

**The Determinants of Emotionally Healthy Parenting and the Transmission of Emotion
Regulation from Parent to Child.**

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Summary

In recent years, there has been increased interest in the determinants of emotionally healthy development in young children. Major theoretical models identify parent characteristics, child characteristics and parenting behaviours in this emotional socialisation process. Little attention has been paid to the impact of parent personality and parent emotional functioning and their role in influencing parenting emotion based behaviours. Thus, the aim of this thesis was to empirically evaluate theory driven models of these factors to clarify the impact of parent emotional functioning on parenting behaviour. The relationships between parent personality, parent emotional intelligence and emotion based parenting practices were investigated using cross sectional and longitudinal designs and advanced statistical techniques including structural equation modelling and latent growth models. Three separate studies were conducted. The first study examined a cross sectional structural model of these parent factors in a large community sample of parents of pre-school age children. The second study comprised a 3 year longitudinal study examining these relationships over time and included child outcome measures. The third study investigated the possibility of improving parent emotional intelligence, emotion regulation skills and emotion coaching behaviours in a brief workshop format with parents of pre-schoolers. The results of these studies indicate that parent emotional attitudes and behaviours play an important role in parenting behaviour and child outcomes. Taken together, these studies advance our understanding of the relationships between these theoretically associated factors and their role in child emotional development. Understanding these relationships is critical to develop effective intervention and treatment programs.

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Statement of Candidate

I certify that the work in this thesis entitled “The Determinants of Emotionally Healthy Parenting and the Transmission of Emotion Regulation from Parent to Child” has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree to any other university or institution other than Macquarie University. All information sources and literature used are indicated in the thesis. I also certify that the thesis is an original piece of research and it has been written by me. The contributions of each of the authors listed for the three papers contained in this thesis are detailed below.

Chapter 2, 3, 4: Sue-Anne Greig was responsible for formulation of research questions, application for Ethics Committee approval, data collection and preparation, statistical analysis and preparation for each of the three papers. Dr Carolyn Schniering and Associate Professor Cathy McMahon supervised the design and writing of each paper. Dr Alan Taylor supervised the statistical analysis of each paper.

The research presented in this thesis was approved by Macquarie University Ethics Review Committee, reference numbers: HE25SEP2009-D00132 on the 2nd November, 2009; 5201000985, 29th September, 2010 and 5201300258 on 11th July, 2013.



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Chapter One

Introduction

Child social and emotional competence

A crucial developmental task for young children is learning to understand emotions in themselves and others in order to develop social and emotional competence (Eisenberg, Cumberland & Spinrad, 1998; Kopp, 1982; Saarni, 1999). Children who are better able to read and understand emotional cues in their family and social situations are more able to form positive interpersonal relationships (Trentacosta & Fine, 2009). Emotional competence is associated with pro-social behaviour and social relationships, attentional skills, and physical health and remains relatively stable through to adolescence (Gottman, Katz & Hooven, 1996; Saalquist et al., 2009; Shields & Cicchetti, 1998). Children who have difficulty developing emotional competence experience more negative emotions and are more likely to have social and behavioural problems (Denham & Kochanoff, 2002; Eisenberg et al., 1996). As they are less able to regulate their emotions, these children experience more difficulties with school transition and making friends and have more difficulty understanding and coping with their own and others emotions. These deficits are associated with later risk taking behaviours, including antisocial behaviour and substance abuse in adolescence and adulthood (Carlton & Winsler, 1999; Eisenberg & Morris, 2002; Raver, 2002). Emotional competence includes the child being able to regulate their experience of emotions, effectively express their emotions, understand their and others emotions and use this knowledge in the context of their relationships with others (Denham et. at., 2003; Eisenberg et al., 1998).

Child Emotion Regulation

Emotional regulation, or the ability to manage emotions in a flexible and adaptable manner across a range of circumstances, is a central element of emotional competence (Calkins, Smith, Gill & Johnson, 1998; Eisenberg & Spinrad, 2004). In the context of flexibly responding to support situational demands (Kopp, 1989), emotion regulation has often been defined as the ability to initiate, maintain, and modulate emotional arousal in order to

accomplish individual goals and facilitate the adaptation to the social environment (Thompson, 1994). Although aspects of emotion regulation are considered to have a biological and temperamental basis, most researchers recognise that parents, caregivers and siblings play an important role in helping infants and toddlers learn to self soothe and regulate emotional and psychological arousal - the building blocks of emotion regulation and emotional understanding (Eisenberg, Cumberland & Spinrad, 2004; Gottman, 2001; Thompson & Meyer, 2007; Volling, McElwain, Notaro & Herrera, 2002). From infant attachment behaviours through to the preschool years, children become increasingly proficient in the acquisition and display of emotion regulation skills and abilities (Calkins & Hill, 2007; Gross, 1999), effectively using utilising metacognitive strategies, such as deliberately changing thoughts, by the early school years (Davis, Levine, Lench & Quas, 2010). In academic settings, children's regulation of emotions has been found to be positively correlated with academic performance (Trentacosta & Izard, 2007), while children who exhibit negative emotionality are more likely to have academic problems due to difficulties with attentional control (Eisenberg et al., 1997). Children with less effective emotion regulation are also more likely to experience internalising and externalising problems (Eisenberg et al., 2009) and clinically significant emotional and behavioural problems particularly related to the ability to correctly identify sadness and anger from expressive and situational cues (Martin, Boekamp, McConville & Wheeler, 2009).

Theoretical models of parent/child emotion regulation.

In an effort to clarify the relationship between parents' emotion-related behaviours, such as discussion and teaching about emotions, and children's regulation of emotion and behaviour, several theoretical models have been developed. Included in the domain of socialization of emotion are parental practices and behaviours that influence a child's learning

regarding the experience, expression and regulation of emotion and emotion-related behaviour.

Meta – emotion model.

Meta-emotion philosophy is defined as a set of feelings, understandings of, and beliefs about one's own emotions and those of others (Gottman, Katz & Hooven, 1996) and is conveyed through parent-child interactions. The parent meta-emotion philosophy, as represented by the parent's awareness, acceptance and coaching of emotion directly influences the child's emotional competence through the child's awareness, expression and regulation of emotion and this is evidenced through psychosocial adjustment and peer relations (Katz, Maliken & Stettler, 2012). Parents are considered to be emotion coaching or emotion dismissing depending on the way in which they engage with their child's emotional experience and expression. Emotion coaching parents are more aware of their child's emotion and help their children deal with their emotions, particularly anger and sadness, notice lower intensity emotion in their children, view the child's negative emotion as an opportunity for intimacy and teaching, are more empathic, assist the child to label their emotions and help the child to problem solve strategies for dealing with the situation while setting behavioural limits (Gottman, Katz & Hooven, 1997; Gottman, 2001). In contrast, emotion dismissing parents tend to want to protect their child from negative affect which they see as harmful and potentially destructive and will try to distract or cheer up the child to change the negative affect as quickly as possible. These parents tend to deny or ignore emotion, have difficulty managing their own emotional reactions and experience personal distress when their children experience intense negative emotions. Emotion dismissing parents see an unhappy child as a failing of their parenting and typically don't notice lower intensity negative affect in their children (Gottman, 2001).

Empirical evidence has provided support for the meta-emotion model of the transmission of emotion regulation. Strong associations have been found between parents who emotion coach and children who are better able to regulate their emotions and who have better social and emotional competency (Denham et al., 1997; Ramsden & Hubbard, 2002) for preschool age children (Brophy-Herb et al., 2010), school age children (Chen, Lin & Li, 2012; Duncombe et al., 2012) and adolescents (Katz & Hunter, 2007). Emotion coaching has also been found to buffer children from the negative effects of marital distress, domestic violence and maltreating parents (Katz & Gottman, 1997; Katz, Hunter & Klowden, 2008, Katz and Windecker-Nelson, 2006; Shipman et al., 2007). In their original longitudinal study, Gottman et al. (1996) found from preschool to middle childhood, emotion coaching predicted greater inhibitory control, lower levels of behaviour problems, higher levels of academic achievement, and better physical health. Denham and Kochanoff (2002) found emotion coaching with three and four year old children predicted emotion knowledge and understanding at five years of age, while adolescents who were emotion coached were better able to self-regulate and demonstrated fewer externalizing problems 3 years later (Shortt, Stoolmiller, Smith-Shine, Eddy, & Sheeber, 2010).

Children of emotion dismissing parents however, have been found to have more difficulty with emotion regulation (Gottman et al., 1996; Ramsden & Hubbard, 2002) and are more likely to experience behavioural and social problems (Katz & Windecker-Nelson, 2004; Lunkenheimer, Shields & Cortina, 2007). There have however, been some mixed findings. Several studies with school age children have found no direct links between emotion coaching and child social competence or problem behaviours (Baker, Fenning & Crnic, 2011; Lunkenheimer, Sheilds & Cortina, 2007). This may suggest that the effectiveness of emotion coaching is more evident in preschool age children, or that other factors in the parent, child or environment override the impact of emotion coaching.

Emotion Related Socialisation model.

Eisenberg, Spinrad and Cumberland (1998) proposed a heuristic model of the socialisation of emotion, in which parent, cultural and contextual factors influence parent emotion related socialisation behaviours (ERSB's). Parent ERSB's include reactions to child emotions, discussion of emotion and emotional expressiveness and are hypothesized to be mediated by aspects of children's temperament/personality, including their regulatory abilities. In addition to being influenced by the broader context, parents' emotion related beliefs are hypothesized to influence their ERSBs which then directly influence children's emotion regulation, and consequently, problem behaviours, and thus the socialisation process is bidirectional. The model posits that ERSB's affect the child's arousal level and therefore the child's functioning in many ways including the experience and expression of emotion; the understanding of emotion and regulation; the affective stance toward emotion; schema formation; and the quality of the parent-child relationship (Eisenberg, et al., 1998).

Research largely supports the importance of ERSB's in the child's developing emotion regulation, with toddlers (Mirabile, Scaramella, Sohr-Preston & Robison, 2009), and with school age children (Gentzler, Contreras-Grau, Kerns & Weimer, 2005; Valiente, Lemery-Chalfant & Reiser, 2007). Longitudinal research by Eisenberg and colleagues has found maternal positive emotional expression and warmth to be predictive of child emotion regulation, adjustment and social competence in four to eight year olds (Eisenberg et al., 2003) and 9-13 year olds (Eisenberg et al., 2005). Parent negative reactions to pre-schoolers have been found to predict child negative emotionality, with child temperament mediating the reporting of internalising and externalising behaviours in several studies of pre-schoolers (Engle & McElwain, 2011; Spinrad et al, 2007; Valiente et al., 2006; Wong et al., 2009). Warren and Stifter (2008) found that mother's emotion based behaviour (expressiveness,

conversation and reactions to child negative emotions) was predictive of children's emotional self-awareness one year later.

Tripartite model

More recently, Morris and colleagues (Morris, Silk, Steinberg, Myers & Robinson, 2007) have proposed a tripartite model incorporating the family context in the development of emotion regulation. They suggest that family context affects the development of emotion regulation in three ways. First, children learn about emotion regulation through observation and parental role modelling. Second, specific parenting practices and behaviours including emotion coaching and parental reactions to emotion affect the child's emotion regulation. Third, emotion regulation is affected by the emotional climate of the family as reflected in the quality of attachment relationships, family expressiveness and the emotional quality of the marital relationship. These factors are hypothesised to directly influence the child's developing emotion regulation and to directly and indirectly impact the child's adjustment and social competence. Parent personality, reactivity and emotion regulation provide the foundation for each component of the tripartite model of parent behaviour. Child characteristics including emotional reactivity and developmental stage are hypothesised to interact with the parenting behaviour and emotion regulation abilities.

Much of the research previously cited in support of the meta-emotion and ERSB models also provide support for the inter-relationships between many of the elements of the tripartite model. In addition, positive parent emotionality and use of emotion regulation strategies has been found to be associated with lower levels of negative expressed emotion, improved child emotion regulation and lower externalising behaviours in families of school age children (Morris et al, 2011), and in families with a history of child maltreatment (Robinson et al, 2009) and children diagnosed with ODD (Dunsmore, Booker & Ollendick, 2013). Morelen and Suveg (2012) also found evidence for the reciprocal nature of emotion

regulation functioning in families of 7-12 year olds for both supportive and non-supportive reactions to negative emotions. Keaton and Kelly (2008) also found evidence supporting the family context of the tripartite model, in their study of families where the amount of family conversation was related to child emotional intelligence. They concluded that children develop the ability to recognize, understand, and manage emotions if they are raised in families with open communication and discussion about feelings.

Parent determinants

Parent dispositional characteristics feature in each of the dominant theories of emotion regulation development in children. Despite this recognition, the qualities of the parent that influence variation in emotion based parenting are less well understood and have been partially explained by factors including maternal attachment styles (Eisenberg et al., 1998), parent cognitive style (Cassano & Zeman, 2010), parent attributions (Bugental, Johnston, New & Silvester, 1998) and maternal psychological health (Feldman et al., 2009). More than 20 years ago, both Belsky (1984) and Dix (1991) recommended further investigation into the impact of parent dispositional qualities, including temperament, personality and emotion regulation, although they have received relatively little research attention, leaving the identification of the determinants of emotionally healthy parenting an important endeavour (Belsky & Barends, 2002; Denham, Bassett & Wyatt, 2007; Lorber, 2012; Morris et al., 2007).

Parent Personality

Belsky's (1984) process model of the determinants of parenting identified parent personality, child characteristics and contextual sources of stress and support as sources of influence in the emotion regulation of the child, with parent personality being the most important determinant. Prinzie et al.'s (2009) meta-analysis of 30 studies indicated that in general lower neuroticism and higher extraversion, openness, agreeableness and

conscientiousness were associated with greater parental warmth and behaviour control, although the findings were modest and inconsistent. For example, mothers high in agreeableness have been found to be more responsive and less intrusive in some studies (Kochanska et al., 2012; Prinzie et al., 2004) and yet in other studies there has been no association (Bornstein, 2011). Similarly, openness appears to be related to parenting cognitions and behaviour in some studies (Bornstein, 2011; Prinzie et al., 2004), but not related in others (Huver et al., 2010). Given that the big five taxonomy for personality is used almost universally in this research it is surprising that these differences continue to be found.

Personality factors have also been found to relate to diverse parenting cognitions across multiple cultural contexts (Bornstein et al., 2007), and to impact on parenting behaviour despite daily hassles and transient mood (Belsky, Crnic & Woodworth, 1995). In one of the only studies to examine parent emotion socialisation practices and their association with personality and parent emotion regulation, Hughes and Gullone (2010) found that parent personality, particularly openness and agreeableness, significantly predicted parent emotion socialisation practices including supportive responses to negative emotions, emotional expressiveness and expressive encouragement with children 10-18 years.

Longitudinal research examining parent personality characteristics and their impact on parenting practices and child outcome also demonstrates mixed findings. Studying mothers of toddlers, Smith et al.'s (2007) found a relationship between parent extraversion, conscientiousness, openness and agreeableness and positive parenting behaviour, partially mediated by mother emotional expression, over 1 year, although Clark, Kochanska and Ready (2000) found no relationship between agreeableness or openness and responsiveness to their infants. In one of the only longitudinal studies with pre-schoolers, Kochanska, Clark and Goldman (1997) found that mothers high in negative emotionality and disagreeableness showed more negative affect and their children were more defiant and angry, were less likely

to be securely attached, had more behavioural problems and lower internalisation of rules. For parents of adolescents, agreeableness, extraversion and conscientiousness have been the best predictors of parenting behaviour (De Haan et al., 2009; De Haan et al., 2012) and teen adjustment problems (Oliver et al., 2009). Taken together, this body of work clearly indicates there is some predictive utility of parent personality factors in the development of emotion regulation in children that warrants further attention.

Parent Emotion regulation

The emotion regulation of the parent plays an important role in the emotion socialisation process of children (Belsky & Barends, 2002). Parents who have difficulty regulating their own emotion expressiveness and reactions are more likely to have difficulty tolerating negative emotions in their children (Katz & Hunter, 2007) and will have fewer strategies for teaching their children about emotions (Katz & Windecker-Nelson, 2004; Martini, 2004).

In the influential Gross (1998) model, emotion regulation is defined as “processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (p. 275). The two primary emotion regulation processes described by Gross and Thompson (2007) are cognitive reappraisal which consists of thinking differently about an emotion-triggering event in order to manage emotion and emotion suppression which refers to directly influencing the experience, expression, and/or physiological responses associated with emotion. Individuals who typically regulate their emotions through use of reappraisal report greater psychological well-being than others, whereas individuals who typically regulate their emotions through use of suppression report less positive affect, more negative affect, less social support, and more depression (John and Gross, 2004).

Extant research examining parent emotional functioning has largely confirmed the association between parents high in emotional awareness and functioning and positive developmental outcomes in children. Mothers with more adaptive emotion regulation, utilising a variety of strategies including cognitive reappraisal, attention shifting and focusing and effortful control, have been found to use more supportive reactions to their children's emotional experience resulting in better emotional regulation and less problem behaviour in their children (Cumberland-Li et al., 2003; Hans & Shaffer, 2013; Hughes & Gallone, 2010; Lorber, 2012; Morris et al., 2011; Robinson et al., 2009; Valiente, Lemery-Chalfant & Reiser, 2007). Further, mothers who were more aware of and accepting of their own emotions had adolescents with lower depressive symptoms, higher self-esteem, fewer externalising problems, and less negative affect (Katz & Hunter, 2007; Yap, Allen, Leve & Katz, 2008).

Parent Emotional Intelligence

Gross (1998) and Gottman (2001) have suggested emotion regulation strategies underlie the development of social and emotional competence and that this forms the basis of emotional intelligence. Individuals higher in emotional intelligence have been found to have more emotion regulation strategies and use them more effectively than individuals with lower emotional intelligence (Schutte, Manes & Malouff, 2009). Emotional intelligence describes the ability to perceive emotions, to access and generate emotions to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth (Mayer & Salovey, 1997; Salovey & Mayer, 1990). These abilities are held to be somewhat distinct, but to also form a general factor. Emotional intelligence has been defined and measured both as an ability (Mayer, Salovey & Caruso, 2004), similar to cognitive intelligence, and as a trait (Neubauer and Freudenthaler 2005; Petrides and Furnham 2003). While both ability and trait operationalization have utility,

trait definitions are considered more appropriate when considering characteristic adaptive emotional functioning in daily life (Schutte, Manes & Malouff, 2009).

Since Salovey & Mayer's (1990) theoretical contribution, a wealth of research has been conducted to clarify and validate this emerging construct. Of note, three meta-analytic investigations have examined the relationship of emotional intelligence to general mental ability, personality, and performance in employment, academic, and life settings (Van Rooy & Viswesvaran, 2004; Van Rooy et al., 2005); and mental and physical health (Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007). Findings indicated that both trait and ability measures correlated with performance in employment, academic, and life settings, and with self-reported levels of mental health, psychosomatic health, and physical health. While trait emotional intelligence measures correlated with broad assessments of personality (e.g., Big Five) the correlations were only moderate and thus not redundant with general personality.

Parents with high emotional intelligence might also be expected to possess an advantage in parenting, as improved emotional awareness, use and regulation of emotions would not only assist with understanding their child's emotional experience but also to effectively teach emotion management skills.. Despite the notion that emotionally intelligent parents are more likely to have emotionally intelligent children (Salovey et al., 2000), there are very few studies investigating emotionally intelligent parenting, or examining the development of this type of intelligence in the family setting. Research does confirm the association between the parents' level of emotional control or regulation and that of their children (Cumberland-Li et al., 2003), and that perceived emotional intelligence is highly correlated between adolescent and adult children and their parents (Sanchez-Nunez, Fernandez-Berrocal, & Latorre, 2013), however, to our knowledge there are no published studies specifically measuring emotional intelligence of parents.

Limitations of past research

In summary, the major theoretical models and research indicate that emotion based parenting behaviour and personality factors play an important role in the development of social and emotional competence in children. While empirical research has made a significant contribution to our understanding of the role of the parent, research in this area has been limited by theoretical and methodological issues.

Although aetiological models (Gottman et al., 1996; Eisenberg et al., 1998, Morris et al., 2007) have proposed that parent characteristics influence a wide range of parenting behaviours and subsequent child emotion regulation, existing studies have tended to neglect a full examination of these, particularly the role of parent emotion functioning. While there is a substantial research base examining parent behaviours, including positive and negative parenting behaviours such as warmth, control, discipline, intrusiveness, availability, attachment, very little research attention has been directed to determine why parents vary in these parenting practices (Lorber, 2012). As current theory does implicate parent emotional functioning as a factor, this is an important avenue of investigation. Additional work is also needed to examine variations within normal parent populations (Smith et al., 2007) as often researchers examining parent factors including personality have relied on clinical samples (i.e., depressed mothers; Belsky & Barends, 2002).

In addition to these theoretical gaps, there are also methodological issues regarding the measurement of emotion regulation and functioning in the parent that require substantial attention. The limited research has to date largely addressed specific areas of emotional functioning making it difficult to directly compare results or apply clinically. Parent emotional expressiveness, discussion of emotion, reactions to negative emotions and emotion coaching have attracted research attention and have been measured using a variety of observational and self-report measures (Chen, Lin & Li, 2012; Duncombe et al., 2012;

Gentzler, Contreras-Grau, Kerns & Weimer, 2005; Mirabile, Scaramella, Sohr-Preston & Robison, 2009). More recently, attention has begun to focus on parent emotion regulation, a facet of overall emotional functioning, although again, the measures used in these studies focus on specific aspects of the parent's emotional regulation, for example attention focusing, and attention shifting (Hans & Shaffer, 2013; Hughes & Gallone, 2010; Lorber, 2012; Morris et al., 2011; Robinson et al., 2009; Valiente, Lemery-Chalfant & Reiser, 2007).

Despite ongoing improvements in theoretical clarity and the development of valid measures, the broad construct of emotional intelligence has received very little research attention in the parenting literature. This is surprising given the apparent value of research and application in a wide variety of other domains such as education at primary, secondary (Foster et al., 2005) and tertiary levels (Boyatzis, Stubbs & Taylor, 2002); the workforce, particularly in interpersonal relationship and stress management (Cherniss, Extein, Goleman & Weissberg, 2006; Slaski & Cartwright, 2003), and in high performance environments, particular sport science (Thelwell, Lane, Weston & Greenlees, 2008). Further investigation in understanding the role of emotional intelligence in parenting and family functioning is clearly warranted.

