25% of the transcripts were scored by a second independent researcher to establish inter-rater reliability. The Cohen's Kappa was adequate ($K = .79$) and disagreements were discussed and resolved.

Behaviour rating scales

Eyberg Child Behaviour Inventory. The Eyberg Child Behaviour Inventory (ECBI; Eyberg & Ross, 1978) is the most commonly used measure in Triple P interventions for assessing behavioural problems in children aged 2-16 years. The ECBI is a 36-item questionnaire of parents' perceptions of child disruptive behaviour and consists of two separate scales. The Intensity Scale measures the frequency of problem behaviours on a 7-point scale (e.g. "*How often does your child [scream]?*") and the Problem Scale reflects the number of behaviours listed by parents as being problematic (e.g. "*Is [answering back] a problem for you?*"). Both scales have high internal consistency (Intensity Scale, $r=.95$; Problem Scale, $r=.94$; Robinson, Eyberg, & Ross, 1980), and the recognised cut off scores (Intensity Scale=127, Problem Scale=11; Eyberg & Ross, 1978) have been validated in both early-child (e.g. Webster-Stratton, 1984) and adolescent clinical studies (e.g. Baden & Howe, 1992).

Language ability

Peabody Picture Vocabulary Test. The Peabody Picture Vocabulary Test (4th ed.; Dunn & Dunn, 2007) was used as a control measure to assess children's level of receptive vocabulary. This measure was administered pre-intervention to compare participants across conditions and ensure that conclusions drawn reflect actual group differences, rather than differences in children's vocabulary ability. The PPVT-4 is suitable for children and adults 2-years 6-months to 90-years of age and involves identifying a target image that best represents words issued by the researcher. The measure has good psychometric properties, reporting high coefficient alphas (averaging .97 and .96), and split half reliabilities across age and grade ranges (.95 and .94 on each form; Dunn & Dunn, 2007). Test-retest correlations also indicate a high level of score stability (ranging from .92-.96), thus the measure was only administered once throughout the intervention. Raw scores were used rather than standardised scores as we were interested in children's actual ability, rather than making

comparisons to others of the same age.

Procedure

Parent-child dyads were allocated a participant number upon entry into the study and randomly assigned to the experimental or control group. These groups were anonymously named 'Blue' and 'Red' so that parents and subsequent experimenters were blind to participants' condition throughout the intervention, data collection and coding process.

As depicted in Figure 1, and as previously mentioned, the study collected data at three time points. The first assessment, a pre-intervention assessment, was conducted at the university where children and parents completed the task battery previously described. Following the parent-child reminiscing task, parents filled out the paper and pen measures in a separate room while their child took part in the remaining tasks with the researcher. Upon session completion children were given a colourful sticker to thank them for their participation. The initial assessment took approximately 1-1.5 hours to complete, with later follow up assessments lasting between 30 minutes to 1 hour.

Approximately one week following initial assessments parents began the intervention. Two separate programmes were run with half the parents participating in the standard GTP intervention and the other half in the EEGTP programme. The programmes were run by seven psychology students under the supervision of two senior clinicians, all trained and accredited in Group Triple P. Both programmes consisted of four 2-hour group sessions at either Victoria University of Wellington or the University of Auckland. Face-to-face sessions were followed by three 15-30 minute telephone sessions during which parents were able to discuss the implementation of Triple P strategies in the home and receive feedback and support. One week later, one final face-to-face group session was conducted to promote the generalisation of skills, maintenance of gains and to celebrate the conclusion of the

programme. Throughout the programme parents were given homework tasks to complete between sessions. These tasks aimed to encourage parents to practice their new skills and help consolidate learnt content from sessions.

Two weeks following the intervention, T2 assessments began. The structure of the assessment session was the same as at T1, however children were no longer required to participate in one of the tasks (the PPVT-4). At the end of the parent measures booklet, a client satisfaction questionnaire was also included to gather feedback about participant's experiences within the programme.

Finally, at a four-month follow-up, the concluding T3 assessments were conducted. This process was identical to that of T2 without the inclusion of the client satisfaction questionnaire. At the end of the session participants were verbally debriefed and told to expect a written debrief and summary of the basic findings of the study within the next two months. As previously mentioned, the current study did not analyse data collected during this follow up, however, an article outlining the results from all three time points will be published by Sanders and colleagues in the near future.

Intervention

Group Triple P. The standard GTP (level 4) intervention consisted of eight group and telephone sessions designed to equip parents with knowledge and skills to manage difficult child behaviour. The programme followed a manualised workbook and adopted an active skills training approach. Parents were encouraged to observe skills modelled by facilitators and DVD footage, practice skills in small groups, and receive constructive feedback from facilitators and group members to maximise parenting effectiveness.

In the first session, parents were introduced to the five core positive parenting

principles, discussed some of the factors that influence children's behaviour, set goals for change and learnt ways of monitoring their child's behaviour. In the second session parents looked at ten positive parenting strategies that help strengthen relationships, encourage positive behaviour and teach children new, more adaptive skills and behaviours. Session three focused on specific techniques for managing misbehaviour and session four introduced a number of '*family survival tips*' for easier parenting and helped parents to plan for and manage future high risk situations. During the next three telephone sessions parents determined the main content (allowing for any individual needs to be addressed) and in the final face-to-face session, parents discussed future problem solving, progress made and generated new goals for the future. As can be seen, early components of the programme focus on building up a strong positive foundation of parenting then shift to teaching more specific discipline techniques for minimising misbehaviour. This progression has been shown by research to increase intervention effectiveness (Sanders, 1992, 1996).

Emotion-Enhanced Group Triple P. The EEGTP condition followed a similar structure to the GTP programme in that initial sessions focused on goal setting and building up positive parenting skills before moving on to management of misbehaviour and future planning. What differed is that the manualised program emphasised 'two' important areas of child development - both behaviour and emotion; hence each session had an additional emphasis on linking emotions with the behaviours and actions described in the standard GTP programme. For example in session one when parents were discussing the five core principles of positive parenting, EEGTP participants were also asked to consider how each of these principles provide opportunities for children to learn to identify, express and manage their emotions. Similarly, when talking about some of causes of child CPs and when asked to generate goals, parents were encouraged to consider emotional elements of each.

