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The development of social–emotional skills in pre-primary children: A comparison of parent, teacher and combined coaching programs

Nichola Lucia Webb
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**The Development of Social–Emotional Skills in Pre-Primary Children:
A Comparison of Parent, Teacher and Combined Coaching Programs**

This thesis is presented for the degree of
Doctor of Philosophy

Nichola Lucia Webb

Edith Cowan University
School of Arts and Humanities

2019

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

Abstract

The development of social–emotional skills is pivotal in generating positive outcomes for mental health and wellbeing throughout the childhood period and into later life (Hertzman, 2004; Moore, 2006; Sosna & Mastergeorge, 2005). While research has explored the effects of parent and teacher influences on young children’s social–emotional skills, most studies have either focussed on high-risk child populations, compared single influences with each other (e.g., parent versus teacher) or compared one combined group of influences with a control group. Few studies have directly compared the separate effects of parent, teacher and peer components to assess which are more successful in the development and maintenance of young children’s social–emotional skills. According to Ştefan and Miclea (2012), it remains an important priority for future research to determine the extent to which each intervention strategy adds information and is relevant for obtaining effects on behavioural skills for children.

The current study compares the separate and combined influences of parent and teacher emotion coaching practices on children’s social–emotional skills in their first year of compulsory schooling in Australia (the pre-primary year) within a low-risk, mainstream setting. This population was chosen due to limited studies focussing on the development of children’s social-emotional skills within this age band, risk status and setting. The aim was to determine the extent to which teacher, parent and combined (teacher and parent) groups as separate approaches influenced children’s social–emotional skill development in this first year of formal education. A control condition was

used to measure normal developmental progression in these skills, thereby controlling for time and maturation. The study's original contribution initially lay within its purpose-designed parent coaching program. This was developed for the study's intervention phase and contained social-emotional skill activities specifically constructed for developing social-emotional skills with pre-primary children. Information was also included for parents in how to develop emotion coaching skills in this process. The program was designed as an at-home, individually-delivered, training guide for parents unable to commit to structured, group-delivery programs. The program focussed on developing age-appropriate core social-emotional skill elements of Emotion Knowledge (EK), Emotion Regulation (ER) and Emotion Expression (EX) as derived from Denham et al.'s (2003) construct of emotional competency, in a cumulative and progressive manner over time. It was successfully piloted with a small sample of children and parents who were not participants in the main study. The classroom program undertaken by teachers in the main study, utilised PATHS (Promoting Alternative Thinking Strategies) by Kusché and Greenberg (1994). As an additional contribution, the study employed a multi-focussed primary prevention approach, utilising a new presentation of separate and combined parent and teacher influences alongside a control group (i.e., parent group versus teacher group versus parent-plus-teacher group versus control group). The Devereux Student Strengths Assessment Mini instrument (DESSA-Mini) (LeBuffe, Shapiro & Naglieri, 2009) was also utilised as a standardised social-emotional skill assessment measure, (not previously used in this manner), to determine skill progression for children over time.

The research took place within two Western Australian independent primary schools, focusing on low-risk, mainstream children in their first year of compulsory schooling (pre-primary children, $n = 86$). Research was conducted over a 15-month period, with nine months intervention and six months follow-up. Each child was assessed three times over the total research period by both parents and teachers at pre, post and follow-up time points.

The quantitative results of the main study showed that teachers and parents rated social–emotional skills higher for children in the combined and teacher groups following the interventions. These outcomes are discussed in relation to the effects of school culture, personal, community and family-of-origin influences upon parents’ and teachers’ abilities to teach social–emotional skills to young children in this age group. While social-emotional skill gains were not sustained in any group at the six-month follow-up period, contrary to expectation, the combined group showed less decay in social–emotional ratings compared with others groups at the follow-up time point. This decline in ratings overall was attributed to a lack of skill practice and consolidation for children over the relatively short intervention period (nine months), leading to a lack of social–emotional skill endurance over time. Additionally, children’s exposure to new teaching styles, academic expectations and social challenges in their following new school year may have resulted in their uncertainty and therefore a regression of observable social–emotional skills as they adjusted. The overall impact of the combined teacher-plus-parent group approach on the development of social-emotional skills in the study was of significance and is discussed, together with the influence of home and school environments in the development of these skills for children.

The qualitative results showed that the majority of parents who completed the purpose-designed program at home were able to teach social–emotional skills to their children and were influenced in doing so by the social–emotional practices of their own family of origin. In particular, parents who developed positive parenting practices despite identifying with negative family-of-origin influences highlighted the importance of parents’ professional learning (e.g., emotion coaching training), together with parents’ abilities to shift their internal working models (i.e., mental representations for understanding the world, self and others).

The research findings highlight the effectiveness of teaching social–emotional skills to pre-primary children in mainstream schooling, with the combined parent-plus-teacher approach proving most effective and enduring over time compared with other outlined approaches. However, longer intervention time frames are recommended. The findings also highlight the effectiveness of a home-based parent coaching program for individual delivery, focussed on developing social-emotional skills with mainstream, pre-primary children.

Findings from the study may also offer a path forward for policymakers in Australia to advocate for the mandatory inclusion of mental health programs in education for children in order to facilitate the development of early mental health practices. In particular, findings demonstrate that combined parent plus teacher approaches for social-emotional skill development are especially important from the first year of compulsory schooling and that benefits are maximised for children’s development through such pairings.

Declaration

I certify that this dissertation does not, to the best of my knowledge and belief: (i) Incorporate, without acknowledgement, any material previously submitted for a degree or diploma in any institution of higher education; (ii) Contain any material previously published or written by another person except where due reference is made in the text; or (iii) Contain any defamatory material.

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2019

Dedication

For my parents Lorna and Kenneth (1948–1978). Thank you for your courageous sacrifices, which have allowed me countless wonderful opportunities in this country that I would never have had otherwise. Dad, I know you've guided me.

For Michael, my husband and my best friend. Thank you for continuing to teach me great love, which shapes me in the richest ways. Without your support, this thesis would simply not have been possible.

Finally, for my daughter, Isabella. This is for you especially, as my original inspiration and true accomplishment in life. As you watched me write this thesis since you were small, I hope my efforts modelled for you what you can achieve in life with persistence and a belief in yourself. Dream big and never give up.

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Most of all, I wish to acknowledge and thank the true stars of this thesis—the pre-primary children, for their valuable contributions.

I would like to also acknowledge Capstone Editing (Academic Editing Service) who provided copyediting and proofreading of this thesis according to the guidelines laid out in the university-endorsed national ‘Guidelines for Editing Research Theses’.

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Prologue

Motivation for this study was drawn from over 20 years of professional practice as a clinical psychologist, where over time it was noted that adult clients would often struggle more intensely with personal issues and distressing life events when they had ‘gaps’ in their social–emotional development, originating from childhood. These gaps would often stall clients in their therapy and render them unable to progress meaningfully. Their mental health would then be placed at risk, which also increased their chances of receiving a formal psychological diagnosis, typically from the depression or anxiety spectrums. Therapy would then involve assisting the individual to develop missing social–emotional skills while moving forward in their treatment. In contrast, it was noted that certain clients appeared to cope better with personal issues and distressing life events when engaged in therapy. These clients appeared to have a different set of social–emotional skills and support networks, which they had acquired early in their development as children.

Therefore, an interest was developed in what might be happening ‘upstream’ for individuals regarding their social–emotional development in childhood and the influences they were exposed to at that time, which appeared to help them cope better psychologically when they later faced adversities as adults ‘downstream’. Since parents and teachers are often the key influencers of children in their early years, it was questioned how these individuals shaped the development of children’s social–emotional skills and whether the best approach involved a singular influence of parent or teacher or a combination of both.

This research explores the ‘upstream’, with parents and teachers regarded as key influencers in children’s early social–emotional skill development. More

specifically, their potential influence on these skills when children commence formal schooling.

‘Children are not a distraction from more important work. They are the most important work.’

C. S. Lewis.

Chapter 1: Introduction

1.1 Background

The term ‘emotional intelligence’ (EI) originated in the latter decades of the twentieth century to highlight the relationship between human emotion and an individual’s logical thought and reasoning processes. EI as a formal concept was introduced, in part, as a response to the rapidly growing and scattered body of research findings since the 1990’s in the areas of physiology, development, cognition, linguistics and social intelligence (Salovey & Pizarro, 2003), funnelling into the fields of emotion and intelligence. Neuroscientists continued to research EI’s foundations during this period and it gained momentum in the scientific literature. EI is defined in this thesis as the ability to accurately perceive, appraise and express emotion, to generate feelings that facilitate thought and to regulate emotions to promote emotional and intellectual growth (Mayer & Salovey, 1997).

In this research, social–emotional skills are considered to be expressive components of the EI construct developing from early childhood. Denham et al. (2003), describe these skills as comprising three key elements including: emotion regulation (ER); emotion expression (EX); and emotion knowledge/understanding (EK). According to Denham (2007), ER assists a child to balance their emotions when they are aversive or distressing or, positive but overwhelming and also assists a child to amplify their emotions if they are too repressed. EX involves the sending of affective messages in keeping with a child’s goals and social context. EK involves the complex skills of initially appraising another person, interpreting a message, understanding the message and applying the necessary information to a social situation. The development of social–emotional skills in children has been demonstrated to yield improvements in the areas of mental health (Catalano, Berglund, Ryan, Lonczac & Hawkins, 2002; Hertzman, 2004; Moore, 2006; Sosna & Mastergeorge, 2005), academic performance

(Seligman, 2005; Denham, 2006) and cognitive and neurological growth (Adolphs, Damasio, Tranel, Cooper & Damasio, 2000; Cohen, Onunaku, Clothier & Poppe, 2005; Fischer & Bidell, 2006; Immordino-Yang & Damasio, 2007). Sound social and emotional skills developed during childhood are also considered to foster long-term benefits in children's families and communities, leading to potential economic and social benefits for wider society (e.g., Greenberg et al; 2003).

According to Taylor and Biglan (1998), contemporary approaches for examining childhood social-emotional skill development have favoured social-ecological frameworks such as the work of Bronfenbrenner (1989), which acknowledges environmental influences in social-emotional skill development for children. These environmental influences include peers, teachers, parents and families. Within social-ecological frameworks, the influence of parents has typically been examined through the processes of modelling (Valiente et al., 2004), contingent responding (Garner, 2010) and emotion coaching practices (Gottman & DeClaire, 1997; Gottman, Katz & Hooven, 1996). Likewise, the influence of teachers has also been examined through modelling (DeMorat, 1998), contingent responding (Denham, Bassett & Zinsser, 2012) and emotion coaching practices (Denham et al., 2002 & Ahn, 2005).

1.2 The Current Issue

To date, studies that have explored the influences of parents and teachers upon children's social-emotional skill development have focused predominantly on high-risk category children such as those with behavioural, learning or mental health issues (Ştefan & Miclea, 2012; Webster-Stratton, 2001) or the comparison of parent, teacher and child factors in a dyadic manner (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Dyadic approaches include parent versus child peer programs (Webster-Stratton & Hammond, 1997); teacher versus parent programs (Flay, Graumlich, Segawa, Burns & Holliday, 2004); or combined (teacher/parent/peer) versus control group programs (Ştefan & Miclea, 2012).

However, dyadic approaches are limited, as they do not compare these multiple influences with each other to determine which social–emotional programs are more effective than others. As such, few studies in this area have compared the extent to which these individual intervention strategies add value to behavioural skill development for young children (Ştefan & Miclea, 2012).

There are also limited studies which focus on the development of children’s social-emotional skills in their early schooling years within low-risk, mainstream classroom settings. None of these to the researcher’s knowledge, have specifically compared several individual intervention approaches for social–emotional skill development when children commence their formal education year. This is important given the afore mentioned known benefits of sound social–emotional skills for children in relation to their academic (Denham, Bassett, Sirotkin & Zinsser, 2013; Thompson & Lagattuta, 2006), neurological (Fischer & Bidell, 2006; Immordino-Yang & Damasio, 2007) and mental health (Hertzman, 2004; Jones, Greenberg & Crowley, 2015; Sosna & Mastergeorge, 2005) outcomes. The current study compares several intervention approaches of parents, teachers and combined (parent-plus-teacher) influences on children’s social-emotional skill development, with a particular focus on children in their pre-primary year, as the entry point to formal schooling in Australia. As such, it is a significant transition point for children in their development, both academically and psychologically.

1.3 Conceptual Framework for the Study

First, the evolution of social–emotional skills in human development will be illustrated through Saarni’s (2008) functionalist and dynamic systems perspective. This perspective suggests that an individual’s responses are adaptive and assist in reaching goals, coping with challenges, managing emotional arousal to promote effective problem-solving, discerning what others feel, responding sympathetically and recognising how emotional communication and self-representation may affect relationships. According to Saarni’s perspective, each emotional

skill arises from its own social context, including the cultural values and belief systems of the individual. Therefore, the emotional skills developed with children in this study will arise from their specific social contexts (home and school settings).

This study will also draw upon Bronfenbrenner's (1980–1993) theory of human development. Based on this approach, children's social–emotional skills are considered to be a result of their interactions with their environments (e.g., school and home), which ascribes a social nature to the process. Bronfenbrenner's theory in its second phase (1980–1993) aligns best with the aims of this study as it focuses on the specific influences of time (within a school year) affecting human development (social–emotional skills). The theory also highlights cultures and subcultures in schools and communities as important influencing factors upon the development of skills for individuals.

1.4 Objectives of the Study

The first objective of the study is to examine whether teacher and parent social–emotional programs enhance pre-primary children's social–emotional skill development. Four groups will be compared: parent, teacher, combined (parent-plus-teacher) and control. Specifically, it is hypothesised that teacher and parent social–emotional programs will enhance social–emotional skills for children following an intervention period, with the greatest improvements being expected for the combined (parent-plus-teacher) approach over single program interventions.

The second objective of the study is to examine whether enhanced social–emotional skills (positive effects of the teacher and parent social–emotional programs) are evident in children six months after the intervention, into the next school year. This is important for understanding the effect over time of acquired social–emotional skills for children in the early years. Longitudinal research has suggested that such skills ultimately lead to significant outcomes in the areas of mental health, academic performance, delinquency and substance

abuse (Denham, 2006; Tremblay, 2000). Specifically, it is hypothesised that both school and home intervention programs will demonstrate an ongoing positive effect at the follow-up period.

Additionally, the study will develop and implement a home-based parent coaching program for those parents partaking in the parent group and combined group. It is anticipated that as a result of this home program, children in these groups will be able to develop and demonstrate EK, ER and EX strategies appropriate for their age group.

1.5 Procedures

First, a pilot study is presented, which introduced parents to activities within a purpose-designed, parent home coaching program for acquiring emotion coaching abilities and developing social–emotional skills with children in the main study. This trial formed the basis of the social–emotional activities to be used by parents in the main study. The first objective of the pilot study was to examine each child’s ability to undertake the social–emotional activities. The second objective was to examine parents’ abilities to implement the social–emotional activities with their children at home.

The main study then follows, which employed a pre, post and follow-up quasi-experimental design. Four pre-primary classes within two private, coeducational K–12 (kindergarten to Year 12) metropolitan primary schools in Perth, Western Australia participated. Classroom teachers used the Promoting Alternative Thinking Strategies (PATHS) social–emotional program by Kusché and Greenberg (1994) at school, while parents undertook the purpose-designed social–emotional program at home. Quantitative data was obtained through teachers’ and parents’ ratings via the Devereux Student Strengths Assessment Mini (DESSA-Mini) tool (LeBuffe et al., 2009). This assessed social–emotional total (SET) scores for children across three assessment time points (i.e., pre-test, post-test and follow-up). Qualitative data regarding parents’ perceptions of their children’s social–emotional skill

development during the intervention phase was obtained through their written responses in the home program's manual.

1.6 Significance of the Study

The research findings highlight the value of developing social–emotional skills with young children in their first year of mainstream schooling in Australia and in particular, the effectiveness of a combined parent-plus-teacher approach in pursuit of this goal. The study also explores the usefulness of a purpose-designed, parent coaching program within the home to assist children in developing these age appropriate social-emotional skills. Findings from the study may also offer a path forward for policymakers in Australia to advocate for the inclusion of mandatory mental health programs from the first year of compulsory education for children in order to facilitate the development of early mental health practices.

1.7 Thesis Structure

Chapter 2 provides background for the study, drawing upon relevant literature in the field of EI while acknowledging social–emotional skills as expressive components of the EI construct in early childhood. Evidence for the important role of parents and teachers in shaping these skills for young children is then presented and critically reviewed. The study's hypotheses then follow. In Chapter 3, the pilot study is presented. This study examined the suitability of the purpose-designed, parent coaching program and the target age group of children for the main study. It also investigated whether parents were able to implement these social–emotional activities at home with children in the target age group.

Chapter 4 introduces the methodology for the main study, describing participants, study design, materials and procedures. In Chapter 5, the results of the study are presented through quantitative and qualitative analyses. Preliminary results are initially described, followed by the main quantitative analyses, which test for main effects and interactions between teacher

and parent social–emotional ratings over pre, post and follow-up time points. The chapter then reports qualitatively on parents’ perceptions of their children’s social–emotional skill development through the study’s parent home coaching program, together with feedback on parents’ own family-of-origin social–emotional experiences. In Chapter 6, the study’s quantitative and qualitative findings overall are discussed within the context of the hypotheses. Chapter 7 contains the study’s conclusions, limitations and recommendations for future research, followed by a consideration of the theoretical perspectives selected and implications for practice.

Chapter 2: Literature Review

This literature review will first provide an outline of Emotional Intelligence (EI) as a means for understanding the psychological study of human emotions. A focus on social–emotional skills as expressive components of the EI construct in early childhood will follow. The literature review will conclude with a summary of the evidence for the role of parents and teachers in building social–emotional skills for children, culminating in the hypotheses for this study.

2.1 Emotional Intelligence (EI)

Over the past two decades, there has been increased research into how individuals express and manage their emotions (Cole, Martin & Dennis, 2004; Denham, 1998; Eisenberg & Fabes, 1992; Fox, 1994; Garber & Dodge, 1991; Goleman, 1995). According to Morris, Silk, Steinberg, Myers and Robinson (2007), this interest is partly due to new insights in developmental research, theory and developmental psychopathology, which have highlighted the importance of regulating emotional responses in socially appropriate and adaptive ways. Examples of such research include studies by Denham et al. (2003), Eisenberg, Spinrad and Morris (2002), Halberstadt, Denham and Dunsmore (2001), Kopp (1992) and Saarni (1990). EI has been one emerging field used to examine these emotional responses.

As a term, EI was coined during the latter decades of the twentieth century to highlight the relationship between human emotion and an individual's logical thought and reasoning processes. Prior to this, a measurable approach to understanding human (cognitive) intelligence was central to the literature and was offered as a predictor of an individual's success. While cognitive intelligence research yielded a substantial body of knowledge, it also left many questions unanswered. Mayer, Salovey and Caruso (2000) noted that during the twentieth century, vast amounts of variance in explaining human intelligence remained unaccounted for,

since cognitive-based psychometric tests were not sampling all forms of human intelligence. The work of Leuner (1966) first used the EI term in the scientific literature when describing motherhood. He speculated that women might reject their roles as housewives and mothers due to a lack of EI. The seminal work of Payne (1986) then formally used EI as a term to promote the concepts of personal and social improvement, which sparked discussion on how emotions interacted with thoughts. Such work and discussion were precursors to understanding the field of EI.

The EI field has grown rapidly since the 1990s in response to the previously scattered body of research findings within the areas of physiology, development, cognition, linguistics and social intelligence (Salovey & Pizarro, 2003), funnelling into the fields of emotion and intelligence. Studies by Mayer, DiPaolo and Salovey (1990) and Salovey and Mayer (1990) highlighted the importance of developing and further refining the EI concept. Contemporary studies in the EI field continue to introduce new EI measures, while neuroscientists persist in researching EI's foundations, further advancing the field.

According to Mayer (2006), two strands of definition for EI have become prominent over time. The first is a scientific definition that views EI as an intelligence involving emotion and therefore, the capacity to reason about emotions. An illustration of this definition by Mayer and Salovey (1997) described EI as the ability to accurately perceive emotions, to access and generate emotions to assist thought, to understand emotions and emotional knowledge and to regulate emotions to promote emotional and intellectual growth. Researchers such as Saarni (2000) add to this conceptualisation, arguing that this definition of EI should also include important elements such as culture, contextual influences and self-representations. Saarni (1999) also suggested that an individual's developmental relationship history (e.g., quality of attachments), cognitive development, system of beliefs, values and context in which emotions

are generated must also be considered when defining EI, since all emotionally intelligent responses towards achieving an individual's goals derive from these unique elements.

Non-academic or popular literature offers an alternative definition of EI, suggesting that it is a means by which emotions enhance thought. EI in non-academic literature became popular following the use of the term in Goleman's (1995) book *Emotional Intelligence*. The definition of EI evolved in response to this popularisation, emphasising motivation and social relationships while also including the scientifically recognised characteristics of EI. According to Goleman's definition, EI encompasses five key areas: knowing one's emotions; managing one's emotions; motivating oneself; recognising emotions in others and managing relationships; and possessing competencies and skills that influence an individual's ability to succeed in coping with environmental demands and pressures.

The current study uses Mayer and Salovey's (1997) definition, which views EI as the ability to accurately perceive, appraise and express emotion to generate feelings that facilitate thought and to regulate emotions to promote emotional and intellectual growth. Cultural and contextual influences together with self-representations are also acknowledged in this study as vital elements of EI, in accordance with Saarni's (2008) functionalist and dynamic systems perspective.