Finally, the lack of research on parent programs focussed on coaching emotionally healthy responses in children and helping them to develop emotion regulation and social and emotional competence is an important area of clinical application. Parent training interventions have typically targeted a limited range of needs depending on the child age (Havighurst, Harley & Prior, 2004), including attachment based interventions such as the Circle of Security (Hoffman, Marvin, Cooper & Powell, 2006), and behaviour management type interventions, such Triple P (Sanders, Markie-Dadds, Tully & Bor, 2000), 123 Magic (Phelan, 2003) and The Incredible Years (Webster-Stratton, Reid & Stoolmiller, 2008). A recent exception is the Tuning into Kids program (Havighurst et al., 2013; Wilson, Havighurst

& Harley, 2012) which is a prevention program for parents of preschool children and teaches parents the skills of emotion coaching. Promising results across several studies indicate that parents who participate in TIK report increased emotion coaching behaviours, decreased emotion dismissing behaviours and less adjustment problems in their pre-schoolers (Havighurst, Harley & Prior, 2004; Havighurst, Wilson, Harley & Prior, 2009; Havighurst et al., 2012; Wilson et al., 2012). To our knowledge there are currently no published parent programs focussing on parent emotional regulation or competence.

Summary and Purpose of this Thesis

In summary, there exists a substantial amount of research confirming the importance of parents in the development of child emotion regulation and social and emotional competence. However, there are a number of limitations in the extant literature that need to be addressed in order to better understand the determinants of emotionally healthy parenting and subsequent optimal conditions for child development. Specifically, there is a need for more rigorous examination of parent emotional functioning in longitudinal and experimental studies, using available and comprehensive constructs such as emotional intelligence. There is also a need to investigate the clinical application of this important domain of parenting is necessary to help parents promote emotionally healthy development in their children.

Thus, the aim of this thesis was to investigate the impact of parent emotional functioning on parenting behaviour. The relationships between parent personality, parent emotional intelligence and emotion based parenting practices were investigated using a combination of cross sectional and longitudinal designs. Specifically, the research in this thesis aimed to examine the role of parent emotional intelligence and emotion regulation as a determinant of effective parenting.

Three separate studies were conducted utilising a range of sophisticated statistical models. The study presented in chapter two examined parent personality, emotional

intelligence and parenting behaviours in a large community sample of parents of pre-school age children. The research contained in chapter three comprised a 3 year longitudinal study examining these parenting variables over time and included child outcome measures. Finally, the study presented in chapter four investigated the possibility of improving parent emotional intelligence, emotion regulation skills and emotion coaching behaviours in a brief workshop format.

Taken together, the results of these studies aim to make an important contribution to our understanding of the way in which parents intentionally and inadvertently promote healthy emotional development in their children. As the results of these studies are presented in a series of self-contained papers, a degree of overlap between the papers was unavoidable.

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Chapter Two

The Relation of Parent Personality and Emotional Intelligence to Emotion Based Parenting Practices.

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Abstract

Although major theoretical models highlight the importance of parent characteristics in children's socioemotional development, factors influencing parenting behaviour, particularly emotion regulation, have been largely ignored. Accordingly, this study investigated the relationships between parent personality, parent emotional intelligence and parent attitudes and behaviour. Parents (n=633) of pre-schoolers (2-5 years) completed measures of the five factor model of personality, emotional intelligence, responses to child negative emotions and parenting behaviour. As expected, emotion coaching and emotion dismissing attitudes were related to distinct positive and negative parenting behaviours. Higher levels of emotional intelligence, agreeableness, extraversion, conscientiousness and openness and lower levels of neuroticism were associated with positive and negative parenting in the expected directions. Structural equation modelling was used to investigate several alternate models and identified direct effects between parents higher in agreeableness, extraversion and emotional intelligence to both emotion coaching and positive parenting. Further, small but significant indirect effects were found for these same parent predictors via emotion coaching to positive parenting. The findings provide empirical support for current theoretical models of the role of parent personality and emotional intelligence in emotion related parent attitudes and behaviours.

The impact of parenting practices on child development has been established and parenting is associated with important child outcomes such as cognitive and social competencies (Cassano & Zeman, 2010; Denham et al., 1997; Desjardins, Zelenski & Caplan, 2008). Caregiving representations, attachment, maternal sensitivity and control, maternal mental health, and knowledge and competence of parents have all been found to influence child behaviour and development (Belsky & Barends, 2002). Recent research has begun to focus on the determinants of parenting behaviour including parent-child relationship quality, family and demographic factors, co-parenting and the influence of parental personality characteristics.

Child outcomes such as internalising and externalising problems, general adjustment and social competence have been found to be directly related to both temperamental and acquired child characteristics such as effortful control, self-regulation and emotion regulation (Eisenberg et al., 2009; Eisenberg, Cumberland & Spinrad, 1998). Emotional regulation, or the ability to manage emotions in a flexible and adaptable manner across a range of circumstances, is one of the central developmental tasks of the early years of childhood (Calkins, Smith, Gill & Johnson, 1998; Eisenberg & Spinrad, 2004; Kopp, 1982) and remains relatively stable through to early adolescence (Saalquist et al., 2009). Although aspects of regulation are considered to have a temperamental basis, most researchers recognise that parents play an important role in helping infants and toddlers learn to self soothe and regulate emotional and psychological arousal - the building blocks of emotion regulation and emotional understanding (Volling, McElwain, Notaro & Herrera, 2002).

In the last decade or so, the relationship between parents' emotion-related behaviours and children's regulation of emotion and behaviour has become a topic of considerable interest (Belsky & Barends, 2002; Eisenberg et al., 1998). Included in the domain of socialization of emotion are parental practices and behaviours that influence a child's learning

regarding the experience, expression and regulation of emotion and emotion-related behaviour. Eisenberg et al. (1998) suggest that parents directly influence the development of children's emotional regulation through discussion of emotion, reactions to children's emotions, and emotional expressiveness. This socialisation or teaching reflects the parent's beliefs, goals and values regarding emotions. These emotion related socialisation behaviours have been found to have a direct impact on emotion regulation and emotion self awareness in preschool age children (Warren & Stifter, 2008).

Building on this work, Morris and colleagues (Morris, Silk, Steinberg, Myers & Robinson, 2007) have proposed a tripartite model where the family context affects the development of emotion regulation in three distinct ways. Firstly, children learn about emotion regulation through observation and parental role modelling. Secondly, specific parenting practices and behaviours including emotion coaching and parental reactions to emotion affect the child's emotion regulation. Thirdly, emotion regulation is affected by the emotional climate of the family as reflected in the quality of attachment relationships, family expressiveness and the emotional quality of the marital relationship.

Of the 3 primary factors hypothesised to influence the child's development of emotion regulation, the second factor, emotion coaching, is the most active and intentional component related to interactions with the child. Parent coaching of emotion has been central to work by Gottman, Katz and Hooven (1996), who found that parents have an organized set of feelings and thoughts about their own emotions and their children's emotions. They referred to this as the parent's meta-emotion philosophy. Parents are considered to be emotion coaching or emotion dismissing depending on the way in which they engage with their child's emotional experience and expression.

Emotion coaching parents are more aware of their child's emotion and help their children deal with their emotions, particularly anger and sadness, notice lower intensity

emotion in their children, view the child's negative emotion as an opportunity for intimacy and teaching, are more empathic, assist the child to label their emotions and help the child to problem solve strategies for dealing with the situation while setting behavioural limits (Gottman, 2001). When parents are emotion coaching, children learn how to inhibit inappropriate behaviour related to strong affect, self-soothe physiological arousal, focus their attention and organise behaviour to achieve external goals (Gottman et al., 1996). These parenting practices have been found to result in children who are better able to regulate emotions (Denham et al., 1997; Ramsden & Hubbard, 2002) and also to buffer children from the negative effects of marital distress (Katz & Gottman, 1997) domestic violence (Katz, Hunter & Klowden, 2008; Katz & Windecker-Nelson, 2006) and maltreating parents (Shipman et al., 2007).

In contrast, emotion dismissing parents tend to want to protect their child from negative affect which they see as harmful and potentially destructive and will try to distract or cheer up the child to change the negative affect as quickly as possible. These parents tend to deny or ignore emotion and convey to their children that emotions are not very important; have difficulty managing their own emotional reactions and experience personal distress when their children experience intense negative emotions. Emotion dismissing parents see an unhappy child as a failing of their parenting, at times interpreting negative emotions as attempts at manipulation and control, and typically don't notice lower intensity negative affect in their children (Gottman, 2001). Children of emotion dismissing parents have been found to have more difficulty with emotion regulation (Gottman et al., 1996; Ramsden & Hubbard, 2002) and experience more behavioural and social problems (Katz & Windecker-Nelson, 2004; Lunkenheimer, Shields & Cortina, 2007).

Empirical research in the emotion coaching domain has largely relied on the original (Gottman et al., 96) Meta-Emotion Interview (MEI), a 60-90 minute semi structured interview

with the parent about their own experience of emotions and their behaviours towards their child's expression of negative emotions. The interviews are audio-taped and later coded. As specialised training is required to conduct the interview there has been limited research in this area. It may also be that parents who are emotion coaching also engage in other, more universally recognised positive parenting behaviours which may also have an effect on their child's emotion regulation and social competence, however researchers in this area have not discriminated between emotion specific parenting practices and broader positive and negative parenting behaviour. Other than Gottman's preliminary study with parents of preschoolers (Gottman et al., 1996), the majority of research has been conducted with school age children.

Given the theoretical and empirical relationship between parenting practices and the child's emotion regulation, research in the field of parent-child emotion regulation now needs to determine why and how parents differ in their ability to coach emotionally healthy responses in their children. Variation in emotion based parenting has been partially explained by factors including maternal attachment styles (Eisenberg et al., 1998), parent cognitive style (Cassano & Zeman, 2010), parent attributions (Bugental, Johnston, New & Silvester, 1998) and maternal psychological health (Feldman et al., 2009). More recently, parental personality has re-emerged as a significant factor in shaping parenting practices with regard to emotion regulation and emotional expressiveness (Bornstein et al., 2007; Hughes & Gullone, 2010; Smith et al., 2007). Belsky's (1984) earlier process model of the determinants of parenting posited parent personality, child characteristics and contextual sources of stress and support as sources of influence, with parent personality being the most important determinant.

Personality measures capture enduring patterns of thoughts, feelings and actions that appear to influence parenting. Studies using the five factor model of personality have found that parents high in extroversion, conscientiousness, agreeableness and openness to experience and low in neuroticism, provide more sensitive and stimulating parenting and less

negative, controlling parenting (Clark, Kochanska & Ready, 2000; Hughes & Gullone, 2010; Prinzie et al., 2004; Smith et al., 2007; Van Aken et al., 2007) for both mothers and fathers (Kochanska, Friesenborg, Lange & Martel, 2004). Personality factors have also been found to relate to diverse parenting cognitions across multiple cultural contexts (Bornstein et al., 2007), and to impact on parenting behaviour despite daily hassles and transient mood (Belsky, Crnic & Woodworth, 1995). Personality factors have been found to be more predictive of mothering than internal working models of attachment (Belsky & Barends, 2002) and have also been found to mediate the impact of demographic risk (Kochanska, Aksan, Penney & Boldt, 2007).

Belsky and Barends (2002) have suggested the parent's emotional experience and regulation might be responsible for the relation between personality and parenting. Gottman (2001) has suggested emotion regulation consists of a set of general abilities that underlie the development of social and emotional competence and that this forms the basis of emotional intelligence. Individuals higher in emotional intelligence have more emotion regulation strategies and use them more effectively than individuals with lower emotional intelligence (Schutte, Manes & Malouff, 2009).

When Salovey and Mayer (1990) coined the term "emotional intelligence" they defined it as "a form of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and action" (pg. 186). Emotional intelligence describes the ability to perceive emotions, to access and generate emotions to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth (Mayer & Salovey, 1997). Emotional intelligence has been found to relate to goal orientation and life satisfaction (Martinez-Pons, 1997), depression and affect intensity (Dawda & Hart, 2000) and marital satisfaction (Schutte et al., 2001). Ciarrochi,

Chan and Bajgar (2001) showed that emotion regulation (as a specific facet of emotion intelligence) is related to mood management behaviour. Despite some conceptual overlap between emotional intelligence and personality dimensions, there is considerable evidence to support the incremental validity of emotional intelligence in studies of mood induction (Ciarrochi et al., 2001; Petrides & Furham, 2003) and in job performance (Joseph & Newman, 2010).

Despite the apparent synchrony between the parent's own emotional intelligence and their ability to act as effective emotion coaches for their children, data on this topic are rare. In the limited research to date, parent emotion regulation, a central feature of emotional intelligence, has been found to be related to parenting behaviours. Cumberland-Li and colleagues (Cumberland-Li et al., 2003) found that high parental regulation (measured as inhibitory control, attention shifting and attention focusing) and low negative emotionality were associated with more positive parental behaviours and better developmental outcomes in 6 year olds whereas parental negative emotionality related to negative parenting and less favourable child outcomes. Research also supports the relations between parent emotion regulation and parent reactions to children's negative emotions in school age children (Hughes & Gullone, 2010) and to more positive and less negative parenting behaviours (Valiente, Lemery-Chalfant & Reiser, 2007). Robinson et al. (2009) observed parent anger was related to negative parenting practices in maltreated pre-schoolers. The measures used in these studies however focus on specific aspects of the parent's emotional regulation, for example attention focusing, which makes it difficult to directly compare results. This highlights the need for a broader measure of healthy adult emotional functioning. Nonetheless, there is some, albeit limited, evidence that parents' ability to manage their own emotions is related to their broader emotion related parenting practices.

In summary, aetiological theories and previous research indicate that emotion based parenting behaviour and personality factors play an important role in the development of social and emotional competence in children. However research in this area has been limited by theoretical and methodological issues. Despite the development of the broad construct of emotional intelligence, researchers have continued to measure very specific components of emotional functioning making it difficult to directly compare results. Furthermore, there has been little effort to investigate the association between parent emotionality and emotion coaching and other positive and negative parenting behaviours or to distinguish between them empirically. Also, the literature on the associations between personality and parenting has not produced a consistent overall picture of how parent personality factors relate to parenting behaviour, particularly emotion coaching. Additional work is needed to examine variations within normal parent populations (Smith et al., 2007) as often researchers examining parent factors including personality have relied on clinical samples (i.e., depressed mothers; Belsky & Barends, 2002). Finally, limited access to the Meta Emotion Interview has also contributed to the paucity of research in this area.

The aim of the current study was to examine the associations between parent personality and emotional intelligence, and emotion coaching in a community sample of parents of pre-schoolers. Pre-schooler age children were chosen because this age range spans an important developmental period for the development of emotion regulation (Kopp, 1982) and parental influences may be stronger among younger children compared with older children (Eisenberg & Morris, 2002). Consistent with Cumberland-Li et al. (2003) and Morris et al. (2007) we hypothesised that parent's emotion regulation, as measured by emotional intelligence, would be related to their parenting behaviours, both emotion coaching and dismissing and more general positive and negative parenting behaviour. We also hypothesised that in accordance with previous studies (Clark et al., 2000; Smith et al., 2007; Van Aken et

al., 2007) positive parenting personality factors, in particular extraversion and agreeableness, would be associated with positive parenting behaviours. Despite the lack of research on the relations between parent personality and emotion coaching we expected that there would also be a relationship between positive parent personality factors and parent emotion coaching. Finally, we expected that parents who were high in emotion coaching would be more likely to report positive parent behaviour, such as praising, playing and showing affection, and parents who were low in emotion coaching would be more likely to engage in negative parenting behaviour, such as inconsistent discipline and ignoring.

Method

Participants

This study involved a community sample of 633 parents of pre-schoolers who attended a weekly playgroup within New South Wales, Australia. Eighty-four percent (534) of the parents were mothers. The mean ages of mothers and fathers were 36.5 and 38.6yrs respectively. The average age of their pre-schoolers was 40.3 months (SD = 10.3 months). Ninety six percent of the preschoolers lived with both parents in the home, 25.5% were only children, 52.8% had one sibling and 21.6% had more than 1 sibling. Fifty three percent of parents worked outside the home, one third of whom for more than 30 hours per week. Consistent with the general Australian population, parents came from a range of socio economic and cultural backgrounds and from a range of country and urban areas throughout the state however the majority identified themselves as Australian born.

Measures

Parent Personality

Parent personality was measured using the Big Five Inventory (BFI; John, Honahue & Kentle, 1991), a self-report multidimensional personality inventory (44 items total), designed

to measure the big five personality dimensions, using a 5 point Likert scale. The BFI consists of short phrases such as “I see myself as someone who is talkative”, “I see myself as someone who gets nervous easily” and produces five scales – extraversion, agreeableness, openness, conscientiousness and neuroticism. The BFI demonstrates good concurrent and convergent validity and good reliabilities ranging from .79 to .81 (John & Srivastava, 1999). In the current study, reliabilities ranged from .73 to .84.

Parent Emotional Intelligence.

The Schutte self-report Emotional intelligence Test (SSEIT; Schutte et al., 1998) was used to assess parent emotion competence. The SSEIT is a 33 item measure of emotional intelligence (EI) designed to map onto the Salovey and Mayer (1990) model of emotional intelligence. Items on the test relate to the three aspects of EI; appraisal and expression of emotion, regulation of emotion and utilisation of emotion, with items including “when I experience a good emotion, I know how to make it last” and “I know why my emotions change”. The SSEIT utilises a 5 point Likert scale and demonstrates high internal consistency of .87 to .90 (.91 in the current study) and test –retest reliability of .78 (Schutte et al., 1998), and significant discriminant and concurrent validity (Schutte et al., 2001).

Parenting behaviour

Parenting behaviour was measured using 2 questionnaires - Coping with Children's Negative Emotions Scale (CCNES; Fabes, Eisenberg, & Bernzweig, 1990) and the Alabama Parenting Questionnaire – Preschool Revision (APQ-pr; Clerkin, Marks, Policaro & Halperin, 2007). The CCNES is a self-report measure of parent attitude and behaviour consisting of six subscales, measured using a 7 point Likert scale, that reflect different ways parents respond to their young children's negative emotions that have been found to relate to children's social competence (Eisenberg, Fabes & Murphy, 1996). In response to the question “if my child loses some prized possession and reacts with tears, the six subscales and sample items are

problem-focused responses “help my child think of places he/she hasn’t looked yet”, emotion focused responses “distract my child by talking about happy things”, distress reactions “get upset with him/her for being so careless and then crying about it”, punitive reactions “tell him/her that’s what happens when you’re not careful”, expressive encouragement “tell him/her it’s OK to cry when you feel unhappy” and minimization reactions “tell my child that he/she is overreacting”. Internal consistency for all scales is acceptable ranging from .6 to .79 with good construct and concurrent validity (Fabes, Poulin, Eisenberg & Madden-Derdich, 2002). Cronbach alphas for the current study ranged from .76 to .90.

The APQ-pr is a 32 item measure of parenting characteristics that have previously been associated with disruptive behaviour. The APQ-pr generates three sub-scales; positive parenting, inconsistent parenting and punitive parenting measured on a 5 point Likert scale.. An item endorsing positive parenting is “you have a friendly talk with your child”, the inconsistent parenting scale includes items such as ‘you threaten to punish your child but then do not actually punish them” and the punitive parenting scale includes items such as “you yell or scream at your child when he/she has done something wrong”. All three scales demonstrate adequate internal consistency with Cronbach’s alpha ranging from .63 to .80 (Clerkin et al., 2007). In the current study reliabilities ranged from .81 to .92.

Procedure

Following ethics approval from Macquarie University, parents were invited to participate via a monthly e-newsletter distributed by Playgroups NSW, a not-for-profit organization coordinating metropolitan and regional playgroups throughout NSW. Interested parents were advised that they would remain anonymous; that the survey would take approximately 30 minutes to complete and that they would have the option of entering a draw to win a \$100 shopping voucher to a store of their choice on completion of the survey.

Consenting parents were then directed electronically to the questionnaires to complete them online.

Results

Total scores for each observed variable were calculated and the Pearson-Product Moment intercorrelational values, means and standard deviations are shown in Table 1. Emotional Intelligence was positively correlated with Positive Parenting, Emotion Focused and Problem Focused Reactions as expected, and negatively correlated with Negative Parenting, Minimising and Punitive Reactions.

Of the personality variables, Agreeableness, Conscientiousness and Openness were positively correlated with all Positive Parenting variables and negatively correlated with all Negative Parenting variables. Neuroticism was significantly correlated with Negative Parenting although not with Minimising Reactions ($r=.075$) and negatively correlated with Positive Parenting though not with Emotion Focused Reactions ($r=-.059$). Extraversion was strongly correlated with Positive Parenting but not correlated with any other parenting variables other than a slight correlation with Problem Focused Reactions ($r=.080$, $p<.05$).

Statistical Analysis

Structural Equation modelling with latent variables was used to analyse the relationships between the variables of interest using Analysis of Moment Structures (AMOS) 20.0 (Arbuckle, 2011). Consistent with convention, the adequacy of the proposed models was evaluated on the basis of a range of fit indices (McDonald & Ho, 2002) including chi-square/degrees of freedom (χ^2 / df ; Hu & Bentler, 1999); goodness-of-fit index (GFI: Bentler & Bonnet, 1980), the comparative-fit index (CFI: Bentler, 1990), the incremental-fit index (IFI, Bollen, 1990), the Tucker-Lewis index (TLI: Marsh, Balla & McDonald, 1988) and the root mean square error of approximation (RMSEA; Steiger, 1990). These indices provide a

range of information regarding model fit including absolute fit, fit adjusted for model parsimony and fit relative to a null model enabling a comprehensive evaluation of the congruence between the model and the data (McDonald & Ho, 2002).

Conventional interpretation is that GFI, CFI, IFI and TLI values of .95 or higher indicate a good fit, .90 or higher an acceptable fit, while RMSEA values of less than 0.08 indicate an acceptable fit and less than .05 indicate good fit (McDonald & Ho, 2002).

Specifying the Latent Factors

Latent factors were specified for each of the variables being investigated: Emotional Intelligence, each of the five Personality factors, Emotion Coaching, Emotion Dismissing, Positive Parenting and Negative Parenting. Positive parenting was based on the positive parenting scale, negative parenting was a composite of the inconsistent and punitive scales from the Alabama Parenting questionnaire.

In order to define the latent variables, item parcels were created for each factor. Item parcels account for any unreliability of the obtained scores, eliminate skewness and therefore enhance normal distribution estimation and reduce the number of possible covariances among measurement error sources (Rae, 2008). The total score for parent Emotional Intelligence and the five personality subscales were each randomly split into three item parcels to create the latent variables of Emotional Intelligence, Extraversion, Openness, Conscientiousness, Agreeableness and Neuroticism.