The most notable difference between the two conditions was the inclusion of content

about using elaborative, emotion talk when discussing past events with children. In these sections of the programme parents were educated about the benefits of engaging in elaborative, emotion-rich reminiscing and were taught skills and techniques to achieve this in the context of both positive events and events characterised by misbehaviour. In relation to the style of reminiscing, parents were encouraged to incorporate additional detail into their narratives and use “wh” questions to promote their child’s participation. When specifically discussing emotion content, parents were encouraged to label their child’s emotion, explain how they knew their child was feeling that way (e.g. “because your face was all screwed up”) and state the cause of the emotion. Parents were also guided to give constructive feedback or praise, reflecting on how their child managed their feelings and providing strategies that they could use in the future. During one of these segments, a demonstration DVD of a mother and son talking about the time he got a haircut was used to model the elaborative emotion talk techniques. Parents were then given the opportunity to practice these using a role-play.

Results

Preliminary analyses

As outlined in the Method, 43 parent-child dyads were randomly allocated to groups and 36 completed all stages of the study. Reasons for non-completion included: moving overseas, language as a second language, difficulty arranging childcare, or was not provided by parents. There were no significant differences between non-completers and those who completed all phases of the study on any of the key variables outlined in Table 1 (all p 's $>.05$). Following van Bergen et al. (2009), all further analyses were conducted on the 36 completing parent-child dyads. Table 1 presents children’s pre-intervention EK scores, behaviour ratings and reminiscing conversation characteristics. Preliminary analyses revealed no significant differences across groups with respect to any of these variables (all p 's $>.05$). Furthermore, there were no significant differences across groups with respect to children’s

age ($t(34) = 1.79, p = .083$), gender ($\chi^2 = .47, p = .494$) and language ability (PPVT; $t(34) = .69, p = .494$).

Child externalising behaviours

To compare differences in children's behaviour pre- to post-intervention, repeated measures ANOVAs were conducted using group as a between participants factor. The dependent variables were parents' perceptions of child disruptive behaviour as reported on the ECBI-problem scale and ECBI-intensity scale.

ECBI-Problem. The number of behaviours reported by parents as being disruptive were calculated for all participants pre- and post-intervention. There was a significant main effect of Time, $F(1, 33) = 45.67, p < .001, \eta^2 = .58$, indicating that the number of behaviours reported by parents as problematic was significantly fewer following intervention, regardless of which group participants were allocated to (see table 1). There was no significant main effect of Group, $F(1, 33) = .00, p = .992, \eta^2 = .00$, or Time x Group interaction $F(1, 33) = .04, p = .84, \eta^2 = .001$.

ECBI-Intensity. The frequency of child problem behaviours reported by parents was also collected pre- and post-intervention for both groups. Again there was a significant main effect of Time, $F(1, 34) = 70.21, p < .001, \eta^2 = .67$, with parents from both conditions reporting problem behaviours as occurring less frequently following intervention. The main effect of Group was not significant, $F(1, 33) = .02, p = .892, \eta^2 = .001$.

A significant Time x Group interaction was also found, $F(1, 34) = 11.54, p = .002, \eta^2 = .25$. Follow-up analyses conducted looking at each group separately revealed that both groups showed significant reductions pre- to post-intervention (GTP: $F(1, 17) = 84.34, p < .01, \eta^2 = .83$; EEGTP: $F(1, 17) = 10.53, p = .005, \eta^2 = .38$). Following up the interaction the other way revealed no significant differences in children's scores between the two conditions at either point (Time 1: $t(34) = .93, p = .36$; Time 2: $t(34) = 1.05, p = .30$), indicating that both

Table 1.

Means (and standard deviations) of key variables across groups, pre-and post-intervention.

Variable	GTP		EEGTP	
	Time 1	Time 2	Time 1	Time 2
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Behaviour measures				
ECBI-Prob	18.81(6.24)	11.96(6.85)	19.00(8.47)	11.72(8.97)
ECBI-Intensity	152.10(17.75)	118.44(24.34)	143.67(33.98)	129.44(37.11)
Reminiscing Conversations				
Parent Econtent	6.17(4.60)	5.00(2.91)	6.44(4.53)	9.61(7.66)
Child Econtent	2.06(2.07)	1.56(1.65)	1.94(1.95)	3.00(2.30)
Ecoaching	0.11(0.32)	0.06(0.24)	0.00(0.00)	0.61(1.20)
Style	2.99(0.51)	2.92(0.55)	2.99(0.49)	3.19(0.81)
Emotion Knowledge				
AKT	42.87(6.93)	44.50(5.74)	46.77(7.85)	45.49(7.48)
Causes	9.53(5.91)	10.88(6.85)	13.78(10.02)	12.23(7.97)

Note. ECBI-Prob = ECBI-Problem scale; ECBI-Intensity = ECBI-Intensity scale; Parent Econtent = frequency of parent's emotion labels and causes during reminiscing conversations; Child Econtent = frequency of children's emotion labels and causes; Ecoaching = frequency of emotion coaching statements; AKT = score on Denham's Affect Knowledge Task; Causes = score on Denham's Emotion Cause Task.

groups' scores were similar pre- and post-intervention. As shown on Table 1, it seems likely that the interaction reflects a difference in the magnitude of the reduction for the GTP group (as scores were initially higher and ended lower than the EEGTP condition), however this numerical difference was not statistically significant.

Parent-child conversations

To investigate the effects of intervention type on parents' and children's reminiscing

talk a series of repeated measures ANOVAs were conducted using group as a between participants factor. Dependent variables were parent's and children's use of emotion labels and cause statements summed, parent's use of emotion coaching items, and parent's reminiscing style.