Interest in EI in recent decades has been directed towards the development of social-emotional skills as expressive components of the EI construct. In particular, studies of early childhood development have highlighted the significant changes that occur for children in the area of social and emotional development, which consequently effect areas such as mental health (Catalano et al; 2002; Hertzman, 2004; Moore, 2006; Sosna & Mastergeorge, 2005), cognitive and neurological growth (Adolphs et al; 2000; Cohen et al; 2005; Fischer & Bidell, 2006; Immordino-Yang & Damasio, 2007) and academic performance (Seligman, 2005;

Denham, 2006). The research on social–emotional skills in early childhood and their key benefits will now be explored.

2.2 The Development of Social–Emotional Skills in Early Childhood

Social–emotional development in early childhood may be defined as:

an emerging ability of young children (ages 0–5 years) to form close and secure adult and peer relationships; experience, regulate and express emotions in socially and culturally appropriate ways and to explore the environment and learn—all in the context of family, community and culture (Yates, Ostrosky, Cheatham, Fetting, Shaffer & Santos, 2008, p. 2).

Child development professionals across disciplines have continued to recognise social–emotional skills as important to a child’s wellbeing and development, with the area of social–emotional competency continuing to gain momentum and public interest (Cooper, Masi & Vick, 2009; Isakson, Higgins, Davidson & Cooper, 2009).

Research has demonstrated that social–emotional growth and development during a child’s early years ultimately affects their health, wellbeing and overall competency throughout life (Denham, 2006). Experiences that offer a child opportunities for curiosity, self-confidence, engagement and satisfying reciprocal relationships have been strongly linked to improvements within the key areas of mental health, cognition, neurology and school performance. Each of these areas will now be examined.

2.2.1 Mental health

Social–emotional skills in early childhood appear pivotal in establishing positive benefits for mental health and wellbeing throughout the childhood period and into later life (Hertzman, 2004; Sosna & Mastergeorge, 2005). Research by Jones et al. (2015) demonstrated a significant association between measured social–emotional skills in kindergarten and key outcomes across multiple domains of education, employment, criminal activity, substance use

and mental health when children became young adults. Jones et al. (2015) concluded that early measures of social–emotional skills may be useful for assessing whether children are at risk of deficits in these areas later in life; thus, such measures can help identify those children in need of early interventions to improve their overall coping skills. Similarly, Denham and Holt (1993) reported that children who are encouraged to develop social–emotional skills such as listening, cooperation, appropriate help seeking and negotiating skills display crucial predictors of later good mental health and wellbeing.

2.2.2 Cognitive and neurological development

Through neuroscientific research into child brain development, it is now understood that social and emotional development is embedded into the architecture of young children’s brains and is influenced by the experiences and environments in which they live. Therefore, the social–emotional elements of the brain do not develop automatically from childhood but rather in response to the social experiences in which a child engages, ultimately becoming both neurologically wired and learned in early childhood development. This is illustrated by Immordino-Yang and Damasio (2007), who argued that the child’s brain develops in an active and dynamic process. As such, social, emotional and cognitive experiences are organised within children’s brains over time in interaction with their biology. Therefore, children’s world views and interactions are shaped by neuropsychological strengths and weaknesses as an intricate and complex pattern in their development (Fischer & Bidell, 2006). Studies by LeDoux (2000), Panksepp (2000) and Gunnar and Davis (2003) concurred that emotion possesses a biological basis that appears wired into several central nervous system regions.

While thought and memory development in early childhood has been shown to affect the development of social–emotional skills, inversely, social–emotional skills have also been shown to improve the overall development of thought and memory areas, through three key factors (Wilson & Wilson, 2014). The first factor suggests that children are able to think more

clearly about their feelings in the early childhood period than in their previous infancy stages and can remember their feelings over a longer period. Likewise, they are also capable of reflecting on their emotional expressions with others and how they intend to express themselves in social–emotional interactions. In alignment with Saarni’s (2008) functionalist and dynamic systems perspective, these developing thought and memory skills adapt to meet the social context of the child. The second factor explains how children’s theory of mind develops and thereby their ability to consider the thoughts and wishes of others. This can predict their behaviours and actions socially. The third factor explains how a child’s language skills develop as a symbolic system within which they may control and manipulate their social environment.

Children’s developing social–emotional skills may also influence other strengthening cognitive and neurological abilities. Adolphs et al. (2000) reported that through the processes of regulation, attention, motivation and evaluation, emotion conversely modulates the recruitment of neural networks for domain-specific skills such as reading. Cohen et al. (2005) also noted other domains of development that are affected by strengthening social–emotional skills, including language, communication, early literacy and numeracy skills. Therefore, emotion and cognition are thought to act together to give rise to skills such as memory, formal learning and creativity (Fischer & Bidell, 2006; Immordino-Yang & Damasio, 2007).

2.2.3 Academic performance

Denham (2006) outlined the importance of social–emotional skills for school readiness, academic performance and success in interactions with peers and adults. Denham et al. (2013) similarly described social–emotionally competent students as those who demonstrate better school adjustment and academic achievement. In contrast, children who do not have opportunities to develop social–emotional skills, according to Raver and Knitzer (2002), demonstrate school adjustment and academic difficulties. Considering that positive relationships may be cultivated within the academic setting, research regarding early schooling

suggests that children's relationships with teachers and peers are pivotal to academic success by way of establishing positive representations of self, emotion knowledge and regulatory abilities (Raver & Knitzer, 2002; Raver & Zigler, 2004). In addition, longitudinal studies with children in this key area demonstrate the link between early academic success and firm foundations in social-emotional skills (Raver, 2002; Stipek, 2006a). These skills are also recognised as important within academic and social settings throughout an individual's lifespan (Thompson & Lagattuta, 2006).

2.3 Current Issues in the Field of Social-Emotional Development

Despite the identified mental health, cognitive, neurological and academic benefits of social-emotional skill development, Jones, Zaslow, Darling-Churchill and Halle (2016) noted that conceptual and measurement issues remain in the social-emotional field. This has resulted in concerns regarding conceptual and definitional clarity. The issues of terminology, context and measurement will now be discussed, in addition to other conceptual issues in the social-emotional field, to arrive at a workable direction for the current study.

2.3.1 Social-emotional terminology

Terminology regarding the social-emotional construct continues to be debated in the literature. In studies where researchers focus on the emotional component, the construct is defined as 'the ability to effectively regulate one's emotions to accomplish one's goal' (Squires, Bricker & Twombly, 2003, p. 6). In studies which focus on the social component, researchers define the construct as 'the ability to integrate thinking, feeling and behaving to achieve interpersonal goals and social outcomes' (MacKay & Keyes, 2002, cited in Kostelnik, Whiren, Soderman, Stein & Gregory, 2006, p. 2). Researchers such as Duckworth, Quinn and Tsukayama (2012) noted the lack of clearly agreed-upon terminology to represent both social and emotional competencies, which they suggest presents a challenge for understanding the field. Numerous terminologies that have been used include, social and emotional intelligence

(Salovey & Mayer, 1990) emotional literacy (Park, Haddon & Goodman, 2003), social competence (Crick & Dodge, 1994), emotional competence (Denham, 2005; Saarni, 1990, 1997, 1999) and affective social competence (Halberstadt et al., 2001). Studies by Weare and Gray (2003) and Halberstadt et al. (2001) suggest that there is a need for a distinct and comprehensive terminology and description for social–emotional skill sets, given the various terms in use, which describe qualitatively different areas. The current lack of agreement on the boundaries between social development and emotional development may lead to a lack of focus for particular social–emotional skills considered to be important, according to Jones et al. (2016). Alternately, Wigelsworth, Humphrey, Kalambouka and Lendrum (2010) and Humphrey et al. (2011) argued that the existing terms do not describe qualitatively different concepts overall, which may offer a reason as to why they are used interchangeably in the literature.

2.3.2 Social–emotional context

Jones et al. (2016) highlighted the challenge of incorporating the role of context in the social–emotional field. These authors suggested that social-emotional skills and competencies may be more attuned to the characteristics of an individual’s environment as opposed to their connections with an individual’s cognitive skill-set. That is, according to Barblett and Maloney (2010), young children’s learning, actions and behaviours are constantly evolving through social construction within the context of their families and communities. As such, the measurement of an individual’s social–emotional skill competencies may depend upon where and when they are measured, which may vary widely.

2.3.3 Social–emotional measurement issues

Considering measurement issues in the social–emotional field, certain technical and educational concerns arise. Regarding technical concerns, the quality of measures to assess social–emotional skills may be less than satisfactory due to issues related to reliability, validity

and norming (Darling-Churchill & Lippman, 2016). Some assessment tools have been based on outdated theories of child development and learning (Shepard, 2000), while others may not adequately represent the norms of society (Barblett & Maloney, 2010).

Regarding educational concerns, some social–emotional assessment tools may also prove unsuitable for a particular phase of child development. Such tools may be used to assess children in unfamiliar environments, assess single skills in isolation, be biased against some linguistically or culturally different children or prescribe tasks that are unfamiliar to children in their daily lives (Barblett & Maloney, 2010). This may result in an uneven developmental picture and less meaningful data. Overuse of assessments and misuse of data can also arise when focusing on isolated skills and therefore, programs for the purposes of retention (Stipek, 2006b). Results of such data may then be used as feedback to report on how well schools and districts are performing, which can lead to distortions and misunderstandings.

2.3.4 Other conceptual issues in the social–emotional field

Other conceptual challenges in the social–emotional skills field include disproportionate focus on potential pathology indicators (Campbell et al., 2016), concerns with capturing the competencies of different populations such as bilingual and disability populations (Espinosa & López, 2007) and reasons behind teachers' choices of assessment tools for measuring social–emotional skills. The latter can lead to serious damage, such as lifelong stigmatisation and the restriction of educational prospects (Barblett & Maloney, 2010). These authors also highlight the importance of the child's voice in social–emotional research and its omission as a further potential issue in the field. That is, as a vital point of reference, a child's feedback regarding social–emotional skills may give meaning to events and objects and can be a valid form of assessment in the field (Edwards, Gandini & Forman, 1998).

2.4 Issues in the Field of Social–Emotional Development and the Current Study

Recognising the role of context in the social–emotional field, the current study will take place within the frameworks of the home (parents) and school (teachers) environments, as social–emotional skills and competencies are influenced through both these environments for children. Considering measurement, this study will use LeBuffe et al.’s (2009) DESSA-Mini tool which provides a single social-emotional total (SET) score, indicating a child’s social–emotional competence. As a strength-based assessment, this measure has demonstrated excellent internal reliability, inter-rater reliability and test-retest reliability across each of the four DESSA-Mini forms (Naglieri, LeBuffe & Shapiro, 2011). Regarding validity, the DESSA-Mini correlates strongly with scores on the full 72-item version of the DESSA assessment. It can identify children in need of instruction while differentiating between groups of children with or without known social–emotional issues, regardless of race or ethnicity. The measure includes the age group in this study and assesses a broad range of relevant life skills within the familiar environments of school and home. Individual children’s results will not be provided to teachers or parents in favour of overall skill development summaries.

Additional conceptual issues such as pathology characteristics will not be highlighted in this study, in favour of solely identifying a child’s individual social–emotional strengths. For parents experiencing difficulties due to language or cultural barriers, support will be offered by the researcher to enable understanding and completion of tasks in the study. The conceptual issue of a child’s ‘voice’ will be addressed via their parents’ responses to the social–emotional tasks in the parent home program, thereby allowing insight to the child’s learning processes.

Regarding terminology issues, this study adopts the ‘social–emotional skills’ term. These skills comprise three key emotional elements (occurring within a social context):

emotion expression (EX), emotion regulation (ER) and emotion knowledge (EK), as derived from Denham et al.'s (2003) construct of emotional competency. Commencing in the early years of childhood (Denham, 1998), these three elements are considered to be integrated with one another while also being individually discrete (Denham et al., 2003). Each element will now be described.

2.5 Three Key Elements

2.5.1 Emotion expression (EX)

EX involves the sending of affective messages in keeping with a child's goals and social context (Denham, 2007). As such, emotions are expressed in such a manner as to be advantageous in moment-to-moment interactions and relationships over time. Patterns of positive EX assist in the development of healthy relationships while negative EX interferes with such relationships (Denham et al., 2003). During the early school years, a child's social world begins to expand and EX skills become important in assisting a child to communicate their intentions appropriately to others, including their peers (Halberstadt et al., 2001). A child's inability to express emotion appropriately may lead to peer rejection and a perception of the child as 'difficult' by class teachers, according to Walker (2009). Denham (2007) reported that within their increasingly complex social world, children in the early schooling years become more aware of the need to send these affective messages and are already capable of expressing all the basic emotions, such as happiness, sadness, anger, fear, surprise and interest. They are also able to express complex social and self-conscious emotions including guilt, empathy, pride, shame and contempt in appropriate contexts (Denham, 1998), with research demonstrating that EX becomes more stable over time from the early schooling period onwards (Denham, 1997). As children mature into middle childhood, EX is managed according to the child's interaction with different people and situations and can involve more complexity and the use of blended signals (Denham, 2007).

2.5.2 Emotion regulation (ER)

ER is a process/skill by which a child learns to balance their emotions when they are aversive or distressing, or positive but overwhelming (Denham, 2007). ER also assists a child to amplify their emotions when they are too repressed (Denham, 2007). According to Lewis, Todd and Xu (2010), ER is often viewed as a cognitive response to challenging emotions. As such, it becomes vital as children learn to manage demands and conflicts when interacting with others in their social environment i.e., controlling, modifying and managing aspects of their emotional reactivity and expressivity (Lemerise & Arsenio, 2000). ER is also essential for fostering positive social behaviour such as adopting another's point of view and thinking through problem situations (Youngstrom et al., 2000). While present from infancy, ER is essential in the early schooling years, given social demands that necessitate emotional control and a child's increasingly complex emotional development. Denham (1998) reported that over time, children's ER skills develop in accordance with their cognitive and social development, assisting children to be more flexible and to make better choices for coping in certain situations. ER may also be considered as a non-cognitive response, with Thompson, van Reekum and Chakrabarti (2019) suggesting that both cognitive and affective components of empathy relate to expressions of ER.

2.5.3 Emotion knowledge (EK)

EK involves the complex skills of initially appraising another person, interpreting a message, understanding the message and applying the necessary information to a social situation (Denham, 2007). According to Denham (1998), a child draws upon EK to manage and communicate the emotions they and others experience. EK also allows children to selectively attend to other aspects of the social experience. Research has shown that children who demonstrate skills in EK are more likely to be good at adopting new perspectives (Laible & Thompson, 1998), displaying prosocial behaviour (Ensor, Spencer & Hughes, 2011) and

establishing positive peer and social relationships (Denham et al., 2002; Trentacosta & Izard, 2007). A further study by Fine, Izard, Mostow, Trentacosta and Ackerman (2003) found that EK also predicts children's social skills and peer acceptance, with those children high in EK displaying fewer internalising behaviours and aggression problems.

Developmentally, children in early schooling are capable of EK skills such as naming and recognising expressions for basic emotions and identifying common emotion-eliciting situations (Denham & Couchoud, 1990). According to Hughes (1998), they are able to talk about emotions and consequences, describe what makes them feel a certain way or how others feel and can also display the behaviours that correspond to these expressions. In addition, children in the early years of schooling are able to differentiate emotions and compare differing expressions and situational cues for emotions (Denham & Couchoud, 1990). They are also able to accurately determine emotions produced by challenging circumstances and can describe strategies they might use to cope with everyday stress (Cole, Dennis, Smith-Simon & Cohen, 2009). As children mature into the middle school years, their EK improves as they develop an understanding of peers' emotional experiences, which then permits them to respond accordingly in alignment with their personal goals (Lemerise & Arsenio, 2000). Having examined the benefits of social-emotional skills in early childhood and current issues in the field, psychological theories for the current study will now be explored.

2.6 Social-Emotional Skills in Childhood-Psychological Perspectives

Physiological processes in the body were used to explain emotional states for most of the twentieth century, prior to psychological theories of human emotional development. Examples include Darwin's *The Expression of Emotion in Man and Animals* (1872); James (1884) and Lange (1885) with James-Lange theory; Bard's (1934) Cannon-Bard theory; Schachter and Singer's (1962) Schachter-Singer two-factor theory and Izard (1981) and Ekman's (1984) discrete emotions theory. Psychological theories of emotion evolved alongside

physiological perspectives, however, they emphasised socio-cultural factors and the functional nature of emotions, viewing context as a key feature of emotional development.

Psychological perspectives of social–emotional development acknowledge the role of genetics in the unfolding of human emotions however also emphasise the influence of social interaction. This is best illustrated by structural developmental theorists including Sroufe (2009), Case, Hayward, Lewis and Hurst (1988) and Saarni (2008). Such theorists suggest that an individual’s emotional development takes place within the context of their social environment. That is, as humans become emotional beings, they also develop into social beings (Grusec, 2011).

The current study adopts a structural developmental approach when considering the development of social–emotional skills in early childhood, as demonstrated by Saarni’s functionalist and dynamic systems perspective (2008). Bronfenbrenner’s theory of human development (1980–1993) will also be drawn upon. These perspectives will now be discussed in relation to this study.

2.6.1 Bronfenbrenner’s theory of human development

Bronfenbrenner viewed human development as an interaction between an individual and his or her environment, describing the social nature of the process in human development. Rosa and Tudge (2013) outlined three distinct phases of Bronfenbrenner’s theory, evolving from the ecological to the bio-ecological. These phases are illustrated in Figure 1.

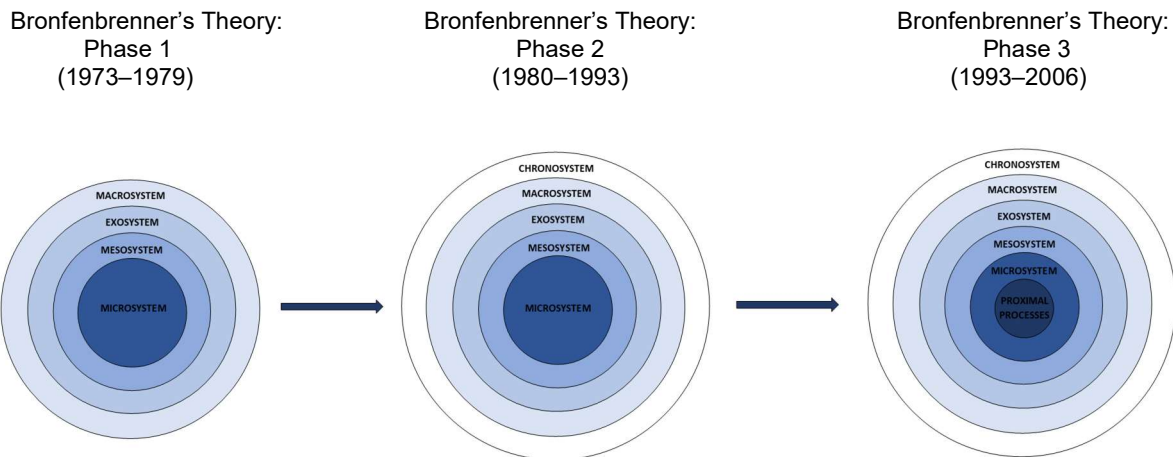


Figure 1. Bronfenbrenner's theory in three phases.

The first phase of Bronfenbrenner's theory (1973–1979) makes clear the social nature of the process of human development (e.g., Bronfenbrenner, 1973, 1979). Ecological environments are described as comprising four interconnected structures including the microsystem (a child's immediate environment such as home, school and peers), a mesosystem (interconnections of two or more microsystems), an exosystem (an individual's indirect environmental influences such as neighbours, parents' workplaces and extended family) and a macrosystem (an individual's social and cultural values, including political and economic influences). During this phase of Bronfenbrenner's theory, humans are described as both the product and producers of their own development, however, little attention is paid to an individual's characteristics and his or her role in this phase.

The second phase of Bronfenbrenner's theory (1980–1993) adds to the model a chronosystem, which describes the influences of time on human development (e.g., Bronfenbrenner, 1983, 1986a, 1986b, 1988, 1989, 1993). It also emphasises the role played by an individual's characteristics in development and addresses culture and subculture influences. The third phase of Bronfenbrenner's theory (1993–2006) emphasises the proximal processes (personal characteristics and environment) over previously emphasised distal processes as driving forces of development (e.g., Bronfenbrenner, 1994, 1995, 1999, 2000, 2001;

Bronfenbrenner & Ceci, 1993, 1994; Bronfenbrenner & Evans, 2000; Bronfenbrenner & Morris, 1998, 2006). These proximal processes are deemed to hold potential for actualising genetic potential and thereby improving developmental functioning (Bronfenbrenner & Ceci, 1994).

The current study aligns best with Bronfenbrenner's theory in its second phase since it acknowledges a child's (social–emotional) development through influences of the microsystem, mesosystem, exosystem and macrosystem. The chronosystem also describes the effect of time upon human (child social–emotional) development in this study as children progress through the intervention and follow-up phases.

2.6.2 Saarni's functionalist and dynamic systems perspective

Saarni's perspective (2008) suggests that an individual's responses are adaptive. These responses assist in reaching goals, coping with challenges, managing emotional arousal to effect problem-solving, discerning what others feel, responding sympathetically and recognising how emotional communication and self-representation affects relationships. Saarni suggests that each emotional skill emerges from its own social context, including the cultural values and belief systems of the individual. Therefore, the emotional skills developed with children in the current study are expected to arise from the specific social contexts of home and school settings.

According to Saarni (2011), a child's experiences with their environment involve dynamic interactions with many emotion-related elements (e.g., expressive behaviour, physiological patterning, action tendencies, goals, motives, social and physical contexts, appraisals and experiential feeling). These elements change over time with the child's maturity and in response to changing environmental interactions. Overall, a child's emotional development is understood as reflecting a social experience within a cultural context. Saarni (2008) added that emotional development may also be viewed from a bio-ecological

framework, in which children are viewed as dynamic systems situated within a community context. Each of these aspects are considered in this study as children engage within their social contexts of home and school.