Table 1: *Pearson Correlations for observed variables.*

	E	A	C	N	O	EI	EFR	PFR	PR	MR	Pos	Mn	SD
Extraversion	1											3.38	.84
Agreeableness	.192**	1										4.04	.54
Conscientiousness	.182**	.318**	1									4.08	.59
Neuroticism	-.318**	-.379**	-.256**	1								2.75	.80
Openness	.310**	.151**	.161**	-.112**	1							3.57	.63
EI total	.431**	.455**	.357**	-.359**	.383**	1						129.54	14.26
Emotion focused reactions	-.008	.184**	.099*	-.059	.093**	.234**	1					5.97	.70
Problem focused reactions	.080*	.326**	.205**	-.150**	.188**	.385**	.686**	1				5.92	.60
Punitive reactions	-.003	-.265**	-.145**	.135**	-.121**	-.198**	-.252**	-.351**	1			2.05	.69
Minimising reactions	-.002	-.229**	-.151**	.075	-.163**	-.196**	-.071	-.219**	.658**	1		2.39	.81
Positive Parenting	.246**	.345**	.194**	-.198**	.157**	.424**	.290**	.382**	-.227**	-.174**	1	52.60	5.12
Negative Parenting	-.063	-.209**	-.286**	.263**	-.087*	-.184**	-.029	-.175**	.257**	.299**	-.155**	13.61	3.49

** - Correlation is significant at the .01 level (two-tailed)

* - Correlation is significant at the 0.05 level (two-tailed).

E - Extraversion; A - Agreeableness; C – Conscientiousness; N – Neuroticism;) – Openness; EI – Emotional Intelligence; EFR – Emotion Focused reactions; PFR – Problem Focused reactions; PR – Punitive reactions; MR – Minimising reactions; Pos – Positive parenting.

The Emotion Coaching and Emotion Dismissing latent variables were defined by the two primary underlying factors of the CCNES (Fabes et al., 2002; McElwain, Halberstadt & Volling, 2007). Emotion Coaching was represented by an aggregate of the emotion focused reactions and the problem focused reactions scale (supportive parenting reactions) and Emotion Dismissing was represented by an aggregate of the punitive reactions and minimising reactions subscales. These composites were consistent with a validation study in which a principal components factor analysis of the six subscales yielded a four-factor solution; punitive and minimization reactions loaded on the first factor and problem-focussed and emotion focused coping loaded in the second factor (Fabes et al., 2002). Both the Emotion Coaching and Emotion Dismissing variable were then split into three item parcels each to create the respective latent variables.

Positive and Negative Parenting were represented by the positive and negative parenting sub-scales from the Alabama Parenting questionnaire. Each variable was randomly split into three item parcels to create the respective latent variables. Unlike the other variables, the Positive Parenting indicator variables were substantially negatively skewed with skewness indices of -2.5, -1.8 and -13.1 respectively. As these variables were not amenable to transformation because of the number of cases with equal values at the upper end of the distribution, bootstrapping was used in AMOS to check the significance of path coefficients.

By convention one path leading from each of the latent variables to one of the item parcels was fixed at 1 to allow for the model to be identified.

Measurement Models

Emotion based parenting behaviour.

Firstly, a measurement model allowing all of the parenting latent variables to co-vary yielded a good fit to the data (GFI = .963, IFI = .969, CFI = .969, TLI = .957, RMSEA = .058). This model provided support for the hypothesised relationship between Emotion

Coaching and Emotion Dismissing and parenting behaviour. Results indicated both a strong positive relationship between Emotion Coaching and Positive Parenting ($r = .41, p < .001$) and also Emotion Dismissing and Negative Parenting ($r = .46, p < .001$)

Parent Emotional Intelligence.

A measurement model including parent Emotional Intelligence and all the parenting factors demonstrated the significant relationship between these variables (GFI = .959, IFI = .975, CFI = .975, TLI = .967, RMSEA = .050). Emotional Intelligence was strongly related to Emotion Coaching ($r = .36, p < .001$) and Positive Parenting behaviour ($r = .47, p < .001$) and as expected, showed smaller and negative relations to Emotion Dismissing ($r = -.24, p < .001$) and Negative Parenting ($r = -.27, p < .001$).

Parent Personality.

An additional measurement model was created to determine the association between parent personality factors and all the parenting variables. Of the five personality factors, Agreeableness clearly had the strongest correlation across all parenting factors (r ranging from $-.323$ to $.404$) (see Table 2). Conscientiousness ($r = -.181$ to $.221$), Openness ($r = -.167$ to $.175$) and Neuroticism ($r = -.225$ to $.399$) all related significantly across all variables in the expected directions. Extraversion, while being significantly related to parenting behaviour, both positive ($r = .299$) and negative ($r = -.137$), did not appear to have any relationship with Emotion Coaching or Emotion Dismissing (GFI = .910, IFI = .932, CFI = .931, TLI = .917, RMSEA = .055).

Overall Measurement Model

Prior to examining more complex structural models, a complete measurement model was developed in which parent Personality, Emotional Intelligence, Emotion Dismissing, Emotion Coaching, Negative Parenting and Positive Parenting were included and were permitted to

covary. The measurement model was then fit to the data and results indicated an acceptable fit (χ^2 (1006.75/360) = 2.80, GFI = .903, IFI = .935, CFI = .935, TLI = .921, RMSEA = .053).

Table 2 – Correlations between Personality factors and Parenting behaviours

	Emotion Coaching	Positive Parenting	Emotion Dismissing	Negative Parenting
Agreeableness	.328***	.404***	-.323***	-.348***
Conscientiousness	.194***	.221***	-.181***	-.364***
Openness	.175***	.167***	-.169***	-.167**
Neuroticism	-.132**	-.225***	.129**	.399***
Extraversion	.038	.299***	-.004	-.137**

*** Correlation significant at the .001 level

**Correlation significant at the .01 level

Structural Modelling.

Structural equation modelling was then used to test the fit of alternate structural models that included all latent variables. Structural equation modelling allows for the direct comparison of competing models of the data (Boomsma, 2000). Plausible competing models can be compared in a number of ways. Where the comparison is between a good fitting model and a model with one or more parameters constrained (a nested model) the change in chi-square values relative to the change in degrees of freedom determines the better fitting model. Where alternate configurations of the variables are being compared, the Bayesian information criterion (BIC) index can be compared, the smaller the index the better the fit of the model (Hu & Bentler, 1999).

Three models were compared that represented differing conceptualisations of the interrelationships of the variables. An initial model was examined in which Personality and EI of the parent were specified as predictors of Emotion Coaching, Emotion Dismissing and Positive and Negative Parenting (see Figure 1). Then a model in which parent Personality was conceptualised as having direct and indirect paths through Emotional Intelligence to the

parenting behaviours was specified (see Figure 2). The final model examined the role of Emotion Coaching and Emotion Dismissing in mediating the relationship between Parent Personality and Emotional Intelligence, and Positive and Negative Parenting (see Figure 3).

Model 1: Direct Equal model

In their tripartite model, Morris et al. (2007) theorised that parenting attitudes and behaviours are equally influenced by various parent factors including parent personality and emotion regulation. Therefore the first model tested the fit of direct pathways from each of the five parent Personality factors and parent Emotional Intelligence to each of the four parenting variables – Emotion Coaching, Emotion Dismissing, Positive Parenting and Negative Parenting. Results indicated an acceptable fit to the data (GFI = .892, IFI = .924, CFI = .924, TLI = .924, RMSEA = .056) (see Table 3).

Although the overall tests indicated an acceptable fit, some of the relations between the variables had non-significant path coefficients, indicating that a more parsimonious model could be found. In a trimming process (Kline, 2011) non-significant paths were removed from the model, one at a time, beginning with the path with the smallest β value. The significant paths remaining in the trimmed model (see Figure 1) leading to Emotion Dismissing were Openness ($\beta = -.167, p < .001$), Agreeableness ($\beta = -.366, p < .001$) and Extraversion ($\beta = .141, p = .003$). Significant paths to Negative Parenting were Neuroticism ($\beta = .236, p < .001$), Conscientiousness ($\beta = -.221, p < .001$), and Agreeableness ($\beta = -.195, p = .001$). Significant paths to Positive Parenting were Agreeableness ($\beta = .256, p < .001$), Extraversion ($\beta = .098, p = .044$), and Emotional Intelligence ($\beta = .282, p < .001$), and for Emotion Coaching, the significant paths were from Agreeableness ($\beta = .221, p < .001$), Extraversion ($\beta = -.168$) and Emotional Intelligence ($\beta = .329, p < .001$). Trimming non-significant paths did not result in a significant change to the model ($\chi^2_{\text{change}} = 13, p > .05$).

Table 3 - Fit indices of the SEM models

Model	χ^2	df	P	χ^2/df	GFI	IFI	CFI	TLI	RMSEA
1. Direct Equal – Full	1122.77	366	.000	3.07	.893	.924	.924	.924	.057
1b. Direct Equal Trimmed	1135.91	378	.000	2.80	.892	.924	.924	.912	.056
2. EI indirect	1287.50	386	.000	3.34	.876	.910	.909	.898	.061
2b. EI indirect – direct personality	1133.07	376	.000	3.01	.892	.924	.924	.912	.056
3 .Emotion based - full	1031.22	364	.000	2.83	.902	.933	.933	.920	.054
3.Emotion based - trimmed	1041.78	377	.000	2.76	.901	.934	.933	.923	.053

The results obtained for extraversion were further examined as extraversion did not produce a significant relationship in the bi-variate model and yet achieved significance in multivariate analysis, for both emotion coaching and emotion dismissing. Additional analysis revealed that for emotion coaching, extraversion became significant when openness and agreeableness were held constant, and for emotion dismissing, extraversion became significant when emotional intelligence was held constant. This does not appear to be due to multicollinearity as the correlations were not particularly high and a comparison of the standard errors was not significantly different. There appears to be some suppression of variance that is not of central importance to the current analysis.

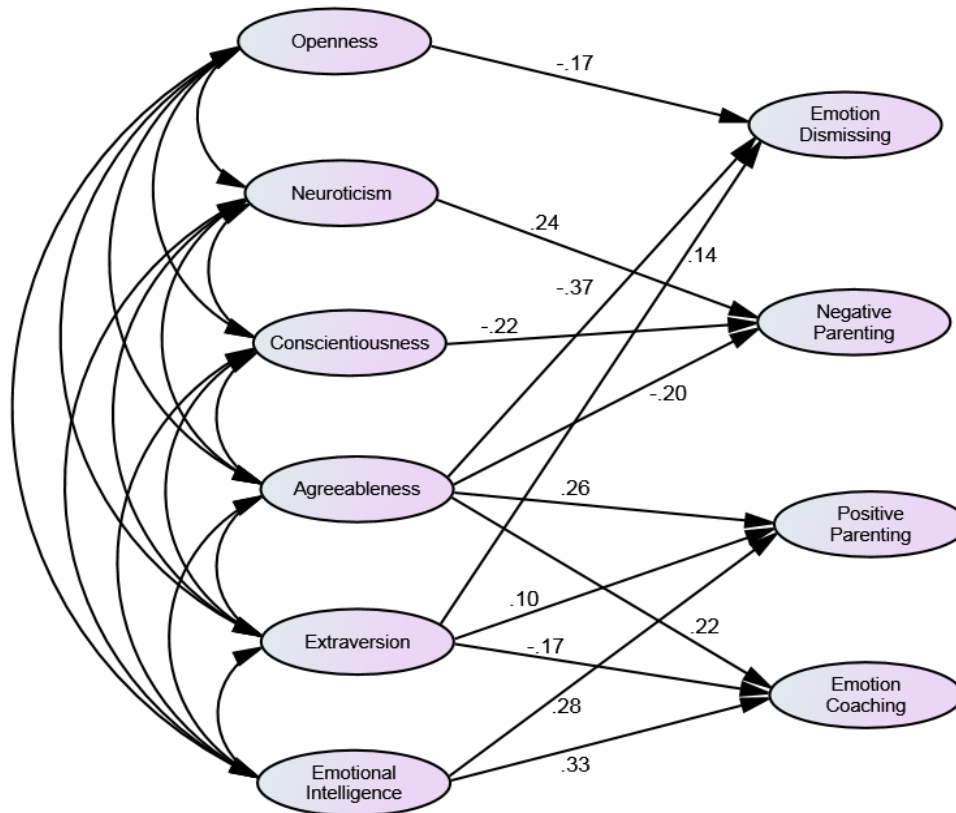


Figure 1: Model 1: Trimmed Direct Equal Model showing standardized regression weights for all significant pathways ($p < .05$). For simplification, item parcels, co-variances and error terms are not shown.

Model 2: Indirect effect of Emotional Intelligence

As parent personality was found to significantly impact parenting behaviour the nature of this relationship was further examined. Belsky and Barends (2002) have proposed that parent emotion may play a mediating role between parent personality and parenting behaviour. To test this, Model 2 examined whether a model where there were only indirect effects of parent personality on parent attitude to emotion and parenting behaviour via Emotional Intelligence as represented below in Figure 2 represented an improved fit. All hypothesised paths were significant, however fit indices were moderate ($GFI = .876$, $IFI = .910$, $CFI = .909$, $TLI = .898$, $RMSEA = .061$).

To examine the direct effects of personality factors in this model, the significant paths from model 1 were added consisting of Openness to Emotion Dismissing, Neuroticism, Conscientiousness; Agreeableness to Negative Parenting; Agreeableness and Extraversion to Emotion Dismissing; and Positive Parenting and Emotion Coaching. This resulted in a slightly improved fit (GFI = .892, IFI = .924, CFI = .924, TLI = .912, RMSEA = .056). However, the addition of the direct paths revealed the non-significance of the relationship between Emotional Intelligence and both Negative Parenting ($\beta = .023$, $p = .693$), and Emotion Dismissing ($\beta = -.102$, $p = .103$) indicating that this model did not accurately represent the theorised relationship between the variables.

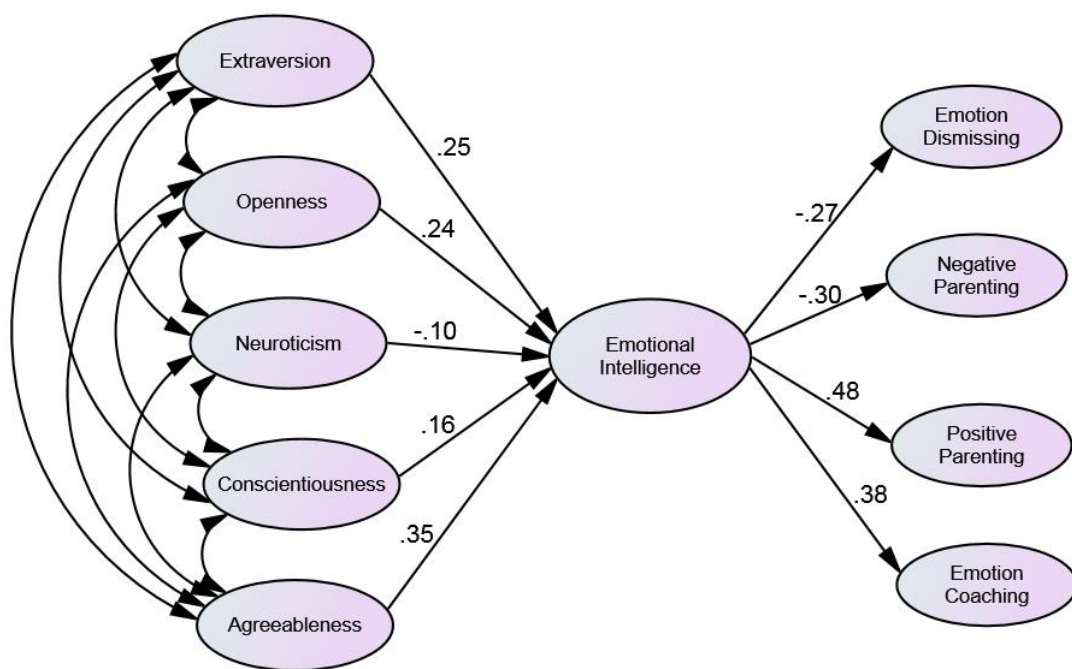


Figure 2: Model 2: Emotional Intelligence mediates effect of personality on emotion related parenting behaviours. Model showing standardized regression weights for all significant pathways ($p < .05$). For simplification, item parcels, co-variances and error terms are not shown.

Model 3: Emotion based model

Various parent personality factors and parent Emotional Intelligence have been found to contribute in distinct ways to emotion based parenting. Consistent with Gottman's (1996) meta-emotion theory which suggests that parenting behaviour is determined by the parent's Emotion Coaching or Dismissing style the final model tested the direct and indirect effect of Emotion Coaching and Dismissing on Positive and Negative Parenting behaviours (see Figure 3). Trimming non-significant paths did not result in a significant change to the model ($\chi^2_{\text{change}} = 13, p > .05$). The final model then represented a good fit to the data (GFI = .901, IFI = .934, CFI = .933, TLI = .923, RMSEA = .053) (see Figure 3).

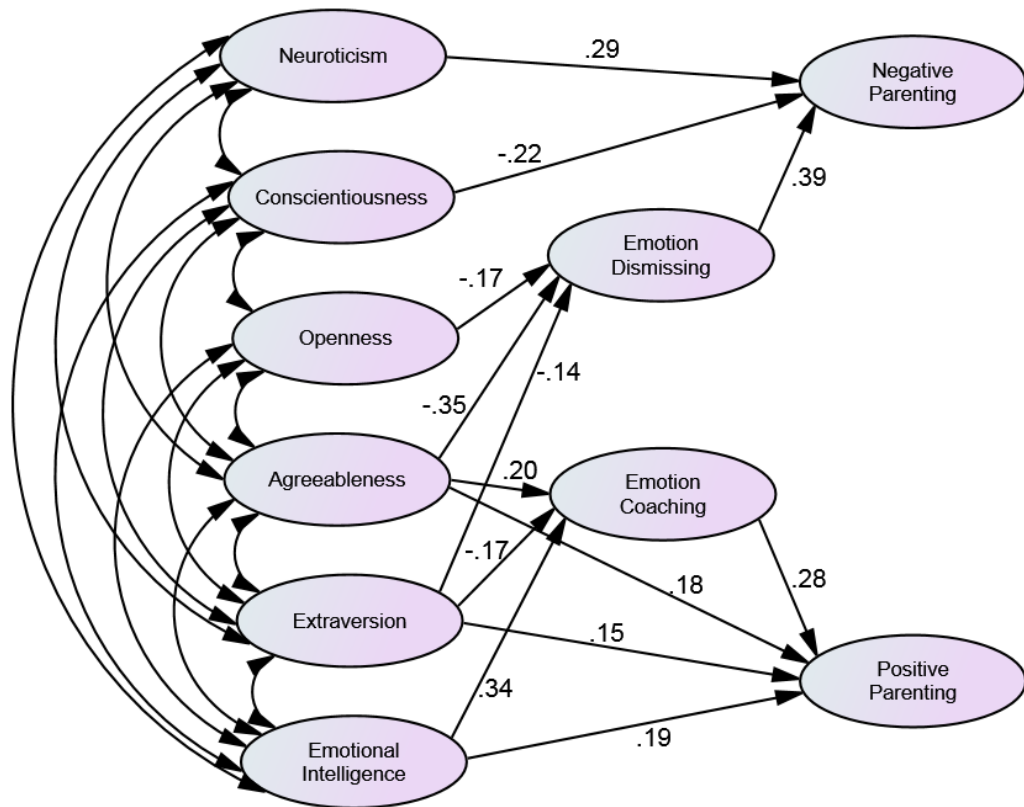


Figure 3: Model 3 – Emotion based model showing direct and indirect effects of EC/ED. Model showing standardized regression weights for all significant pathways ($p < .05$). For simplification, item parcels, co-variances and error terms are not shown.

As this model fits the data well, a test of direct and indirect effects was performed to further examine the impact of parent Emotional Intelligence and Personality on parenting behaviour. Direct effects were tested using bootstrapping within AMOS using bias corrected sample intervals (MacKinnon, Fairchild & Fritz, 2007). As expected significant direct effects were found for all paths. Strong positive direct effects were found for Emotional Intelligence to Emotion Coaching ($\beta = .337, p < .001$) and for Neuroticism to Negative Parenting ($\beta = .287, p < .001$). A strong negative direct effect was found for Agreeableness to Emotion Dismissing ($\beta = -.348, p < .001$).

In addition, small, but significant, indirect effects were found for all variables. The indirect effects through Emotion Dismissing for Negative Parenting were Agreeableness ($\beta = -.134, p < .001$), Openness ($\beta = -.067, p < .001$) and Extraversion ($\beta = .054, p = .009$). The indirect effects through Emotion Coaching for Positive Parenting were Emotional Intelligence ($\beta = .093, p = .002$), Agreeableness ($\beta = .055, p < .001$) and Extraversion ($\beta = -.047, p = .002$). These indirect effects provide support for the role of the parent's emotion based attitudes in influencing parenting behaviour, both positive and negative.

On balance, the final Emotion based model was the best fitting model on all indices; however, as the models are not nested it is not appropriate to directly compare the χ^2 . Instead, a comparison of the BIC index supports this conclusion (Emotion based BIC = 1609.20, EI Indirect BIC = 1796.56, Direct model BIC=1696.96).

Discussion

As parenting practices and child emotion regulation feature in most models of child development and are recognized as having substantial predictive effects in terms of child outcomes, the aim of the present study was to examine the interrelationships between parent emotional intelligence, personality, emotion coaching and parenting practices. Study hypotheses were largely supported. Parent emotional intelligence was strongly associated

with both emotion coaching behaviour and positive parenting practices. In addition, parent personality factors were related with emotion coaching behaviour and positive and negative parenting behaviour in expected directions. Further, emotion coaching and emotion dismissing attitudes were directly related to positive and negative parenting behaviours respectively. There were also some grounds to support an enhanced role of parent meta-emotion philosophy in the Morris et al. (2007) tripartite model of emotion socialization.

In accordance with Gottman's (1996) meta-emotion philosophy, parent emotion coaching and emotion dismissing attitudes were related to distinct positive and negative parenting behaviours. It was found that parents who adopt an emotion coaching style with their preschoolers also engaged in more positive parenting behaviour, and emotion dismissing parents reported more negative parenting behaviours. This indicates that emotion coaching and dismissing attitudes influence broader parenting behaviours including discipline, encouragement and organization. Parents' awareness of their child's emotion management skills may engage in more sensitive and well-timed parenting practices resulting in overall more positive parenting practices (Gottman, 2001).