Parent's emotion content. The number of emotion labels and causes that parents used during conversations at each time point was summed. There were no significant main effects of Time, $F(1, 34) = .81, p = .37, \eta^2 = .02$, or Group $F(1, 34) = 3.33, p = .08, \eta^2 = .09$, nor was the interaction between Time x Group significant, $F(1, 34) = 3.82, p = .06, \eta^2 = .10$. Although the interaction was non-significant, inspection of the means show that parent's in the EEGTP condition increased their use of emotion content following the intervention whereas parents in the GTP condition decreased their use of emotion labels and causes over time (see Figure 2). This numerical pattern indicates that although parents' increased use of emotion language was not statistically significant, the results are trending in the hypothesised direction.

Children's emotion content. With respect to children's use of emotion labels and causes, no significant main effect of Time $F(1, 34) = .46, p = .50, \eta^2 = .01$, Group $F(1, 34) = 1.58, p = .22, \eta^2 = .04$, or significant interaction between Time x Group was found, $F(1, 34) = 3.64, p = .07, \eta^2 = .10$. Similar to parents, however, the means trended in the hypothesised direction, with children whose parents participated in the emotion-enhanced condition increasing their use of emotion labels following intervention and children of parents in the GTP condition showing the opposite pattern (see Figure 2).

Emotion coaching. Parents' use of emotion interpretation statements, future response prompts, and praise for past emotion responding were summed to produce a total emotion coaching score for each parent at each time point. There were no significant main effects of Time, $F(1, 34) = 3.47, p = .07, \eta^2 = .09$, or Group, $F(1, 34) = 2.26, p = .14, \eta^2 = .06$. As

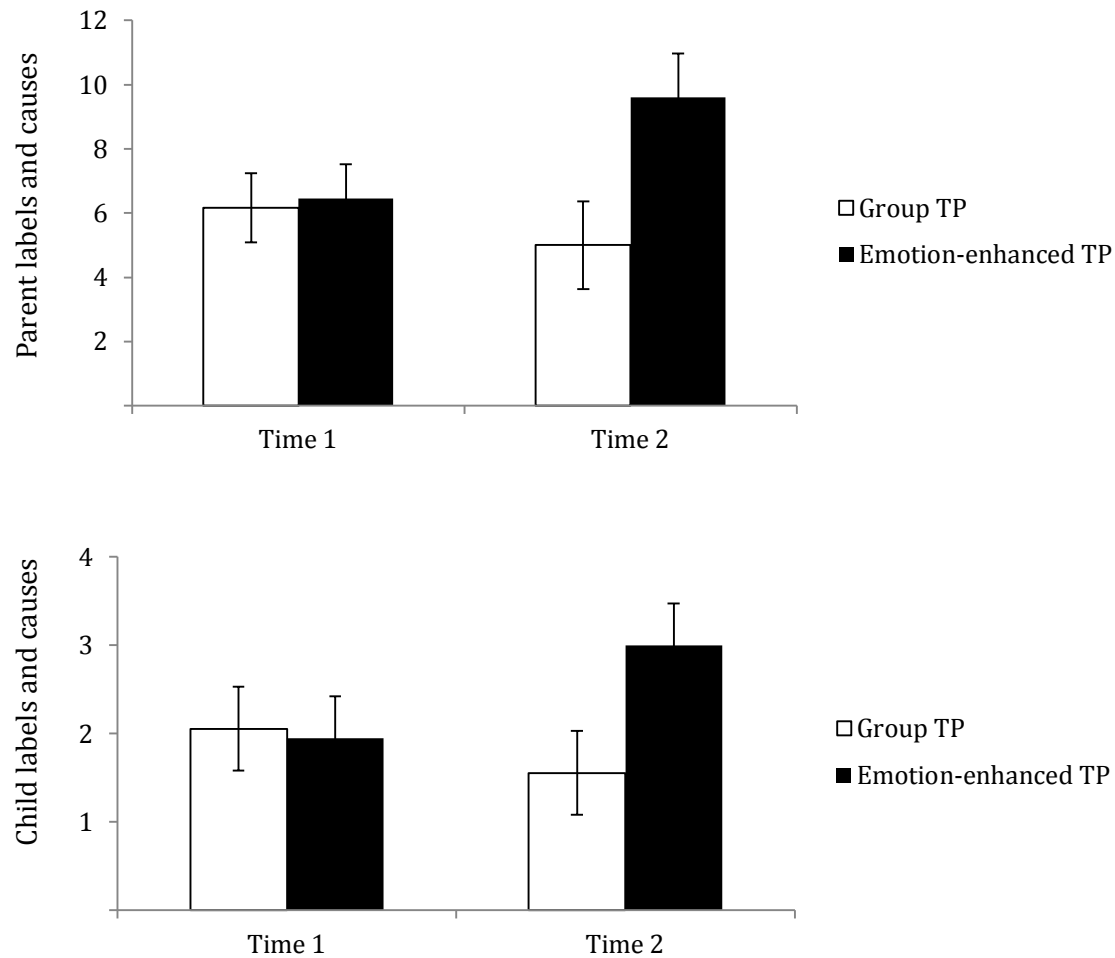


Figure 2. Mean parent and child emotion labels and causes summed, by group.

anticipated, there was a significant interaction between Time x Group, $F(1, 34) = 5.00$, $p = .03$, $\eta^2 = .13$ (see Figure 3). This interaction was followed up using repeated measures ANOVAs for each group separately and revealed a significant main effect of Time for the EEGTP, $F(1, 17) = 4.71$, $p = .045$, $\eta^2 = .22$) but not the GTP condition, $F(1, 17) = .32$, $p = .58$, $\eta^2 = .02$. These findings are consistent with our hypothesis, that parents in the EEGTP group would show a significant increase in emotion coaching following intervention, whereas no change would be evident for parents participating in the standard GTP condition.