Saarni (2000) also takes the view that a child's emotional development is a process within which particular skills manifest at certain developmental milestones from infancy to adolescence in response to their social interactions. She identifies eight interdependent skills of emotional competence that are influenced by a child's past social experiences, learning, relationship history and their system of belief and values (Saarni, 2000). These skills include: an awareness of one's own emotions; the ability to discern and understand other's emotions; the ability to use the vocabulary of emotion and expression; the capacity for empathic involvement; the ability to differentiate subjective emotional experience from external emotion expression; adaptive coping with aversive emotions and distressing circumstances; an awareness of emotional communication within relationships and the capacity for emotional self-efficacy. Saarni (2011) stipulated that these progressive skills do not develop in isolation from each other or necessarily in sequential order, but rather are tied to a child's cognitive development. In this manner, a child learns to create their emotional experience through cognitive development and social exposure while also learning what it means to feel an emotion and do something about it. In the current study, pre-primary children are the developmental focus, with particular sets of social-emotional skills being anticipated. Having presented a theoretical framework for the current study, the literature on parents and teachers as key influencers of social-emotional skills for children will now be examined.

2.7 Parents and Teachers as Influences of Social-Emotional Skills in Children

While early models for addressing mental health issues in children focused largely on interventions at the level of the individual child and therefore, on intrapersonal (within-child)

factors, more contemporary approaches such as Bronfenbrenner's theory of human development (1980–1993) address these issues through social–ecological models. Such theories target environmental influences on children's mental health and wellbeing by addressing the critical roles of schools, peers, neighbourhoods, parents and families (Taylor & Biglam, 1998). These approaches emphasise interpersonal (external-child) factors, which may account for much of the individual variation in social–emotional skill development between children. Parents and teachers are especially vital in this process, given their direct influence upon a child's development. Therefore, contemporary approaches highlight the need to educate caregivers appropriately in this area.

First, the evidence regarding the role of parents in promoting childhood social–emotional skills will be examined. This will be followed by the role of schools in promoting social–emotional skill development and the associated social, academic and neurological outcomes for children. Teachers within the school system will then be examined and specifically, their role in promoting childhood social–emotional skills.

2.8 The Role of Parents as Influences of Social–Emotional Skill Development

Parents are primary attachment figures for children and promote the understanding of basic emotions (Denham, 2000) and mixed emotions in early development (Steele, Steele, Croft & Fonagy, 1999). Research demonstrates that social relationships, particularly with parents, contribute to a child's emotional development and provide the context within which children learn to understand and regulate emotion (Cole et al., 2004). Parents are also life-experienced adults who potentially possess advanced knowledge of emotions and strategies for regulating emotions, placing them in a position to teach social–emotional skills to young children (Dunn, Brown, Slomkowski, Tesla & Youngblade, 1991). Consequently, parents have the capacity to provide children with a valuable framework within which they can learn to interpret and synthesise emotion. Within this framework, Denham et al. (2012) highlighted the

importance of parents' generally positive emotional expression (with safe negative emotional expression), their openness and expertise when discussing emotions and their encouragement of these same reactions in children. This ultimately assists children to become social-emotionally competent when they enter early schooling. Hastings, Utendale and Sullivan (2007) added that parents who engage in supportive emotion socialisation with their children tend to be more empathetic and prosocial overall, while Scrimgeour, Davis and Buss (2016) acknowledged that children of such parents tend to display more effective solution-oriented behaviours.

Parents' own social-emotional development is also influenced by their family-of-origin social-emotional experiences in childhood, which may consequently affect the social-emotional development of their children. As reported by Leerkes and Crockenberg (2002), parents who demonstrate high maternal self-efficacy with their children are more likely to report their own emotional needs having been met when they were children themselves. Likewise, parents who are raised in controlling or emotionally rejecting environments tend to experience more hostility, negative attitudes and negative attributions towards their own and others' infants and children (Leerkes & Siepak, 2006).

Studies have identified three effective strategies for parents to develop social-emotional skills with their children i.e., parent modelling of emotions, parent reactions to children's emotions and parent teaching about emotions (Denham, 1998; Eisenberg, Cumberland & Spinrad, 1998; Garner, 2010). Each strategy will now be discussed.

2.8.1 Parent modelling of emotions

Through emotion modelling, a parent's own emotional expressiveness may teach a child about which emotions are acceptable and how to express and regulate these (Valiente, Fabes, Eisenberg & Spinrad, 2004). Studies by Luebbe, Kiel and Buss (2011) and Silk et al. (2011) examined negative parenting styles upon children's developing ER abilities. Results

show that children's effective social functioning is stunted when parents model consistently negative emotions or provide children with sad or hostile templates for dealing with people and situations. According to Raver and Spagnola (2002), children in such positions learn little about emotions and do not self-reflect well. Children may also acquire modelled information from parents about which situations evoke certain emotions such as fear, and what the appropriate response may be. This contributes to their emotional knowledge in more functional ways, possibly promoting their survival (Nixon & Watson, 2001). While positive parent modelling may contribute to a child's emotional knowledge for their benefit, it is also likely that negatively modelled emotions contribute to a child's emotional knowledge in less functional ways (Garner, Jones & Miner, 1994).

2.8.2 Parent reactions to children's emotions—contingent responding

Through contingent responding, parents may either encourage or discourage a child's emotional expression by the way they react to particular behaviours (Denham, 1998; Eisenberg et al; 1998; Garner, 2010). Parents who encourage expression of emotions by accepting them in their children have been shown to impart valuable lessons in emotional tolerance and control. Gottman, Katz and Hooven (1997) demonstrated this as positively associated with children's emotional expressiveness in schooling. Conversely, Berlin and Cassidy (2003) demonstrated that parents who consistently dismiss their children's emotional world or punish their emotional experiences contribute to their children being more subdued, sad or fearful. According to Fabes, Leonard, Kupanoff and Martin (2001), this leads to diminished emotional regulation for children, who then cannot alter their situation or emotional responses appropriately without the necessary skills. As such, they remain psychologically aroused.

Popular evidence-based behavioural programs that reflect contingent responding include Parent Management Training (Pearl, 2009), The Incredible Years (Webster-Stratton, Jamila Reid & Stoolmiller, 2008) and Triple P (Sanders, Markie-Dadds, Tully & Bor, 2000).

Such programs base successful outcomes on teaching positive and negative reinforcement of children's behaviour. However, they are not designed to teach parents to specifically respond to children's emotional needs or the unique social-emotional situations that result from children's behavioural responses. The third strategy, of parents teaching children about emotions (emotion coaching), addresses this issue.

2.8.3 Parent teaching about emotions—emotion coaching

Emotion coaching is best described as supportive responding, with parents verbally labelling emotions and using empathy to teach children to understand and regulate their emotions (Gottman & DeClaire, 1997; Gottman et al; 1996). Behavioural causes, consequences and empathy skills are also addressed through parent emotion coaching (Denham & Kochanoff, 2002). The deliberate use of instruction in emotion coaching assists children to make connections between expressions, situations and words to formulate meaningful scripts about their unique emotional experiences. Through discussing emotions, parents impart new tools for emotion expression and self-regulation to their children, while also validating, clarifying and highlighting their emotional states (Brown & Dunn, 1992). Additionally, as children expand their social interactions, parent emotion coaching assists in guiding children to be aware of specific emotional cues and to be aware of manageable components of their behaviour (Denham et al., 2012), while contributing to a child's expanding EK skill-set (Havighurst, Wilson, Harley, Prior & Kehoe, 2010). This emotion knowledge includes a child's increased awareness of emotional expressions, situations and causes (Denham, Zoller & Couchoud, 1994), leading to the child establishing a meaningful body of knowledge about emotion.

Studies focusing on parents as emotion coaches identify positive outcomes for child social-emotional development. For example, Bierman et al. (2008) revealed positive social-emotional skill trends for four year old children (n = 356) engaged in an emotional intelligence development program at school. Additional materials (videos and handouts) were provided for

parents at home, with parent emotion coaching practices reinforcing these school program lessons. Bierman, Welsh, Heinrichs, Nix and Mathis (2015) also compared several outcomes for four year old children (n=200) after assigning them to a Research Based, Developmentally Informed (REDI) program versus a combined REDI program plus parent program which gave parents evidence-based learning activities and games to play with their children using emotion coaching strategies. The combined program proved effective in demonstrating significant improvements in child literacy, academic skills, self-directed learning and social competence. Havighurst and colleagues (Havighurst, Harley & Prior, 2004; Havighurst, Wilson, Harley & Prior, 2009; Havighurst et al; 2010; Wilson, Havighurst & Harley, 2012, Havighurst et al; 2013; Havighurst et al; 2015), also investigated the role of parents in building children's emotional competence through emotion coaching techniques, using video materials, group discussions, exercises, role-play, reading, information and home activities. Using a structured, group-delivery program for parents—Tuning Into Kids—Havighurst and her colleagues demonstrated significant improvements in parent and teacher reports of children's emotional competence and decreases in teacher and parent-reported behavioural difficulties after children (aged four to six years) completed the program. Samples in these studies ranged from n = 47 to n = 218.

While each parent strategy has shown positive influences on children's social-emotional skill development, the emotion coaching approach has been the most closely related to optimal social-emotional development in childhood (Eisenberg et al., 2001; Gottman et al., 1996). As such, it will serve as the selected strategy for parents in this study, within a purpose-designed social-emotional skill program.

2.9 The Role of Schools in Social-Emotional Skill Development

As a microsystem in Bronfenbrenner's theory of human development (1980-1993), schools set the stage for early learning and are important in children's early social-emotional

skill development. Educators have increasingly recognised the importance of children's social and emotional competence in their developing years (Tang, 2002). Mastery of these skills is associated with greater wellbeing and school performance while a deficiency in these skills is associated with a variety of personal, social and academic difficulties (Eisenberg, Fabes & Spinrad, 2006; Guerra & Bradshaw, 2008). According to Taylor and Dymnicki (2007), teachers have long recognised that it is not enough for children to simply acquire traditional academic skills; they also need to be able to use social–emotional knowledge and skills in the broader context of their everyday lives.

Immordino-Yang and Damasio (2007) suggest that social–emotional choices for children are grounded in emotion and emotional thought. This implies that the processing of emotion is important for understanding the way children learn in the classroom and the way knowledge is consolidated and accessed. Therefore, it follows that if schools are involved in intellectual development with children, they are also inherently involved in their emotional development (Hinton, Miyamoto & Della-Chiesa, 2008). Consequently, most educators, parents and the public endorse the development of a broader educational agenda that supports children's social–emotional competence, character, overall health and community involvement (Metlife, 2002). The educational priority, according to Weissberg and Greenberg (1998) is therefore one which acknowledges the increasingly complex situations children face today regarding their academic studies, social relationships, health and the community. This priority requires that children acquire skills for negotiating diverse contexts and challenges within each developmental level.

However, it has been challenging for the education system to develop social–emotional skills with children, given the increasing pressure upon educators to meet various academic standards of development in formal education (Denham, 2005). That is, there is a continued emphasis on early literacy and numeracy skills over social and emotional development in the

formative years, which appears to have extended in recent times to early, non-compulsory years of formal schooling (Miller & Almon, 2009). These authors also reported a growing concern among early childhood practitioners that these years are now becoming more formal, with a focus on traditional academic learning of content areas. Denham (2005) emphasised the need however for continued research into supporting schools to promote social–emotional skills for children beyond the academic requirements. Research on the positive social, academic and neurological outcomes of developing social–emotional skills with children in the school system will now be examined.

2.9.1 Social outcomes

The development of social–emotional skills in the early education years is vital in establishing sustained positive engagement and connections with peers. Denham and Holt (1993) found that children who are encouraged to develop listening, cooperating, appropriate help seeking, negotiating and joining skills, display crucial predictors of later good mental health and wellbeing. Ladd, Birch and Buhs (1999) also demonstrated that children who reflect positive profiles of social–emotional competence maintain positive attitudes towards school. They also make more successful early adjustments to a school environment than those children who are less socially and emotionally developed. Positive social–emotional development in the early years of education has also been shown to nurture prosocial behaviours that encourage positive peer and teacher relationships (e.g., helping, sharing and taking turns), self-regulation skills (Denham & Burton, 2003) and social problem-solving skills (Youngstrom et al., 2000). Additionally, Durlak et al. (2011) found that when formal social–emotional programs are implemented within schools, positive effects are demonstrated on targeted skills and children’s attitudes about self, others and school in general.

2.9.2 Academic outcomes

Research supports the link between early childhood social–emotional skill development and academic achievement. For example, skills in self-awareness (Zafiropoulou, Sotiriou & Mitsioli, 2007), self-management (Bierman et al. 2008), social awareness (Leerkes, Paradise, O’Brien, Calkins & Lange, 2008), responsible decision-making (Warren, Way, Kalb, Denham & Bassett, 2010) and relationships (Elias & Haynes, 2008) positively influence academic success. Additionally, Duckworth and Seligman (2005) demonstrated that students who are more able to manage their stress and are motivated and organised, learn more and achieve better academic grades. Other important educational domains such as literacy, numeracy, language and communication are also shown to improve as a result of social–emotional development (Cohen et al., 2005). Conversely, Raver and Knitzer (2002) highlighted that children who do not have opportunities to develop social–emotional skills demonstrate school adjustment and academic difficulties as a result. Overall, social–emotional skill development within the early years of education has been established as a predictor of academic success when controlling for other factors such as earlier academic success (Shields et al., 2001).

2.9.3 Neurological outcomes

Posner and Rothbart (2000) suggested that the neural circuitry involved in emotion regulation is closely associated and interdependent with executive brain functions such as planning, judgement, decision-making and problem-solving. These functions are key aspects in education. Immordino-Yang and Damasio (2007) used the analogy of emotion as the ‘rudder’ that steers a child’s thinking in the classroom, assisting the child to recall information and memories relevant to the topic at hand. Similarly, Greenberg (2006) suggested that social–emotional programs within the classroom may serve to stimulate central executive cognitive functions including inhibitory control and planning, as a result of building greater cognitive-affect regulation in the prefrontal areas of the cortex. Through this process of regulation,

attention, motivation and evaluation, emotion may also modulate the recruitment of neural networks for domain-specific skills such as reading. Therefore, emotion and cognition are suggested to act together to give rise to skills such as memory, formal learning and creativity (Fischer & Bidell, 2006; Immordino-Yang & Damasio, 2007). This is an important finding for educational practices.

2.10 Emerging Priorities for Social–Emotional Development in Education

Considering these positive social, academic and neurological outcomes, Immordino-Yang and Damasio (2007) and Rose and Meyer (2006) suggest that it should be the role of schools and educators to be aware of the unique social, academic and neurological profiles for children. It is recommended that schools and educators are supported in developing an individual child's skills (within their unique profiles), given the established connection between emotion and executive functioning (Bush, Luu & Posner, 2000; Shonkoff & Phillips, 2000). Teachers are a vital link in this profiling process. One approach to supporting children's learning in this manner is the KidsMatter Australian primary school mental health initiative (Australian Government Department of Health and Ageing, 2011).

The KidsMatter initiative (Australian Government Department of Health and Ageing, 2011) aims to increase teacher and parent awareness of children's mental health issues to promote early detection and provision of assistance to those who require it. The initiative uses a school population health model. Schools are provided with a framework, an implementation process and a set of key resources to develop mental health education strategies. A social–ecological approach is emphasised, acknowledging the key influences of parents, families and schools in children's mental health. The initiative comprises four components, which use whole-school and targeted strategies i.e., a positive school community, parenting support and education, early intervention for children experiencing mental health issues and social–emotional learning for children. The KidsMatter initiative is an Australian example of a model

that recognises the unique influences of parents, families and schools upon children, with emphasis on the roles of teachers and schools in this process. A KidsMatter social-emotional classroom program is used by teachers in the current study.

2.11 The Role of Teachers as Social–Emotional Influences

Teachers play a significant role in influencing children’s social–emotional development. While educators have long recognised the importance of nurturing children’s social–emotional skills in the classroom, Denham et al. (2012) noted that little research exists in this area compared with the area of parents as influences of children’s developing social–emotional skills. According to Denham et al. this is particularly significant given that teachers spend considerable amounts of time conducting emotion-focused tasks and providing sources of emotional security for children.

Denham et al. (2012) described teachers as being typically well-trained to manage emotionally charged events in a classroom situation. While research in the area is sparse, Denham et al. suggest four strategies that teachers in the classroom can use to further develop children’s social–emotional skills i.e., teacher emotional ability, teacher modelling of emotions, teacher reactions to children’s emotions and teacher emotion coaching. These strategies will now be discussed.

2.11.1 Teacher emotional ability

The way teachers manage their own emotional lives is suggested to contribute to and influence children’s social–emotional skill development (Denham et al., 2012). Using the Mayer, Salovey, Caruso and Sitarenios (2001) model of EI, Denham et al. suggested that teachers may cultivate the following personal skills for use in the classroom i.e., developing emotional perception of self and others via facial and postural expressions; utilising emotions to facilitate cognition and action; understanding emotions while appreciating their time frame and consequences; and managing emotions. These skills are suggested to be linked to a

teacher's sense of efficacy in his or her role (Penrose, Perry & Ball, 2007; Perry & Ball, 2008). Studies examining the emotional abilities of teachers in the early schooling years support this by correlating these abilities with teachers' reactions to children's emotions (Ersay, 2007). Strategies for promoting teacher social–emotional competence and wellbeing, as suggested by Jennings and Greenberg (2009), include EI training (Brackett & Caruso, 2006) and mindfulness-based techniques (Brown, Ryan & Creswell, 2007; Carmody & Baer, 2008). These strategies have been designed to promote teachers' wellbeing, emotional awareness, regulation and prosocial behaviour while reducing stress.

2.11.2 Teacher modelling of emotions

It has long been understood that positively modelled teacher expressiveness relates to children's emotional competence in the classroom. That is, teachers' positive emotions may assist children to express themselves more positively and self-regulate, which then renders them more capable of learning about emotions within the school environment. Conversely, a teachers' negative emotions may create an environment where emotion regulation is difficult for a child. According to Denham et al. (2012), little research has been conducted to confirm this. DeMorat (1998) demonstrated this link however with kindergarten teachers who displayed emotions of pride and happiness, which was then translated to their children who matched these positively modelled emotional states.

2.11.3 Teacher reactions to children's emotions—contingent responding

Denham et al. (2012) reported that teachers' supportive reactions to children's emotions lead to children's positive EX, ER and EK, while teachers who minimise their reactions or punish children's emotional states negatively affect these factors. Dunn (1994) revealed that even young children absorb and interpret both the content, form and quality of a teacher's support. Denham et al. stated that teachers' positive and encouraging responses provide examples for children in how to tolerate and regulate certain emotions, with emotional

situations in classrooms providing valuable opportunities for learning and sharing. Studies by Ahn (2005) and Ahn and Stifter (2006) demonstrated children's contingent responding to teachers' emotions, with teachers demonstrating varied levels of responses according to children's ages. Toddlers typically receive more physical comfort and distraction in response to negative emotional states, while teachers in the early schooling years rely more on verbal approaches. The work of Ahn and Stifter also highlights the shortcomings of contingent responding techniques. That is, they fail to validate children's negative emotions, which is a particular strength of the emotion coaching strategy.

2.11.4 Teacher emotion coaching

Denham et al. (2012) reported that teacher coaching of emotions with children is positively related to children's EK, EX and problem-solving skills. Children's ER patterns are also positively affected by teacher emotion coaching (Denham et al. 2002). Ahn (2005) further demonstrated that children's negative emotions are reconstructed and expressed in alternative ways in the early schooling years when emotion coaching is used by teachers.

While each of Denham et al.'s (2012) suggested strategies influence children's social-emotional skill development, the emotion coaching approach is regarded as the most closely related to the effective development of social-emotional skills in childhood (Eisenberg et al., 2001; Gottman et al., 1996). As such, this approach will also serve as the selected strategy for teachers in the current study. A classroom social-emotional program will provide the formal structure and vehicle through which these emotion coaching strategies will be used by teachers in the current study to develop social-emotional skills with children. These classroom programs will now be discussed, arriving at the most suitable program type for the current study.

2.12 Classroom Social-Emotional Learning Programs

Protective factor frameworks that target the precursors of mental health issues for children have become a prominent focus in education (Hoagwood & Johnson, 2003; Strein,

Hoagwood & Cohn, 2003), with schools being appropriate settings for population health models to address the prevention of mental health issues for children. Educators have become interested in identifying factors that decrease the chances of a mental health issue occurring for children by incorporating approaches into lessons that strengthen and promote positive behaviours rather than simply decreasing problematic behaviours. Examples include the promotion of social–emotional, behavioural and cognitive skill sets (Catalano et al., 2002; Durlak & Wells, 1997). A meta-analysis of social-emotional school-based interventions conducted by Durlak et al. (2011) demonstrates the importance of schools working to build social-emotional skills with children to achieve longer-term benefits. Of the 213 school-based, universal social and emotional learning (SEL) programs surveyed in the study, involving 270,034 kindergarten through to high school students over a 37 year period, Durlak et al; showed that SEL participants demonstrated significantly improved social and emotional skills, attitudes, behaviour, and academic performance over time. Similarly, in a meta-analysis study of 69 after-school programs over 29 years which promoted personal and social skills in children and adolescents, Durlak, Weissberg and Pachan (2010) showed that participants demonstrated significant increases in their self-perceptions and bonding to school, positive social behaviours, school grades and levels of academic achievement. There were also significant reductions in problem behaviours over time.