With regard to the associations between parent functioning, as hypothesised, parent emotional intelligence was strongly related to emotion coaching and positive parenting behaviour. It seems reasonable to expect that parents who are more aware of their own emotional experience and who are better able to utilize strategies to understand and manage their own emotions may be more able to help their children do the same, although to our knowledge this is one of the first studies to explicitly test this hypothesis. These findings indicate that parent emotional knowledge is transmitted directly through higher levels of emotion coaching, and more adaptive responses to the child's negative emotion states. Parent emotional intelligence was also related to more general positive parenting behaviours,

providing support for the role of parent emotion regulation in determining emotionally healthy parenting.

The role of parent personality in emotion based parenting has received relatively little attention to date. Consistent with existing research regarding the relationship between parent personality factors and general parenting behaviours (Clark et al., 2000; Prinzie et al., 2004; Smith et al., 2007; Van Aken et al., 2007), this study also found that the higher levels of agreeableness, extraversion, conscientiousness and openness and lower levels of neuroticism were associated with positive parenting and negative behaviours in the expected directions. Also, as expected, with regard to emotion based parenting, agreeableness, conscientiousness and openness were found to be positively associated with an emotion coaching parenting style and neuroticism was related to having an emotion dismissing style. These findings may be due to parents having higher levels of the positive traits being more responsive and supportive when their child is experiencing intense emotions.

The role of extraversion produced some inconsistent results. Despite there being no significant simple correlation with either emotion coaching or emotion dismissing, extraversion emerged with a significant negative influence to both emotion based variables when emotional intelligence was included in the analysis. It is possible that extraverted parents are more amplified in their responses to emotional expression in general, as suggested by Hughes and Gullone (2010) although it is curious that extraversion seems incompatible with emotional content of expression. It seems that even though extraverts are generally considered to be more sociable and engaging (John & Srivastava, 1999), high extravert parents are less likely to focus on emotion laden aspects of child experiences.

Parenting is a complex, multi-determined set of behaviours influenced by a range of parent, child and contextual factors (Belsky, 1984). As there has been very little research examining relative contributions of multiple parent factors in determining parenting

behaviour, an additional goal of the present study was to evaluate the adequacy of the theoretical association between the parent factors proposed by Morris and colleagues (2007). Various models were evaluated to determine the extent to which the data provided empirical support for the tripartite theory and structural equation modeling confirmed the direct effects of various parent characteristics, both personality factors and parent emotional intelligence, on both positive and negative parenting practices and emotion coaching and dismissing behaviours. Gottman and colleagues (1996, 1997) have argued that the parent emotion base, or meta-emotion philosophy, as operationalized in both emotional intelligence (or awareness) and emotion coaching, hold a more central role in shaping general parenting behaviours and subsequent child emotion regulation and outcomes. The results of this study also provide additional support for this relationship as Emotional Intelligence was the strongest individual predictor of both emotion coaching and positive parenting behaviour. In addition, indirect effects from parent personality and emotional intelligence to positive and negative parenting via emotion coaching and dismissing suggest a distinction between the emotion coaching and other parenting behaviour consistent with the work of Gottman and colleagues (1996).

Examining the determinants of effective parenting also has important clinical implications. The results from this study suggest that assessing, reinforcing and developing parent emotional intelligence would result in more effective emotion based parenting practices. In particular, parents who are more aware of their emotions and who are better able to regulate and manage their emotions in the service of desired goals are more likely to engage in emotionally healthy parenting practices such as emotion coaching. Such efforts are likely to be beneficial to both parent and child, particularly in the development of emotional competence by supporting the child's ability to cope with a range of emotions and at the same time providing a positive role model of emotional interactions in the family.

This study has a number of noteworthy strengths. This was one of the first studies to investigate the associations between parent personality factors, emotional intelligence and emotion based parenting practices in a normal population. In addition to contributing to the knowledge base related to emotion coaching and positive parenting practices, using a broad based measure of emotional intelligence has provided unique information regarding associations between emotional intelligence and parent emotion based parenting. Also, the large parent sample allowed for the use of rigorous statistical procedures to compare alternating theoretical conceptualisations using structural equation modeling.

Several limitations in the study should also be noted. Firstly, a cross sectional design was used, which limits the scope for drawing firm conclusions about the direction of effects. Longitudinal analysis should verify the causal direction of the effects. Secondly, the present study relied upon self-report questionnaire data which may have led to the overestimation of associations between parent personality, emotional intelligence and parenting behaviours due to shared method variance. In particular it might be that extrovert parents who report themselves as having high emotional intelligence would be more likely to endorse items related to their parenting that are consistent with their self belief.. Similarly, introvert parents who report lower emotional intelligence may be less likely to endorse emotion coaching items or positive parenting behaviours possibly due to their personality functioning. Lastly, the emotion coaching measures capture parent intentions about what they would do in emotionally distressing situations, rather than what parents actually do when their child is distressed (Warren & Stifter, 2008). Observational studies that assess how parents who are high in emotional intelligence use emotion coaching to talk to their children about emotion would provide additional insight to this important area of parenting.

Given the dearth of studies that have examined the role of emotional intelligence in emotion based parenting, there are many paths available for future research. As previously

mentioned, longitudinal studies examining the role of emotional intelligence and personality in emotion based parenting, and the impact this has on child outcomes over time will further clarify theoretical models and clinical practice. Moreover, observational studies of that shed light on the specific strategies used by parents will help shape parent interventions with a view to educating and developing emotional intelligence and competence in parenting practice. It would also be helpful to include assessment of child characteristics, particularly temperament and emotional reactivity to further examine the direction of effects between child, parent and the broader family context.

In summary, the results of the present study indicate that parent personality factors and emotional intelligence make an important contribution to emotion based parenting attitudes and behaviours. Given the importance of children's social and emotional competence in many aspects of optimal development, identifying parents who have lower emotional intelligence, and supporting parents to develop their emotional intelligence and emotion regulation skills will likely assist parents to more effectively coach emotionally healthy responses in their children.

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Chapter Three

The Longitudinal Impact of Parent Personality and Emotional Intelligence and Emotion Coaching on Pre-schooler Adjustment.

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Submitted for publication

Abstract

The impact of parent emotion regulation and personality on children's socioemotional development is clearly evidenced in theoretical models, however has received very little research attention to date. Thus the aim of this study was to examine the contribution of parent emotional intelligence and personality to emotion coaching and preschool child adjustment longitudinally. Mothers (n=218) of preschool age children (2-5 years) completed measures of the five factor model of personality (Time 1), measures of emotional intelligence and emotion coaching (Time 1, Time 2, Time 3 spaced 1 year apart) and child outcome measures at Time 3. Latent Growth Modelling was used to evaluate the relationships over time. Mothers with higher emotional intelligence engaged in more emotion coaching behaviour, both initially and over time and also reported less adjustment problems with their pre-schoolers, although emotion coaching did not predict pre-schooler adjustment. Of the personality factors, agreeableness and openness predicted emotional intelligence however no personality factors emerged as significant predictors of emotion coaching. These findings provide support for the effect of emotion regulation from the parent, via parent emotional intelligence.

There is substantial and consistent evidence indicating the importance of parenting in children's socioemotional development. A positive, supportive parent– child relationship cultivates emotional competence and regulation in the child (Eisenberg, Cumberland, & Spinrad, 1998; Trentacosta & Shaw, 2009). For pre-schoolers, the development of emotion regulation has substantial implications for effective development and well-being as well as school readiness (Denham & Kochanoff, 2002). The qualities of the parent that influence child emotion socialisation are less well understood (Belsky & Barends, 2002). More than 20 years ago, both Belsky (1984) and Dix (1991) recommended further investigation into the impact of parent dispositional qualities, including temperament, personality and emotion regulation on child development, although they have received relatively little research attention. The focus of emotion socialisation research has generally been on links between parent behaviours and child outcomes, leaving the identification of the determinants of emotionally healthy parenting, particularly throughout the preschool period of development, an important endeavour (Denham, Bassett & Wyatt, 2007; Morris et al., 2007).

One of the most important contributions to the development of emotional competence and regulation in children is parental socialization of emotion: children learn about emotion through parent emotion-related behaviour (Eisenberg et al., 1998; Morris, Silk, Steinberg, Myers & Robinson, 2007; Saarni, 1999), which is largely determined by parental beliefs regarding their own and their children's emotions (Gottman, Katz & Hooven, 1996). The present study is based on the theoretical model outlined in Morris et al. (2007), which highlights parent characteristics as well as parent behaviours in the development of emotional regulation and adjustment of the child. Specifically parent personality, reactivity and emotion regulation provide the foundation for each component of the tripartite model of parent behaviour – observation and modelling of emotion based behaviour, parenting practices, including emotion coaching, and the broader emotional climate of the family. These factors

are hypothesised to directly influence the child's developing emotion regulation and to directly and indirectly impact the child's adjustment and social competence. In addition we incorporate Gottman's (Gottman, Katz & Hooven, 1997) meta-emotion philosophy and emotion coaching socialization theory as the platform for understanding the transmission of parent emotion regulation to children's emotional development. Meta-emotion philosophy is defined as a set of feelings, understandings of, and beliefs about one's own emotions and those of others (Gottman et al., 1996) and is conveyed through parent-child interactions. Emotion coaching involves parents viewing their child's negative emotions as an opportunity for intimacy and teaching, actively validating and labeling the child's emotions, and problem-solving with the child by discussing goals and strategies for dealing with the situation that led to the emotions (Gottman et al., 1997).

Cross sectional research findings have suggested that emotion coaching is indeed an important factor influencing children's development. For pre-school age children, emotion coaching has been found to relate to the development of social and emotional competency (Brophy-Herb et al., 2010) and also to buffer the child from the negative effects of marital distress (Gottman et al., 1997) and domestic violence (Katz & Windecker-Nelson, 2006). Strong associations have also been found between emotion coaching and child social and emotional competency for school age children (Chen, Lin & Li, 2012; Duncombe et al., 2012). There have however, been some mixed findings. Several studies with school age children have found no direct links between emotion coaching and child social competence or problem behaviours (Baker, Fenning & Crnic, 2011; Lunkenheimer, Shields & Cortina, 2007). This may suggest that the effectiveness of emotion coaching is more evident in preschool age children, or that other factors in the parent or child may be influencing child outcomes.

Very few studies have examined the effects of emotion coaching over time. In their original longitudinal study, Gottman et al. (1996) found that emotion coaching was linked to children's emotion regulation (as reported by parents) as well as to levels of vagal tone (a parasympathetic indicator of regulation) in five to eight year old children. Denham and Kochanoff (2002) found emotion coaching with three and four year old children predicted emotion knowledge and understanding at five years of age, and that the mother's own experience of emotional expressiveness and behaviour would create a foundation for their attitudes about emotion within childrearing and would also predict young children's emotion knowledge. This indicates that an important component of emotion coaching is the parent's awareness of their own emotions.

The fundamental premise that the parent's ability to regulate and express their own emotions directly contributes to the efforts of their children to do the same has received little research attention. A comprehensive approach to parent emotional functioning, including the emotion regulation processes of cognitive reappraisal and emotional suppression, is found in the emotional intelligence framework, originally proposed by Salovey and Mayer (1990; modified by Mayer & Salovey, 1997). Emotional intelligence is conceptualised as an interrelated set of skills that allow an individual to function effectively. The primary skills of emotional intelligence include accurately perceiving emotional episodes, using emotion-related information to facilitate thought and make better decisions; understanding emotions and finally, managing emotions (Wranik, Barrett & Salovey, 2007). Individuals higher in emotional intelligence have been found to have more emotion regulation strategies and to use them more effectively than individuals with lower emotional intelligence (Schutte, Manes & Malouff, 2009).

Research assessing adult emotional intelligence as applied to the workplace and job satisfaction has been prolific (see Brackett et al., 2010 for a review), however to date there are

no published studies, to our knowledge, specifically measuring emotional intelligence of parents. Research examining more specific aspects of parent emotional functioning has however, largely confirmed the association between parents high in emotional awareness and functioning and positive developmental outcomes in children. Katz and Windecker-Nelson (2004) found that mothers (of 4-6 year old children at risk of conduct problems) who were high in awareness of their own as well as their child's emotions had children who showed less negative peer interactions than mothers of children who were less aware of emotion. Also, mothers with more adaptive emotion regulation, utilising a variety of strategies including cognitive reappraisal, attention shifting and focusing and effortful control, have been found to use more supportive reactions to their children's emotional experience resulting in better emotional regulation and less problem behaviour in their children (Cumberland-Li et al., 2003; Lorber, 2012; Morris et al., 2011; Valiente, Lemery-Chalfant & Reiser, 2007). Further, mothers who were more aware of and accepting of their own emotions had adolescents with lower depressive symptoms, higher self-esteem, fewer externalising problems, and less negative affect (Katz & Hunter, 2007; Yap, Allen, Leve & Katz, 2008). In our previous study parent emotional intelligence was found to be associated with parent emotion coaching behaviour and positive parenting practices in mothers of pre-schoolers (Greig & Schniering, 2014).

Longitudinal research by Eisenberg and colleagues has found maternal positive emotional expression and warmth to be predictive of child emotion regulation, adjustment and social competence in four to eight year olds (Eisenberg et al., 2003) and 9-13 year olds (Eisenberg et al., 2005). Warren and Stifter (2008) found that mother's emotion based behaviour (expressiveness, conversation and reactions to child negative emotions) was predictive of children's emotional self-awareness one year later. Despite the apparent consistency of findings, the many different ways that emotional functioning has been

operationalised reflects the multi-faceted nature of the construct and makes these findings difficult to compare across studies or to apply clinically.

The other important consideration in the Morris et al. (2007) theoretical model of the parent factors influencing child development is parent personality. Personality has been shown to be a consistent predictor of parenting behaviour and child adjustment with optimal parenting being associated with lower neuroticism and higher extraversion, openness, agreeableness and conscientiousness (Belsky & Barends, 2002). It is argued that these traits lead to positive parenting practices due to their influence on factors such as emotional stability and engagement and interest in parent–child interactions (Belsky & Jaffee, 2006).

Prinz et al.'s (2009) meta-analysis of 30 studies indicated that in general lower neuroticism and higher extraversion, openness, agreeableness and conscientiousness were associated with greater parental warmth and behaviour control, although the findings were modest and inconsistent. For instance, mothers high in agreeableness have been found to be more responsive and less intrusive (Kochanska, Kim & Nordling, 2012; Prinz et al., 2004) and yet in other studies there has been no association (Bornstein, 2011). Similarly, openness appears to be related to parenting cognitions and behaviour in some studies (Bornstein et al., 2011; Prinz et al., 2004), but not related in others (Huver, Otten, de Vries & Engels, 2010). Additional work is warranted in this area as these differences continue to be found despite the almost universal use of the big five taxonomy in research of parent personality.

Longitudinal research examining parent personality characteristics and their impact on parenting practices and child outcome also demonstrates mixed findings. Direct effects were found in Smith et al.'s (2007) longitudinal study between positive maternal personality traits of extraversion, conscientiousness, openness and agreeableness and maternal parenting behaviour (sensitivity and intrusiveness coded from free play observation) and maternal emotional expression with toddlers (18 – 30 months). In addition to direct effects of maternal

personality on maternal parenting, mothers' emotional expressiveness was found to be a possible pathway for explaining relations of maternal personality and parenting. Also studying mothers of infants, Clark, Kochanska and Ready (2000) found mothers who were high in either neuroticism or extraversion used a more controlling or forceful style in discipline contexts, while mothers high in conscientiousness, but not agreeableness or openness, were more responsive to their children. The only longitudinal study with pre-schoolers (Kochanska, Clark & Goldman, 1997) found that mothers high in negative emotionality and disagreeableness showed more negative affect and their children were more defiant and angry, were less likely to be securely attached, had more behavioural problems and lower internalisation of rules. Mothers high in constraint and socialisation reported more secure attachment and better internalisation of rules in their children. For parents of adolescents, agreeableness, extraversion and conscientiousness have been the best predictors of parenting behaviour (De Haan, Prinzie & Dekovic, 2009; De Haan, Dekovic & Prinzie, 2012) and teen adjustment problems (Oliver, Guerin & Coffman, 2009). This body of work clearly indicates the predictive utility of parent personality factors however greater clarity is needed to determine the impact of personality on emotion based parenting behaviours and child outcomes.

In one of the only studies to examine parent emotion socialisation practices and their association with personality and parent emotion regulation, Hughes and Gullone (2010) found that parent personality, particularly openness and agreeableness, significantly predicted parent emotion socialisation practices including supportive responses to negative emotions, emotional expressiveness and expressive encouragement with children 10-18 years. Additionally, they found that although there were some significant associations between parent emotion regulation use and emotion socialisation behaviours, emotion regulation explained very little variance in parenting after controlling for personality. In our earlier work

with parents of pre-schoolers (Greig & Schniering, 2014), we examined the relationships between parent personality, emotional intelligence, emotion coaching and positive parenting behaviour and found significant direct and indirect effects. Structural equation modelling demonstrated direct effects between parents with higher scores for agreeableness, extraversion and emotional intelligence to higher emotion coaching and positive parenting behaviours. Further, small but significant indirect effects were found for these same parent predictors via emotion coaching to positive parenting. Neither of these studies included child outcome measures however and therefore the relative contributions of personality and parent emotion functioning to child outcome is unknown.

In summary, despite considerable evidence that parenting does influence children's social and emotional development, there are limitations to extant research. First, there are very few longitudinal studies examining the impact of the emotional competence of the parent during their child's pre-school years, a critical window of time where the child is acquiring emotional regulation skills (Belsky & Barends, 2002; Saarni, 1999). Second, few studies have measured multiple parent factors, the majority of studies tending to focus in one domain, for example either personality or emotion regulation or some subset of parent behaviours, making it difficult to determine the relative contributions towards the complex task of parenting. Finally, few studies have examined both parent characteristics and behaviours that help develop children's social and emotional competence (Morris et al., 2007).

The current study addresses a number of these limitations by examining parent characteristics theorised to directly and indirectly contribute to child adjustment (Morris et al., 2007). The aim of the study was to examine the role of parent personality and emotional competence on specific emotion based parenting practices over time, and to examine the influence of these variables on pre-schooler socioemotional and behavioural outcomes. To achieve this aim, we used Latent Growth Modelling to examine the relationships between

parent factors (personality and emotional competence), parent emotion based parenting, and child adjustment over 3 years. The current study focused on preschool age children because this age range spans an important developmental period including the acquisition of emotion regulation skills (Denham & Kochanoff, 2002; Kopp, 1982; Saarni, 1999) and advances in cognitive development (Calkins & Bell, 1999) and parental influences may be stronger among younger children compared with older children (Denham & Kochanoff, 2002; Eisenberg & Morris, 2002). Overall, we hypothesised that parents with higher emotional intelligence would engage in more emotion coaching behaviour and that this would be associated with better adjustment indicators in children. Consistent with Morris et al.'s. (2007) tripartite model, we also expected to find a direct relationship between parent emotional intelligence and child outcome. Finally we sought to clarify the relationship between parent personality factors, parent emotional intelligence, emotion coaching and child adjustment over time.

Method

Participants

Participants were involved in a longitudinal study that included 3 assessments, 1 year apart, conducted over 2 years . The initial sample (henceforth called T1) of 525 mothers were recruited anonymously via a statewide email newsletter sent to parents whose children attended a weekly playgroup within New South Wales, Australia. Of these, 278 mothers completed time 2 (T2) assessments 1 year later and a further 218 completed time 3 (T3) assessments. Chi-square tests were conducted to compare participants who dropped out at each stage and no demographic factors were related to attrition. At T3, mothers average age was 35.2 years, and child age was 61 months (SD=8.7 months) including 96 girls and 122 boys. The majority of children were first born (72%) and came from 2 child families. Almost all (214) children lived with both parents. Mothers were very well educated with 68% having a university degree. Nearly half (47%) the mothers worked outside the home, 86% for less

than 30 hours per week. Consistent with the general Australian population, mothers came from a range of socio economic and cultural backgrounds and from a range of country and urban areas throughout the state however the majority (86%) were born in Australia.

Measures

Parent Personality

Parent personality was measured using the Big Five Inventory (BFI; John, Honahue & Kentle, 1991), a self-report multidimensional personality inventory (44 items total), designed to measure the big five personality dimensions, using a 5 point Likert scale. The BFI consists of short phrases such as “I see myself as someone who is talkative”, “I see myself as someone who gets nervous easily” and produces five scales – extraversion, agreeableness, openness, conscientiousness and neuroticism. The BFI demonstrates good concurrent and convergent validity and good reliabilities ranging from .79 to .81 (John & Srivastava, 1999). In the current study, cronbach alphas ranged from .74 to .91.

Parent Emotional Intelligence.

The Schutte self-report Emotional intelligence Test (SSEIT; Schutte et al., 1998) was used to assess parent emotion competence. The SSEIT is a 33 item measure of emotional intelligence (EI) designed to map onto the Salovey and Mayer (1990) model of emotional intelligence. Items on the test relate to the three aspects of EI; appraisal and expression of emotion, regulation of emotion and utilisation of emotion, with items including “when I experience a good emotion, I know how to make it last” and “I know why my emotions change”. The SSEIT utilises a 5 point Likert scale and demonstrates high internal consistency of .87 to .90 (.89 to .92 in the current study) and test –retest reliability of .78 (Schutte et al., 1998), and significant discriminant and concurrent validity (Schutte et al., 2001).

Emotion based Parenting responses

Emotion based Parenting behaviour was measured using the Coping with children's negative emotions scale (CCNES; Fabes, Eisenberg, & Bernzweig, 1990). The CCNES is a self-report measure of parent attitude and behaviour consisting of six subscales, measured using a 7 point Likert scale, that reflect different ways parents respond to their young children's negative emotions that have been found to relate to children's social competence (Eisenberg, Fabes & Murphy, 1996). In response to the question "if my child loses some prized possession and reacts with tears, the six subscales and sample items are problem-focused responses "help my child think of places he/she hasn't looked yet", emotion focused responses "distract my child by talking about happy things", distress reactions "get upset with him/her for being so careless and then crying about it", punitive reactions "tell him/her that's what happens when you're not careful", expressive encouragement "tell him/her it's OK to cry when you feel unhappy" and minimization reactions "tell my child that he/she is overreacting". Internal consistency for all scales is acceptable ranging from .6 to .79 with good construct and concurrent validity (Fabes, Poulin, Eisenberg & Madden-Derdich, 2002). Reliabilities in the current study ranged from .71 to .90 across all three time points.