Parental reminiscing style. Parents' reminiscing conversations were given a rating from one (low elaborative) to five (high elaborative) depending on the amount of contextual information provided and the nature of the questions asked. Inconsistent with our

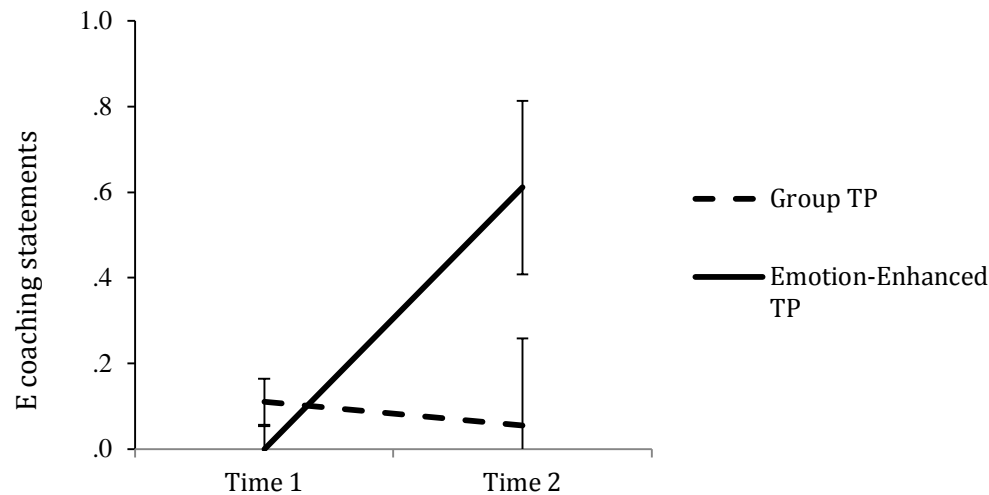


Figure 3. Change in the frequency of emotion coaching statements produced during reminiscing conversations.

hypothesis there were no significant main effects or interactions (Time: $F(1, 34) = .33, p = .57, \eta^2 = .01$, Group: $F(1, 34) = .76, p = .39, \eta^2 = .02$, Time x Group: $F(1, 34) = 1.30, p = .26, \eta^2 = .04$).

Emotion knowledge

To test the hypothesis that involvement in the EEGTP condition would boost children's EK compared to those in the control group, repeated measures ANOVAs were conducted with group as a between participants factor. The dependent variables were children's EK scores on the Denham Affect Knowledge and Denham Causes Task.

Affect knowledge. Children's ability to correctly identify emotions was calculated pre- and post-intervention. There was no significant main effect of Time, $F(1, 32) = .05, p = .82, \eta^2 = .002$, or Group, $F(1, 32) = 1.12, p = .30, \eta^2 = .03$, nor was the interaction between Time x Group significant, $F(1, 32) = 3.48, p = .07, \eta^2 = .10$.

Emotion causes. The number of plausible, independent causes provided by children for each of the four emotions was totalled, giving children a total emotion cause score at each time point. Again there was no significant main effect of Time, $F(1, 33) = .01, p = .94, \eta^2 = .00$, Group $F(1, 33) = 1.43, p = .24, \eta^2 = .04$, or significant Time x Group interaction, $F(1,$

33) = 1.30, $p = .26$, $\eta^2 = .04$.

Affect knowledge and emotion causes combined. As the Affect Knowledge Task has previously been found to reach ceiling effects (e.g. van Bergen et al., 2009), analyses were also run combining participants scores on the Affect Knowledge Task and Emotion Cause Task (see Denham, 2006). Consistent with individual analyses, there was no significant main effect of Time, $F(1, 32) = .01$, $p = .91$, $\eta^2 = .00$, Group $F(1, 32) = 1.44$, $p = .24$, $\eta^2 = .04$, or significant Time x Group interaction, $F(1, 33) = 3.59$, $p = .067$, $\eta^2 = .10$.

Discussion

It is well established that having strong EK is associated with many aspects of positive development and fewer externalising difficulties (e.g. Trentacosta & Fine, 2010). Despite this, research has yet to investigate the effectiveness of integrating components that boost EK into commonly used behavioural interventions for children with CPs. Therefore, the aim of the current study was to broaden the focus of GTP and assess the effectiveness of a new Emotion-Enhanced Group Triple P programme which combines both behaviour and emotion elements. Research has demonstrated an association between parent-child conversations about emotion and children's EK, and has suggested links between poor EK and childhood CPs (e.g. Denham et al., 2002; Dunn et al., 1991). Given this, it was hypothesised that, in addition to seeing reductions in child CPs across both groups, additional benefits in terms of reminiscing content, children's EK, and parent reported CPs would be evident in the EEGTP group. As expected, children's behaviour according to parent report improved in both groups. This is consistent with a significant body of research demonstrating the effectiveness of Triple P interventions in reducing childhood CPs (de Graaf et al., 2008). Findings regarding additional improvements on parent-child conversations, emotion knowledge and behaviour reductions, however, were mixed.

As outlined in the Introduction, a number of experimental studies have shown that

parents can learn to alter the style and content of their reminiscing conversations with children following training (e.g. Salmon et al., 2009; van Bergen et al., 2009). Similarly, the current study identified that parents in the emotion-enhanced condition were using more emotion labels and causes post-intervention, results that were not replicated for parents in the GTP condition. Whilst this pattern of results trended in the predicted direction, they did not reach statistical significance.

There are a number of possible reasons why this may have been the case. Firstly, parents may have felt overwhelmed by the amount of content in the EEGTP programme. Both programmes covered positive parenting principles, goal setting, strategies for increasing and decreasing children's behaviour, and strategies for managing future high risk situations. In addition to these core components, the EEGTP programme introduced emotion-focussed aspects to each activity and involved sections on incorporating emotion content into reminiscing conversations with children. Thus, both sessions had the same number of sessions but varied in their amount of content. Feedback received from parents in the EEGTP group indicated that the emotion specific content of the programme felt 'rushed.' This may have resulted in 'information overload' for parents - reducing the amount of emotion content they were able to take on board.

Another difference which may explain this finding is that children were present during previous intervention studies, whereas the current study was designed to be implemented with parents only. It may be that having children present during reminiscing training provides parents with a richer learning opportunity. Combined sessions would allow parents to practice this method of discourse directly with their child and receive immediate feedback from facilitators, an arrangement that may strengthen parents' learning and promote future implementation of newly acquired skills.