Durlak and Wells (1998) described three types of prevention programs within the classroom environment: primary, secondary and tertiary. Primary prevention programs are designed for children with no identified risk factors such as dysfunctional parenting style, poor education or impoverished environmental, cultural or community contexts. Secondary prevention programs are designed for children who display various degrees of these risks, while tertiary prevention programs target children who already exhibit symptoms consistent with a conduct issue. The current study uses a primary prevention program approach, within which

the population sample is selected from a mainstream school setting with no significant risk factors for children, as identified by the schools and teachers. Primary prevention programs may be further categorised as universal or multi-focused.

2.12.1 Universal primary prevention programs

Universal primary prevention programs are implemented by teachers in the classroom using established activities within a curriculum. The aim is for children to be provided with an ecological context in which they can practice their acquired skills and behaviours appropriately with others (van Lier, Vuijk & Crijnen, 2005). Zins and Elias (2006) highlighted universal approaches as having the potential to enhance children's success in school and life. Malecki and Elliott (2002) and Caprara, Barbaranelli, Pastorelli, Bandura and Zimbardo (2000) noted that these approaches enable children to cope better with life stressors, improve their relationships with parents, teachers and peers and perform better academically. Skills that have shown improvements following universal primary prevention programs include interpersonal skills, prosocial behaviour and problem-solving skills, with an increasing trend in the development of EK and ER skills (Domitrovich, Cortes & Greenberg, 2007). Additionally, these programs have proven particularly effective when teacher training has been offered beforehand (Kam, Greenberg & Walls, 2003).

A distinct advantage of universal programs for social-emotional skill development includes the use of structured manuals and curricula, supporting consistency in their delivery (Catalano et al; 2002). An additional benefit is the development of standardised measures to assess children's behavioural outcomes. Greenberg et al. (2003) further report that the classroom environments of universal programs provide interactive instructional opportunities together with peer and school community opportunities and child self-direction. Child responses may be rewarded systematically and are more likely to be consolidated through multi-year programs (Greenberg et al., 2003).

However, universal programs are limited in their ability to address a variety of contextual risk factors that may contribute to social–emotional difficulties in early childhood, such as ineffective parenting or neighbourhood risks (Domitrovich et al., 2007). The overall trend with these approaches also appears to be one of schools delivering short-term, narrow-band universal program interventions to address specific concerns such as bullying (Adelman & Taylor, 2003). While such programs offer a specific focus (Catalano et al; 2002), they do not provide comprehensive, coordinated whole-school population strategies that combine universal and targeted approaches within multiple domains (e.g., child, peers, school and family). Multi-focused prevention programs address this need and as such, offer a more comprehensive approach.

2.12.2 Multi-focused primary prevention programs

Multi-focused primary prevention programs involve multiple combinations of teacher, parent and child peers as agents of change for children. Transfer and generalisation of acquired social–emotional skills between home and classroom settings are demonstrated to be more effective within these programs than in universal programs (Hughes, Cavell, Meehan, Zhang & Collie, 2005). Ștefan and Miclea (2012) report that multi-focused approaches comprising teacher training, parent training and child-focused activities within a curriculum are the most likely to affect child social–emotional outcomes, particularly for high-risk category children. Webster-Stratton and Hammond (1997) explored the possibilities of multiple combination peer and parent influences by using a social–emotional program to examine child classroom behaviours in children aged four to eight with known conduct problems. They compared a ‘child as peer’ training group with a ‘parent’ training group, a combined ‘child as peer plus parent’ training group and a control group. Their results demonstrate that combining elements of social–emotional skills training leads to superior outcomes for social–emotional skill development, with consolidation of these skills achieved after one year. A further example is

offered by Webster-Stratton (2001) in her multi-focused program, *The Incredible Years*. Children aged 2–13 years with identified behavioural difficulties undertook a ‘teacher plus parent’ combined skills training program. Results showed reductions in child misbehaviours within a classroom setting. Multi-focused programs have also been effective for improving conduct disorders in low, moderate and high-risk category children. For example, Ştefan and Miclea (2012) compared a ‘teacher plus parent plus child’ skills training group (using contingent responding with social–emotional activities) with a control group for children, aged four years. Results show that the multi-focused group achieved significant social–emotional skill improvement across all risk categories.

However, multi-focused interventions have also been criticised for having no additional benefits over universal programs (Tobler et al., 2000). Studies by Durlak and DuPre (2008) and Wilson and Lipsey (2007) suggest that multi-focused interventions are more likely to encounter implementation problems than universal programs, affecting the successful development of skills for children. An example of this may be the difficulty such programs face in following SAFE (sequenced, active, focused and explicit) procedures (Durlak et al., 2011). Such implementation problems may be minimised with universal interventions however, since the teacher leads the program and is able to manage SAFE procedures within the classroom setting.

The current study adopts the multi-focused primary prevention approach, aimed at examining combinations of parent and teacher influences as agents of change for children’s social–emotional skills. The implementation issues with this approach will be addressed in the study’s methodology chapter.

2.13 Research Direction

Researchers have examined the influence of parents on children’s early social–emotional skill development (e.g., Denham et al; 2012; Havighurst et al; 2010) and more

recently, the influence of teachers on these skills (e.g., Bierman et al; 2008; Ahn, 2005). Studies have also recently begun to explore the combined effects of these important influences for children's social–emotional development. However, these studies have largely focused on high risk category children, such as those with behavioural, learning or mental health issues (Ştefan & Miclea, 2012; Webster-Stratton, 2001) or compared single influences such as parent versus child peer programs (e.g., Webster-Stratton & Hammond, 1997) or teacher versus parent programs (e.g., Flay et al., 2004). Additionally, combined group studies have typically compared the effects of one large multi-focused group with a control measure, for example teacher/parent/child versus a control group (e.g., Ştefan & Miclea, 2012). Therefore, it is difficult to disentangle the respective roles of each separate element on the development of children's social–emotional skills. As such, studies are needed to directly compare the effects of each component and the extent to which each adds value to social–emotional skill development for children. Ştefan and Miclea (2012) suggested that examining these separate influences is important and provides additional information to the understanding of their effects on children's behaviours.

2.14 The Current Study

This study will contribute to the research by investigating the extent to which the separate and combined influences of parents and teachers affect young children's social–emotional skill development compared with a control group. The focus will be on mainstream-educated, low-risk children. The study will employ a multi-focused primary prevention approach utilising a new presentation of separate and combined parent and teacher influences alongside a control comparison (i.e., parent group versus teacher group versus parent-plus-teacher group versus control group). These experimental groups are displayed in Figure 2. Pre-primary children (aged five to six years) will be the selected focus for the current study as this is the identified entry point for compulsory schooling in Australia. The Devereux Student

Strengths Assessment Mini instrument (DESSA-Mini) (LeBuffe et al; 2009) will also be utilised as a standardised social-emotional skill assessment measure not previously used in this manner, to determine skill progression for children over time, with teachers and parents as raters. Overall, the study presents a unique multi-focused combination approach with low-risk, mainstream children at the formal school entry point within an Australian school population to measure social-emotional skill outcomes.

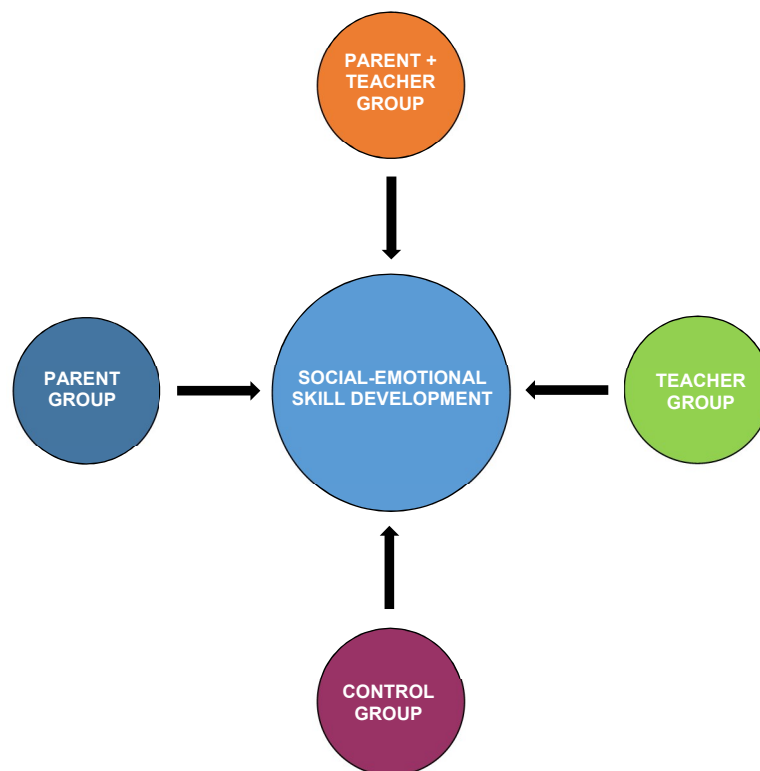


Figure 2. Experimental groups in the study

It is anticipated that the influence of the combined parent-plus-teacher group will yield greater improvements in children's social-emotional skills following the intervention phase, due to the generalisation and transfer of acquired social-emotional skills between the home and classroom settings. The teacher only group is expected to be the next most effective, given the reduced likelihood of implementation problems in the classroom setting with this program

compared with the home setting program. The use of structured manuals and curricula to support consistency in delivery of the social–emotional program within the classroom environment is also anticipated to enhance the likelihood of this outcome. The parent only group is expected to have the next highest improvements in social-emotional skill ratings, given the likelihood of implementation challenges in the home, while the control group is anticipated to yield the smallest effects for social-emotional skill development given the absence of applied interventions. Maturation effects of social–emotional skills are expected for all children in the study over time (to be observed in the study’s control group) given the natural reduction in aggressive and non-compliant behaviours that occur developmentally for children over time, irrespective of risk status (Hill, Degnan, Calkins & Keane, 2006).

Additionally, the study will examine whether acquired social–emotional skills endure into a new school year for children overall. This is important for understanding long-term effects of social–emotional skills for children in the early years. Longitudinal research has suggested that social–emotional skills ultimately lead to significant outcomes in the areas of mental health, academic performance, delinquency and substance abuse (Denham, 2006; Tremblay, 2000).

The study will also introduce a purpose-designed home-based parent emotion coaching program for the parent and combined groups, to develop social-emotional skills with their children. An already established parent program to develop social-emotional skills with children, such as Havighurst’s Tuning into Kids as a ‘group-delivered’ program (Havighurst et al; 2004; Havighurst et al; 2009; Havighurst et al; 2010; Wilson et al; 2012, Havighurst et al; 2013; Havighurst et al; 2015), was not utilised in the current study. Instead, an ‘individually-delivered’ purpose-designed program was developed due to an anticipation that parent drop-out rates in the schools would be substantial if their regular commitment and attendance in group sessions was required. The study’s parent coaching program also offered children the

opportunity to develop singular and specific social-emotional skill elements over time through activities, i.e., emotion knowledge, emotion expression and emotion regulation. It was anticipated that as a result of the parent home program, children in the parent and combined groups would be able to communicate effective messages about their social-emotional needs and how they felt with other people while demonstrating EK, ER and EX strategies appropriate for their age group.

As previously mentioned, research also demonstrates the importance of parents' own social-emotional development (as influenced by their family-of-origin social-emotional experiences in childhood), which may affect the social-emotional development of their children (Havighurst et al., 2010; Leerkes & Crockenberg, 2002; Leerkes & Siepak, 2006). Therefore, lastly, as an adjunct to the main hypotheses, the current study will also explore parents' social-emotional experiences from their families of origin and discuss the extent to which they are consequently able to develop social-emotional skills with their own children through the study's parent home program.

2.15 Hypotheses

- 1.** Both the parent social-emotional skills program and teacher social-emotional skills program will enhance pre-primary children's social-emotional skill development.
Specifically, after controlling for pre-existing social-emotional skills, it is predicted that:
 - a)** Children who receive the combined school and home social-emotional skills programs will have the highest social-emotional total scores (SET) after the program when compared with the other three groups.
 - b)** Children who receive only the school social-emotional skills program will have the second highest social-emotional total scores (SET) after the program.

- c) Children who receive only the home social-emotional skills program will have the third highest social-emotional total scores (SET) after the program.
 - d) Children who do not receive any social-emotional skills program i.e., the control group, will have the lowest social-emotional total scores (SET) after the program.
2. The positive effects of the teacher and parent social-emotional skills programs will be evident six months later into the next school grade, such that:
- a) Children who receive the combined social-emotional skills program will maintain the highest social-emotional total scores (SET) after the program, six months later, compared with the other three groups. These scores will also be significantly higher than their baseline measures.
 - b) Children who receive only the school social-emotional skills program will have the second highest social-emotional total scores (SET) after the program, six months later. These scores will also be significantly higher than their baseline measures.
 - c) Children who receive only the home social-emotional skills program will have the third highest social-emotional total scores (SET) after the program, six months later. These scores will also be significantly higher than their baseline measures.
 - d) Children who do not receive any social-emotional skills program i.e., the control group, will have the lowest social-emotional total scores (SET) after the program, six

months later. These scores will be higher than their baseline measures due to maturation effects over time.

Chapter 3: Pilot Study

A pilot study was conducted to trial five researcher-developed social–emotional skill activities to be offered in the main study’s parent coaching program at home, with the parent group and combined group. The activities were presented in a purpose-designed manual and developed with guidance from evidence-based literature (further details to be provided in section 3.2). The first objective of the pilot study was to determine whether the five social–emotional activities were suitable for the target age group of children. The second objective was to investigate whether parents were able to implement the social–emotional activities at home with children in the target age group. The development, administration and outcomes of the pilot study will now be presented.

3.1 Participants

To assess the first objective, three children were chosen through parent word of mouth from one of the selected schools in the principal study. The school was a private, co-educational K–12 metropolitan primary school in Perth, Western Australia. The school’s suburb reflected a middle-income average household wage (City of Joondalup Community Profile, 2016). Participants were predominantly of Anglo-European background. The children were three girls aged between five and six years old. None of the children were identified by their parents as being high-risk behaviourally or as having learning difficulties.

To assess the second objective, three different parents were selected through parent word of mouth from one of the selected schools in the principal study. As before, the school was a private, co-educational K–12 metropolitan primary school in Perth, Western Australia. The school’s suburb reflected a middle-income average household wage (City of Joondalup Community Profile, 2016). Participants were predominantly Anglo-European. The children of the parents were two boys and one girl aged between five and six years old. None of these

children were identified by their parents as being high-risk behaviourally or as having learning difficulties.

3.2 Materials

The materials used in the pilot study included two researcher-developed assessment stories, a researcher-developed parent manual and a demonstration DVD for parents. These are described below.

3.2.1 Assessment stories

The two researcher-developed stories were entitled ‘Max Builds a Block Tower’ and ‘Lucy Loses Her Favourite Toy’ (Appendix A). The purpose of these assessment stories in the pilot study was to explore whether children in the target age group were able to demonstrate EK, ER and EX skills (as measures of social–emotional competence) and then gradually build these skills through the development of each story. This would confirm the capacity of children in the target age group to undertake the social–emotional skill activities in the researcher-developed manual for the main study, within which EK, ER and EX skills were also explored and developed. Existing measures were not used in the pilot study given the researcher’s intention of cumulatively ‘building’ EK, ER and EX skills with the participant over the course of one assessment.

The stories were read to each of the children individually by the researcher. Each story was four pages in length and colourfully illustrated. The stories posed social–emotional questions to each child regarding their personal experience of the character’s situation and how she felt about it, how the character might feel throughout the story and what the child might do to solve the problem situation in the story. These questions drew from Denham, Wyatt, Bassett, Echeverria and Knox’s (2009) table of general developmental tasks, which assesses dimensions of a child’s social and emotional development at progressive age periods (see Table 1). Within this table, social and emotional developmental milestones are specified for children in the three

to six-year age band, which aligns with the target age group for the pilot and main study. Considering these age milestones, questions for the assessment stories assessed the capacity of children in this age group to express a combination of emotions (EX), understand expressions and situations of basic emotions (EK) and display more independent ER than expected for previous age levels. The researcher also anticipated the possibility of simple problem-solving skills emerging in social–emotional situations for this age group.

Table 1

Social and Emotional Developmental Tasks for Each Developmental Period (Denham, Wyatt, Bassett, Echeverria & Knox, 2009)

Developmental Period	Emotional Competence	Social Competence
Birth–24 months	Expression of basic emotions. Differential reaction to adult emotions. ER, some self-soothing, much assistance by adults.	Interest in people. Shows desire for personal attention. Capable of coordinated interaction. Initiates contact with age mates.
24 months–3 years	Expression of more social emotions (e.g., guilt, shame, empathy). Begins to comprehend ‘good’ and ‘bad’ feelings. More independent ER.	Plays alongside age mates. Participates in group play.

3 years–6 years	Expression of ‘blended’ emotions. Understands expressions and situations of basic emotions. More independent ER.	Beginning peer interaction while managing emotional arousal. Beginning of specific friendships and peer status. Prosocial behaviours and interactions emerge.
7 years–11 years	Use of display rules. Understands complex emotions (e.g., ambivalence, unique perspectives). Begins independently to use cognitive strategies to regulate emotions.	Formation of dyadic friendships. Solidification of peer status. General diminution of physical aggression.

3.2.2 Parent manual

The parent manual appears as Appendix B. for the main study, following revisions from the pilot study. The pilot study parent manual contained:

- An information letter about the pilot study and a parent consent form.
- Psychoeducational material outlining the importance of social–emotional skills and the benefits of parent emotion coaching.
- A reflection questionnaire for parents on their family of origin and current parenting practices.
- A description of the five steps to effective emotion coaching for parents (Gottman & DeClaire, 1997). This was defined for parents as a way of responding to their children’s emotions, understanding the different emotions their children

experienced, understanding why such emotions occurred and understanding how they could manage these.

- A demonstration DVD of the five social–emotional activities in the manual.
- Five social–emotional activities for parents to complete with their child, including a social–emotional picture book for activity five (‘The Way I Feel’ [Cain, 2000]).
- A parent feedback sheet for each of the five social–emotional activities, including short answer responses and Likert rating scales.

The social–emotional activities in the parent manual comprised:

Activity one: ‘What is your body saying?’—This activity required children to label physical manifestations of their emotional states on paper cut-out figures and aimed to measure Emotion Expression (EX).

Activity two: ‘Emotion face match-up and emotion flash cards’—this activity required children to label emotion states in themselves and others and aimed to measure Emotion Expression (EX).

Activity three: ‘Relaxation: learning to read your body’—this activity required children to practise self-regulating their emotional experiences through relaxation techniques and aimed to measure Emotion Regulation (ER).

Activity four: ‘Masks’—this activity required children to problem-solve fictitious emotional situations and aimed to measure Emotion Knowledge (EK).

Activity five: ‘Emotion chat time and shared reading’—this activity required children to problem-solve emotion situations using their own examples from daily life or characters from a story for reflection and aimed to measure Emotion Knowledge (EK).

Activities were play based, involving two-way open-ended emotion dialogue with the parent while allowing children the opportunity to express their unique perspectives. Activities were also built on the assumption that children learn through active involvement, social participation, meaningful activities, prior knowledge, strategy and engagement in self-regulation and self-reflection. It was also acknowledged that children gain an understanding rather than a memorisation of new information through practice (Vosniadou, 2001). Activities were cumulative and sequential, progressing from basic skill levels; however, it was also expected that skill development could overlap between the activities for children over the developmental period. Each of the five activities were grounded in Denham et al.'s (2003) emotional competency construct and therefore designed to strengthen children's EK, EX and ER capacities:

- EX—the child's ability to recognise, label and express anger, sadness, fear and happiness in themselves and others while also understanding expressions and situations of basic emotions.
- ER—the child's ability to control, modify and manage aspects of their emotional reactivity and expressivity.
- EK—the child's ability to appraise another person, interpret a message, understand the message and apply the necessary information to a social situation.

3.2.3 Demonstration video

A DVD was provided to parents, offering demonstrations of each activity using the suggested emotion coaching techniques. The video portrayed the researcher acting in the role of parent emotion coach with her own child (aged six years). Each activity demonstrated in the video was completed in approximately 15–20 minutes.

3.3 Independent Reviewer Critique

The parent manual plus the two assessment stories were critically evaluated by two independent reviewers who were experts in early childhood education and educational psychology, before commencement of the pilot study. Revisions were subsequently made to the pilot study parent manual and assessment stories in response to the reviewers' recommendations. These recommendations included simpler and clearer text for the stories, an overall reduction in the amount of text for the manual, simpler and clearer parent instructions for the social–emotional activities and a clearer explanation of the aims of the parent self-reflection questionnaire in the manual. Omission of two emotion flash card pictures and one facial expression mask in the activities was also suggested, since these were deemed ambiguous. All recommendations were incorporated into the parent manual and assessment stories prior to the commencement of the pilot study.

3.4 Procedure

The first objective of the pilot study was to examine the target age group's ability to complete the social–emotional activities intended for the main study. This was determined through the researcher's administration of both the assessment stories and social–emotional activities with children in the target age group. It was anticipated that the children would be able to understand the emotion vocabulary presented in the parent manual, express and regulate their own emotions and respond to the emotions of others in alignment with the milestones of the age group as outlined by Denham et al. (2009).

The parents of the three children were provided with an information letter about the pilot study (Appendix C) and a consent form to complete (Appendix D). Children were assessed individually by the researcher and were also video recorded. Two assessment stories were administered to each child, followed by either one or two of the social–emotional activities (to avoid the length of administering all five activities to one child at once). The first

child undertook activities one and two, the second child undertook activities three and five and the third child undertook activity four. Assessments with each child lasted approximately 20–30 minutes. Children were thanked and given stickers as a reward, while parents were thanked with gift vouchers.