Child adjustment and functioning.

Child adjustment was measured using the Child Behavior Checklist (CBCL/1_–5; Achenbach & Rescorla, 2001). The CBCL/1_–5 is a parent-report rating scale that assesses emotional, behavioural, and adaptive functioning across three composite subscales: Internalising Problems, Externalising Problems, and Total Problems. The CBCL/1_–5 contains 100 items and is measured using a 3-point Likert scale (0, not true; 1, somewhat or sometimes true; 2 very true or often true) and includes items asking parents to indicate if their child "is easily frustrated", "is disturbed by changes to routine" and "looks unhappy without good reason". Scores are given as T scores, with a mean of 50 and a standard deviation on 10.

Scores two standard deviations above the mean are considered in the clinical range. Adequate internal consistency, construct validity, and criterion validity have been found for the CBCL in samples similar to this sample (Achenbach & Rescorla, 2001). Cronbach alphas for the current study were very high for internalising (.90), externalising (.91) and total problems (.95).

Procedure

Following ethics approval from Macquarie University, parents were invited to participate via a monthly e-newsletter distributed by Playgroups NSW, a not-for-profit organization coordinating metropolitan and regional playgroups throughout NSW. Interested parents were advised that the survey would take approximately 30 minutes to complete and that they would have the option of entering a draw to win a \$100 shopping voucher to a store of their choice on completion of the survey. Consenting parents were then directed electronically to the questionnaires to complete them online. Parents indicated agreement to be re-contacted at each follow-up. Participating parents consented at each assessment period. At T1, parents completed all parenting questionnaires. At T2 and T3, parents did not complete the personality questionnaire (as it was expected that personality functioning would remain stable over time (John & Srivastava, 1999), but did complete all other parenting questionnaires and the CBCL for the target child.

Results

In preliminary analyses, the shape of the distribution of emotional intelligence and emotion coaching behaviour was assessed. Change over time was modelled with Latent Growth Models (LGMs). LGMs are able to test linear and non-linear growth and enable the inclusion of predictor and outcome variables (Duncan, Duncan & Strycker, 2006). Growth curve models were used to create individual trajectories for each parent's emotional intelligence and emotion coaching over time. Two or more latent factors are typically

estimated; the first often represents the initial level of each factor for that person (the intercept) and the second represents the rate of linear change over time (the slope), the third, where necessary, represents the curvilinear change over time (the quadratic or cubic). It is also possible to assess associations between growth models of different variables in a dual process model.

There were no missing data. The adequacy of the proposed models was evaluated on the basis of a range of fit indices (McDonald & Ho, 2002) including chi-square/degrees of freedom of between 1 and 2 (Hu & Bentler, 1999); incremental fit index over .90 (IFI: Bollen, 1989), the comparative-fit index over .90 (CFI: Hu & Bentler, 1999), the Tucker-Lewis index over .90 (TLI: Marsh, Balla & McDonald, 1988) and the root mean square error of approximation of less than .08 (RMSEA; Steiger, 1990).

The statistical analysis was conducted in four stages. First, separate (univariate) LGMs were developed for emotional intelligence (EI) and emotion coaching (EC) to examine change over time (Duncan et al., 2006). Secondly, a combined (dual process) model examined patterns of change and interrelationships over the three yearly time periods for the two primary variables, EI and EC. Predictor/antecedent variables (parent personality factors) and consequent/outcome variables (child internalising and externalising behaviour) were then added to the model and the final stage examined causality. All models were fitted using AMOS 21.0 (Arbuckle, 2012).

Specifying the latent variables

The EC variable comprised an aggregate of the emotion focused reactions and the problem focused reactions scales (supportive parenting reactions) of the Coping with Children's negative emotions scale (Fabes et al., 2002; McElwain, Halberstadt & Volling, 2007), otherwise referred to as "supportive reactions" (Fabes et al., 2002). Latent factors were

specified for the longitudinal variables such that both EI and EC each had a latent variable for intercept, slope and quadratic, drawn from time 1, time 2 and time 3 observed scores.

Latent variables were created for each of the five predictor personality factors as well as the outcome variable of child problems. In order to define the latent variables, item parcels were created for each factor. Item parcels account for any unreliability of the obtained scores, eliminate skewness and therefore enhance normal distribution estimation and reduce the number of possible covariances among measurement error sources (Rae, 2008). The total score for each personality subscale was randomly split into three item parcels to create the latent variables of, Extraversion, Openness, Conscientiousness, Agreeableness and Neuroticism. The Child Outcome latent variable comprised an aggregate of internalising and externalising problems. By convention one path leading from each of the latent variables to one of the item parcels was fixed at 1 to allow for the model to be identified.

Descriptive statistics

Descriptive statistics and correlations are presented in Table 1. Scale means all fall within the expected ranges. Extraversion, agreeableness and openness were positively correlated and neuroticism negatively correlated with EI at all three time points.

Table 1: Pearson Correlation and descriptive statistics for observed variables.

	Observed Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Mean	St Dev
1	Extraversion	1														3.43	.85
2	Agreeableness	.20**	1													4.05	.52
3	Conscientiousness	.08	.31**	1												4.12	.58
4	Neuroticism	-.31**	-.40**	-.24**	1											2.81	.83
5	Openness	.34**	.19**	.08	-.07	1										3.55	.63
6	T1 Emotional Intelligence	.42**	.52**	.29**	-.40**	.41**	1									130.22	13.86
7	T2 Emotional Intelligence	.33**	.35**	.13	-.31**	.31**	.66**	1								125.25	10.30
8	T3 Emotional Intelligence	.34**	.39**	.07	-.29**	.36**	.65**	.71**	1							125.90	10.50
9	T1 Emotion Coach Reactions	.08	.16*	.03	.00	.17*	.22**	.14*	.27**	1						6.02	.41
10	T2 Emotion Coach Reactions	.06	.26**	.02	-.15*	.14*	.21**	.27**	.25**	.55**	1					5.87	.57
11	T3 Emotion Coach Reactions	.09	.27**	.00	-.13	.13	.15*	.21**	.37**	.45**	.67**	1				5.82	.57
12	T3 CB Internalising	-.23**	-.13	-.12	.29**	.02	-.18**	-.17*	-.18**	.03	.03	.03	1			43.88	7.39
13	T3 CB Externalising	-.22**	-.14*	-.07	.20**	-.05	-.19**	-.20**	-.24**	.00	-.05	-.02	.72**	1		32.96	4.48
14	T3 CB Total	-.25**	-.13*	-.11	-.27**	-.01	-.20**	-.19**	-.24**	.00	.00	.00	.92**	.90**	1	123.77	19.65

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

T1, T2, T3 refer to time one, two and three; CB – child behaviour problems.

Conscientiousness was correlated with EI at T1, but not at T2 or T3. Also, EI was positively correlated with EC behaviour and negatively correlated with child outcomes. Surprisingly, there was no correlation found between EC behaviour and child outcomes. Considerable checks were done, by item, to check for failure to reverse items, data entry errors and very influential outliers. Extraversion, agreeableness and neuroticism were all correlated with child outcomes in the expected directions.

Step 1 - Univariate analysis

Univariate LGMs were developed for both emotional intelligence and emotion coaching to examine linearity. Loadings for both intercept (1, 1, 1) and slope (0, 1, 2) were fixed at values to correspond to linear change, with intercepts set at time 1. Preliminary inspection determined that the change over the three time points was non-linear and it was necessary to incorporate a quadratic term for both variables. The intercept, slope and quadratic term were allowed to covary. In order for a three time model to be identified it was necessary to apply additional constraints. The variance of the errors was set to 0 and the intercepts for the observed variables were also set to 0. This meant the model was just identified but provided an estimate for each case (Duncan et al., 2006).

The variances of the latent variables, EI and EC, were all significantly different from zero confirming the need for the quadratic term. The coding of the linear slope for both measures was varied so that the means and variances at each of the three time points could be examined (see Table 2). Both emotional intelligence and emotion coaching were lower at time 2 compared to time 1 and then stabilised at time 3. Due to the curvilinear change the linear slope was different at each time point.

Table 2: Means and variances at each time point for Latent variables - Emotional Intelligence and Emotion Coaching.

	Emotional Intelligence			Emotion Coaching		
	T1	T2	T3	T1	T2	T3
Intercept mean	130.23**	125.25**	125.86**	6.02**	5.87**	5.82**
Intercept variance	191.19**	105.45**	109.82**	.17**	.32**	.33**
Slope mean	-7.78**	-2.18**	3.42**	-.21**	-.10**	.01
Slope variance	301.59**	28.09**	207.98**	.73**	.07**	.67**

**p<.01

Step 2 – Dual process model

In order to examine the nature of the relationship between parent emotional intelligence and emotion coaching behaviour over time stage two of the analysis involved developing a dual process/parallel path model (Duncan et al., 2006) as depicted in Figure 2. Within each scale, these latent variables were allowed to covary. Due to the need for a quadratic term, the model was just identified however estimates for the relationships between the variables were provided. Correlations for the model centred at T1 are presented in Table 3.

The EI intercept was negatively correlated with the EI slope as expected due to the quadratic nature of the change so that mothers with higher EI at time 1 had a larger drop at time 2 and a larger upswing at time 3. The same pattern of significant relationships was found for EC. There was a strong positive correlation between EI intercept and EC intercept and a negative correlation between EI intercept and EC slope.

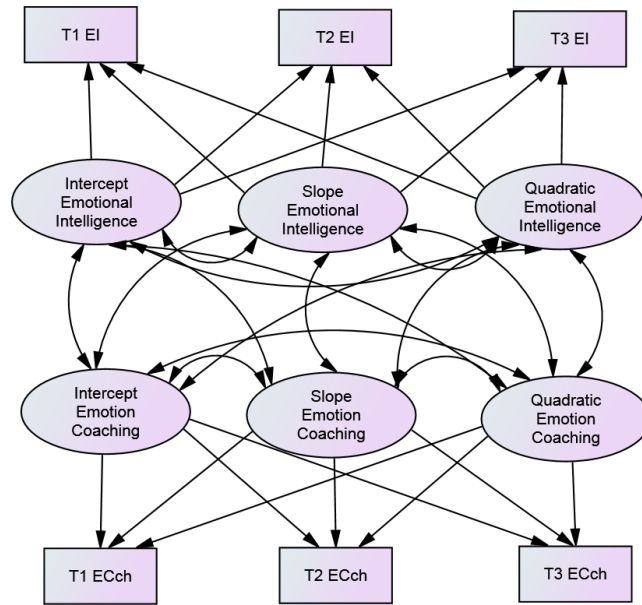


Figure 1: *Dual process model*

Table 3: *Pearson Correlation for Dual process model latent variables.*

		1	2	3	4	5
1	EI intercept	1				
2	EI slope	-.61**	1			
3	EI quad	.47**	-.97**	1		
4	EC Intercept	.22*	-.16*	.17*	1	
5	EC Slope	.07	.12	-.16*	-.18*	1
6	EC quad	-.08*	-.10	.16*	-.08	-.95**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

EI – Emotional Intelligence; EC – Emotion Coaching.

Step 3 – Antecedent and Consequent variables

The third stage added predictor and outcome variables to the dual process model. The predictor variables were the parent personality factors of extraversion, agreeableness, neuroticism, conscientiousness and openness and the outcome variable was child behaviour problems. Covariances among the exogenous variables, and also among the residuals of the

outcomes, were freely estimated, as were covariances among residuals of the intercept factors and (separately) the slope and quadratic factors.

Model fit was good, χ^2 (176df) = 295.48, χ^2/df = 1.68, IFI = .953, CFI = .952, TLI = .931, RMSEA = .056. Inspection of the modification indices suggested including covariances between several of the personality error terms. The error terms were investigated to confirm there was no bias in the estimate of the paths of interest and this being the case, the covariances were retained. This resulted in an improved fit, χ^2 (172df) = 248.68, χ^2/df = 1.45, IFI = .970, CFI = .969, TLI = .955, RMSEA = .045.

A more parsimonious model could be found by trimming non-significant path coefficients (Kline, 1998). Trimming the non-significant paths did not affect the model fit ($\chi^2_{\text{change}} = 5$, $p > .05$). All personality factors remained as predictors of the intercept for EI at Time 1 with Agreeableness ($\beta = .392$, $p < .001$) and Openness ($\beta = .273$, $p < .001$) being the strongest (Extraversion: $\beta = .175$, $p = .002$; Neuroticism: $\beta = -.104$, $p = .044$; Conscientiousness $\beta = .103$, $p = .069$). Agreeableness and Openness were also the most significant predictors of the slope of EI ($\beta = -.317$, $p < .001$ and $\beta = -.168$, $p = .020$ respectively) as well as Conscientiousness ($\beta = -.065$, $p = .002$). The only significant personality predictor for EC was Agreeableness ($\beta = .208$, $p = .023$). For the child problem outcome variables, the EI intercept and slope remained as significant predictors ($\beta = -.333$, $p < .001$ and $\beta = -.632$, $p = .029$). Surprisingly EC did not predict child outcomes. The final trimmed model provided a good fit to the data, χ^2 (189df) = 263.46, χ^2/df = 1.39, IFI = .971, CFI = .970, TLI = .960, RMSEA = .043.

Step 4 – Causal model.

The final stage in the analysis was to add causal paths between the primary variables of interest. Consistent with the hypothesis that parent's emotional intelligence would be related to their emotion coaching behaviour, direct paths were added from EI intercept to EC intercept, slope and quad, EI slope to EC slope and quad and from EI quad to EC quad,

making the EC variables endogenous. Model fit was slightly improved with causal paths added, χ^2 (189df) = 261.04, χ^2/df = 1.38, IFI = .972, CFI = .971, TLI = .961, RMSEA = .042. The path from the EI intercept to EC intercept just failed to reach significance (β = .170, p = .056), although did predict EC slope (β = .175, p = .034). The EI slope predicted the EC slope (β = .261, p = .001) as did the EI quad to EC quad (β = .530, p = .001). The final model with significant paths is shown in Figure 2.

Discussion

Past research and theory indicate that parent personality and emotion based parenting practices play a crucial role in the development of children's social and emotional competency (Belsky, 1984; Eisenberg et al., 1998; Morris et al., 2007). The present study examined the predictive ability of maternal personality and emotional intelligence on both emotion coaching behaviour and on child internalising and externalising problems over 2 years during the preschool period. For the most part, study hypotheses were supported. Mothers with higher emotional intelligence did engage in more emotion coaching behaviour, both initially and over time, although emotion coaching was not found to be related to child adjustment, an unexpected finding. A direct relationship was found between mothers emotional intelligence and child outcome, both internalising and externalising symptoms, providing support for the direct transmission of emotion regulation from parent to child.

Consistent with expectations, mothers with higher emotional intelligence were more likely to report supportive emotional responses to child negative emotions, indicative of an emotion coaching approach. This finding does provide support for the notion that mothers who have greater awareness and regulation of their own emotions are more likely to be able to coach their pre-schooler age children to do the same over time. This finding is consistent with limited existing cross-sectional research also reporting positive relations between parent

emotion regulation and emotion coaching behaviours (Lorber 2012; Valiente et al., 2007) and to our knowledge is the first longitudinal study to report this association.

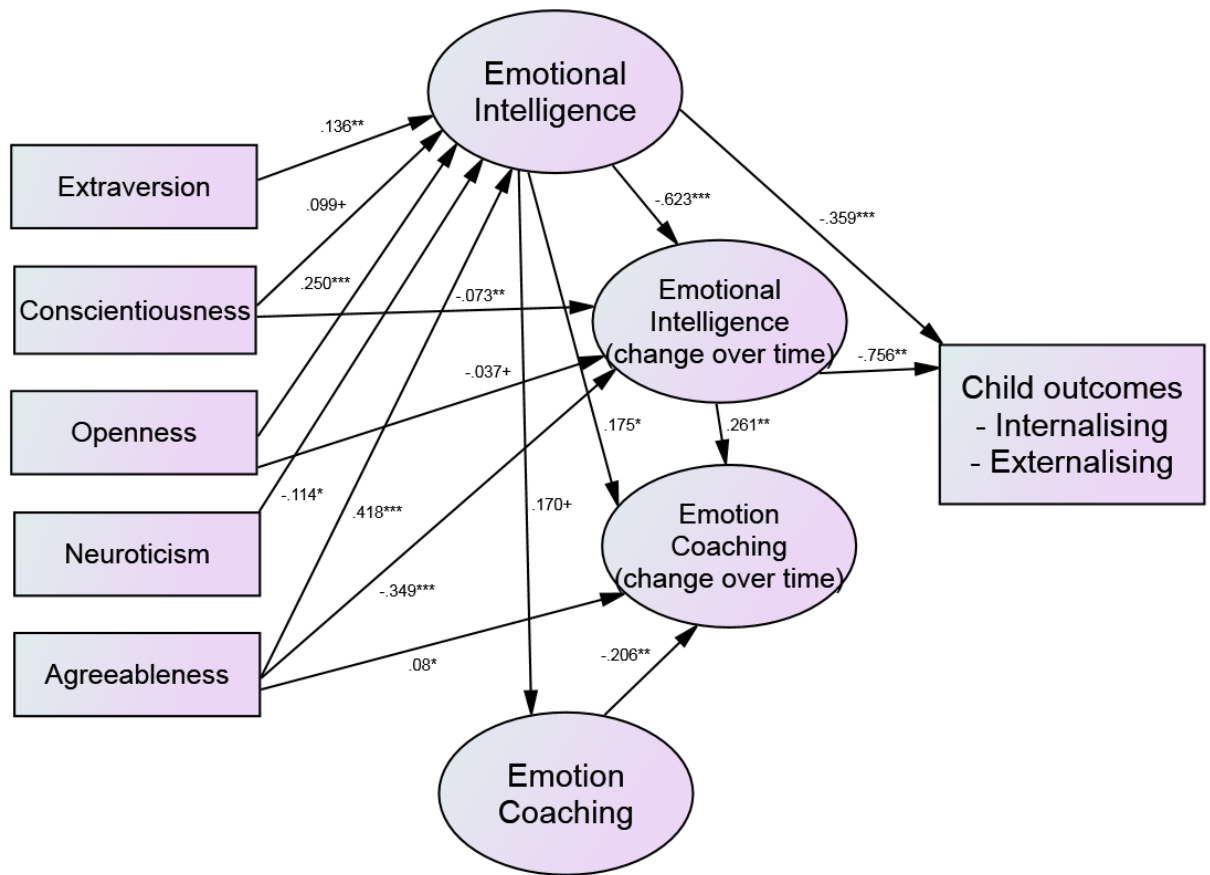


Figure 2: Causal Model of Relationship between Parent Personality, Emotional Intelligence, Emotion Coaching and Child Outcomes

+ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Maternal emotional intelligence did vary over the three time points and both the initial level and the change over time (slight drop at T2 and increase at T3) were also significant predictors of their children's internalising and externalising problem behaviour, independent of parenting behaviour including emotion coaching. This finding suggests that mothers who function with a higher level of emotional competence are more likely to experience less

problematic behaviour in their children. This may be a perception bias whereby mothers who are more emotionally intelligent may be less likely to interpret negative behaviour in their child as problematic, and perhaps see it more as a natural developmental opportunity, rather than an annoying or developmentally inappropriate behaviour (Morris et al., 2011). Given the earlier finding that mothers with high emotional intelligence are also more likely to engage in emotion coaching, we would expect that these mothers would be more likely to experience negative behaviour from their pre-schools as an opportunity to intervene and provide assistance. Further research, incorporating independent assessment of child behaviour, is needed to replicate this finding.

Based upon theory and previous research, it was predicted that parent emotion coaching (represented by parent reactions to negative emotions) would predict child adjustment which rendered the absence of a significant relationship somewhat surprising. The complete absence of a relationship prompted rigorous data checking as emotion coaching behaviours have been directly and indirectly associated with child outcomes in cross sectional research (Brophy-Herb et al., 2010; Gottman et al., 1996; Warren & Stifter, 2008). It may be that the measure used in this study, the Coping with Child Negative Emotional Reactions (Fabes et al., 2002), either does not capture the construct of emotion coaching adequately, or that there may be a divergence in reported hypothetical reactions to negative child emotions and actual emotion coaching behaviours. Baker et al. (2011) found no association between parent reported negative reactions and observed emotion coaching behaviour for either mothers or fathers, and similar findings have occurred with at risk children (Duncombe et al., 2012) and children with disruptive behaviour problems (Ramsden & Hubbard, 2002). Other factors that have been theorised to influence the impact of emotion coaching on child outcome include child characteristics and contextual factors (Morris et al., 2007). For children who are highly emotionally reactive, it may be parent emotion coaching is overwhelming and

therefore ineffective in soothing and regulating the child in distress, an indication of less than ideal goodness of fit (Belsky, 1984). Family context factors, including age and emotional development of siblings, and marital cohesion, may also interact or interfere with the process of emotion coaching, perhaps effecting the transmission of emotional understanding and competence from parent to child (Eisenberg et al., 1998; Morris et al., 2007).

With regard to parent personality, all five factors were related to parent emotional intelligence. As expected, the positive factors of agreeableness, openness, conscientiousness and extraversion all predicted emotional intelligence with agreeableness and openness the strongest factors. There was also a significant negative relationship with neuroticism and emotional intelligence. These findings are consistent with existing research relating personality and emotional intelligence (Joseph & Newman, 2010; Van der Linden, 2012). As found in Greig and Schniering's (2014) earlier work, agreeableness was the only personality factor that correlated with emotion coaching behaviour, in contrast to Hughes and Gullone's (2010) finding that all personality factors were significantly associated with emotion coaching behaviours in parents of older children and adolescents. Given the same measures were used this difference is difficult to interpret. In the longitudinal model however, no personality factors emerged as significant predictors of emotion coaching, although agreeableness had a small but significant effect on the change in emotion coaching over time. It appears, based on this preliminary work, that personality factors may not be consistently related to parent reactions to children's negative emotions, in the way they are associated with other positive parenting behaviours, such as sensitivity and warmth (Clark et al., 2000; Smith et al., 2007). If it is the case that emotion based parenting has less to do with parent personality and more to do with parent emotional competence, our efforts to educate and enhance parents' efforts may be more promising. There is considerable evidence to suggest that emotional competence is open

to improvement (Goleman, 1995; Salovey & Mayer, 1997; Schutte et al., 2009) unlike the more stable personality factors (John et al., 1991; John & Srivastava, 1999).