Alternatively, the non-significant finding may have been due to the study having a small sample size ($n=18$ in each condition) and therefore limited statistical power. Previous observational studies have had participant numbers around 50 (e.g. Dunn et al., 1991) and although numbers of completing participants in recent experimental studies are similar to the current study ($n=38$ and $n=44$; Salmon et al., 2009; van Bergen et al., 2009), they too have described this as a limitation.

Despite these influences, the means did reflect an increase in parents' use of emotion labels and cause statements following the emotion-enhanced intervention that was not evident for other parents. This pattern of findings is important as research has identified that children come to internalise the style and content of parent's discussions over time, with children of high-elaborative parents who frequently discuss emotions using more emotion language themselves (Kuebli, Butler, & Fivush, 1995).

Consistent with this, the results of the current study indicated that children's emotion content following the intervention mirrored changes seen by parents. Children too were using more emotion labels and cause statements during reminiscing discussions if their parent was in the EEGTP group. That children were using more emotion labels and causes during conversations is important as the ability to use emotion labels and communicate some of the causes of emotion is likely to help children express their feelings and improve interpersonal relationships (Thompson & Meyer, 2007). The parallel findings between parents and children also reinforce Gottman's (1997) notion of parents as *emotion coaches* for their children, scaffolding language and conversational style and providing the structure for children's future interactions with others.

Also in line with our hypotheses, parents in the EEGTP programme used significantly more emotion coaching statements following intervention than other parents - that is, more

emotion interpretations, future response prompts, and praise for positive emotion responses during reminiscing conversations. This is an important finding as parents play a crucial role in children's EK development and constitute one of the primary sources by which children come to learn about emotion during their early years (Eisenberg et al., 1995). This finding is also important as it proposes that parents can be taught to increase their use of emotion coaching statements with benefits evident in their conversations with children. The current study is one of the first to specifically measure parental emotion coaching during conversations in the context of a PT programme, therefore complementing and extending previous findings in this area.

Interestingly, the well-established finding that parents use a more elaborative reminiscing style following training was not replicated in the current study. It is likely that this was due to the programme's greater emphasis on the emotion content of conversations rather than the style; however it is a finding that may be worth exploring further if replicated in future studies.

In addition to seeing changes in parent-child conversations, the current study also hypothesised that the intervention would boost children's EK in the target group. Previous studies have repeatedly shown evidence of a link between emotion-oriented discourse and children's ability to understand emotion - particularly when these discussions are about past events or explain the causes of emotion (e.g. Thompson & Meyer, 2007; Wareham & Salmon, 2006). However, more recent experimental studies that look at the effects of training parents to engage in elaborative, emotion-rich reminiscing with their children have produced mixed results, often failing to find increases in EK post-intervention. For example in van Bergen et al.'s (2009) study, no improvements in EK were found using the Denham Affect Knowledge Task, and improvements on the Emotion Cause Knowledge Task were only evident at six-month follow-up. Similar to previous studies, differences seen in parent-child

discussions in the current investigation did not translate to improvements in children's EK post-intervention. Three main possibilities as to why these changes may not have been evident are explored.

Firstly it is likely that changes were not seen due to the short length of time between the intervention and post-intervention assessments. The first T2 assessment was conducted only two weeks after intervention completion whereas other studies reporting enhancements in EK have been longitudinal and noted these effects over time (e.g. van Bergen et al., 2009).

Following research identifying similar patterns of results - that is, immediate changes in parent's and children's use of emotion language post-intervention but no evidence of improvements in EK until later follow-up assessments, Salmon et al. (2012) commenced research investigating the trajectory by which changes in EK become evident over time. In one study of a two part investigation Salmon and colleagues looked at the effects of emotion cause training on 3-4 year old's EK. They found improvements in children's emotion labelling but not their causal language skills and it was concluded that emotion labelling is the most amenable to change, likely generalising to other aspects of EK over time. This conclusion is in line with the progression of skills described in previous observational studies indicating that children start to use emotion labels around 18 months of age, develop some of the basics of causal understanding from 28 months, then progress to provide explanations and consequences of emotions after three years (Southam-Gerow & Kendall, 2002; Hickling & Wellman, 2001). Thus it seems that although changes in behaviour (specifically conversation content) may be evident immediately after intervention, changes in knowledge are likely to develop over time as a result of repeated interactions between parents and children. This highlights the importance of longitudinal designs to assess development over time, hence the four-month follow-up in the current study that is yet to be analysed should go some way to rectifying this issue.

This idea leads us to another point of interest in the current study – that it is difficult to determine how often parents were engaging in emotion-oriented conversations with their children at home. It may be that parents increased their use of emotion coaching language during the assessment, knowing what was expected of them, but failed to implement these changes in their everyday conversations with children at home. This is possible given that parents' primary motivation for participation was to reduce oppositional difficulties, and therefore, the implementation of behavioural strategies may have taken priority. Although difficult to control for, this remains an important consideration given the assumption that EK develops over time as a result of multiple emotion-rich conversations between parents and children.

Another possible explanation for the lack of significant findings may be related to limitations of the measures used to evaluate the construct of EK. A common critique of Denham's Affect Knowledge Task is that it is relatively easy for children to reach ceiling effects beyond the age of 54-months (Denham, 2006). Participants in the current study ranged from 38- to 83-months of age, therefore additional analyses combining the two EK measures were conducted to eliminate this as a possible limitation. With regards to Denham's Emotion Cause Task, whilst it has been shown to produce results consistent with other measures of EK, it is important to note that it is a new measure in experimental research and lacks empirical evidence as to its validity and reliability across multiple time points. This task also has the potential to be time-consuming, continuing for as long as children are able to provide plausible independent causes.