The second objective of the pilot study was to examine parents' abilities to implement the social-emotional activities with the target age group. Different parents from those selected for objective one were provided with an information letter about the pilot study (Appendix E) before completing a consent form (Appendix F) and the parent reflection questionnaire in their manual. A DVD explaining the social–emotional activities they were asked to complete was also included. Each parent then administered one or two social–emotional activities to their child (to avoid the length of administering all five activities to one child at once). The first parent completed activities one and five, the second parent completed activities three and four and the third parent completed activity two. While engaged in these activities, parents were encouraged to offer their children the emotion coaching strategies outlined in their manual and DVD, so they could observe their children's reactions and experiences.

Parents' written feedback for each activity was requested via short answer responses and rating scales in the parent manual. These were designed to assess parents' perceptions of the effectiveness of the activities for their child, the usefulness of the activities for their child's social–emotional development and their opinion of what worked well and what did not work well for their child. Parents were thanked and given gift vouchers.

3.5 Analysis

The video recordings of each child were reviewed by the researcher. To assess the first objective using the assessment stories component, the type and number of responses for each child were recorded according to their use of emotion vocabulary (EK) i.e., happy, sad, angry, their ability to identify personal emotion states and those of others (EX) and their ability to

problem-solve social–emotional situations (ER, EX and EK). The five social–emotional activities were also analysed and likewise recorded according to the number and type of responses for each child.

To assess the second objective, parents' short answers and responses on the manual's rating scales were examined. These were categorised by type and frequency when parents answered questions about their child's ability to complete the activities, the usefulness of the activities for their child, the methods they used to engage their child in the activities, aspects that worked well or did not work well and any recommendations offered. Parent responses for family-of-origin parenting practices were categorised according to whether or not in their family of origin: feelings were viewed as important; tools were provided to manage emotion; good social–emotional examples were provided; or negative emotions were minimised. Responses were also categorised according to whether or not parents would now follow their family-of-origin social–emotional parenting practices with their own children.

3.6 Results

3.6.1 Objective 1

The first objective of the pilot study was to determine whether the five social–emotional activities would be suitable for the target age group of children in the main study. Data from the assessment stories component of the study revealed that each child demonstrated an ability to use emotion-based words in general, thereby displaying age-appropriate emotion vocabulary (EK) for the target age group. Children were also able to use the emotion-based words from their assessment stories to identify how they might feel (EX) or regulate their emotions (ER), as well as how others might feel. Finally, each child was able to demonstrate simple problem-solving skills using the characters in the stories while also drawing upon their own experiences (EK, ER and EX). Based on the assessment stories data from this small sample, it was determined that the target age group would be able to understand the level of emotion

vocabulary in the manual's activities for the main study. Similarly, data from the social-emotional activities demonstrated children's capacities to undertake tasks involving EK, EX and ER skills.

Therefore, the first objective of the pilot study was achieved and the findings indicated that the social-emotional activities for the target age group were appropriate. Only minor revisions were required for the main study regarding activity two ('Emotion face match-up and emotion flash cards'), with the omission of the 'cranky' and 'worried' flash cards. This omission was due to the cards' apparent ambiguity for the target age group and their visual similarity to the 'angry' and 'scared' emotion flash cards, as reported by the children.

3.6.2 Objective 2

The second objective of the pilot study was to determine parents' abilities to implement the social-emotional activities with the target age group using the outlined emotion coaching strategies. Activity one ('What is your body saying?') was considered useful for both parent and child; however, the parent reported that some difficulty was experienced by her child in identifying negative emotion body states, since this was not a familiar practice. The parent in this situation also reported being uncertain about whether to prompt the child further for responses or when to offer emotion coaching for this activity. Consequently, a modification for this activity was made to emphasise the parent's role as an emotion coach more clearly in the manual.

Regarding activity two ('Emotion face match-up and emotion flash cards'), feedback from the parent indicated that her child was able to name their emotions, match their emotions to a flash card and talk about both their emotions and those of others. This activity was considered useful for both the parent and child in understanding certain thoughts and behaviours that occurred at school. As a result of the parent's feedback, the role of the parent

as an emotion coach was highlighted further, as was their ability to assist their child in problem-solving.

Regarding activity three ('Relaxation: learning to read your body'), the parent commented that her child was able to bubble breathe and that this exercise was useful for both the parent and child. The parent described 'breathing worries out' as particularly useful but reported that stretching to relax was difficult as this required the child's sustained attention for the entire exercise. Modifications were made to this activity to emphasise that parents should trial several of the suggested relaxation exercises in the parent manual and also experiment with the time of day these exercises were implemented (e.g., bed time) to achieve the best outcomes for their child.

Parent feedback for activity four ('Masks') indicated that it was useful for both parent and child. It also provided some insight for the parent about the child's peer interactions at school. Based on the parent's recommendations, the researcher made two modifications to this activity for the main study. First, the child would be given the option of jumbling the facial features of the masks (after identifying the key emotions required for the activity) as a means of constructing new emotion states if they wished to continue with their play. This would potentially lead to further, more involved discussions of other emotion states and peer dynamics with the parent. Second, the parent's role as an emotion coach would be further emphasised through the manual's text instructions, suggesting that the parent could assist their child to problem-solve using relevant, real-world examples.

Finally, parent feedback for activity five ('Emotion chat time and shared reading') reported the child's ability to self-reflect on positive and negative aspects of their day. The positive aspects were identified much more easily than the negative. This activity prompted lengthy conversations between the parent and child about sibling dynamics within the family unit of which the parent was not previously aware and which required attention. However, the

parent in this situation reported uncertainty about whether to offer emotion coaching solutions for the negatively identified social–emotional situations. As a result, modifications were made to this activity to emphasise the parent’s role as an emotion coach and to prompt parents to assist their child in further problem-solving if required.

Overall, the second objective of the pilot study was achieved, indicating that parents were able to implement the social–emotional activities in the parent manual satisfactorily as intended for the target age group of children in the main study. Given the positive outcomes of the pilot study, the main study was initiated. Methodology for the main study is presented in the following chapter.

Chapter 4: Methodology – Main Study

4.1 Design

The main study employed a pre, post and follow-up quasi-experimental design. The independent variable was social–emotional skills training, comprising the parent and teacher social–emotional skills programs. The dependent variable was social–emotional skills as measured by the participants’ social-emotional total (SET) scores. This score was obtained through the DESSA-Mini tool (LeBuffe et al., 2009).

4.2 Participants

Two private, co-educational K–12 metropolitan primary schools in Perth, Western Australia were selected for the study. The schools were in neighbouring suburbs with similar socio-economic populations for children attending, that is, 54.3% per cent of the population of these suburbs reflected a middle-income average household wage (City of Joondalup Community Profile, 2016). The schools were also chosen due to their similar match in religious denomination (as a base comparison for the study) and their similarly expressed positive views on social–emotional skill development for their students. Each school contained two pre-primary classes consisting of between 28 and 30 students. Children in all four classes were identified by their school principals and teachers as low-risk and mainstream. Four pre-primary teachers initially participated in the study, with one teacher for each of the four groups. In the follow-up period, four new teachers from the next year level in the same two schools provided the six-month assessments for the same children as they transitioned into their new school grade.

Children from both schools were predominantly of Anglo-European origin. Initially, 116 participants were approached to take part in the study. Of these, 101 consented to take part, with a final 86 participants completing the study through all pre, post and follow-up time

periods over 15 months. The dropout rate of participants was therefore 15 per cent. Reasons for participants dropping out of the study included parent lack of time (five parents), child illness (two parents), child refusal to participate (one parent), altered family situations (two parents) and lack of response to invitations to continue with the study (five parents).

A power analysis was conducted using the G*Power program (Erdfelder, Faul & Buchner, 1996) to determine the number of participants needed to yield an acceptable effect size for the study. A total sample of between 30 participants (7 per experimental group) and 44 participants (11 per experimental group) was found to be required to yield a moderate effect size ($d = 0.5$), with 90 per cent power at an alpha of 0.05, in accordance with Cohen's 1977 effect size conventions. This finding appears consistent with moderate effect sizes achieved for other studies in the social-emotional domain. That is, Hattie's (2009) synthesis of eight meta-analyses examining the impact of social skill interventions, yielded an average effect size of $d = 0.4$, where the number of studies was 540 and the number of total participants was 7,180. Effect sizes were observed to be greatest in interventions involving younger students and those with poor social skills. Additionally, findings from a meta-analysis of 213 social-emotional programs by Durlak et al. (2011) reported a mean effect size of $d = 0.57$ for social-emotional skills, where the number of participants was 270,034.

4.3 Sample Descriptions

The final dataset in the main study consisted of 86 children ($n = 46$ in School One and $n = 40$ in School Two). Of these, 47.7 per cent of participants were male and 52.3 per cent were female. The mean age of children was 5.1 years. Ages ranged from 4.3 to 5.6 years. Children in the study were most commonly the first child in the family ($n = 43$). Most children originated from two parent families ($n = 84$). The most common number of siblings was one ($n = 57$) and aged between 3–4 years old. Most parents of the children sampled originated from Anglo/Western European backgrounds ($n = 84$). English was identified by the majority of

parents as the main language spoken at home with their children (n = 85). Most mothers reported English as their first language (n = 79), as did most fathers (n = 82).

The final composition of experimental groups was as follows: 29.1% (n = 25) of participants comprised the control group, 27.9 per cent (n = 24) comprised the teacher group, 17.4 per cent (n = 15) comprised the parent group and 25.6 per cent (n = 22) comprised the parent-plus-teacher (combined) group.

4.4 Materials

4.4.1 The DESSA-Mini (LeBuffe et al., 2009)

Teachers and parents were asked to complete the DESSA-Mini assessment for their children during the pre, post and follow-up time periods, using DESSA-Mini form one (Appendix G), form two (Appendix H) and form three (Appendix I) in correspondence with the three time points in the study. The DESSA-Mini is a synthesised version of the full 72-item DESSA instrument which is designed to help schools meet emerging social-emotional learning standards. The tool supports universal screening, assessment, intervention planning, progress monitoring and outcome evaluation in the social–emotional skill domain. Designed for use with children in kindergarten through to year eight, each of the four eight-item DESSA-Mini forms are strength based. The forms’ five-point response scales range from ‘never’ to ‘very frequently’. The DESSA-Mini provides a single social-emotional total (SET) score, which indicates each child’s social–emotional competence. Reliability of the DESSA-Mini forms was established with the kindergarten to year eight population in the USA. The scale indicated excellent internal reliability, inter-rater reliability and test-retest reliability for each of the DESSA-Mini forms (Naglieri et al; 2011). Considering validity, the DESSA-Mini forms correlate strongly with SET scores achieved on the full DESSA instrument and are able to identify children in need of instruction. Additionally, DESSA-Mini forms can differentiate between groups of children with known social–emotional issues and those without, regardless

of race or ethnicity. According to the test developers, the teacher norms supplied are also available to use with parent data if these are used solely to track changes for the child over time, rather than being used to make decisions about individual students based on their SET scores (e.g., eligibility for services or at-risk status). Additionally, test developers note that the differences between parent and teacher norms are also minimal, with both sharing similar reliabilities.

4.4.2 Demographic information questionnaire

At the commencement of the study, parents were asked to complete a brief form requesting demographic information (Appendix J). This form included questions regarding: family configuration, ethnic identity of the family, age of the participating child, birth order of the child, number of siblings in the child's family, ages of the child's siblings, language spoken with the child at home and the mother's and father's first language.

4.4.3 Promoting Alternative Thinking Strategies Program (Kusché & Greenberg, 1994)

The PATHS program, Module One (for children aged three to six years) was used in the study by teachers in the teacher group and combined group. Teachers were instructed in the use of the program by external PATHS trainers over one day of professional development prior to commencement of the intervention. Module One comprised 44 lessons designed to: increase children's self-control; improve friendship skills (sharing, caring, and other social skills); enhance children's self-esteem; enhance children's self-confidence and their ability to give and receive compliments; increase children's understanding and communication of the vocabulary of emotions (through verbal mediation and dialoguing about feelings with others); help children recognise and understand how their behaviour affected others; increase children's understanding and use of logical reasoning and problem-solving vocabulary; and improve children's knowledge of, and skill in, the steps of social problem-solving.

The PATHS program presents a coherent and complex model of emotional development in education, constructed with reference to developmental models of competency. It has been well researched internationally within school contexts for over 20 years and is anchored in evidence-based practice using strong experimental designs e.g., Domitrovich et al. (2007), Greenberg, Kusché, Cook and Quamma (1995), Greenberg, Kusché and Riggs (2004) and Kusché, Riggs and Greenberg (1999). PATHS has been found to have a positive effect on emotional understanding, interpersonal skills and behaviour with children (Kelly, Longbottom, Potts & Williamson, 2004). At its core, PATHS is based on the proposal that children's adaptation is a function of both their individual skill level and of the environmental context in which they reside (Bronfenbrenner & Crouter, 1983; Cicchetti & Toth, 1997). According to Domitrovich et al. (2007), the PATHS program expands on existing social-emotional developmental tools within the classroom by including instruction in multiple skill domains delivered in a developmentally appropriate sequence, allowing for continuity across year levels. PATHS developers report an emotional component to the program, which emphasises children's affective awareness of themselves and others while supporting their ability to self-regulate through meaningful real-life opportunities. This allows for generalisation of these skills through activities that highlight writing, reading, storytelling, singing, drawing, science and maths concepts. In a review of research studies on PATHS over a 20 year period, Greenberg and Kusché (2006) report numerous benefits for children, including increased protective factors (e.g., emotional understanding, social-cognition, social competence and decreased aggression) and reduced internal distress (e.g., depressive and anxiety symptoms). PATHS has also been demonstrated to be effective with early childhood populations (e.g., Domitrovich et al., 2007; Saltali & Deniz, 2010), which is particularly relevant to the current study.

PATHS is based on an ABCD (affective, behavioural, cognitive and dynamic) model of development. This aligns well with the current study since the model emphasises a cohesion of affect, vocabulary of emotion and cognitive understanding as individual factors, which are expressed elements in social and emotional competence (Kusché & Greenberg, 1994). As an ecologically oriented program, PATHS examines learning primarily at the level of systems change and uses meaningful real-life opportunities to practice skills and develop reinforcement of these skills. Therefore, the PATHS lessons offered to children in the current study provides them with the opportunity to generalise learned social and emotional skills to situations outside the immediate classroom, such as the playground or home environments where these skills can be practiced, shaped and reinforced through interactions with others. This also aligns well with the current study's goal of investigating children's social-emotional skill development through concurrent influential systems such as parents in the home and teachers at school.

4.4.4 Parent manual: Developing social-emotional skills—a parent package

The parent social-emotional skills manual (Appendix B) contained revisions from the pilot study and comprised:

- An information letter about the study and a parent consent form.
- Psychoeducational material outlining the importance of social-emotional skills and the benefits of parent emotion coaching.
- A reflection questionnaire for parents on their family of origin and current parenting practices.
- A description of the five steps to effective emotion coaching (Gottman & DeClaire, 1997). This was defined for parents as a way of responding to their children's emotions, understanding the different emotions their children experienced, understanding why they occurred and how they could manage these.

- A DVD demonstration video of the five social–emotional activities in the manual which each parent was required to complete.
- The revised five social–emotional activities for parents to complete with their child, including a social–emotional picture book for activity five (‘The Way I Feel’ [Cain, 2000]).
- A parent feedback sheet for each of the five social–emotional activities, including short answer responses and Likert rating scales.

The social–emotional activities were designed to complement aspects of the PATHS program by assisting children to sustain attention, plan sequences of action, think reflectively, problem-solve and accurately anticipate and evaluate situations. Further, in keeping with the PATHS program, the social–emotional skill activities complemented and were designed around reading, storytelling, role-play and drawing concepts. As such, the activities required children to reflect upon their social interactions in order to develop emotional skills. This is consistent with Saarni’s (2008) view that each emotional skill arises from its own social context.

4.5 Procedure

Ethics approval was obtained from Edith Cowan University’s Human Research Ethics Committee, followed by formal permission from school principals and parents. Principals, pre-primary teachers and parents of the two schools were provided with further information about the study (Appendices K–P) and consent forms were given to parents (Appendix Q). Both schools endorsed a ‘pro’ social–emotional school culture for their students. The principal from School One expressed an interest in introducing a formal social–emotional program into the school’s curriculum at a future point as a longer-term goal, however this intention had not been conveyed to her staff. School One was allocated the teacher group and combined group programs in the study. School Two was assigned the parent group and control group. While

this was not strictly random assignment to groups, School One's teachers were unaware of their principal's longer-term goals for a social-emotional program and therefore were not considered to be directly influenced by this.

Parents in each of the four groups were offered an incentive following completion of all three DESSA-Mini questionnaires over the pre, post and follow-up time points in the study. Parents in the control group and teacher group were entered into a \$50 prize draw (one draw for each group). Parents in the parent group and combined group were entered into a prize draw to win an iPad mini (one draw for each group). Prize incentives for parent and combined groups were larger considering parents' additional effort in delivering the social-emotional activities to their children.

The study commenced in week four of the new school year, allowing time for children, teachers and parents to settle in and commence orientation to the school curriculum for the year ahead. This timing also allowed for important child-teacher relationships to be developed, which facilitated the DESSA-Mini assessments and the teacher social-emotional program.

4.5.1 Pre-test (time one)

Teachers from all four groups completed the DESSA-Mini questionnaire (form one) for each participating child in their class at the commencement of the study. Assessments for each child took teachers approximately one to two minutes to complete. Teachers were female and their levels of classroom experience were also noted i.e., the combined group teacher had two years' experience, the teacher group teacher had five years' experience, the parent group teacher had six years' experience and the control group teacher had 12 years' experience. This averaged 6.2 years' classroom experience overall for these pre-primary teachers with some variability between them. Participating parents from all four groups also completed the DESSA-Mini questionnaire (form one) for their children at the commencement of the study, in

addition to a short demographic information form. Assessments for each child took parents approximately one to two minutes to complete.

Following these initial DESSA-Mini assessments, both teacher and parent social-emotional programs were initiated simultaneously. The teacher programs were conducted over nine months of the school year. This comprised the total intervention period. Since the PATHS program was unfamiliar to the two pre-primary class teachers who were conducting this program, PATHS training was provided for these teachers over one day of external professional development by PATHS project trainers. During the intervention period, these teachers were guided in their class lessons by the PATHS comprehensive manual and CD. They were also offered ongoing program support by their onsite school psychologist who had been previously trained in the use of the PATHS program. A total of 44 lessons for the PATHS program were completed during the nine month intervention period, consisting of two, 20-minute class lessons per week, during which time teachers acted as children's emotion coach throughout. This completed Module One of the PATHS program. There was no shared PATHS content with the parent intervention groups.

Prior to commencing the parent coaching program at home, parents attended an individual, face-to-face, 15-minute interview with the researcher and were provided with their parent manual, instructions and a DVD. Parent questions were also discussed at that time and motivation provided by the researcher for parents to complete the program. Parents were encouraged to conduct one social-emotional activity from the parent coaching program with their children at home every three weeks, following the order designated in their manuals. Therefore, parents completed a total of five social-emotional activities over 15 weeks. The researcher emailed all participating parents every three weeks to prompt their progression to the next activity. Parents submitted their completed manuals (all five social-emotional activities) to the researcher once the teachers' PATHS programs had been finalised after nine

months. Only fully completed manuals were included, that is, the final sample includes only parents who completed the five activities with their children.

4.5.2 Post-test (time two)

Teachers and parents from all four groups completed the DESSA-Mini (form two) for each of their participating children at the end of the nine-month intervention period. Assessments for each child took approximately one to two minutes to complete. Teachers and parents were then contacted and thanked for their participation. School principals were provided with a brief, written progress report of the first year's results for their school. These summaries used de-identified aggregate data (Appendix R). Parents were also reminded at that time of their commitment to complete the DESSA-Mini questionnaire on a final occasion in six months' time.

4.5.3 Follow-up (time three)

Six months later, year one teachers at the same two schools were approached and provided with information and consent forms related to the study. The pre-primary cohort was now mixed between classes in year one; therefore, they had not transferred to the next year level in alignment with their previous experimental groups. Year one teachers were blind to the experimental groups in which the children had been the previous year. Teachers were female and their levels of classroom experience were also noted i.e., School One teachers had eight and five years' experience and School Two teachers had eight and 11 years' experience. This averaged eight years' experience overall for these year one teachers and suggests comparable levels across the teachers (no novice teachers). These teachers then completed the DESSA-Mini (form three) for those children who had participated in the study six months previously. These assessments for each child took approximately one to two minutes to complete. Parents from all four groups also completed the DESSA-Mini (form three) at this

time point for their children. The assessments took approximately one to two minutes to complete.

The schools, teachers and parents were thanked for their participation in the research study. Schools were provided with a final overall summary of the results for their school following data analysis, using de-identified aggregate data (Appendix S). Parents were also invited to request a summary of their school's results if they wished. Parent prize winners were drawn at random and notified by the researcher through email.

Chapter 5: Results

This chapter presents the findings of the study, examining the effectiveness of the parent and teacher social–emotional programs (in their various combinations) in enhancing pre-primary children’s social–emotional skills. Preliminary analyses are first presented. This is followed by results of the main analyses, including parent and teacher ratings of children’s social–emotional skills at pre, post and follow-up intervention time points, using a quantitative approach. Qualitative results will then be presented, examining parents’ perceptions of their children’s social–emotional skill development as a result of the home parent program.