The theoretical and developmental implications of these findings are noteworthy. While parent emotion regulation and personality have been identified as factors in theoretical models of the socialisation of emotion, parent behaviours, such as emotion coaching and emotional expressiveness, dominate the process by which parents are theorised to influence their child's emotional development. These findings indicate that parent emotional intelligence, may warrant further attention as a direct factor in the transmission of emotional competence to the child. As parent behaviour varies over time with the needs of the developing child, parent emotional intelligence and regulation may also play an important role in differentiating parents who more effectively adjust to the changing emotional needs of the child.

The results of this study have important clinical implications. Parent training interventions for pre-schooler age children typically focus on managing difficult behaviour and reducing temper tantrums such as Triple P (Sanders, Markie-Dadds, Tully & Bor, 2000), 123 Magic (Phelan, 2003) and The Incredible Years (Webster-Stratton, Reid & Stoolmiller, 2008). These programs aim to improve the quality of the parent child relationship with an overall emphasis on rewarding positive behaviour and ignoring negative behaviour. Programs with an emphasis on emotion coaching have been slow to emerge, with the exception of the recently trialled Tuning into Kids program (Havighurst et al., 2013; Wilson, Havighurst & Harley, 2010). The findings of this study however suggest that parent programs with an emphasis on parent emotional health and competence may be a promising alternative.

This study has a number of noteworthy strengths. This was the first study to investigate the relationship between parent personality, emotional intelligence, related emotion based parenting behaviours and child adjustment, and to do so in a longitudinal

design. In addition, rigorous statistical procedures recommended for longitudinal data analysis were used so that robust conclusions could be drawn (Duncan et al., 2006). Further, the study made use of a broad based measure of emotional intelligence providing preliminary information regarding associations between emotional intelligence and parent emotion based parenting. Finally, the study examined emotion based parenting practices spanning the preschool years, a time crucial for the development of social and emotional competencies (Denham & Kochanoff, 2002; Gottman et al., 1997).

There are some limitations in this study that should be acknowledged. All constructs were assessed via self-report and thus the significance of the findings could be magnified by shared method variance or affected by mood consistent responding. In particular it might be that extrovert parents who report themselves as having high emotional intelligence would be more likely to endorse items related to their parenting that are consistent with their self belief.. Similarly, introvert parents who report lower emotional intelligence may be less likely to endorse emotion coaching items or positive parenting behaviours possibly due to their personality functioning. Also, despite efforts to attract a representative sample using a state-wide distribution organisation, the disproportionately high levels of education, intact families and lack of cultural diversity constrain our confidence in the generalizability of these findings, particularly as culture is inextricably tied to emotion socialisation (Cole & Tan, 2007). Replicating this study with a more diverse population would provide important additional information. Finally this study would be enhanced by multiple measures of emotion socialization practices. While there are no universally accepted measures of parent emotion socialisation practices, assessing a range of parent behaviours would further illuminate this important area of investigation.

The findings of this study generate a number of additional research avenues. Firstly, research evaluating the transmission of emotion regulation would benefit from measures

including child temperament and emotion regulation, as child emotion regulation has been identified as a moderating factor in contemporary theories (Eisenberg et al., 1998; Morris et al., 2007). In addition, measures of child physiology would provide useful objective information regarding child arousal and reactivity (Gottman, 2001) to better understand the mechanism of transmission. Secondly, research including broader family context factors, including siblings, grandparents, quality of marital relationship, social, vocational and financial stresses will further illuminate the most meaningful factors that influence emotionally healthy parenting (Belsky, 1984; Morris et al., 2007). Finally, research examining the possibility of improving parent emotion competence, and thereby improving emotion coaching efforts will provide an indication as to whether this focus on parents is a fruitful application of theory in the complex and dynamic business of raising emotionally healthy children.

In summary, the results of this study highlight the importance of focussing on parent emotion regulation and emotional intelligence when examining the development of child social and emotional competence. Even though parent emotional functioning is identified in major theoretical frameworks of child emotional functioning such as Eisenberg's emotion socialisation model, (Eisenberg et al., 1998) and Morris's tripartite model (Morris et al., 2007), empirical investigations into the role of parent emotion regulation is an emerging field (Hughes & Gullone, 2010). The findings from this study suggest that parents who are having difficulties with their pre-schoolers emotional development would benefit not only from emotion based strategies, but also therapeutic attention to their own emotion regulation. Parent programs focussed on developing emotional intelligence might be expected to have a positive cascade effect to their emotion socialisation parenting efforts and to the emotional health and development of their pre-schoolers.

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Chapter Four

Enhancing Emotional Intelligence, Emotion Regulation and Emotion Coaching in Parents of Pre-schoolers – A Parent Intervention.

Sue-Anne Greig and Carolyn A. Schniering

Abstract

Along with a range of family and contextual factors, parent emotion regulation and emotional intelligence influences the way parents intentionally and inadvertently parent their children, particularly in their efforts to socialise their children's emotional development. This study investigated whether educating parents of pre-school children about their own emotional competence, in addition to instructing them in the steps of emotion coaching, would result in an improvement in emotion regulation and emotional intelligence in the parent. Parents (n=33 treatment, n=30 wait-list) of pre-school age children were randomly assigned to one of two half day workshops teaching the skills of emotional intelligence and emotion coaching. Parents reported significant improvement in both overall emotional intelligence and emotion coaching, and reduction in emotion dismissing behaviours post treatment, regardless of initial level of emotional intelligence. Parents also reported increased use of the emotion regulation strategy of re-appraisal and reduced use of emotional suppression. These findings provide preliminary grounds to enhance the role of parent emotion regulation in current theoretical models and to consider interventions targeting parent emotion related beliefs and behaviours as an important addition to existing parent training and education programs.

One of the important development tasks for young children is learning to understand emotions in themselves and others in order to develop emotional competence (Eisenberg, Cumberland & Spinrad, 1998; Kopp, 1982; Saarni, 1999). Emotional competence includes the child being able to regulate their experience of emotions, effectively express their emotions, understand their and others emotions and use this knowledge in the context of their relationships with others. The development of emotional competence is associated with pro-social behaviour and social relationships, attentional skills, and physical health and remains relatively stable through to adolescence (Eisenberg & Morris, 2002; Gottman, Katz & Hooven, 1997; Saalquist et al., 2009; Shields & Cicchetti, 1998). Children who do not develop emotional competence effectively experience more negative emotions and are more likely to have social and behavioural problems. As they are less able to regulate their emotions, these children experience difficulties with school transition and making friends, they display more negative affect and have more difficulty understanding their own and others emotions. These deficits are associated with later risk taking behaviours, including antisocial behaviour and substance abuse in adolescence and adulthood (Denham & Kochanoff, 2002; Eisenberg & Morris, 2002; Raver, 2002; Silk, Steinberg & Morris, 2003).

Family members and carers, especially parents, are the primary source of information about emotions for the preschooler, both directly in terms of responses to emotional expression and emotion based behaviour and indirectly via parent displays of emotions and reactions to the others emotions (Denham & Kochanoff, 2002; Dix, 1991). This emotion socialisation of the pre-schooler plays a central role in the development of emotional competence. Included in the domain of socialization of emotion are the way parents' model emotional expression, their reactions to emotions and how they assist their preschooler learn about their emotions and emotion-related behaviour (Eisenberg et al., 1998; Morris, Silk, Steinberg, Myers & Robinson, 2007). Eisenberg et al. (1998) suggest that parents directly

influence the development of children's emotional regulation through discussion of emotion, reactions to children's emotions, and emotional expressiveness. This socialisation or teaching reflects the parent's beliefs, goals and values regarding emotions and have been found to have a direct impact on emotion regulation and emotion self-awareness in preschool age children (Gottman, Katz & Hooven, 1996; Warren & Stifter, 2008).

The factors contributing to the development of emotional regulation in children have been theorised to function within a tripartite model proposed by Morris and colleagues (2007). Parent and child temperamental characteristics contribute to the transmission of emotional knowledge via observation and modelling of emotion based behaviour, parenting practices, including emotion coaching, and the broader emotional climate of the family. Parent characteristics include emotional regulation and reactivity, mental health and family history. Of the three factors that are hypothesised to directly influence the child's developing emotion regulation and to directly and indirectly impact the child's adjustment and social competence, the parent practice of emotion coaching is the most active and intentional. Parents are considered to be emotion coaching or emotion dismissing depending on the way in which they engage with their child's emotional experience and expression (Gottman et al., 1996). Emotion coaching parents are aware of their child's emotion and help their children deal with their emotions, particularly anger and sadness, notice lower intensity emotion in their children, view the child's negative emotion as an opportunity for intimacy and teaching, are more empathic, assist the child to label their emotions and help the child to problem solve strategies for dealing with the situation while setting behavioural limits (Gottman, 2001). Children with emotion coaching parents have been found to have better cognitive abilities, emotion regulation skills and social and emotional competence (Brophy-Herb et al., 2010; Chen, Lin & Li, 2012; Denham et al., 1997; Duncombe et al., 2012; Gottman et al., 1997). There is also evidence that they are more protected from the negative effects of marital

distress, domestic violence and maltreating parents (Katz & Gottman, 1997; Katz & Windecker-Nelson, 2006; Shipman et al., 2007).

The emotion regulation and emotional awareness of the parent plays an important role in the emotion socialisation process of children (Belsky & Barends, 2002). In their tripartite model, Morris and colleagues (2007) identify parent regulation as a factor influencing all three emotion socialisation processes – observation and modelling, parenting practices such as emotion coaching and reactions to child emotions and also the emotional climate of the home. Parents who have difficulty regulating their own emotion expressiveness and reactions are more likely to have difficulty tolerating negative emotions in their children (Katz & Hunter, 2007) and have fewer strategies for teaching their children about emotions (Katz & Windecker-Nelson, 2004). Other researchers have found that various aspects of parent emotion regulation and low negative emotionality are associated with more positive parental behaviours, including emotion coaching, and more positive child outcomes (Cumberland-Li et al., 2003; Hughes & Gullone, 2010; Valiente, Lemery-Chalfant & Reiser, 2007). In our earlier longitudinal study, we found a predictive relationship between parents with higher emotional intelligence and parent reported adjustment in pre-schoolers over a two year period (Greig & Schniering, 2014b). Consequently, in addition to teaching the skills of emotion coaching, parent training interventions that target the parents' own emotion awareness and regulation may offer specific benefits for the child's developing social and emotional competence.

Parent training interventions have typically targeted a limited range of needs depending on the child age (Havighurst et al., 2013). Parent-child attachment based interventions, focussing on maternal sensitivity and responsiveness within the parent child interaction are available for parents of babies and infants experiencing separation difficulties (Bakermans-Kranenburg, van IJzendoorn & Juffer, 2003). Prevention and corrective programs for parents of older children in general are manualised behaviour based programs

focussing on managing difficult behaviour, dealing with temper tantrums and teaching effective discipline such as Triple P (Sanders, Markie-Dadds, Tully & Bor, 2000), 123 Magic (Phelan, 2003) and The Incredible Years (Webster-Stratton, Reid & Stoolmiller, 2008). Prevention programs specifically addressing parent and child emotion regulation, and emotion coaching, have been slow to emerge, with the exception of the recently trialled Tuning into Kids program (Havighurst et al., 2013; Wilson, Havighurst & Harley, 2012). The Tuning in to Kids: Emotionally Intelligent Parenting program (TIK) is a prevention program for parents of preschool children and teaches parents the skills of emotion coaching. Promising results across several studies indicate that parents who participate in TIK report increased emotion coaching behaviours, decreased emotion dismissing behaviours and less adjustment problems in their pre-schoolers (Havighurst, Harley & Prior, 2004; Havighurst, Wilson, Harley & Prior, 2009; Havighurst et al., 2010; Wilson et al., 2012). To our knowledge there are currently no published parent programs focussing exclusively on parent emotional regulation or competence.

This is surprising given the emergence of emotional competence and emotional intelligence as an asset in many areas of performance and functioning over the last two decades (Cherniss, Extein, Goleman & Weissberg, 2006). Social and emotional development and learning is increasingly incorporated in school curriculums with more than half of the schools in the US directing resources towards the emotional functioning of their students (Foster et al., 2005). A recent meta-analysis (Durlak, Weissberg & Pachan, 2010) found that these interventions produced a range of positive benefits for children from 5-18 years of age including enhanced personal and social competencies, decreased antisocial behaviour and aggression, and fewer serious discipline problems and school suspensions. At tertiary level, emotional intelligence content is routinely included in MBA programs (Boyatzis, Stubbs & Taylor, 2002) and is offered as extracurricular coursework in many tertiary education

institutions, an indicator of the extent to which the business and corporate world have embraced these “soft skills” in leadership contexts and in efforts to reduce stress amongst workers (Slaski & Cartwright, 2003). Training in emotional intelligence is also being utilised in high performance environments, particular sport science (Thelwell, Lane, Weston & Greenlees, 2008). Given the effectiveness of emotional competence training in a variety of domains, it seems likely that parents and families may also experience benefits in increasing their emotional awareness and functioning.

Drawing on emotion based theory and existing research the aim of this study was to determine whether emotional competence training for parents would improve their emotion regulation skills and overall emotional intelligence, as well as their emotion coaching behaviours toward their pre-school age children. A half day workshop was developed for parents based on the theory and concepts in the areas of adult and child emotional regulation and competence (Eisenberg et al., 1998; Gottman et.al., 1997; Gross & John, 2003; Salovey & Mayer, 1990). The workshop taught parents skills and strategies to improve their own emotion regulation and also the skills of emotion coaching which include noticing and labelling emotions, viewing emotions as a time for intimacy and teaching, empathizing and validating their children’s emotions, and problem solving around emotional events. The hypotheses tested in this study were that participating parents would report both an improvement in their own emotional intelligence, as well as their emotion coaching skills, and a reduction in their emotion dismissing practices. It was also hypothesised that the change in parent emotion coaching behaviour would be related to changes in parent emotional intelligence. As parenting pre-schoolers can be a stressful experience, it was also predicted that improvements in emotional intelligence and emotion coaching would not reflect any reduction in overall parenting stress.

Method

Intervention

The Emotionally Healthy Parenting – Emotion Coaching your Pre-schooler Workshop is a half day group parenting workshop, conducted by the author, an experienced clinical psychologist and corporate trainer and facilitator. Parents were taught the skills of emotion regulation, broadly contained within an emotional intelligence framework, including perceiving emotions, using emotions, understanding emotions and managing emotions (Salovey & Mayer, 1990) with specific strategies discussed to address parent anger and anxiety. Building on this base, the second part of the workshop then taught the 5 steps of emotion coaching (Gottman & DeClaire, 1997): (a) becoming aware of the child's emotion, especially when it is at a lower intensity; (b) viewing the child's emotion as an opportunity for intimacy and teaching; (c) communicating understanding and acceptance of the emotion; (d) helping the child to use words to describe how they feel; and (e) if necessary, assisting them with problem-solving (while setting limits). Parents were also provided with psycho education re age appropriate emotional development, demonstrations of emotion coaching, role play exercises and take home material with summaries of the workshop (see Table 1). As the majority of Emotional Intelligence course material is proprietary, workshop material was adapted from commercially available EI workbooks (Dann & Dann, 2012; Hay Group, 2008; Lynn, 2011). Two workshops were run 2 weeks apart with 33 parents attending the first workshop and 30 attending the second. Participants interacted with each other in role plays and during afternoon tea.

Participants

The sample comprised sixty-three parents (56 mothers, 7 fathers) of a pre-schooler (28 boys, 35 girls) aged two to five years ($m = 43.9$ months, $s.d. = 10.6$ months) at the time of first assessment. Sixty parents (95%) were living with the child's other parent and three (5%) were single. Most families had two children (62%), with twenty (31%) single child families

and four (6%) had three children. The majority of parents identified themselves as Australian (84%), the remainder reported European origins. The parent sample was highly educated with

Table 1: Session outline of “The Emotionally Healthy Parenting – Emotion Coaching your Pre-schooler” Workshop

	Topic	Content
1	Emotional Development	Emotional development 1-5yrs Parent child Attachment Factors affecting normal development
2	Parent Emotional Intelligence and Emotion Regulation skills	Perceiving Emotions - Emotional literacy Using Emotions - Thinking and problem solving Understanding Emotions - How emotions change over time Managing Emotions - Emotion regulation – fear and anger
3	Parenting with Emotional Intelligence - Emotion Coaching	1. Awareness of emotion 2. Opportunity for intimacy and teaching 3. Understand and acknowledge emotion 4. Label emotion 5. Problem solve (with limits)

38 parents (60%) reporting university qualifications, more than double the national and state average (ABS, 2011). Most parents (82.5%) were in paid work, and of those, twelve (23%) were working 15 hours or less per week, twenty two (42%) working 15-29 hours per week and eighteen (35%) working 30 or more hours per week.

Measures

Parent Emotion Coaching

The Maternal Emotional Style Questionnaire (MESQ; Lagace-Se´guin & Coplan, 2005) was used to assess parents’ beliefs about coping with children’s emotions of sadness and anger and their emotion coaching and dismissing behaviours. The MESQ comprises two 7-item scales (Emotion Coaching and Emotion Dismissing). An item endorsing coaching is: “When my child is sad, it’s time to get close”; for dismissing: “Childhood is a happy-go-lucky time, not a time for feeling sad or angry”. Lagace-Se´guin and Coplan (2005) reported good

psychometric properties, including stability, convergent validity, and construct validity for the 2-factor (seven items each) MESQ with Cronbach's alpha for the first factor, emotion dismissing (ED) ranged from .78 to .92 (.78 in the current study), and for the second factor, emotion coaching (EC), from .81 to .90 (.67 in the current study).

General Parenting behaviour

The APQ-pr is a 32 item measure of parenting characteristics that have previously been associated with disruptive behaviour. The APQ-pr generates three sub-scales; positive parenting, inconsistent parenting and punitive parenting measured on a 5 point Likert scale. An item endorsing positive parenting is "you have a friendly talk with your child", the inconsistent parenting scale includes items such as 'you threaten to punish your child but then do not actually punish them' and the punitive parenting scale includes items such as "you yell or scream at your child when he/she has done something wrong". All three scales demonstrate adequate internal consistency with Cronbach's alpha ranging from .63 to .80 (Clerkin et al., 2007). In the current study, scale reliability ranged from .68 to .78.

Parent Emotion Competence

The Schutte self-report Emotional intelligence Test (SSEIT; Schutte et al., 1998) was used to assess parent emotion competence. The SSEIT is a 33 item measure of emotional intelligence (EI) designed to map onto the Salovey and Mayer (1990) model of emotional intelligence. Items on the test relate to the three aspects of EI; appraisal and expression of emotion, regulation of emotion and utilisation of emotion, with items including "when I experience a good emotion, I know how to make it last" and "I know why my emotions change". The SSEIT utilises a 5 point Likert scale and demonstrates high internal consistency of .87 to .90 (.91 in the current study) and test-retest reliability of .78 (Schutte et al., 1998), and significant discriminant and concurrent validity (Schutte et al., 2001).

The emotion regulation (ER) strategies of Reappraisal and Suppression were assessed using the Emotion Regulation Questionnaire (ERQ; Gross & John, 2003). The ERQ is a 10 item measure of Emotion Regulation using a 7 point Likert scale. An item endorsing reappraisal is “I control my emotions by changing the way I think about the situation I’m in”, and for suppression “I control my emotions by not expressing them”. Scale reliabilities in community samples have been adequate for both reappraisal (.082) and suppression (.76) (Witlink et al., 2014). In the current study were .87 for reappraisal and .79 for suppression.

Parent Stress

Parenting Stress was assessed using the Parenting Stress Index—Short Form (PSI-SF; Abidin, 1995). The PSI-SF is a 36-item scale questionnaire scale that contains subscales for stress stemming from the child, the parent-child relationship, and the parent as well as a total score. Items are rated on a 5-point scale (Strongly Agree, Agree, Not Sure, Disagree, Strongly Disagree), for example “I feel trapped by my responsibilities as a parent” and “my child smiles at me much less than I expected”. This measure demonstrates good reliability and validity (Abidin, 1995). We used the Total Stress raw score ($\alpha = .91$; Abidin, 1995) as an assessment of overall parenting stress where higher scores indicate increased parenting stress, with scale reliability .93.

Procedure

Information flyers were distributed to all 35 registered preschools in the Manly Warringah local government area in Sydney, Australia, for parents of 2 to 5 year old children. Parent participation was voluntary. Inclusion criteria were English language proficiency and completion of an online pre-intervention questionnaire before the specified cut-off date. Eligible participants were randomly allocated to either treatment (n=33) or waitlist (n=30) depending on which workshop date they could attend. Participants in the treatment group completed pre and post-treatment assessments (2 weeks following treatment), including all

measures. Waitlist participants completed assessments 4 weeks apart (prior to attendance at the workshop). The workshops were delivered at a participating preschool centrally located within the area on Saturday afternoon to provide flexibility for at least one parent to attend. The study was approved by the Macquarie University Human Ethics Committee and all parents signed informed consent.

Results

The most appropriate method of analysis was determined to be repeated measures ANOVA, as there were no missing data and the focus of interest was primarily the interaction between group (treatment and wait-list) and time (time 1 and time 2). General linear models (GLM) were calculated for each of the variables of interest to determine if there was a 2 way interaction (group x time). Subject based covariates were then included in the GLM analysis to examine whether 3 way interactions existed, that is, whether the intervention was more or less effective for parents dependent on their level of emotional intelligence and emotion regulation (both reappraisal and suppression). Finally, mixed linear models were developed to examine the relationship between time varying co-variates, enabling the analysis of

Table 2: Descriptive statistics

								Wait-list (n=30)				Treatment (n=33)			
								Time 1		Time 2		Time 1		Time 2	
	EI	EC	ED	ER-re	ER-su	PosP	NegP	Mean	St Dev	Mean	St Dev	Mean	St Dev	Mean	St Dev
Emotional Intelligence	1							122.60	12.58	122.43	12.03	123.88	10.89	127.85	10.58
Emotion Coaching	.27*	1						3.66	.31	3.65	.41	3.74	.41	4.06	.45
Emotion Dismissing	-.10	-.07	1					3.38	.53	3.25	.61	3.30	.49	2.92	.53
ER - reappraisal	.58**	.06	.26*	1				4.73	1.17	4.53	.95	4.78	.88	5.20	.81
ER - suppression	-.46**	-.1	.16	-.18	1			3.24	1.07	3.13	1.16	3.24	1.20	2.85	1.08
Positive parenting	.46**	.44**	.04	.29*	-.29*	1		4.28	.37	4.26	.36	4.23	.41	4.27	.43
Negative parenting	-.2	-.22	.32*	-.37**	.13	-.22	1	2.25	.52	2.21	.65	2.24	.49	2.06	.43
Parent stress	-.56**	-.20	.12	-.45**	.40**	-.39**	-.38**	80.60	16.79	74.00	17.03	81.67	21.65	74.81	19.89

Correlations are for combined pre scores – n=63.