During four-month follow-up assessments children appeared to get frustrated doing this task and many had learnt that answering "I don't know" early on allowed them to get through each condition faster and move on to the next task. In the current study, responses were minimal and prompts given by researchers were limited to "*what else do you think*

made him feel that way” to ensure consistency cross sites. Although it would appear that evasion of the task was not as prominent during time 2 assessments, it is possible that similar influences may have masked any emerging benefits made following the intervention. Future administration of the measure incorporating praise to reinforce child contributions may help to balance out some of the less desirable effects of task length and encourage children to perform to their full potential.

Beyond these measures specifically, the finding that young children may perform inconsistently on EK tasks or have scores that vary across tasks has been noted in some studies - even when subtests are intending to measure the same skill (e.g. Laible & Thompson, 1998; Morgan et al., 2010). It has been proposed that these performance differences may be due to the different presentation methods used (e.g. whether pictorial stimuli such as photographs or puppets faces are used) and the level of cognitive demand placed on the child (i.e. whether children are expected to independently generate information; Salmon et al., 2012; Widen & Russell, 2010). Therefore, although Denham’s Affect Knowledge Task is a widely used and accepted measure of EK, this and future studies may benefit from using multiple measures of EK to most accurately capture children’s true capability in this area.

In addition to using multiple measures, looking at individual subtest scores may increase the measures’ sensitivity to changes in EK (e.g. separating out the emotion recognition and perspective taking components of the Affect Knowledge Task). This idea is prompted by Salmon et al.’s (2012) research which reminds readers that EK, often referred to as a singular concept, is in reality made up of a number of similar but distinct components. As previously mentioned, Salmon and colleagues also found that providing training in emotion language increased particular skills but did not generalise to all aspects of EK. Therefore, keeping in mind that the development of EK may be a gradual process by which

particular aspects develop and start to generalise over time, using individual subtest scores may be a better way of tracking more subtle changes in EK, particularly when follow-up times are minimal.

Given the link identified between elaborative, emotion-rich conversations and children's EK, it is still anticipated that increases in children's EK will be evident in the EEGTP condition during the current study's four-month follow-up assessment. If this does not turn out to be the case, the results could suggest two possibilities. It may be that four months is still not long enough for changes in EK to be evident on measures of EK. Previous studies that have noted improvements conducted follow-up assessments six months post-intervention (van Bergen et al., 2009; Salmon et al., 2009). Alternatively, as previous studies reporting increases in EK also found significant increases in parents' elaborative style, it may be that changes in both parents' style and content of reminiscing are necessary to precipitate change. Future longitudinal research including an elaborative, reminiscing-only control condition would aid in teasing apart these effects.

If, as expected, improvements children's EK in the emotion-enhanced condition are evident at four-month follow-up, we hope to be able to answer the question: what is the role of EK in childhood CPs? Or more specifically, are positive changes in EK an additional mediator for reductions in CPs? Based on previous research suggesting a link between the two, it is hypothesised that this will be the case and that changes seen in children's EK at four-month follow-up will result in additional reductions in CP behaviour compared to controls. As the current study is one of the first to directly address this question, and the results from time 2 assessments are limited, research has yet to support this hypothesis.

If further studies of a similar nature are conducted it would be beneficial to consider the inclusion of a waitlist control condition. This would help to ensure that conclusions drawn reflect intervention effects rather than developmental changes over time – an important

consideration given the rapid pace by which EK develops during the preschool years. Also, as research has yet to assess for any indirect effects of GTP on emotion development, the inclusion of a waitlist control will eliminate time as a confounding variable if changes in EK are seen for both groups following intervention.

In reflecting on some of the limitations of the current study and the at times inconsistent results that have emerged, it seems appropriate to remind the reader of the complexities of conducting research with this population. Firstly, recruiting and retaining participants is difficult making the inclusion of multiple control conditions challenging and at times impractical. Reese and Newcombe (2007) visited parents in their homes to reduce parental demands and minimise attrition rates, however this requires time and financial resources that are not always available.

Secondly, the benefits that are likely to be obtained by increasing the number of trials or variety of measures used are constrained by the need to keep assessments concise. This is essential to maximise participant willingness and motivation to engage in the study, and to minimise child distraction and fatigue across assessment tasks. Thus researchers need to consider both elements, producing a balanced research design that gathers strong data whilst being sensitive to the specific characteristics of the subject group.

Thirdly, it is crucial to consider the vast number of factors shaping parent and child behaviour and knowledge. These include but are by no means limited to: children's age and language ability, parental mental health difficulties, socioeconomic status, and wider societal expectations. Research has also indicated that mothers adapt their reminiscing style and use of emotion content depending on children's temperament and gender, and has identified differences across cultures in relation to the emphasis that parents place on emotion talk and understanding (e.g. Fivush et al., 2006; Kuebli et al., 1995; Wang et al., 2006). These are all

factors which add to the picture of parent-child conversations, EK and behavioural difficulties and again highlight the challenges of using experimental studies in which only some of these factors can be controlled for.

Overall it seems that there are a number of factors which make experimental research in this area difficult, and research findings remain somewhat unclear. Experimental studies, including the current pilot study, have shown that parents can be taught to use more emotion language and coaching with their children. Observational studies have also indicated links between parent-child conversations and children's EK, and between poor EK and child CPs (e.g. Denham et al., 2002; Dunn et al., 1991; van Bergen et al., 2009). Research has yet to draw strong conclusions regarding causal relationships between these factors, however, and to clearly establish the mechanisms underpinning these relationships. Further exploration of the different components of EK and how they evolve over time is likely to enhance our understanding, and future longitudinal studies will be essential in drawing more concrete conclusions.

Given findings that poor EK is associated with childhood CPs and a number of other short and long-term negative consequences, understanding the direct relationships between these factors and ways in which interventions can boost EK will be important for promoting young children's on-going positive development. The current study is the first of our knowledge to combine both behaviour and emotion-focused elements, integrating elaborative, emotion-rich reminiscing into an already established PT programme. It is also one of the first studies to engage parents in this type of discourse training in a group context, rather than individually. Therefore the current study provides a crucial first step in determining whether broadening the focus of PT programmes can improve EK and outcomes for children with CPs and whether such interventions can be administered in a group, rather than individual context to enhance effectiveness and minimise resource demands.