5.1 Preliminary Analyses

5.1.1 Participant dropout comparisons

At the post-intervention time point (time two), 15 per cent ($n = 15$) of the 101 participants had dropped out of the study. An independent samples t-test was conducted to investigate whether systematic differences existed between participants who completed assessments at time two and participants who did not. For teacher raters, a subsample of 15 children who completed from the dataset was created and juxtaposed with the 15 children who did not complete¹, for comparison. Another comparison was made for parent raters using a subsample of 15 children who completed from the dataset with the 15 children who did not complete at this time point.

¹ Teacher non-completers were defined according to their parent non-completer counterparts. That is, if a parent did not complete ratings at time two for their child, they were considered to have dropped out of the study, which automatically rendered the teacher ratings at time two for that child as ‘non-complete’.

Results showed no significant difference in teacher ratings of children's social-emotional skills at time one, between those who completed time two assessments ($M = 24$, $SD = 4.6$) and those who did not complete time two assessments ($M = 25.2$, $SD = 5.5$); $t(28) = -0.68$, $p = 0.50$. Likewise, there was no significant difference found in parent ratings of children's social-emotional skills at time one, between those who completed time two assessments ($M = 24.20$, $SD = 4.3$) and those who did not complete time two assessments ($M = 23.20$, $SD = 3.3$); $t(28) = 0.72$, $p = 0.48$. No additional participants dropped out at the follow-up time point (time three).

Further comparisons using chi-square tests were made for the subsample of 15 completers and the 15 non-completers, juxtaposed with demographic data achieved from the parents, to explore whether differences existed between these groups. The demographic data examined: the age of the child, the birth order of the child in the family (first, second third or fourth), the gender of the child, the number of siblings the child had within their family (none through to more than five) and the ages of these siblings (zero to adult). Results showed there was no significant difference for completers and non-completers when comparing the age of the child participating in the study $\chi^2(9, N=30) = 10.143$, $p = 0.339$. There was also no significant difference found for completers and non-completers when comparing the birth order of the child in the family $\chi^2(3, N=30) = 1.503$, $p = 0.682$. Furthermore, there was no significant difference found for completers and non-completers when comparing the child's gender $\chi^2(1, N=30) = 136$, $p = 0.713$. Additionally, no significant difference for completers and non-completers was found when comparing the number of siblings children had within their family $\chi^2(3, N = 30) = 6.303$, $p = 0.098$. Considering the ages of the child's siblings within their family, there was no significant difference found when this was compared with completers and non-completers $\chi^2(4, N = 30) = 1.434$, $p = 0.838$. Comparisons could not be made for: main language spoken at home (English or other); parents' first language (English or other); ethnic

background of the family (Anglo or other); or family configuration (single parent or two parent family) due to very small numbers. The results of these analyses overall showed that considering the demographic information, there were no differences between completers and non-completers when they commenced the study.

5.1.2 Reliability

An internal reliability analysis was conducted for questionnaire items in DESSA-Mini forms one, two and three using Cronbach's alpha. DESSA-Mini forms one, two and three corresponded with pre (time one), post (time two) and follow-up (time three) points in the study respectively. Form one responses to the scale were found to be highly reliable for teacher raters ($\alpha = 0.923$) and parent raters ($\alpha = 0.766$). Form two responses were also highly reliable for teacher raters ($\alpha = 0.956$) and parent raters ($\alpha = 0.884$). Form three responses again revealed a high reliability for teacher raters ($\alpha = 0.919$) and parent raters ($\alpha = 0.809$).

A test-retest reliability analysis for DESSA-Mini forms one, two and three with teacher raters was conducted. Forms one and two for teachers (nine months apart) showed a Pearson's correlation of $r = 0.537$ ($p < 0.01$). Ratings on forms two and three (six months apart) revealed a Pearson's correlation of $r = 0.732$ ($p < 0.01$).² It is acknowledged that these rankings may have changed in response to children's individual rates of maturation and skill acquisition over time; however, those factors were not examined in this study.

5.1.3 Demographic Differences between Groups

Given that the four groups were not completely randomly allocated to schools, further chi-square analyses were undertaken to investigate whether differences existed between the

² Test-retest reliability analyses were not performed for parent raters because of their limitation in rating only one child, as opposed to teachers' ratings of multiple children within a class. Consequently, it was decided that there was little utility in examining this.

groups compared with demographic information, to account for any heterogenous factors which may have influenced participants' ratings in the study. Results showed that there was no significant difference between the groups and the age of the child $\chi^2(39, N = 86) = 44.625, p = 0.247$. No significant difference was revealed between birth order of the participating child in their family (first, second third or fourth) and groups $\chi^2(9, N = 86) = 5.810, p = 0.759$. Considering a child's gender, no significant differences were found when this was compared to groups $\chi^2(3, N = 86) = 0.649, p = 0.885$. The number of siblings within a family for the participating child (no siblings through to more than five), was also examined. Results revealed there were no significant differences when this was compared with the groups $\chi^2(9, N = 86) = 11.149, p = 0.266$. The ages of a participating child's siblings was also considered (zero years to adult). Results revealed there were no significant differences when this was compared with the groups $\chi^2(18, N = 86) = 24.124, p = 0.151$. The participating child's family configuration (both parents or single parent) was also examined. Results revealed there were no significant differences when this was compared with the groups $\chi^2(3, N = 86) = 2.888, p = 0.409$. The ethnic background of the family (Anglo origin versus other) was also explored. Results revealed there were no significant differences when this was compared with the groups $\chi^2(3, N = 86) = 2.722, p = 0.437$. The main language the participating child spoke at home (English or other) was also examined. Results showed that there were no significant differences when this was compared with the groups $\chi^2(3, N = 86) = 1.788, p = 0.618$. Parents' first language was also explored (English or other). Results revealed that for both mothers and fathers there were no significant differences when this was compared with the groups i.e., mothers $\chi^2(3, N = 86) = 0.923, p = 0.820$ and fathers $\chi^2(3, N = 86) = 2.272, p = 0.518$. The results of these analyses overall showed there were no differences between the groups when examining this particular demographic information and that as such, participants in all the groups were homogenous in these factors when commencing the study, despite their non-randomisation.

5.1.4 Potential confounds: —differences between schools

As previously noted, principals in both schools expressed a positive attitude towards promoting social–emotional skills for their students within their school culture. However, the principal from School One communicated an interest in introducing a formal social–emotional program into her school’s curriculum in the future. As such, School One implemented the PATHS program which included the teacher group and combined group. Therefore, the potential differences in teacher and parent ratings between the schools was investigated. To examine teachers’ DESSA-Mini ratings between schools over times one, two and three, a two-way (school x time) repeated measures ANOVA (analysis of variance) was conducted. Another two-way repeated measures ANOVA (school x time) was also conducted to examine parents’ DESSA-Mini ratings between schools over times one, two and three.

For teacher ratings, a main effect was found for school, ($F(1,84) = 82.7, p < 0.001$), demonstrating that School One teachers rated children’s skills higher compared with teachers from School Two. A main effect was also found for time, ($F(2,84) = 33.7, p < 0.001$), indicating that differences occurred over the three time points. These main effects were qualified by an interaction for school by time, ($F(2,84) = 8.4, p < 0.001$), which revealed that the effect of time was dependent on which school the participant attended. Post-hoc analyses showed that over time, School One revealed higher teacher ratings for children in the study.

Similarly, for parent ratings, a main effect was found for school ($F(1,84) = 8.0, p < 0.01$), demonstrating that School One parents rated children’s skills higher than parents from School Two. A main effect was also found for time ($F(2,84) = 13.9, p < 0.001$), indicating that differences occurred over the three time points. These main effects were qualified by an interaction for school x time ($F(2,84) = 12.6, p < 0.001$), which revealed that the effect of time once again was dependent on which school the participant attended. Post-hoc analyses showed that over time, School One revealed higher parent ratings for children in the study.

5.2 Main Analysis

5.2.1 Assessment of social–emotional skills over time—quantitative results for teachers

Descriptive statistics (participant numbers, means and standard deviations for DESSA-Mini scores) for each of the experimental groups for teacher raters at pre-intervention (time one), post-intervention (time two) and six-month follow-up (time three) points are shown in Table 2. DESSA-mini assessment developers identified raw score mean normative data for each form matched to a K-2 population. For each DESSA-mini form used in the current study (with the same population age group), these means are as follows: time one/form one (21.6), time two/form two (21.5) and time three/form three (20.9). Therefore, the pre-test means in the current study are comparable to these norms.

Table 2

Descriptive Statistics for Experimental Groups over Times One, Two and Three for Teachers' Ratings in the Final Sample, Using the DESSA-Mini Questionnaire.

Group	Time one <i>M(SD)</i>	Time two <i>M(SD)</i>	Time three <i>M(SD)</i>
Control n = 25	21.96 (3.74)	23.16 (4.13)	21.84 (3.88)
Parent n = 15	19.53 (2.75)	22.60 (3.33)	22.53 (4.44)
Teacher n = 24	24.50 (4.05)	30.54 (3.51)	26.12 (4.50)
Combined n = 22	26.05 (5.63)	31.09 (1.02)	28.82 (1.33)

Note: the possible range of DESSA-Mini raw scores was 0–32. The above data reflects the final sample (i.e., the scores for participants who had complete data at time three; n = 86).

5.2.2 Main effects and interaction

Figure 3³ shows DESSA-Mini ratings for teachers in the experimental groups over times one, two and three. A two-way repeated measures ANOVA was conducted to examine teacher ratings between groups overall at times one, two and three⁴. A significant main effect was found for time ($F(2,82) = 35.176, p < 0.001$) and group ($F(1,82) = 29.656, p < 0.001$). A significant interaction was found for group by time ($F(2,82) = 4.305, p < 0.001$). The interaction between group and time reflects that there was no uniform pattern of effects for groups across all time points. This is evident in Figure 3, in which all groups' DESSA-Mini scores were observed to improve from time one to time two following the interventions and was particularly so for combined and teacher groups. All groups' scores then decreased from time two to time three when the interventions concluded, however the combined and teacher groups maintained their higher ratings compared with other groups. In Figure 3, it is evident that all groups made improvements in their social-emotional skills by the end of the study compared with when they started, with the exception of the control group. Scores for the combined and teacher groups were also above the K-2 population normative data sample mean average by time point three.

³ Standard Error (SE) bars on the figure indicate a between subjects factor only.

⁴ A significant interaction was found for gender by time by group ($F(2,78) = 3.15, p < 0.05$), with teachers' perceptions that girls performed higher than boys over time. Stronger decay effects for scores were seen at time three for boys in the teacher group.

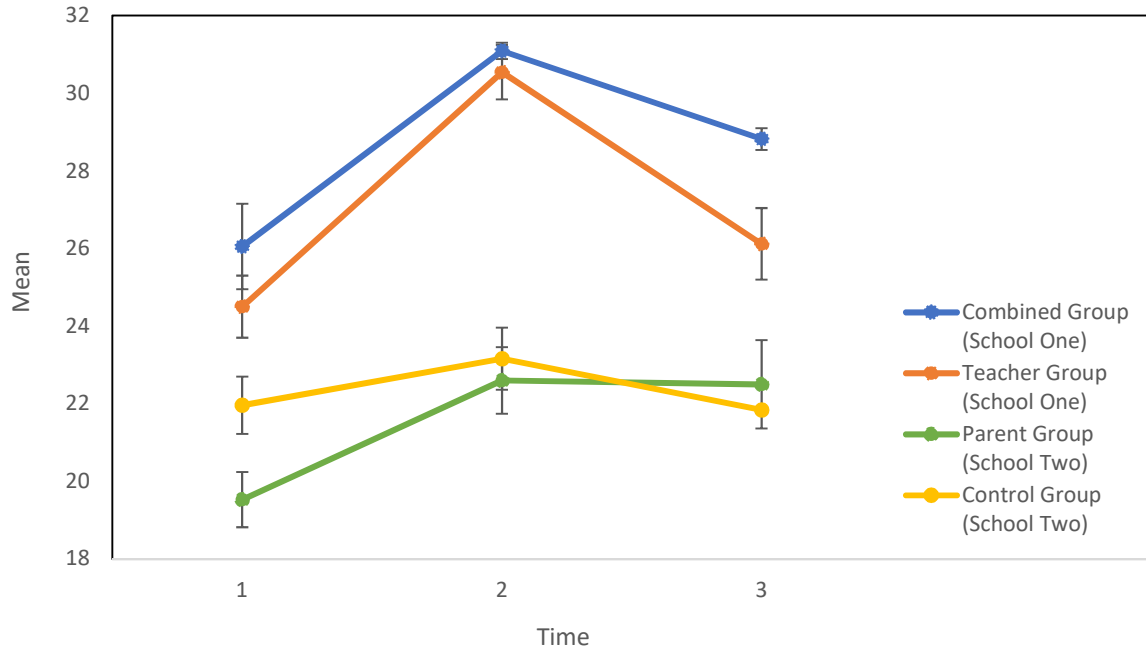


Figure 3. Teacher DESSA-Mini ratings for experimental groups at times one, two and three.

5.2.3 Group differences at times one, two and three

A simple effects analysis was performed to examine differences between the four groups for teacher raters at times one, two and three. Findings showed that at time one, the teacher group scored significantly higher than the control group $F(3,82)=2.5, p<0.05$ and parent group $F(3,82)=4.9, p<0.05$ and the combined group's scores were significantly higher than the control group $F(3,82)=4.1, p<0.05$ and parent group's scores $F(3,82)=6.5, p<0.05$. There were no significant differences between teacher and combined groups $F(3,82)=1.5, p=0.22$ or between control and parent groups $F(3,82)=2.4, p=0.08$. At time two, all groups' scores had increased with the teacher group being significantly higher than the control group $F(3,82)=7.3, p<0.05$ and parent group $F(3,82)=7.9, p<0.05$. The combined group's scores were also significantly higher than the control group $F(3,82)=7.9, p<0.05$ and parent group's scores $F(1,82)=8.5, p<0.05$. However, there was no difference between the teacher and combined groups and the effect sizes for these group differences were small at time two i.e., $d= -1.03$ for

the combined group and $d = -1.43$ for the teacher group. This suggests that the improvement was greater for the teacher group at time two. Differences remained for the groups overall. At time three, all groups' scores declined, displaying a decay effect. Despite this, the teacher group remained significantly higher than the control group $F(1,82)=4.3, p<0.05$ and parent group $F(1,82)= 3.6, p<0.05$. The combined group's scores remained significantly higher than the control group $F(1,82) = 6.9, p<0.05$ and parent group's scores $F(1,82)= -6.2, p<0.05$. At time three, there were no significant differences between control and parent groups $F(1,82) = -6.9, p=0.57$; however, there was a significant difference between the combined group and the teacher group $F(1,82) =2.6, p<0.05$.

5.2.4 Assessment of social–emotional skills over time—quantitative results for parents

Descriptive statistics (participant numbers, means and standard deviations for DESSA-Mini scores) for each of the experimental groups for parent raters at pre-intervention (time one), post-intervention (time two) and six-month follow-up (time three) points are shown in Table 3. Once again, the pre-test scores were consistent with DESSA-mini raw score mean normative data for each form, matched to a K-2 population.

Table 3

Descriptive Statistics for Experimental Groups over Times One, Two and Three for Parents' Ratings in the Final Sample, Using the DESSA-Mini Questionnaire.

Group	Time one	Time two	Time three
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Control	23.64 (2.55)	23.80 (4.08)	22.96 (3.78)
n = 25			
Parent	23.93 (4.70)	24.20 (4.37)	23.93 (4.04)
n = 15			
Teacher	22.92 (4.12)	24.25 (3.33)	24.13 (3.07)
n = 24			
Combined	23.77 (4.04)	31.09 (0.81)	28.00 (2.23)
n = 22			

Note: The possible range of DESSA-Mini raw scores was 0–32. The above data reflects the final sample (i.e., the scores for participants who had complete data at time three; n = 86).

5.2.5 Main effects and interaction

Figure 4⁵ shows DESSA-Mini ratings for parents in the experimental groups over times one, two and three. A two-way repeated measures ANOVA was conducted to examine parent ratings between groups overall at times one, two and three⁶. A significant main effect was found for time ($F(2,82) = 16.884, p < 0.001$) and group ($F(1,82) = 10.463, p < 0.001$). A significant interaction was found for group by time ($F(2,82) = 10.460, p < 0.001$). The

⁵ Standard Error (SE) bars on the figure indicate a between subjects factor only.

⁶ There were no significant gender (of child) effects for parent ratings.

interaction between group and time reflects that there was no uniform pattern of effects for groups across all time points. This is evident in Figure 4 where all groups' DESSA-Mini scores were observed to improve from time one to time two, with this improvement being particularly noticeable for the combined group. All groups' scores then decreased from time two to time three, when the interventions concluded. This effect appeared to be the most pronounced for the combined group, which nevertheless maintained its higher ratings compared with other groups. In Figure 4, it is evident that teacher and combined groups made improvements in their social-emotional skills by the end of the study compared with when they started; however, this was not the case for control and parent groups. Scores for the combined group were also well above the K-2 population normative data sample mean average on time points two and three.

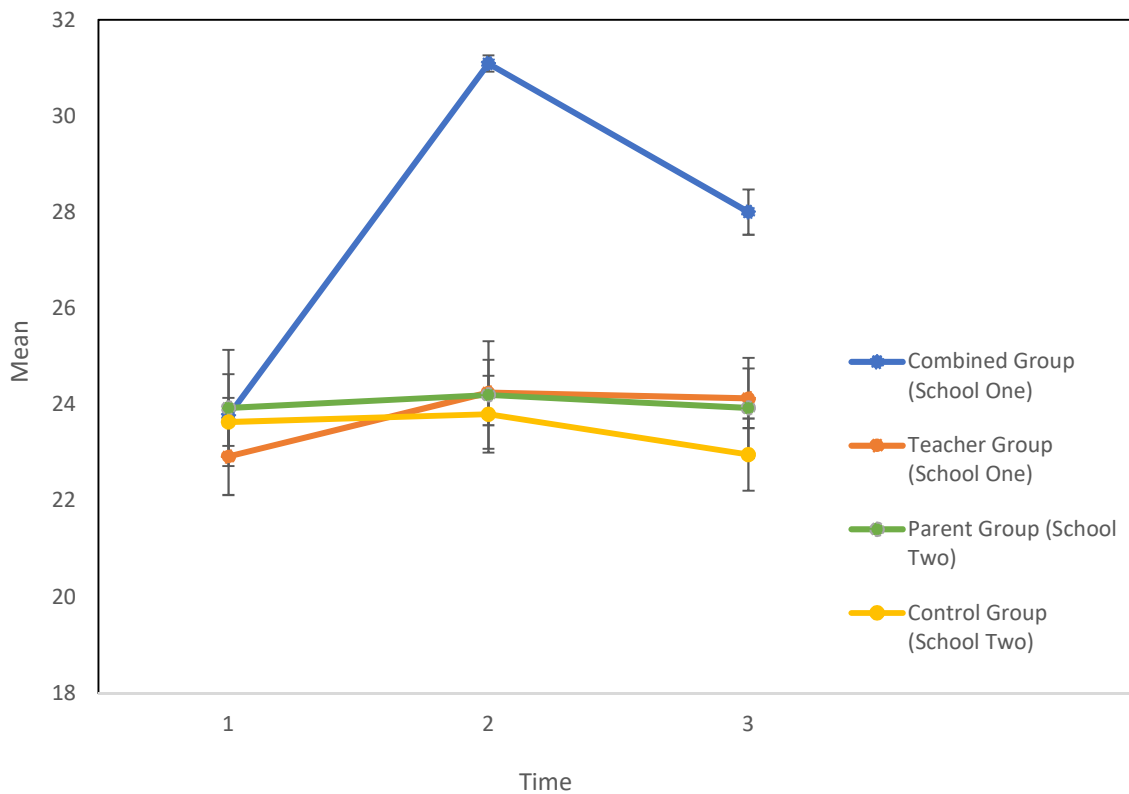


Figure 4. Parent DESSA-Mini ratings for all experimental groups at times one, two and three.

5.2.6 Group differences at times one, two and three

A simple effects analysis was performed to examine differences between the four groups for parent raters at times one, two and three. Findings showed that at time one, there were no significant differences between the groups' scores. At time two, all groups' scores had increased, however, the combined group's scores were significantly higher than all other groups' scores, i.e., control group $F(1,82)=7.2, p<0.05$, parent group $F(1,82)=6.8, p<0.05$ and teacher group $F(1,82)=6.8, p<0.05$. There were no significant differences between the other groups' scores. At time three, all groups' scores had declined and therefore, demonstrated a decay effect for ratings. Despite this, the combined group's scores were once again significantly higher than all other groups' scores at the third time point i.e., control group $F(1,82)=5.0, p<0.05$ teacher group $F(1,82)=3.8, p<0.05$ and parent group $F(1,82)=4.0, p<0.05$. There were no significant differences between the other groups' scores.

5.3 Parent Perceptions of Children's Social–Emotional Skill Development: Qualitative Results

This section of the chapter reports on parents' perceptions of their children's social–emotional skill development and the children's ability to develop EX, ER and EK skills through the home parent program. This is followed by an exploration of parents' family-of-origin emotional experiences and reactions.

Thirty-seven parents (15 from the parent group and 22 from the combined group) responded to questions that related to their children's social–emotional skill development through the parent program. These responses were obtained by way of written reflective comments and Likert scale ratings in the parent manual. Results overall reported that 86% of parents who completed the parent program were able to develop the social–emotional skills of EX, ER and EK with their children. The social–emotional activities undertaken by parents with corresponding social–emotional skills are shown in Table 4.

Table 4

Social–Emotional Skills With Corresponding Social–Emotional Activities.