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

EI – Emotional Intelligence; EC – Emotion Coaching; ED – Emotion Dismissing; ER-re – Emotion regulation – suppression; ER-su – Emotion Regulation - suppression; PosP – Positive parenting; NegP – Negative parenting.

relationships between their changes over time and changes in outcomes (Rabe-Hesketh & Skrondal, 2008).

Descriptive Statistics

Descriptive statistics and correlations are presented in Table 2. Scale means all fall within the expected ranges. As expected, emotional intelligence was correlated with emotion coaching, albeit weakly, and more strongly with positive parenting and parent stress in the expected directions. Surprisingly, emotional intelligence was not correlated with emotion dismissing, nor with negative parenting. Emotion coaching was correlated with positive parenting and emotion dismissing was correlated negative parenting in the expected directions. The emotion regulation variables were strongly correlated with emotional intelligence however had very little association with emotion coaching or dismissing, other than a weak relationship between emotion regulation - reappraisal and emotion dismissing.

Comparisons of gender (both parent and child) across all demographic variables showed that there were no significant differences across the treatment and wait-list groups on any variables. T-tests were also performed on all variables of interest and the only significant difference that emerged was for positive parenting. Mothers reported more positive parenting than fathers, $t(61df) = 2.59, p=.012$, and parents reported more positive parenting towards girls rather than boys, $t(61df) = 3.44, p=.001$.

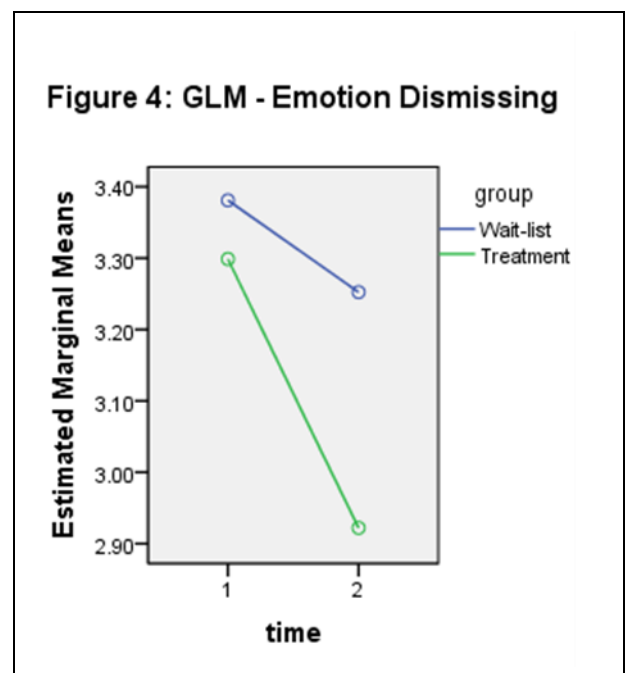
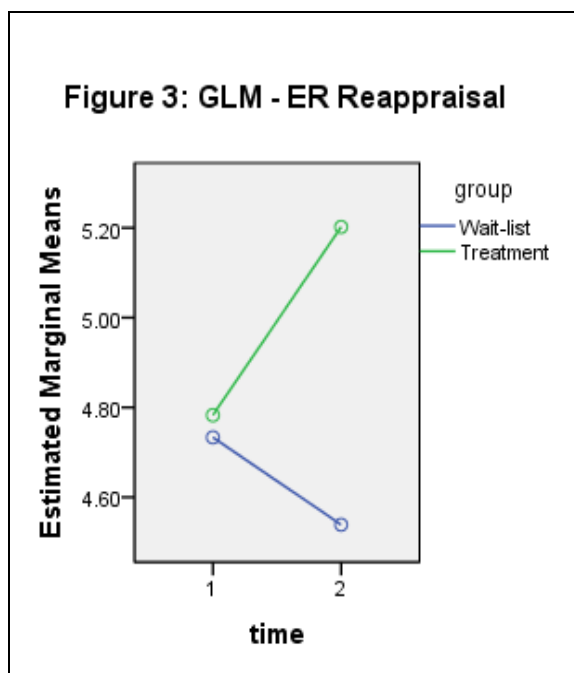
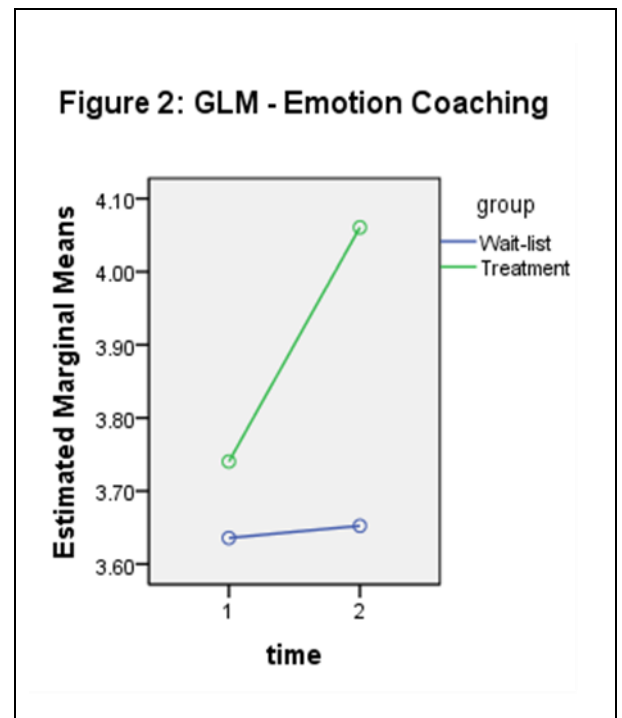
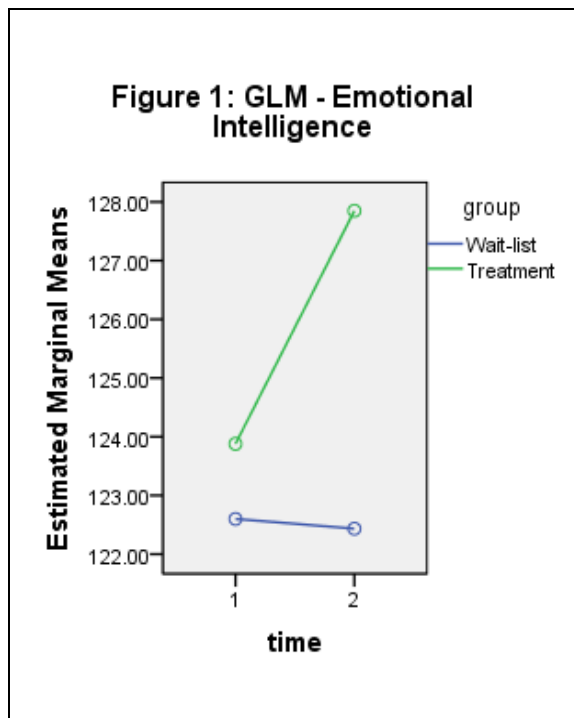
General linear models (GLM) were calculated for each of the variables of interest to determine if there was a 2 way interaction indicating treatment effect. The results are summarised in Table 3, and indicate significant interactions were found for emotional intelligence, emotion coaching, emotion dismissing and emotion regulation – reappraisal.

Table 3: *GLM results – time and group interactions*

Variable	F	df	p	$\eta^2 p$
Emotional intelligence	4.89	1, 61	.031	.07
Emotion Coaching	7.23	1, 61	.009	.11
Emotion Dismissing	4.00	1, 61	.049	.06
Emotion regulation - reappraisal	9.37	1, 61	.003	.13
Emotion regulation - suppression	1.79	1, 61	.185	.03
Positive parenting	.77	1, 61	.383	.01
Negative parenting	1.32	1, 61	.255	.02
Parent stress	.011	1, 61	.918	.00

The variables with significant interactions are displayed in Figures 1 - 4. Tests of simple effects of time showed that there was a significant change over time for the treatment group for emotional intelligence, $t(63) = 3.08$, $p=.003$, compared to wait-list, $t(63) = .12$, $p=.902$, for emotion coaching, $t(63) = 4.10$, $p=.000$ compared to $t(63)=.21$, $p=.839$ for wait-list, emotion dismissing, $t(63) = 4.38$, $p=.000$ compared to $t(63)=1.43$, $p=.157$ for wait-list, and for ER reappraisal, $t(63)= 3.04$, $p=.004$ compared to $t(63)=.1.34$, $p=.185$ for wait-list. Therefore participants in the treatment group showed significant improvements on all variables of interest, compared to wait-list.

To determine whether the intervention was more or less effective for parents with different levels of emotional intelligence and emotion regulation, subject-based covariates were included in the GLM analysis. To aid interpretability, all subject-based covariates were centred at their mean. Results indicated that 3 way interactions for emotional intelligence (time by group by EI) were not significant for either emotion coaching, $F(1,61) =.122$, $p=.728$, or emotion dismissing, $F(1,61) =1.16$, $p=.286$, indicating that the effect of the intervention was not different for parents with different emotional intelligence level.



Figures 1 – 4: *General Linear models of Emotional Intelligence, Emotion Coaching, ER reappraisal and Emotion Dismissing.*

Parent change in emotion regulation strategy, both reappraisal and suppression was also unrelated to group and parent emotional intelligence, $F(1,61) = .191$, $p = .664$ and $F(1,61)$

=2.158, $p=.147$ respectively, although the 2 way interaction, time by EI total was significant for reappraisal $F(1,61)=5.346$, $p=.024$, indicating that regardless of group, the change over time was different for parents with different EI scores.

Variation in emotion coaching and dismissing were also not related to group by parents emotion regulation strategies, for either reappraisal, $F(1,61) = .771$, $p = .383$; $F(1,61) = .054$, $p = .817$, or suppression, $F(1,61) = .178$, $p = .674$; $F(1,61) = .553$, $p = .460$. The 2 way interaction, time by ER reappraisal was significant for emotion dismissing, $F(1,61) = 6.411$, $p = .014$, indicating that, regardless of group, the change over time in emotion dismissing was different for parents with different ER reappraisal scores.

To evaluate the relationship between changes over time and changes in outcomes linear mixed models were developed (Rabe-Hesketh & Skrondal, 2008) for emotional intelligence, ER reappraisal and ER suppression. These analyses used stacked data and means centred by cluster (individual).

Emotional Intelligence

Between subject changes in emotional intelligence were significantly related to changes in emotion coaching, $F(1,61)= 6.69$, $p = .012$, such that the higher the mean EI, the higher the EC, to the extent that a 1 unit increase in EI is associated with a .31 increase in EC. There was no relationship for within subject variation, $F(1,61)= 3.458$, $p= .068$, nor significant relationships for emotion dismissing, between subject $F(1,61) = .625$, $p = .432$; within subject, $F(1,61) = .174$, $p = .678$.

Both between and within subject variation were found for ER reappraisal and emotional intelligence (between subject: $F(1,61) = 43.689$, $p = .000$; within subject: $F(1,61) = 7.975$, $p = .006$). This result indicates that regardless of time, people who have a higher EI tend to employ ER reappraisal anyway to the extent that a 1 unit increase in EI is associated

with a .05 unit increase in ER reappraisal. Also, within subject variation indicates that a 1 unit increase over time in EI is associated with a .04 increase in ER reappraisal for individuals.

There was also a significant between subject relationship found between ER suppression and emotional intelligence, $F(1,61) = 30.923$, $p = .000$. Here a 1 unit increase in emotional intelligence was associated with a reduction of .06 unit in ER suppression. No relationship was found for within subject variation, $F(1,61) = 1.815$, $p = .183$.

Emotion Regulation

Holding ER reappraisal as the covariate, no significant relationships were found for either emotion coaching (between subject: $F(1,61) = .233$, $p = .634$; within subject: $F(1,61) = .504$, $p = .480$) or emotion dismissing (between subject: $F(1,61) = 1.764$, $p = .189$; within subject: $F(1,61) = .930$, $p = .339$).

For ER suppression, a significant within subject relationship was found with emotion coaching, $F(1,61) = 11.723$, $p = .001$, indicating that changes in Emotion coaching over time were related to changes in ER suppression to the extent that a 1 unit increase in ER suppression was associated with a drop of .21 per unit of emotion coaching. No between subject variation was found, $F(1,61) = .724$, $p = .398$. Also, there were no significant relationships found between ER suppression and emotion dismissing (between subject: $F(1,61) = .270$, $p = .605$; within subject: $F(1,61) = 3.942$, $p = .052$). In summary, changes in emotion coaching were associated with changes in emotional intelligence (between subject) and changes in ER suppression (within subject).

Discussion

This aim of this study was to determine whether brief training for parents of pre-schoolers would generate improvement in parent emotional intelligence and emotion regulation and increased emotion coaching behaviour. Study hypotheses were supported. Compared to the wait-list condition, parents in the treatment group reported improvements in

their emotional intelligence, use of emotion regulation strategies and improvements in targeted aspects of emotion based parenting practices.

The workshop taught parents how they could improve their own emotion competence using the emotional intelligence framework, including perceiving emotions, using emotions, understanding emotions and managing emotions (Salovey & Mayer, 1990) with particular attention to regulating parental anger and worry. As predicted, parents in the treatment group reported increases in their overall emotional intelligence, and improvements in the underlying regulation strategies compared to wait-list. Parents reported significant improvements in their use of reappraisal in regulating their emotions and also reductions in their use of emotional suppression, compared to wait-list. This is consistent with anecdotal feedback from participants at the workshop who reported they had been “flying blind” trying to manage the emotional roller coaster that sometimes accompanies parenting a child (or children) of pre-school age.

The second aim of the study was to improve parents’ emotion coaching efforts with their pre-schoolers. Parents were taught the specific steps of emotion coaching which include paying attention to their child’s emotion, particularly lower intensity emotion, viewing the child’s emotion as an opportunity for intimacy and teaching, communicating understanding and acceptance of the emotion, helping the child to use words to describe how they feel and if necessary, assist them with problem-solving (while setting limits) (Gottman et al., 1997). Following the workshop, parents reported an increase in their emotion coaching attitudes and practices, and were more likely to endorse responses such as “When my child is angry/sad, it’s an opportunity for getting close” and “Anger is an emotion worth exploring”. This encouraging result has important implications for improving the social and emotional competencies of pre-schoolers as the benefits of an emotion coaching approach are well

evidenced (Brophy-Herb et al., 2010; Chen et al., 2012; Denham et al., 1997; Duncombe et al., 2012).

In addition to improved emotion coaching practices, an additional goal of the study was to decrease emotion dismissing parenting beliefs. Consistent with the findings of parents participating in the Tuning into Kids six week program (Havighurst et al., 2009, 2010, 2013), parents in the treatment group reported significantly less emotion dismissing beliefs and behaviours and were less likely to endorse items such as “I prefer my child to be happy rather than overly emotional” and “I try to change my child’s angry mood into a cheerful one”. These findings indicate that the workshop was effective in changing parent emotion related beliefs and emotion socialisation practices with their children, a change that has consistently been found to be related to improvements in child social and emotional development (Denham et al, 1997, Katz & Windecker-Nelson, 2004, Lunkenheimer, Shields & Cortina, 2007; Ramsden & Hubbard, 2002).

It should not be surprising that parents are able to learn and apply the skills of emotion regulation and emotional intelligence. Therapists spend a large amount of time teaching these skills in session to allow people to improve their interpersonal relationships, especially in family contexts (Nichols, 2010). In addition, many people attend workshops and seminars to improve their emotional intelligence (the so called “soft skills”) in a variety of domains including work, education and performance areas such as sport (Schutte, Malouff & Thorsteinsson, 2013), so the idea that there may be some utility in the parenting arena seems logical.

The final hypothesis tested whether an improvement in parent emotion competence was related to changes in emotion related parenting practices. Theoretical models of child emotion development implicate parent emotional functioning as part of a broad constellation of parent characteristics influencing parenting practices and child outcome (Belsky, 1984;

Eisenberg et al., 1998; Morris et al., 2007). In prior cross sectional (Greig & Schniering, 2014a) and longitudinal (Greig & Schniering, 2014b) studies, we have found evidence supporting the theoretical association between parent emotional intelligence and parent coaching behaviour. The results of this study provide additional empirical support for this relationship as parent increases in emotional intelligence were found to be related to improvements in emotion coaching.

Improvements in emotion coaching and reduction in emotion dismissing were not related to the initial emotional intelligence level of the parent. This important finding confirms individual (emotional intelligence and emotion regulation) and applied (emotion coaching) skills can improve regardless of initial level of emotional intelligence and is especially encouraging. Efforts to improve emotional functioning for parents who present with initial lower levels of regulation will not be futile, consistent with the experience of a therapist who may consider it more important to focus on improving emotion regulation skills with a client who exhibits low awareness or a deficit in this ability. Interventions such as this could therefore be applied in a wide range of settings and may offer benefits to parents seeking support regardless of their initial emotional intelligence level.

In order to examine any spillover effects, parents also completed measures on general parenting and parent stress. There were no significant differences between groups or within the treatment group on any of these measures indicating that the treatment effectively targeted emotion based interactions for the parent and child, rather than more generally endorsing positive parenting practices. Despite the expectation that improved emotional intelligence leads to reduced stress (Goleman, 1995; Slaski & Cartwright, 2003), adopting new strategies to manage emotionally intense situations with pre-schoolers may take more than the four week post treatment follow-up to bed down.

The findings from this study provide additional support for contemporary theories of the socialisation of emotion for children. In their family based model, Morris and colleagues (Morris et al., 2007) implicate parent emotional functioning as a contributing factor to the development of emotional regulation, in addition to family history and parent mental health. Similarly, Eisenberg's emotion socialisation model (Eisenberg et al., 1998) identifies parent emotion related beliefs, norms and values as factors influencing emotion-related parenting practices (which include reactions to child's emotions, discussion of emotion and emotional expressiveness). In both of these frameworks, parent emotion regulation or competence appears to be static input to the process, in the same way that Belsky's (1984) process model identifies parent personality as a primary, but stable, input to parenting practices.

The results from this study however indicate that parent emotion regulation is open to change and may therefore have a more dynamic impact than previously thought. As parent emotional functioning is able to be learned, unlike personality which is considered to be more stable, there may be some grounds for more precisely discriminating, and perhaps, weighting, family and contextual factors in theoretical models to account for the significant role that parent emotion regulation may play. As parent emotional intelligence and emotion coaching levels have been found to clearly result in improved regulation and emotional competence in children (Greig & Schniering, 2014b; Gottman et al., 1996), it is encouraging to note that a relatively simple intervention can improve these skills. It remains important to determine whether these improvements would be stable at longer followup and to determine the balance between amount of time invested in intervention and stability of skills development and application.

Being able to precisely target parent emotion regulation development, independent of more general parenting practices, has important clinical implications. Parents experiencing difficulties with their pre-schooler emotion regulation and emotional development, or

experiencing emotional distress themselves, may benefit from specific emotion based parent interventions. For some parents, it may be that despite having read the parenting books, and understanding and applying the principles of rewarding good behaviour and ignoring bad behaviour, dealing with emotional intensity in themselves and their children continues to be a confusing and unsatisfying experience. Emotional competence training, coupled with instruction in emotion coaching, may provide these parents with additional resources to equip them to continue the important and challenging work of raising children.

There are several limitations to this study. Due to resource limitations, all constructs were assessed via parent self report, and only one post treatment assessment was conducted. Self report measures used in the outcomes of intervention studies may be influenced by expectancy bias and also shared method variance. In particular it might be that extrovert parents who report themselves as having high emotional intelligence would be more likely to endorse items related to their parenting that are consistent with their self belief.. Similarly, introvert parents who report lower emotional intelligence may be less likely to endorse emotion coaching items or positive parenting behaviours possibly due to their personality functioning. Naturalistic observations in the home setting would provide a more accurate measurement of real-time parent emotion coaching and dismissing practices and child outcome measures would also give some indication as to the effectiveness of any parenting change. Also, the measures used to assess emotion related parenting practices are somewhat limited and do not specifically capture information related to each of the five steps of the coaching process. Additional follow-up, perhaps at three or six months would also determine whether the changes reported here persist over time. It should also be noted that the sample in this study was not representative of the general population with the large numbers of university educated, intact families, and lack of cultural diversity limit the generalizability of

these findings. Additional work, involving a large scale trial would clarify the efficacy of this type of parent intervention.

To our knowledge, this is the first study to specifically target parent emotional competence as a pathway to influence emotion based parenting behaviour. The preliminary findings from this research indicate that parents attending a brief half day workshop report improvements in their own emotional intelligence and emotion regulation, and in their emotion related parenting practices. Parents indicated a positive shift in their attitudes and beliefs towards increasing their emotion coaching behaviour and reducing their emotion dismissing practices in helping their pre-schoolers develop emotional competence. In addition to reviewing the relative importance and of parent emotional functioning in current theoretical models, interventions targeting parent emotion related beliefs and behaviours may be an important addition to existing parent training and education programs.

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Chapter Five

General Discussion

Summary of Key Findings

The body of research in this thesis aimed to extend our understanding of the impact of parent factors including personality, emotional intelligence and emotion coaching in the socialisation of emotional competence of pre-schoolers. The first study (presented in Chapter two) found that both parent personality factors and emotional intelligence make an important contribution to effective parenting practices such as emotion coaching and more general positive parenting behaviours, consistent with major theoretical models (Eisenberg, Cumberland & Spinrad, 1998; Gottman, Katz & Hooven, 1996; Morris, Silk, Steinberg, Myers & Robinson, 2007). In one of the first studies to examine these associations, the results indicated that parent emotional intelligence was strongly associated with both emotion coaching and more general positive parenting behaviours. With regard to parent personality, consistent with the bulk of existing research, this study found that higher levels of agreeableness, conscientiousness, extraversion and openness and lower levels of neuroticism were associated with positive parenting behaviours (Clark, Kochanska & Ready, 2000; Prinzie et al., 2004; Smith et al., 2007). More specifically, agreeableness, conscientiousness and openness were associated with emotion coaching behaviours. Additionally, small but significant indirect effects from parent personality and emotional intelligence to positive and negative parenting via emotion coaching and emotion dismissing were found, as suggested by Gottman (2001). These findings provided preliminary support for the importance of parent factors in emotionally healthy parenting.