Thus far it does not appear that the results deviate significantly from previous interventions where parents have been trained in elaborative emotion reminiscing, suggesting some promise for the contents' integration into group PT programmes (e.g. Salmon et al., 2009; van Bergen et al., 2009). Results from the four-month follow-up assessments will be essential in determining this, however, given that changes in children's EK likely evolve over time. The finding that parents in the EEGTP group were using more emotion coaching statements following intervention suggests that the programme was providing parents with tools which they were taking on board and beginning to apply. However, the lack of statistical significance in parent and child increases in emotion labels and causes, and parental feedback that the emotion-focused components of the programme felt rushed, suggests that further research may be needed to determine the optimal balance of intervention content and length to promote parental engagement and maximise intervention effectiveness.

In conclusion, it is clear that there is a link between parent-child conversations and children's EK, however the recipe by which this can be 'trained' in experimental studies and the effect that this can subsequently have on CPs throughout childhood is still being constructed. By extending previous studies, the current pilot study took steps to broaden the focus of a well-established PT programme. Findings constitute a platform for a more thorough understanding of the nature of EK in childhood and the key ingredients and doses needed to maximise intervention effectiveness for children with CPs.

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Appendix A

Information Sheet for Parents



Emotion Enhanced Triple P (Positive Parenting Program)

Karen Salmon

Associate Professor

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(04) 463- 9528

Dear Parents/Caregivers,

We are conducting a study that aiming to evaluate the effectiveness of a new group parenting program aiming to help parents develop their child's ability to manage their emotions and behaviour. We are inviting parents who have a child aged 3- to 6 years, who is showing difficulties with his or her behaviour, to take part in this project. This research has been approved by the School of Psychology Human Ethics Committee under delegated authority from Victoria University of Wellington Human Ethics Committee.

What is the purpose of this research?

- This research evaluates the effectiveness of a new form of the Triple P Positive Parenting Program, which has been developed through over 30 years of research and offers practical resources and support for parents. It is important that Triple P is updated and revised to ensure that it is meeting the needs of families.

Who is conducting the research?

- This research is being conducted by researchers from the School of Psychology at Victoria University, Wellington (Associate Professor Karen Salmon), and the Faculty of Education at the University of Auckland (Professor Matthew Sanders and Dr Cassy Dittman). The research is funded by Victoria University of Wellington.

What is involved if you and your child participate in this study?

- Parents who participate will be allocated to either standard Group Triple P or a new emotion-enhanced version of Group Triple P. Please note that we assign parents randomly to each program, and parents are not able to choose which they attend.
- Before starting the group program, you and your child will be asked to visit our clinic in the School of Psychology's Kelburn Campus, for an initial session that will take approximately

90 minutes. During the session, you will complete a number of questionnaires about your parenting, your child's behaviour and its impact on you, and your own stress and coping.

- At the same time, we will ask your consent to engage your child in tasks that help us understand her or his language skill and understanding and management of emotions. These tasks are designed to be fun for young children, and involve looking at pictures, playing with puppets, and playing games. We will videotape these assessments. We will ask you to talk with your child about one positive and one negative recent event. We will audiotape your conversation.
- So that we can assess the immediate and long-term effects of each version of the Group Triple P program, you and your child will be asked take part in these assessment sessions on 3 occasions: before the program starts, at the end, and again 4 months after completing the program. At the end of the first assessment session, we will let you know which group we will offer you.
- We will also ask for your consent to contact your child's school or kindergarten teacher (where relevant). We would like to ask them complete a short rating scale about your child's behaviour and emotions. We will give teachers a stamped self-addressed envelope to return this form to us to help maintain confidentiality.

What is involved in the group programmes?

- Both programs involve coming to 5 x 2-hour group sessions, and having 3 x 15-minute individual phone consultations. The group sessions will be run at our research clinic at Victoria University of Wellington's Kelburn Campus.
- The group includes information about parenting and child behaviour, and strategies for promoting positive parent-child relationships and dealing with difficult behaviour.
- The phone consultations are designed to support you in how you implement the parenting skills and strategies taught in the group sessions and to help problem solve any difficulties.
- In the emotion-enhanced group program, extra emphasis will be placed on strategies and examples to help teach children to manage their emotions.
- Both groups will be delivered by accredited Triple P practitioners.
- Participation in both groups is free of cost, and you will keep all program resources.
- Some group sessions will be videotaped to ensure that the groups are being delivered to you in the standardised way. Parents will be informed of this and can refuse if they feel uncomfortable.

Privacy and Confidentiality

- Consent forms and data from the study will be kept for five years after we publish any of the results of this research.
- Each family will be assigned a code number and your name will be erased from any forms or videotapes. Coded data will be securely stored in the laboratory of Dr Karen Salmon.
- Only the researchers and their assistants will have access to information that matches names with code numbers. All research assistants and group facilitators will be required to sign a confidentiality agreement.
- Coded data may be shared with other competent professionals upon request.

What happens to the information that you provide?

- We may publish the results of the study in a scientific journal or present them in a conference. For both publication and theses, no child will be identified in the results and will remain confidential.
- A summary of the results will be sent out to you upon completion of the study, which we anticipate will be in early 2012.

If you agree for you and your child to participate in this study, please complete and sign the

attached consent form. If you have any further questions, you are most welcome to contact Dr Karen Salmon, ph 463 9528 or Karen.Salmon@vuw.ac.nz.

Thank you for your time in considering participating in this study.

Yours sincerely,

Karen Salmon, PhD., Dip.Clin.Psych

Associate Professor in Psychology

Appendix B

Consent Form

Statement of Consent

I have read all the information above and have asked any questions relating to this study, which have been answered satisfactorily.

I agree to participate in this research and consent to my child's participation. I understand that I can withdraw from this study at any point prior to the end of the study, and that my child is free to indicate that she or he does not wish to participate.

Parents Name:

Child's Name:

Child's Date of Birth:

Address:

Email Address:.....