Social-Emotional Skills	Parent Social-Emotional Activities
Emotion expression (EX)	<ul style="list-style-type: none"> • What is your body saying? • Emotion face matchup and emotion flash cards
Emotion regulation (ER)	<ul style="list-style-type: none"> • Relaxation: Learning to read your body
Emotional knowledge (EK)	<ul style="list-style-type: none"> • Masks • Shared reading and emotion chat time

5.3.1 Emotion expression (EX)

Parents were initially asked a series of questions about their children’s ability to recognise, label and express emotions over two activities. In the ‘What is your body saying?’ activity, 32 of the 37 parents (86%) reported that their child was able to identify his or her own unique happy, sad, frightened and angry emotion states on a figure cut-out and name their physical sensations when experiencing an emotion. These parents viewed emotion coaching⁷ as the most effective strategy for developing emotion recognition, labelling and expression skills with their children when compared with other strategies, followed by the strategy of problem-solving. The remaining five parents (14%) identified the following challenges for developing emotion recognition, labelling and expression skills with their children i.e., difficulty in making the connection between their body and an emotion, difficulty generalising

⁷ Gottman (1997) outlined five steps to Emotion Coaching: 1) understanding how you (the parent) deal with your own feelings; 2) believing that your child’s negative emotions are an opportunity for closeness and teaching; 3) listening with empathy and understanding while validating your child’s feelings; 4) labelling your child’s emotions; and 5) setting limits while exploring possible solutions to a problem that causes negative emotion.

the labelling to other situations and difficulty identifying with particular visual cues on the figure cut-out.

Parents recognised the ‘Emotion face match-up and emotion flash cards’ activities as important for children in learning to label their own emotions and the emotions of others. Thirty-four of the 37 parents (92%) reported that their child was able to identify emotions (both their own and others’) including happy, silly, surprised, tired, worried and angry. These parents viewed emotion coaching as the most effective strategy for developing emotion recognition, labelling and expression skills with their children when compared with other strategies, followed (in order) by the strategies of visual prompts, applying the skills to everyday situations, offering a parent’s own personal examples and repeated practice. The remaining three parents (8%) shared the following challenges around developing emotion recognition, labelling and expression skills with their children i.e., difficulties applying an emotional label to other situations, difficulties identifying with particular emotions portrayed on the flash cards and difficulties identifying the emotions of others.

Overall, results showed that most parents found the two activities useful in developing emotion recognition, labelling and expression skills with their children. For example, one parent reported that their child ‘raised a recent situation [during the activity] where he felt angry and showed [the parent] how this impacted him by identifying it on his body’ (Parent 79, Combined Group). Another parent reported that her child ‘would carry the emotion flash cards around with her and find the appropriate face to match her feeling state during the day’ (Parent 56, Parent Group). Additionally, one parent noted that she ‘learned about an important playground social situation involving her child’ and as such, the activities ‘helped [her daughter] to identify her feelings in that situation’ (Parent 91, Combined Group).

5.3.2 Emotion regulation (ER)

Parents were also asked a series of questions about their child's capacity to control, modify and manage aspects of their emotional reactivity and expressivity. The 'Relaxation—learning to read your body' activity focused on relaxation and the importance of children learning to regulate their emotional states. Children were given controlled breathing exercises, such as dragon breathing and bubble breathing, together with progressive muscle relaxation exercises. Thirty-five of the 37 parents (95%) reported that their children were able to perform the exercises. Of these, emotion coaching was observed as the most effective strategy for developing ER with children compared with other strategies, followed (in order) by strategies which applied the exercises to relevant emotional situations and having family members also participate. The remaining two parents (5%) experienced difficulty developing ER skills with their children due to their poor concentration for the exercises.

Results showed that most parents found the relaxation activity to be useful for developing the skill of ER with their children. For example, one parent reported that her child 'recognised how good it felt to release muscle tensions after being upset' (Parent 62, Parent Group) while another revealed that her child 'now used these exercises before bedtime' to promote calmness (Parent 70, Parent Group).

5.3.3 Emotion knowledge (EK)

Parents were then asked a series of questions about their child's ability to appraise another person, interpret a message, understand the message and apply the necessary information to a social situation. The 'Role-play masks' activity focused on children correctly identifying a mask's emotion and verbalising how they could 'change the (negative) feeling' within a social situation. Thirty of the 37 parents (81%) reported that their child was able to identify, role-play and problem-solve emotion situations with the masks in this activity. Among these parents, emotion coaching was viewed as the most effective strategy for developing

emotion knowledge skills with children compared with other strategies, followed (in order) by strategies involving role-play and craft aspects of the task. The remaining seven parents (19%) conveyed that their children experienced difficulties role-playing, identifying emotion situations and problem-solving.

The second activity, ‘Shared reading and emotion chat time’, challenged children to identify various emotion states in relation to personal situations. Thirty-five of the 37 parents (95%) reported that their child was able to achieve this outcome. Raising awareness through discussion was considered the most effective strategy for developing EK, followed (in order) by emotion coaching strategies, problem-solving, using the social–emotional book (provided with the parent manual) as a visual aid for the activity and applying regular practice. The remaining two parents (5%) communicated that their child experienced difficulties discussing negative aspects of their day, generalising their feelings to other situations, problem-solving, using the social–emotional book as a visual aide and applying more than one response to all emotion scenarios.

Results showed that most parents found the two activities useful in developing EK skills with their children. For example, one parent reported that her child ‘used a recent playground scenario to role-play his emotions’. He had likened aspects of the mask role-play activity to the in-class PATHS role-play activities being performed that week, in which he was protecting his emotions from the negativity of others by ‘being a turtle’ (Parent 93, Combined Group). Another parent outlined a significant moment with her child, who was unable to share a toy with her brother. This parent asked the child what she could do to change the negative feeling. The child worked this through with the parent (as per the activity) and returned to the situation ‘happy’. This parent reported that her child was ‘able to talk about how she solved the problem and how she could have done it differently, with emotion coaching helping her to talk about it

more' (Parent 86, Combined Group). Another parent noted that her child 'could now discuss mean kids in the playground and how she could handle this' (Parent 74, Parent Group).

The final section of this chapter reports on the social–emotional experiences of parents in the study as influenced by their families-of-origin, as they perceived it. The extent to which parents were able to develop social–emotional skills with their own children in the study as a result of these influences will then be examined.

5.4 Parents' Family-of-Origin Emotional Experiences and Reactions

Parents' own social–emotional development may be influenced by their family-of-origin social–emotional experiences in childhood, which may consequently affect the social–emotional development of their children (Havighurst et al., 2010; Leerkes & Crockenberg, 2002; Leerkes & Siepak 2006). Of the 37 parents who completed the parent manual, 23 (62%) chose to complete a short reflection questionnaire within the manual in relation to their family-of-origin social–emotional experiences in childhood. This moderate response suggests that parents may have simply overlooked completing this section in the program or considered these questions too self-disclosing and personal to complete for the study. Three themes emerged from parents' responses to this questionnaire: emotional reactions from families; social–emotional modelling by adults; and skills to cope with emotion situations. These will now be discussed.

Both positive and negative emotional reactions from families-of-origin were acknowledged by parents. Of the 23 parents who completed the questionnaire, 16 parents (70%) reported that their families did recognise happiness, sadness, fear and anger in their childhoods. Of these, the emotions that were minimised were fear, sadness and anger. Eight parents (35%) who completed the questionnaire reported a lack of appropriate social–emotional modelling by the adults in their lives during childhood, specifically in relation to managing anger. Fourteen parents (61%) reported an absence of acquired social–emotional skills in their

childhoods to help them cope with anger and revealed that they would not take the same approach now in managing anger with their own children. Twelve parents (52%) reported an absence of acquired social–emotional skills in their childhoods to help them cope with fear, while ten (43%) did not learn to cope with sadness. Despite the small sample, results revealed limited social–emotional coping skills demonstrated for parents in their own childhoods from which they could learn to manage their negative emotions.

Based on these questionnaire responses, two categories of family-of-origin social–emotional experiences were formed. These were based on the dimensions of largely positive or largely negative family-of-origin social–emotional influences and their resulting effect on parents’ own social–emotional parenting skills, as identified from their responses in the parent program. Category 1 comprised parents who identified themselves as originating from largely positive family-of-origin social–emotional influences and who reflected largely positive social–emotional parenting skills with their own children. Category 2 comprised parents who identified themselves as originating from largely negative family-of-origin social–emotional influences and who reflected largely negative social–emotional parenting skills with their own children. These categories provided data about the effect of family-of-origin social–emotional influences on parents’ own social–emotional skills and, consequently, how parents were then able to develop social–emotional skills with their own children in the study. These categories are presented below.

5.4.1 Category 1: Positive family-of-origin social–emotional influences and positive current parenting in social–emotional skills

Forty-eight per cent of parents who completed the reflection questionnaire formed Category 1. This category described parents who identified themselves as experiencing largely positive social–emotional influences within their families-of-origin. Their written responses in the parent manuals were rich in detail and they engaged fully in the emotion coaching strategies

suggested for all activities. Their children responded positively to the emotion coaching practices demonstrated and according to these parents, the social–emotional competencies of their children progressed with each successive activity. One parent noted, ‘I was blessed to live in somewhat of a story-tale childhood. We now talk with our kids a lot about our feelings and why. Possibly this is what we had ourselves as children’ (Parent 88, Combined Group).

5.4.2 Category 2: Negative family-of-origin social–emotional influences and negative current parenting in social–emotional skills

Seventeen per cent of parents who completed the reflection questionnaire formed Category 2. This category described parents who identified themselves as experiencing largely negative social–emotional influences from their families-of-origin. Their written responses in the parent manuals were negative or minimal and they either did not engage in the emotion coaching strategies suggested for activities or found these difficult to understand or implement with their children. As such, they reported minimal or no connection with their children while engaging in the activities. Children in this category responded negatively overall to the social–emotional activities and parents reported minimal or no gains in their children’s social–emotional competency through the program. One parent in this category noted that the ‘activities were too hard for a five year old’ and that her child thought the activities ‘were silly’ (Parent 63, Parent Group). However, results also uncovered a third category.

5.4.3 Category 3: Negative family-of-origin social–emotional influences and positive current parenting in social–emotional skills

Thirty-five per cent of parents who completed the reflection questionnaire formed an unexpected third category. This category described parents who identified themselves as experiencing largely negative social–emotional influences from their families-of-origin. Despite these backgrounds, their written responses in the parent manuals were rich in detail and they engaged fully in the emotion coaching strategies suggested for all activities. These

results are consistent with those of the parents in Category 1. This suggested the possible influence of social–emotional skills training through the parent program, individual factors, societal factors or cultural factors upon these parents. Their children responded positively to the emotion coaching practices demonstrated and according to these parents, the social–emotional competencies of these children progressed with each successive activity. One parent in this category noted that ‘how my parents dealt with emotions is very different to how my husband and I want to treat our children’s emotions’, adding that ‘anger was the basis of my whole upbringing. I would not like to take the same approach with my child now’ (Parent 92, Combined Group). This category reflected parents’ abilities to develop social–emotional skills with their children despite their largely negative family-of-origin social–emotional influences.

5.5 Summary of Results

The quantitative findings of the study reflected that overall, children improved in their social–emotional skill development after the interventions were applied (time one to time two) with the highest SET ratings derived from the DESSA-mini achieved for the combined group. While results showed a decrease in SET ratings for children at follow-up (time two to time three), the combined group showed less decay in parent and teacher ratings overall. Qualitative results showed that 86% of parents who completed the home parent program were able to develop the social–emotional skills of EX, ER and EK with their children.

Family-of-origin categories showed that parents were influenced by social–emotional practices within their own families growing up, in relation to the degree of awareness shown by family members to emotion issues, emotion management practices and the level of emotion validation expressed among family members. Consequently, these parents’ abilities to teach social–emotional skills to their own children appears to have derived influence from these original social–emotional practices. Most interestingly, parents who developed positive parenting practices through the parent program despite identifying with negative family-of-

origin influences, highlighted the potential for professional learning (such as emotion coaching training) for parents when attempting to develop social–emotional skills with young children.

Chapter 6: Discussion

The aim of this thesis was to compare the separate and combined influences of parents and teachers on children's social-emotional skills in their first year of compulsory schooling within a low-risk, mainstream setting. The study's original contribution initially lay within its purpose-designed parent coaching program which was developed for the study's intervention phase (parent group and combined group) and contained activities specifically constructed for developing social-emotional skills with pre-primary children. This program was created to support and guide parents at their own individual pace within the home environment and as such, offered a means by which parents could acquire training without the need for participating in a structured, group-delivery setting and a regular commitment to attend. The program also focussed on developing age appropriate core social-emotional skill elements of EK, ER and EX in a cumulative and progressive manner over time. As an additional contribution, the study employed a multi-focussed primary prevention approach utilising a new presentation of separate and combined parent and teacher influences alongside a control group (i.e., parent group versus teacher group versus parent-plus-teacher group versus control group). Additionally, the Devereux Student Strengths Assessment Mini instrument (DESSA-Mini) (LeBuffe et al; 2009) was utilised as a standardised social-emotional skill assessment measure not previously used in this manner, to determine skill progression for children over time.

This chapter presents an overall summary of the study's findings, followed by a discussion of the quantitative results, as related to the hypotheses. The qualitative findings will then be discussed in relation to parents' perceptions of their children's social-emotional skill development through the parent program and the influence of parents' family-of-origin social-emotional experiences upon their abilities to develop social-emotional skills with their own children in the study. The theoretical perspectives underpinning the study and important

implications for practice will then be presented, followed by a discussion of the study's limitations and recommendations for future research.

6.1 Summary of Findings

The first hypothesis was supported by findings which demonstrated the effectiveness of parent and teacher social-emotional skill programs in enhancing pre-primary children's social-emotional skill development, as measured by parent and teacher ratings. After controlling for pre-existing social-emotional skills, children who demonstrated the highest scores at post-intervention were from the combined group (parent plus teacher), followed by children in the teacher group, parent group and control group respectively, which was the order predicted. There was no greater change however in skill improvement between the combined and teacher group at the post-intervention point. The second hypothesis was only partially supported. That is, contrary to expectation, the effects of the social-emotional programs were not maintained into the next school grade for children. However, despite this outcome, there was less decay in social-emotional skill ratings for children in the combined group at the follow-up phase. Ratings for this group were also significantly higher than the group's own pre-test measures at the commencement of the study. Group order of outcomes at the follow-up phase were also as predicted i.e., combined group, teacher group, parent group and control group, which supported the second hypothesis.

Regarding parents' perceptions of their children's social-emotional skill development through the home parent program, results showed that parents were able to develop skills of EX, ER and EK with their children. That is, parents described their children as being able to communicate effective messages about their social-emotional needs and how they felt with other people, using strategies appropriate for their age group. The importance of parents' own social-emotional development as influenced by their family-of-origin experiences and how these perceptions consequently affected their approach to the development of social-emotional

skills with their own children was also considered. Results showed that their abilities to teach social–emotional skills to their children were influenced by their own family-of-origin social–emotional practices. Parents who developed positive parenting practices despite having experienced negative family-of-origin influences highlighted the importance of professional learning for parents (e.g., emotion coaching training) and their capacity to shift internal working models.

6.2 Demographic Data of Participants

Demographic data obtained from parents at the commencement of the study supported the homogeneity of participants, despite the experimental groups not being completely randomised to schools i.e: the child’s age, birth order in their family, gender, number of siblings, ages of the child’s siblings, ethnic origin of the family, family configuration, main language spoken at home or the parent’s first language. That is, these factors did not appear to influence the scores children achieved in all four groups when the groups and demographic information were compared. The homogeneity of participants in the study was also supported when the demographic data was compared with ratings for participants who completed all assessments and those who dropped out before completing all assessments i.e: the age of the child, birth order of the child in the family, gender of the child, number of siblings, ages of these siblings and the parents’ first language. That is, these factors did not appear to influence the scores children achieved as completers or non-completers.

6.3 Children’s Social–Emotional Skills Prior to the Social–Emotional Programs

Teacher and parent social–emotional skill ratings for participating children were examined at the commencement of the study. This assessed parents’ and teachers’ perceptions of children’s social–emotional skills prior to the implementation of the intervention programs and provided a base point from which to determine the trajectory of any improvements

thereafter. First, considering teachers' ratings of all experimental groups, there were significant differences between the groups with a particular disparity observed in teachers' ratings between the two schools. That is, the combined group and teacher groups' ratings in School One were significantly higher than those of the parent group and control group in School Two at the starting point. This showed a difference in teachers' perceptions of children's social-emotional skills between the schools prior to the commencement of the intervention phase. This will now be discussed further before addressing the main findings of the research.

Upon consideration of differences between the schools, it can be suggested that the role of school culture (or climate) may have influenced teachers' expectations and motivations at the commencement of the study. School culture is defined in conceptual terms as 'the basic assumptions, norms, values and cultural artefacts that are shared by school members, which influence their functioning at school' (Maslowski, 2001, pp. 8–9). It is also viewed as the traditions, norms and values of a school that affect teachers' and parents' focus, how they identify with their school and how hard they work to achieve a goal (Deal & Peterson, 1999). According to Cohen, McCabe, Michelli and Pickeral (2009), every aspect of the school experience may be considered in school culture, including the quality of teaching and learning, school community and relationships, school organisation and the institutional and structural features of a school environment. Wang and Degol (2016) report that school culture possesses four specific domains: academic (the overall quality of the curricula, instruction, teacher training and professional development), safety (the physical and emotional security and fair disciplinary practices provided by a school), institutional environment (the structural features of the school environment) and community (the quality of interpersonal relationships within the school). It is the community domain within school culture that appears to be the most relevant to the current study, given the interpersonal relationships that exist in school culture between teachers, parents, schools and wider communities. The community domain contains a

further four dimensions, which are considered important to understanding the relationship dynamics between staff, students and children at a school. These dimensions are as follows: quality interpersonal relationships within the school e.g., student-teacher, student-student and teacher-teacher relationships (Hopson & Lee, 2011); connectedness or the psychological state of attachment that students experience towards their school (Freeman et al; 2009), respect for diversity between teachers and students (Chang & Le, 2010) and community partnerships (Hill & Taylor, 2004). This last dimension of community partnerships is a particularly important aspect of school culture since it describes the sense of partnership, communication and involvement that parents and community members feel with the school personnel and within the school setting. Therefore, the community partnership (or relationship) domain of school culture is viewed as a bi-directional relationship between the school's individuals (parents, teachers and students) and the school as a whole. All individuals contribute to the development of their school culture and are influenced by it in turn. As a result of community partnerships, particular behaviours and attitudes are cultivated towards acceptance and participation in certain school ideologies and positive student achievements and behaviours are promoted (Sheldon & Epstein, 2005).

With relevance to the current study, staff and parents from both schools reported cultures in which social-emotional skills were perceived as important for their students. The higher teacher ratings achieved for groups in School One may have reflected a stronger emphasis placed on these skills by teachers, as potentially influenced by their overall school culture, compared with School Two. Teachers' own individual levels of social-emotional competence may also be considered a potential influencing factor upon the differences between teacher's ratings for groups at the commencement of the study. While this was not directly investigated in this study, it may be argued that those teachers with higher levels of social-emotional competence set a similar tone for their classrooms through the development of

supportive and encouraging relationships with and among their students (Jennings & Greenberg, 2009). These relationships may have then promoted optimal social–emotional classroom climates and primed the children for further improvements in their social–emotional skills. Such considerations may be deserving of future research attention.

In contrast to the teachers’ ratings, parents’ ratings for all groups did not differ significantly from each other at the commencement of the research. This suggested a uniformity in parents’ perceptions of their children’s social–emotional skills at the commencement of the study, regardless of school. It is possible that parents may have been a step removed from their schools’ cultures, compared with teachers who experienced direct involvement. As such, parents were likely to have been largely unaware of school culture in their everyday interactions with the children, as reflected in the uniformity of their ratings.

6.4 Children’s Social–Emotional Skills Following the Social–Emotional Programs

The first objective of the study was to examine whether the parent and teacher social–emotional programs enhanced pre-primary children’s social–emotional skill development over the intervention phase (nine months). Specifically, it was hypothesised that the programs would have an effect, such that after controlling for pre-existing social–emotional skills in children, the highest social–emotional improvements would be achieved for the combined (parent plus teacher) group, followed by the teacher, parent and finally control groups. Overall, teachers’ and parents’ ratings reflected significant improvements in social–emotional skills for all groups. These results will now be discussed.

The general improvement for all groups over the intervention phase regardless of the condition may initially be considered in terms of the natural maturation of social–emotional skills for the children over time. Improvements observed in the control group provide support for this and is consistent with research which suggests that behavioural skill maturation in

general will occur for all young children between the ages of three and five years, irrespective of risk status (Hill et al; 2006). However, a more convincing explanation is that the effects of the social–emotional programs themselves are the reason for these improvements. Greater improvements in children’s social–emotional skills overall were observed when the program interventions were applied than when they were not (i.e., for the control group). Such programs offer children the opportunity to practice acquired social–emotional skills appropriately with others (van Lier et al., 2005). These results are also consistent with studies by Kam et al. (2003) and Domitrovich et al. (2007), who describe the benefits of social–emotional programs for children versus a control group, including the further development of prosocial behaviour, interpersonal and problem-solving skills.

The highest scores at the post-intervention point were observed for the combined (parent plus teacher) group. These results may suggest a possible transfer and generalisation of social–emotional skills between the home and classroom environments (Hughes et al., 2005) and also lends support for the increased likelihood of children adopting positive social–emotional, behavioural and general health practices when classroom instruction is combined with environmental reinforcements from peers, family members, school personnel, health professionals, community members and the media (Bierman et al., 2008; Hughes et al., 2005; Osher, Dwyer & Jackson, 2002; Ştefan & Miclea, 2012; 2013; Weissberg & Greenberg, 1998). Improvements within the combined group may also be considered in view of other factors such as the benefits of ‘double dose’ programs and the influence of overall school culture in School One. The exact reasons for this finding could not be disentangled (i.e., double dose versus combined or multiplicative effect) and were beyond the scope of the current study. This may be deserving of future research.