The second study (Chapter three) built upon the first by examining parent personality, emotional intelligence and emotion coaching longitudinally over 3 years. In addition to examining change over time in parent factors, pre-schooler adjustment measures were added at time 3. Specifically, Study Two demonstrated that mothers with higher emotional intelligence engaged in more emotion coaching, both initially and over time and reported less

internalising and externalising problems with their pre-schoolers than mothers with lower emotional intelligence, consistent with limited cross sectional research (Lorber 2012; Valiente, Lemery-Chalfant & Reiser, 2007). In contrast, an unexpected finding was the absence of a relationship between emotion coaching behaviour and pre-schooler adjustment. These results diverge from previous studies which have generally found a consistent relationship between emotion coaching and pre-schooler adjustment (Brophy-Herb et al., 2010; Gottman et al., 1996; Warren & Sifter, 2008). Additionally, the personality factors of agreeableness and openness emerged as the most significant predictors of maternal emotional intelligence; however no personality factors were related to emotion coaching behaviour per se. The findings from Study Two provide support for the enhanced role of parent emotional functioning in theoretical models (Eisenberg et al, 1998; Gottman et al, 1996; Morris et al, 2007) and the direct transmission of emotion regulation skills from parent to child.

The third and final study in this thesis (Chapter Four) investigated whether educating parents of pre-schoolers about their own emotional intelligence and emotion regulation, in addition to instructing them in the steps of emotion coaching, would generate enhanced emotional intelligence and emotion coaching behaviours. Parents attended a half day workshop and reported significant improvement in their overall emotional intelligence as well as increased use of the more effective emotion regulation strategy of cognitive reappraisal and decreased use of the less effective strategy of emotional suppression. Despite the lack of prior research utilising emotional intelligence in the parenting domain, these findings are consistent with the application of emotional intelligence in education, the workplace and performance management (Durlak, Weissberg & Pachan, 2010; Slaski & Cartwright, 2003; Thelwell, Lane, Weston & Greenlees, 2008). Parents also reported a significant increase in emotion coaching behaviour and a decrease in emotion dismissing behaviour, a finding in keeping with work being carried out by Havighurst and colleagues (Havighurst, Harley & Prior, 2004;

Havighurst, Wilson, Harley & Prior, 2009, 2010; Havighurst et al., 2013; Wilson, Havighurst & Harley, 2012) who have developed a more extensive emotion coaching training program for parents of pre-schoolers.

In summary, the results from the three studies suggest that parent personality, emotional functioning, both emotional intelligence and underlying emotion regulation skills, are important determinants of emotionally healthy parenting practices, particularly emotion coaching. Additionally, parent emotional intelligence directly impacts pre-schooler internalising and externalising behaviours independent of specific emotion coaching strategies. Furthermore, unlike more stable personality factors, parent emotional intelligence, use of emotion regulation strategies and emotion coaching skills are able to be learned in a brief workshop format, a promising clinical finding.

These findings highlight the importance of parent emotional functioning in optimal parenting and child development. While past and contemporary theoretical models recognise that parent factors, such as personality and emotion health influence parent behaviours and subsequent child outcomes, very little research attention has specifically examined these factors and their direct and indirect effects on parenting behaviours and child outcomes.

Theoretical Implications

Taken together, the results from the studies presented in this thesis have important theoretical implications for understanding the transmission of emotion regulation from parent to child. The research findings suggest that the way in which parent factors, in particular, parent emotional intelligence and emotion regulation contribute to the development of social and emotional competence in pre-schoolers may play a more prominent role than previously proposed in theoretical models. Specifically, the current findings suggest that parent emotional intelligence, representing a broader conceptualisation of adult emotional functioning than constituent emotion regulation strategies, directly affect child adjustment and

outcomes. Given that these results were obtained longitudinally throughout the pre-school period, and that direct effects alone accounted for variations in child outcome, parent emotional functioning warrants further examination.

Identifying underlying factors determining parent functioning provides important insights into pathways that may be accessed to generate better outcomes for parents and their children's development. Specific parent characteristics, including positive and negative emotional reactivity and regulation, general parenting style, mental health and gender differences, have been previously investigated, and reflect the interplay and complexity of cultural and emotion based influences. These multiple influences form the basis of aetiological conceptualisations and frameworks such as Eisenberg's "heuristic" model (Eisenberg et al, 1998) and Morris's tripartite model (Morris et al., 2007). Existing models may be enhanced by reconsidering the role of parent emotional functioning as a fundamental causal factor influencing many of the specific intrapersonal and interpersonal aspects of parenting behaviour. Parent emotional functioning may provide a buffer, or mediating role, for other parent factors that influence parent behaviour. Parents with higher emotional intelligence may be more able to insulate children from any negative effects of less optimal personality traits, mental health concerns in themselves and other family members, as well as problematic or dysfunctional family relationships, including the quality of the parent relationship.

Theoretical clarity regarding healthy emotional competence in adults is an important endeavour, both theoretically and clinically. Current theoretical conceptualisations broadly operationalise emotional functioning as either a largely reactive process requiring regulation, or as a general acquired ability. The ongoing debate regarding the dimensions and definition of adult emotional functioning pose methodological concerns for researchers. Emotion regulation has been included as a component of a broader emotional intelligence or

competence, although critics of emotional intelligence maintain concerns about this breadth and therefore the usefulness of the construct (Matthews, Zeidner & Roberts, 2012). Current theoretical models of the development of child emotion regulation reflect this distinction by sequencing emotion regulation as a mechanism, or mediating factor influencing broader social and emotional functioning. Emotional intelligence theory may also benefit from more specifically examining the relationship between the underlying factors, as Joseph and Newman (2010) have proposed with their cascading formulation applied to job performance whereby emotion perception precedes emotion understanding which in turn precedes emotion regulation which ultimately results in performance. Notionally similar to the steps of emotion coaching, a sequential conceptualisation has the potential to integrate work in emotion regulation, meta-emotion and emotional intelligence.

Consistent with the fundamental theoretical premise that the emotional functioning of a child has a developmental trajectory, this research indicates that changes in emotional functioning are also evident in parents. The development acknowledges fluidity and change and this research points to the conclusion that these processes are also seen in adults. There is a growing body of research demonstrating the dynamic nature of emotion regulation and emotional intelligence across multiple life domains including education, sport science and the workplace (Boyatzis, Stubbs & Taylor, 2002; Slaski & Cartwright, 2003; Thelwell, Lane, Weston & Greenlees, 2008). In line with this research, the present findings demonstrate that parent emotional regulation and intelligence, and emotion coaching are open to change as a result of increased awareness and knowledge. Given the previously noted direct transmission from parent emotional intelligence to child adjustment and outcome, this finding has theoretical implications. Current conceptualisations suggest that many parent factors, for example personality, family history and attachment history, contribute to parent socialisation of emotion in an independent or exogenous way. Factors that are seen as variable and thus

attract research and clinical attention tend to be behaviour based, for example positive parenting, expressiveness, reactions to emotions and child behaviour management strategies. As parent behaviour varies over time with the needs of the developing child, parent emotional intelligence and regulation may play an important role in differentiating parents who more effectively adjust to the changing emotional needs of the child.

More broadly, the studies provide support for a range of factors influencing optimal child emotional development that have been implicated in theoretical models and previous empirical research, such as parent personality, emotional functioning, emotion regulation and emotion coaching parenting practices. As parenting is a complex, multi- determined and dynamic endeavour, a multivariate approach will be essential to advance our understanding of the mechanisms open to change that are most likely to positively result in the development of emotionally healthy children.

Intervention Implications

Several important clinical implications can be drawn from the research contained in this thesis. Firstly, there is a need for prevention and intervention programs targeted at the determinants of emotion based parenting. Preschool parent programs that focus solely on the child are unlikely to be effective. Approaches which involve parent emotional functioning, with a specific focus on improving awareness and application of their own emotional intelligence and emotion regulation skills may be better suited to provide an experiential and personal foundation from which parents can model and guide their children in a more authentic, and therefore effective, way. Parents who are more skilled in perceiving, using, understanding and regulating their own emotions will be more able to respond adaptively and helpfully to their children, especially during the intense emotional developmental period during the pre-school years.

A second and related application of this research is that interventions specifically targeting emotion based parenting strategies, such as emotion coaching, may not be adequate in developing emotional competence or reducing the likelihood of internalizing or externalising problems in children. In the absence of parent expertise in understanding and modelling emotional competence, instructing parents to emotion coach their pre-schoolers is likely to be ineffective. Given the importance of learning through observation and modelling, children may be more likely to imitate their parent's efforts to manage difficult emotions, even when these efforts are unsuccessful and result in withdrawal or high distress. Embedding emotion coaching training as an application of parent emotional development may be more likely to lead to the successful acquisition of emotion regulation skills for children.

Thirdly, there are developmental considerations in the way in which children acquire emotion regulation skills that should be addressed in intervention efforts. As the preschool years are generally regarded as a time when children are learning to regulate their emotions, assisting parents during this developmental window is important. As this period of time is also recognised as a time of high stress for families, parents are also likely to benefit from programs that offer a more personal emotion regulation component. Interventions that occur during pre-school are also well situated to prevent the development of poor emotion regulation skills in children which later contributes to lower social and emotional competence through the early school years.

Lastly, emotion regulation and pre-schooler development are best considered as part of a broader family system. They should be addressed within the context of a range of other important factors, which include family structure, physical and mental health, cultural and social and economic stressors. Consistent with current aetiological models, prevention and intervention efforts are most likely to be successful when a multi-faceted approach is taken.

Thesis Strengths

This research demonstrates several noteworthy strengths. Firstly, it examined the determinants of emotion based parenting using a combination of prospective and experimental research designs. There is a substantial amount of cross sectional research that indicates that different aspects of emotion based parenting are associated with the development of child emotional competence (Eisenberg, Cumberland, & Spinrad, 1998; Gottman, Katz & Hooven, 1996; Trentacosta & Shaw, 2009). Longitudinal and experimental studies such as those contained in this thesis are now required to understand the determinants of effective parenting and to examine the relative contributions, significance and associations of these determinants. Each of the three individual studies utilised strong and sophisticated statistical techniques including structural equation, latent growth and general linear modelling to enable robust conclusions to be drawn from the multivariate investigations.

Another strength of the current research is that it is the first to simultaneously examine personality, emotional intelligence and emotion coaching in parents of pre-schoolers. Although researchers have previously acknowledged that personality factors and aspects of positive and negative emotionality, as well as emotion coaching practices, are important components of emotionally healthy parenting (Brophy-Herb et al., 2010; Chen, Lin & Li, 2012; Duncombe et al., 2012), this study is unique in actively examining these determinants over time. The importance of parent emotional intelligence, over and above personality and emotion coaching, in contributing to pre-schooler outcomes is empirically supported by the present data.

Additionally, this research investigated the clinical application of these findings utilising a randomised control trial. Specifically, the research evaluated the effectiveness of a brief parent training workshop targeting parent emotional intelligence as a precursor to learning the skills of emotion coaching. Encouraging findings from this preliminary work

indicate that prevention and intervention efforts represent an important opportunity to assist parents in raising emotionally healthy children.

Limitation and Future Directions

Limitations of research should also be acknowledged and considered in the design of future studies. Firstly, care should be taken in generalising the results from these studies to the wider parent population. While efforts were made to attract a diverse sample from a state based organisation (Playgroups NSW) for the cross sectional and subsequent longitudinal study, the disproportionately high levels of education, intact families and lack of cultural diversity constrain our confidence in the generalizability of these findings, particularly as culture is inextricably tied to emotion socialisation (Cole & Tan, 2007). Replicating these studies with a more diverse population would provide important additional information.

Secondly, reliance on parent self-report data raise methodological issues that need to be addressed. Utilising self-report questionnaires introduces legitimate concerns regarding overestimation of associations between parent variables due to shared method variance. Furthermore, self-report data, particularly in the case of emotion management, parenting and child outcomes could be influenced by mood consistent responding and expectancy bias. In addition, while there are no universally accepted measures of parent emotion socialisation practices, the measures used in this research are somewhat limited. The cross sectional and longitudinal studies relied on measures that captured parent intentions about what they would do in emotionally distressing situations, rather than what parents actually do when their child is distressed (Warren & Stifter, 2008). The more specific emotion coaching measure used in study three, while commonly used to assess emotion coaching, does not specifically capture information related to each of the five steps of the coaching process. Multiple measures of emotion socialization practices, including naturalistic observations in the home setting, would provide more robust evidence of the mechanics of emotion coaching, particularly the extent to

which parents maintain their ability to emotion coach their children across different negative emotions, and in complex situations.

The current research examined the contribution of parent determinants of emotionally healthy parenting practices. Although that is congruent with the way major theoretical models and empirical studies have conceptualised the transmission of emotional regulation in children, very little attention has been paid to the implications of deficits in parent emotional functioning. Parents with low emotional intelligence and poor emotion regulation strategies may be more likely to negatively influence pre-schoolers, both indirectly, in terms of an emotionally unstable environment and directly through inadequate guidance and assistance when their child is experiencing intense and distressing emotion (Morris et al., 2011). Identifying parents who may be having difficulty navigating the emotional development needs of their pre-schoolers may be an effective preventative strategy to reduce the likelihood of problematic outcomes for parents and their children.

Lastly, while the current research yields important insights into the determinants of emotionally healthy parenting, additional family context factors are yet to be investigated. Incorporated into major theoretical models, the impact of siblings, multiple carers, including grandparents, the quality of marital relationship, social, vocational and financial stresses are also important to understand in advancing our knowledge regarding optimal child development. The extent to which parent emotional competence has the potential to mediate these and other contextual stressors is yet to be determined.

Concluding Remarks

In conclusion, this thesis has made a unique and important contribution to understanding the determinants of emotionally healthy parenting. Overall, the findings indicate the key role of parent personality and emotional intelligence and regulation in emotion based parenting throughout the pre-school years. Furthermore, parent emotional

intelligence emerged as being more influential than emotion coaching in social and emotional outcomes for preschoolers as they enter their early schooling, indicating that parents who are having difficulties with their pre-schooler's emotional development would benefit not only from emotion based strategies, but also therapeutic attention to their own emotion regulation.

Demonstrating the effectiveness of a clinical intervention specifically targeting parent emotional intelligence, emotion regulation and emotion coaching skills is an important step forward in meeting the needs of parents, and their children, in the wider community. The current research provides some significant insights into the factors that are important in determining effective emotional socialisation practices, however, continued prospective research designs and the development of clinical interventions are essential in achieving the important task of raising emotionally intelligent children.

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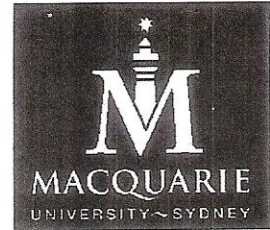
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Chapter Six

Ethics Approval



16 October 2008

Ms Sue Greig
31 Knightsbridge Avenue
Belrose
NSW 2085

Reference: HE26SEP2008-D06072

Dear Ms Greig

FINAL APPROVAL

Title of project: Emotionally healthy parenting

Thank you for your recent correspondence. Your response has addressed the issues raised by the Committee and you may now proceed with your research. This approval is subject to the following condition:

1. Please forward a copy of the advertisement (in attachment 5.4 of your original application) amended to reflect the change in value for the gift voucher.

Please note the following standard requirements of approval:

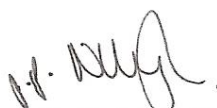
1. Approval will be for a period of twelve (12) months. At the end of this period, if the project has been completed, abandoned, discontinued or not commenced for any reason, you are required to submit a Final Report on the project. If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. The Final Report is available at: http://www.research.mq.edu.au/researchers/ethics/human_ethics/forms
2. However, at the end of the 12 month period if the project is still current you should instead submit an application for renewal of the approval if the project has run for less than five (5) years. This form is available at http://www.research.mq.edu.au/researchers/ethics/human_ethics/forms. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report (see Point 1 above) and submit a new application for the project. (The five year limit on renewal of approvals allows the Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).
3. Please remember the Committee must be notified of any alteration to the project.
4. You must notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that might affect continued ethical acceptability of the project.
5. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University
http://www.research.mq.edu.au/researchers/ethics/human_ethics/policy

If you will be applying for or have applied for internal or external funding for the above project **it is your responsibility** to provide Macquarie University's Research Grants Officer with a copy of this letter as soon as possible. The Research Grants Officer will not inform external funding agencies that you have final approval for your project and funds will not be released until the Research Grants Officer has received a copy of this final approval letter.

ETHICS REVIEW COMMITTEE (HUMAN RESEARCH)
LEVEL 3, RESEARCH HUB, BUILDING C5C
MACQUARIE UNIVERSITY
NSW, 2109 AUSTRALIA

Ethics Secretariat: Ph: (02) 9850 6848 Fax: (02) 9850 4465 E-mail: ethics.secretariat@vc.mq.edu.au
http://www.research.mq.edu.au/researchers/ethics/human_ethics

Yours sincerely



Dr Margaret Stuart
Director of Research Ethics
Chair, Ethics Review Committee (Human Research)

Cc. Dr Carolyn Schniering, Department of Psychology

ETHICS REVIEW COMMITTEE (HUMAN RESEARCH)
LEVEL 3, RESEARCH HUB, BUILDING C5C
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http://www.research.mq.edu.au/researchers/ethics/human_ethics



Sue Greig <sue.greig@mq.edu.au>

Ethics application reference- 5201000985- Final approval

1 message

Ethics Secretariat <ethics.secretariat@mq.edu.au>

Wed, Sep 29, 2010 at 10:02 AM

To: "Dr Carolyn A. Schniering" <carolyn@psy.mq.edu.au>

Cc: Dr Catherine A McMahon <cathy.mcmahon@psy.mq.edu.au>, Mrs Sue Greig <sue.greig@mq.edu.au>

Dear Dr Schniering

Re: "The effect of parental meta-emotion on the emotion regulation of pre-schoolers" (Ethics Ref: 5201000985)

Thank you for your recent correspondence. Your response has addressed the issues raised by the Human Research Ethics Committee and you may now commence your research.

The following personnel are authorised to conduct this research:

Dr Carolyn A. Schniering- Chief Investigator/Supervisor
Dr Catherine A McMahon & Mrs Sue Greig- Co-Investigators

Please note the following standard requirements of approval:

1. The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Human Research (2007).
2. Approval will be for a period of five (5) years subject to the provision of annual reports. Your first progress report is due on 29th September 2011.

If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. If the project has been discontinued or not commenced for any reason, you are also required to submit a Final Report for the project.

Progress reports and Final Reports are available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms

3. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report and submit a new application for the project. (The five year limit on renewal of approvals allows the Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).
4. All amendments to the project must be reviewed and approved by the Committee before implementation. Please complete and submit a Request for Amendment Form available at the following website:
http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms
5. Please notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that affect the continued ethical acceptability of the project.

<https://mail.google.com/mail/?ui=2&ik=c80ac8a2c4&view=pt&q=ethics&qs=true&sea...> 3/11/2011

6. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University. This information is available at the following websites:

<http://www.mq.edu.au/policy/>

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/policy

If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide the Macquarie University's Research Grants Management Assistant with a copy of this email as soon as possible. Internal and External funding agencies will not be informed that you have final approval for your project and funds will not be released until the Research Grants Management Assistant has received a copy of this email.

If you need to provide a hard copy letter of Final Approval to an external organisation as evidence that you have Final Approval, please do not hesitate to contact the Ethics Secretariat at the address below.

Please retain a copy of this email as this is your official notification of final ethics approval.

Yours sincerely
Dr Karolyn White
Director of Research Ethics
Chair, Human Research Ethics Committee

<https://mail.google.com/mail/?ui=2&ik=c80ac8a2c4&view=pt&q=ethics&qs=true&sea...> 3/11/2011



SUE-ANNE GREIG <sue-anne.greig@students.mq.edu.au>

Approved- Ethics application- Schniering (Ref No: 5201300258)

2 messages

Ethics Secretariat <ethics.secretariat@mq.edu.au>

Thu, Jul 11, 2013 at 11:07 AM

To: Dr Carolyn Schniering <carolyn.schniering@mq.edu.au>

Cc: A/Prof Cathy McMahon <cathy.mcmahon@mq.edu.au>, Mrs Sue-Anne Greig <sue-anne.greig@students.mq.edu.au>

Dear Dr Schniering

Re: "Emotion Coaching Preschoolers- helping parents to help their pre-schooler" (Ethics Ref: 5201300258)

Thank you for your recent correspondence. Your response has addressed the issues raised by the Human Research Ethics Committee (Human Sciences and Humanities), effective 11-Jul-13. This email constitutes ethical approval only.

This research meets the requirements of the National Statement on Ethical Conduct in Human Research (2007). The National Statement is available at the following web site:

http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/e72.pdf.

The following personnel are authorised to conduct this research:

A/Prof Cathy McMahon
Dr Carolyn Schniering
Mrs Sue-Anne Greig

NB. STUDENTS: IT IS YOUR RESPONSIBILITY TO KEEP A COPY OF THIS APPROVAL EMAIL TO SUBMIT WITH YOUR THESIS.

Please note the following standard requirements of approval:

1. The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Human Research (2007).
2. Approval will be for a period of five (5) years subject to the provision of annual reports.

Progress Report 1 Due: 11 July 2014
Progress Report 2 Due: 11 July 2015
Progress Report 3 Due: 11 July 2016
Progress Report 4 Due: 11 July 2017
Final Report Due: 11 July 2018

NB. If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. If the project has been discontinued or not commenced for any reason, you are also required to submit a Final Report for the project.

Progress reports and Final Reports are available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms

3. If the project has run for more than five (5) years you cannot renew

<https://mail.google.com/mail/u/0/?ui=2&ik=a2aec82335&view=pt&search=inbox&th...> 27/04/2014

approval for the project. You will need to complete and submit a Final Report and submit a new application for the project. (The five year limit on renewal of approvals allows the Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).

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5. Please notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that affect the continued ethical acceptability of the project.

6. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University. This information is available at the following websites:

<http://www.mq.edu.au/policy/>

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If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide the Macquarie University's Research Grants Management Assistant with a copy of this email as soon as possible. Internal and External funding agencies will not be informed that you have approval for your project and funds will not be released until the Research Grants Management Assistant has received a copy of this email.

Please retain a copy of this email as this is your official notification of ethics approval.

Yours sincerely

Dr Karolyn White
Director of Research Ethics
Chair, Human Research Ethics Committees

Office of the Deputy Vice Chancellor (Research)

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