Phone Number:

Signature:

Date:

Appendix C

Parent-Child Conversation Coding Protocol

Parent-Child Conversation Coding Scheme

Code each event separately. (e.g., 'negative' or 'positive' event).

Disregard off-topic utterances (as in Wareham, 2006, Fivush et al., 2003). Cross them out and don't code at all.

Don't start coding until the event itself is introduced.

Note whether event was discussed first or second.

Measures / Datapoints:

1. Report **length** of conversation?
2. Report # of **conversational turns**?
3. Report # of **parent interruptions** (i.e., parent interrupts child).
4. Report # of **child interruptions** (i.e., child interrupts parent).
- 5a. Report frequency of **prototypical emotion labelling** (e.g., happy, angry, sad). Reflects an internal state. Please *exclude quasi-emotions* from coding (e.g., good, bad, fun, funny, friendly, quiet).
 - # of positive emotion labels produced by parent
 - # of negative emotion labels produced by parent
 - # of unclear emotion labels produced by parent
 - # of positive emotion labels produced by child
 - # of negative emotion labels produced by child
 - # of unclear emotion labels produced by child
- 5b. Report frequency of **emotion behaviour labelling** (e.g., crying, laughing, hit). An internal state made you do this behaviour.
 - # of positive emotion behaviour labels produced by parent

of negative emotion behaviour labels produced by parent

of unclear emotion behaviour labels produced by parent

of positive emotion behaviour labels produced by child

of negative emotion behaviour labels produced by child

of unclear emotion behaviour labels produced by child

6. Report frequency of **emotion cause** discussion. This is when the cause of the emotion is discussed by providing the cause (“You were angry because daddy didn’t let you play”) or prompting the other participant to provide the cause (“Why were you scared?”). In order to be included, the statement must include the emotion label. Causes should be independent (the same cause of emotion repeated several times is entered only once).

of emotion cause statements produced by parent.

of emotion cause statements produced by child.

7. Emotion Coaching Items.

7a. Report frequency of **constructive emotion interpretation**. Parent reference to child’s signs/body cues etc. that indicated to the parent that the child was feeling a particular way (“I knew you were feeling scared because you screwed up your eyes...”)

of emotion interpretation statements.

7b. Report frequency of statements that **prompt future emotion responding**. Specific suggestions of future (positive) coping strategies as discussed in the Triple P programme. “Next time you could use your big breaths to get a little calmer.”

of future emotion response prompts.

7c. Report frequency of statements that **praise past emotion responding** in the past event being discussed. Praise for specific, desirable emotion responses. “I liked the way that you got yourself calm and used your ‘take 10 breaths.’”

of statements praising an emotion response.

7d. Report frequency of statements that provide **non-constructive feedback** about the discussed event and/or future responses. These are coercive statements that do not provide positive information or strategies. They may sound like an accusation. Past event

example: “The time you had a tantrum” with no further discussion of the issue. Future behaviour examples: “Next time you’ll do it differently.” “Next time you’ll come to the car straight away without misbehaving.”

of non-constructive feedback statements.

7e. Report frequency statements providing **constructive non-emotion (behavioural) feedback** about discussed event / future responses. E.g., “next time Mum is on the phone and you want to speak to her, how about you wait patiently for a little while until she is finished.”

of constructive feedback statements.

8. Report “**Maternal elaborative style.**” See Laible (2004, 2011). A 5-point scale reflecting the elaborateness of a Mother’s utterances across the whole conversation. (Note – this may be dropped if coding a transcript takes too long). Anchor-points described below:

1 = little or no background material discussed. Maternal questions not open-ended;

3 = moderate background material discussed, mothers use a mixture of open-ended and yes-no questions, and repetition is occasional;

5 = high levels of background material discussed, mothers ask predominantly open-ended questions, and repetition is minimal and only when the child ignores a question or does not respond.

Appendix D

Denham Causes Task Coding Protocol

Denham Puppet Causes Task Coding Scheme

For the Denham Puppet Causes task, please transcribe each reason provided by the child onto a separate sheet (see layout below). You do not have to transcribe whole conversations—just provide a list of every reason provided by the child. Also report the number of prompts the child received for that item (e.g., sad-puppet, or happy-child).

From Denham (2006): “Scores reflect the number of **accurate, independent** reasons given”

Clarification / Issues to consider:

Only one score is reported for each emotion – collapse causes (and requirements of independence) across self and puppet.

Independence: Denham (2006) states that “I get angry when my buddies fight” and “I get angry when Shawn hits me” is a single response/reason (that is, only ONE point would be given, NOT TWO).

When considering independence, we first looked to identify causes that shared an action/experience/outcome (e.g., “playing” or “getting”). Then we looked to see if these actions/experiences/outcome shared a subject: (1) self, (2) other people, (3) objects, (4) food.

If they shared an action/experience/outcome but had different subjects, they WERE independent.

If they shared an action/experience/outcome and a subject, they were NOT independent.

Thus the responses “getting a new doll” and “getting lollies” are two different things/causes and receive two points.

By contrast, “playing with harry”, and “playing with my sister” only receive one point (representing the action/experience “playing” and the subject “another person”).

Furthermore, “she got an ice-cream” and “I get to go to the dairy and get treats” are NOT independent. The subject (self) and the outcome (getting food) are the same.

Please distinguish between internal and external causes. This means that “eating a lot of lollies and getting sick” and “being falling over and hurting my knee” are two different causes (internal “sick” versus external “hurt”).

Negative statements such as “Happy because he didn’t get robbed” “He’s happy because his house didn’t fall down in an earthquake” are OK.

Statements about the appearance/clothes (self or doll) must include evaluative information in order to be considered a cause. That is “she has a pink shirt” is not sufficient. But “she has a pink

shirt and she LOVES pink" would be.

With regard to going to locations – each one is considered independent. E.g., "she went to the zoo" and "she went to the movies" are both worth a point. However, "she went to her friend's house" and "she went to her cousin's house" are NOT (as they both involve going to someone else's house"

Finally, causes must be plausible!

E.g. Monsters (and other things that do not exist) not to be given points (or discuss with each other).