It was also predicted that groups’ development would follow a hierarchical order after the intervention phase, whereby the highest ratings would be achieved for the combined group,

followed by teacher, parent and control groups respectively. Results supported this expectation, with the teacher group yielding the next highest ratings following the intervention however, it was noted that there was no significant difference in children's skill improvement between the combined and teacher group at the post-intervention point. Professional (teaching) skills in program implementation and school culture influences may account for the teacher group's high scores. Durlak et al. (2011) noted that school-based programs were likely to experience fewer implementation problems than home-based programs, given teachers' likelihood of following SAFE procedures in the classroom. According to these authors, those procedures, implemented by way of structured program manuals and curricula, allow for more consistency in the delivery of teachers' programs (Durlak et al.). This, when combined with teachers' specialist training and structured curriculum mindset, was likely to have influenced their assessments and comparisons of children's skills in the study, particularly when each child was also compared against others in their cohort. It should also be noted that teachers' specific experiences in delivering social-emotional programs in the study were not influencing factors on their ratings since none of the teachers had administered social-emotional programs before, despite acknowledging a general interest in this area. Additionally, teacher ratings may have reflected a stronger emphasis placed on these skills, as influenced by their school culture (even though these skills were not actively promoted or discussed in their school).

According to the first hypothesis, the parent and control groups respectively were expected to improve after the intervention phase. However, this prediction was only supported when parents rated the experimental groups. That is, the parent only group proved more effective for developing social-emotional skills with children than the control group, according to parent raters. This outcome is consistent with that of other studies in which parent interventions were compared with no interventions at all (e.g., van Lier et al., 2005). However, the prediction was not supported when teachers rated the experimental groups following the

intervention phase. That is, the control group ratings were higher than those for the parent group. This may suggest a link between the quality of the relationships of children in the parent group with their teachers (i.e., poorer quality) and children's subsequently assessed behaviours within the class environment. Birch and Ladd (1997) highlighted these relationships as an important consideration. Despite this result, the overall improvement of skills between baseline and post-intervention was higher for the parent group.

6.5 Demand Characteristics

The notable increase in ratings for children in the teacher and combined groups from time one to time two, may also be considered in terms of demand characteristics as a potential influence. Demand characteristics may be defined as "the totality of cues which convey an experimental hypothesis to the subject" (Orne, 1962, p.779). According to Orne, if participants become exposed to these cues or are aware of the research hypotheses, there is a possibility they may respond in such a way as to confirm the hypotheses and comply favourably to the research (Orne, 1962). Likewise, participants may also attempt to sabotage a study by deliberately responding unfavourably to disprove hypotheses or respond in socially desirable ways in the context of the proposed hypotheses (Rubin, 2016). In the current study, teachers and parents in all groups from time one to time two were aware of their children's group placings. As such, it is possible to consider they may have been influenced by the study's research hypotheses (and therefore demand characteristics) or even each other through informal discussions over the course of the intervention phase, when rating the children. There is some doubt with this proposition however, since parents' ratings in all groups were consistently lower overall across all three time points compared with those of teachers'. This suggests that parents may not have been vulnerable to demand characteristics in the study or conferred with teachers to align their ratings. Similarly, teachers in all four groups at time three were blind to

the group placings of their children from the previous year and additionally would have not have been influenced by the study's hypotheses when rating the children.

6.6 Children's Social–Emotional Skills over Time

The second objective of the study was to examine whether any positive effects of the parent and teacher social–emotional programs were evident six months later, into the next school grade for children. Specifically, it was hypothesised that the programs would have an ongoing maintenance effect following the intervention phase, with all groups maintaining their relative positions from that point. However, the findings across both teacher and parent ratings showed that all groups unexpectedly declined between the intervention and the follow-up phase. This did not support the second hypothesis. However, support was achieved for part of the hypothesis that predicted the final order of groups at the follow-up phase for both teacher and parent ratings (i.e., combined group, teacher group, parent group and control group). The unexpected skill decay at the follow-up phase will now be discussed, followed by consideration of the final order of experimental groups at the conclusion of the study.

The first reason for the decline in ratings observed at the follow-up phase may be due to a lack of skill practice and consolidation for children over the relatively short, fixed intervention time frame (nine months to complete the school program and 15 weeks to complete the home parent program). This may have led to a lack of maintenance of children's acquired social–emotional skills over the six-month follow-up time phase. Had children continued with both programs over subsequent academic years, it is possible that social–emotional skill gains would have been cumulative and improvements clearly visible at further follow-up time points. This also supports Durlak et al.'s (2011) view that younger students may need more time to acquire more complex skills. A longer intervention time frame was unfortunately not possible in this study. The importance of the relationship between the number of social-emotional program lessons and outcome effects in the development of social–

emotional skills with children is emphasised by Aber, Jones, Brown, Chaudry and Samples (1998). These authors report that among social-emotional programs in which the primary goal is to improve students' social-emotional skills and engagement in learning, the actual number of social-emotional lessons delivered is proportional to the positive student outcomes overall. In the context of the current study, this suggests that had more PATHS and parent lessons been applied to children over time, a greater consolidation of these skills may have been acquired.

Greenberg et al. (2003) further suggested that multi-component, multi-year time frame interventions are more likely to foster enduring effects on skills over time compared to short-term preventative interventions, which often produce short-lived results. A review of positive youth development programs by Catalano et al. (2002) concurred with this recommendation. That is, when these authors examined 25 programs that focused on school-age children and included social-emotional skill building components, programs that lasted for more than nine months were revealed to produce better outcomes for skill building than shorter interventions. Likewise, a multi-year, universal social-emotional program conducted by Bierman et al. (2010) examined the effect of PATHS over a three-year period. The findings demonstrated that well-implemented, multi-year social-emotional learning programs had significant and meaningful effects on the population rates of aggression, social competence and academic engagement in the primary school years. Similar results for the PATHS program were achieved in a study by Kam, Greenberg and Kusché (2004), in which long-term effects were sustained over three successive years following an initial 12-month intervention with primary school aged children. These authors findings demonstrate modest positive effects of sustained program exposure over time and additionally suggest that it is feasible to expect schools to complete all six PATHS modules with children over successive years.

A second reason for the decline in ratings at the follow-up-phase may be due to the children's exposure to new teaching styles and academic expectations in their following school

year. Combined with new social challenges, this may have resulted in some uncertainty and therefore, a temporary regression in social–emotional skills as children adjusted. In response to their adjustment, new teachers in this academic year may have perceived these children’s social–emotional skills to be lower than they were. The new teachers also had a comparatively shorter time frame than teachers in the previous year in which to develop relationships with the children before being asked to rate their social–emotional skills (i.e., nine months for pre-primary teachers and four months for year one teachers). As such, year one teachers were likely to have less knowledge of each child’s existing social–emotional abilities and as such, may have rated children’s abilities lower. This illustrates Birch and Ladd’s (1997) claim that there is an important link between the quality of children’s relationships with their teachers and their subsequently assessed behaviours within the class environment. It should be noted that teachers’ levels of classroom experience overall in the study was not considered to be systematically different and therefore could not account for any differences or declines between the experimental groups.

Nonetheless, support was achieved for part of the second hypothesis, which predicted the final order of the groups at the follow-up phase. Combined and teacher groups demonstrated significantly greater improvements compared with other groups which may suggest a possible influence of school culture in School One. However, less decay was demonstrated in the combined group at the follow-up phase. This suggests the added value of environmental and family supports to classroom social–emotional programs, the possibility of skill generalisability and transfer between the home and class environments or the double dose benefits for children receiving two social–emotional programs. Ratings for children in the teacher group were the next highest, suggesting the effectiveness of teachers’ implementation skills for their class programs followed by ratings for children in the parent group. Ratings for

the control group were lowest, highlighting the effectiveness of a social–emotional program for children when compared with no program offered at all (van Lier et al., 2005).

6.7 Comparison of Teacher and Parent Ratings

Overall, teacher and parent ratings did not follow the same pattern throughout the study. Teacher ratings improved across all groups by the conclusion of the study, with the exception of the control group. Parent ratings improved for combined and teacher groups by the conclusion of the study, however control and parent groups' ratings did not improve.

At post-intervention and follow-up phases, parents were observed to rate children's social–emotional skills lower than teachers did on average. This finding is consistent with research that highlights low agreement ratings between teachers and parents when assessing children's behaviours overall and the tendency for parents to rate children's problematic behaviours higher than teachers (Dennebeil et al., 2013; Graves, Blake & Kim, 2012; Strickland, Hopkins & Keenan, 2012). One possible explanation is that teachers are less likely to report behavioural issues in school-age children unless a child shows co-morbid peer or behavioural problems (Drugli, Larsson, Clifford & Fossum, 2007; Strickland et al., 2012). Poor rater agreement between teachers and parents may also be attributed to situation-specific behaviours (Re & Cornoldi, 2009; Graves et al., 2012). That is, depending on either the home or school context, children's identical behaviours may be interpreted as problematic or appropriate and rated as such by teachers or parents i.e., teachers observe within an educational setting in which the goal is to reach educational targets, while parents observe within a family setting in which family rules are often the target. Moreover, parents may often only have a small number of other children of a similar age in the same setting with whom to compare their own child (Rescorla et al., 2012), while teachers are exposed to large groups of children over time and therefore, to larger spectrums of behaviour for making age-appropriate assessments (Strickland et al., 2012). As such, parents' ratings in the current study may not have been as

educationally or developmentally informed as teachers' and therefore, presented as lower overall.

Teacher interaction styles (Cai, Kaiser & Hancock, 2004) and individual characteristics (Berg-Nielsen, Solheim, Belsky & Wichstrom, 2012) should also be considered as possibilities for the higher teacher assessment ratings of children, however these, in addition to the emotional climates of the children's homes and schools were not directly assessed in this study. Despite discrepancies between teacher and parent assessments of child behaviour outcomes, studies with school-age children show that teacher and parent assessments in combination possess high predictive value (Goodman, Ford, Simmons, Gatwood & Meltzer, 2003; Owens & Hoza, 2003; van Dulmen & Egeland, 2011) for future psychiatric disorders (Goodman, Renfrew & Mullick, 2000) and psychopathology (Ferdinand et al., 2003). Therefore, such ratings are still a worthy combination of assessments for young children in social-emotional research.

6.8 Home and School Domains for Developing Social-Emotional Skills

An important consideration when viewing the results of the study are the two different environments of home and school in which the interventions took place with children. Firstly, each environment may be considered in terms of their impact upon children's social-emotional skill development (how the children were assessed). That is, the classroom environment in the current study was able to offer teachers the opportunity to employ free-standing social-emotional lessons through a program which provided explicit step-by-step direct instruction and role-play. Within this environment, teachers are able to integrate social-emotional skills into their curriculum for instructional practice and consolidation, such as in project-based learning. Classroom activities may also develop specific social-emotional skills using strategies within a sequenced manner, across lessons (Durlak et al; 2011). As such, social-emotional skills can be embedded successfully into the school day for a child so they become

natural and purposeful. The school environment may also work to create a culture or climate which fosters social-emotional learning for children as a wrap-around support for these skills being developed in the classroom (Dusenbury, Calin, Domitrovich & Weissenberg, 2015). A child therefore is immersed in an environment in which these skills are potentially demonstrated, modelled and practiced consistently with feedback. Additionally, a standard set of expectations and rules may be applied with a safety net of teacher interventions which creates artificial constraints on social interactions (Dusenbury et al; 2015). Same-aged peers of similar abilities are also present in the school environment with whom children may practice these skills.

Within the home environment, opportunities for practicing social-emotional skills, modelling these, developing attitudes in alignment with these and cultivating behaviours, social interactions and social-emotional climates within families may be less organised, structured and monitored compared with school environments. As such, social-emotional skill acquisition and progress may be ad-hoc. Home environments however, do offer a range of real-world experiences for children beyond the school environment in which to learn and practice these skills. This appears important since there are a limited set of experiences within a school environment in which to anchor social-emotional instruction for children. Home environments are also organically changing, adding depth and breadth to social-emotional learning for children on the whole. Comparing the two environments in the current study, ratings were consistently greater for the school-based teacher program over all time points compared with the parent program. This may reflect the more structured, modelled, reinforced, opportunity-focussed and consistent environment of the school and classroom for social-emotional skill development with children, compared with the home environment.

Secondly, each environment may also be considered in terms of their impact upon the teachers and parents themselves as raters of the children's social-emotional skills (how the

raters observed). That is, teachers and parents made their respective ratings for children based on observing differently, according to their roles within these two settings. This may account for the differences in ratings seen for parents compared with those of teachers in the study.

On the whole, it may be considered that social-emotional learning for children is typically acquired best outside the vacuum of only one environmental setting. That is, engaging parents and families in home settings in partnership with teachers in school settings adds greater relevance and meaning to academic and social-emotional skills and is also mutually reinforcing for children across these contexts (Christenson & Sheridan, 2001). Therefore, outcomes of the combined (parent-plus teacher) approach for developing social-emotional skills with children will now be discussed.

6.9 The Combined Group Approach

Results from the study demonstrate consistently higher outcomes for the combined approach in children's social-emotional skill development over three time points compared with the single influences of parent or teacher alone. The particular strength of the combined group approach may be considered in terms of the structured classroom social-emotional program when this was paired with parents' skills in establishing a home environment which was conducive to the development of these skills i.e., through interactive learning experiences, positive discussions within the family incorporating the child and modelling these skills for children. This added element of parent involvement to a school social-emotional program is considered to be particularly important and is supported in studies such as Allbright and Weissberg (2010) which focussed on school-family-partnerships (SFP's) for developing social-emotional skills with children. Allbright and Weissberg (2010) note that SFP's are associated with a range of positive outcomes for children including improved attendance, higher rates of homework completion, higher grades, test scores and higher rates of school completion (Barnard, 2004; Jeynes, 2005). Positive outcomes for this combination extends

further to include increased self-esteem, improved behaviour at home and school, positive attitudes towards school and improved interpersonal and decision-making skills (Christenson & Havsy, 2004; Patrikakou, Weissberg, Redding & Walberg, 2005). In the current study, this was supported by a number of comments from parents in the combined group, who reported their children's increased self-esteem, improved behaviours at home and improved interpersonal and decision-making skills.

The higher ratings achieved for the combined group also support positive results seen with multi focussed prevention programs which involve multiple combinations of teacher, parent and child peers as agents of change for children. It also suggests the likelihood of a transfer and generalisation of acquired social–emotional skills between home and classroom settings which are demonstrated to be more effective with these programs than for universal programs (Hughes et al; 2005).

6.10 Parents' Perceptions of Children's Social–Emotional Skill Development

Parents' perceptions of their children's social–emotional skill development were also explored qualitatively in the study. Eighty-six percent of parents who completed the parent program (parent group and combined group) reported that their children were able to communicate effective messages about their social-emotional needs and how they felt with other people while demonstrating EK, ER and EX strategies appropriate for their age group. According to these parents, the skills also proved useful for the children when interacting with others in their social environments and managing conflicts, as was demonstrated by Lewis et al. (2010). Denham (2007) confirmed these are important elements for developing social–emotional competency in children at the early school level. The emotion coaching strategy was identified by parents as the most beneficial tool overall in developing social–emotional skills with children in the study and will now be further discussed.

6.10.1 Emotion coaching strategies

Parents reported that emotion coaching practices assisted their children to learn concepts such as causes, consequences and empathy with regards to emotion, which they were then able to validate, clarify, model and highlight using emotion situations. Parents noted that as children expanded their social interactions, emotion coaching practices guided them to be aware of more specific emotion cues, while making EK, ER and EX components more manageable. These results are consistent with research that describes emotion coaching as an effective strategy for parents in developing optimal social–emotional skills with their children, assisting them to make connections between expressions, situations and words to formulate meaningful scripts about their unique emotional experiences (Eisenberg et al., 2001; Gottman et al., 1996). It should also be noted that aside from a focus on social-emotional skill acquisition, emotion coaching may also be viewed as an ‘attitude’ parents might display when responding to emotions in children. According to Gottman, Katz and Hooven (1996) and their Parental Meta-emotion Philosophy, emotion coaching is therefore a relational style which in turn impacts upon the learning of the child. The current study however was solely focussed on social-emotional skill acquisition through emotion coaching.

It was also considered that parents in the study may have been influenced by their particular Christian, community or family and cultural–based ideologies, either in singularity or combination, which in turn affected their approaches towards social–emotional skill development with their children. These influences while also important when considering how the parent program was implemented by parents, were beyond the scope of the current study and therefore not investigated. Parents’ family-of-origin social–emotional experiences will now be further discussed.

6.11 Parents' Family-of-Origin Social–Emotional Experiences

Parents who completed the home parent program (parent group and combined group) also reported on their personal social–emotional experiences regarding their families of origin and how they perceived these experiences to have affected their abilities to develop social–emotional skills with their own children in the study. The responses revealed that parents' own social–emotional development was indeed influenced by their social–emotional experiences in their families of origin in childhood (either positively or negatively), which consequently affected their abilities to develop social–emotional skills with their children in the study. These findings are consistent with studies by Leerkes and Crockenberg (2002) and Leerkes and Siepak (2006), which demonstrated the correlation between parents' social–emotional capabilities (as influenced by their own parents) and their subsequent social–emotional responsiveness to their own children. From the parent responses in the current study, three categories evolved which provided further support for the findings of Leerkes and her colleagues. These categories will now be discussed with reference to the overall effectiveness of the home parent program.

6.11.1 Category 1: Positive social–emotional parent influences leading to positive social–emotional parenting practices

The first category of parents consisted of those who identified themselves as having experienced largely positive social–emotional influences from their families of origin and who demonstrated largely positive social–emotional parenting practices with their own children in the study. This suggested that these parents had consequently replicated these positive social–emotional practices with their children. These findings support those of Leerkes and Crockenberg (2002), who identified high maternal self-efficacy among parents who perceive their own emotional needs as being met when they were children, through their recollections of positive parental models. The positive feelings of self for parents are suggested to then

generalise to their own parenting. Additionally, research by Fonagy, Steele and Steele (1991), reported that mothers with a history of having their own emotional needs met in childhood are likely to become parents who respond more effectively to their children's emotional and cognitive distress. Fonagy et al. emphasised that mothers who experience positive influences early in their own lives engage in more sensitive behaviours and are self-reflective, which consequently assists them to empathise with their children's perspectives.

Overall, for parents in Category 1, the study's home parent program may have reinforced existing beliefs and values or offered alternatives for better personal psychological adjustments to challenging and often unmanageable family circumstances.

6.11.2 Category 2: Negative social–emotional parent influences leading to negative social–emotional parenting practices

The second category of parents consisted of those who identified themselves as having experienced largely negative social–emotional influences from their families of origin and who demonstrated mostly negative social–emotional parenting practices with their own children in the study. This suggested that these parents had consequently replicated these largely negative social-emotional practices with their children. This outcome is consistent with findings by Daggett, O'Brien, Zanolli and Peyton (2000) and Leerkes and Siepak (2006), who reported that adults raised in controlling or emotionally rejecting environments tend to experience more hostility, negative attitudes and negative attributions towards their own children and the children of others. Leerkes and Siepak (2006) further described a history of parental emotional rejection as associated with feelings of amusement and neutrality in response to their own children's distress, while Leerkes and Crockenberg (2006) reported that mothers whose emotional needs are not met in childhood show less empathy and more negative emotion in response to children. Bowlby (1988) additionally suggested that a mother's early experiences predict and appear to affect how she perceives, interprets and feels about a child's distress cues.

Overall, for parents in Category 2, the study's home parent program may have confronted their existing beliefs and values but ultimately was unable to shift these. As such, the program was not able to offer these parents alternatives for better personal psychological adjustments to challenging and often unmanageable family circumstances. Future research may seek to tailor home-based social-emotional interventions to parents in this category, depending on their characteristics or backgrounds, in order to improve a program's effectiveness.

6.11.3 Category 3: Negative social-emotional parent influences leading to positive social-emotional parenting practices

The third category of parents consisted of those who identified themselves as having experienced largely negative social-emotional influences from their families of origin but who demonstrated mostly positive social-emotional parenting practices with their children in the study. This category suggests that parents who experienced largely negative social-emotional family practices in their childhoods may have altered their social-emotional parenting practices with their own children to discontinue a negative style of social-emotional parenting (in contrast with those parents in the second category).

Firstly, the finding suggests that parents in this third category may have changed their internal working models over time in response to several factors. According to Bowlby (1980), these may include new relationships (such as those gradually developed outside a family-of-origin influence) and experiences or events (such as cultural, interpersonal or learning influences). Similarly, Harkness, Super and Keefer (1992) suggest that while parents' negative beliefs, emotions and social interactions may be influenced by their own families-of-origin, parents may also set goals to actively avoid similar experiences with their own children. Research in the field of resiliency offers further insight into explaining these potential changes in parents. Psychological resilience is considered to be a protective mechanism that operates in the face of negative stressors (Masten, 2001; Bonanno, 2004). According to Bonanno (2005),

multiple and sometimes unexpected factors might promote resilient outcomes for individuals who have experienced potentially traumatic events. These factors may be situational, such as the presence of supportive relationships (Block & Block, 1980). They may also be individual, such as the capacity to adapt flexibly to challenges (Block & Block, 1980) or to cope pragmatically by expressing relatively less negative emotion and greater positive emotion to minimise the impact of loss (Bonanno & Keltner, 1997).

Secondly, a vehicle for change for parents in this category may have been the parent program, in which they were trained to develop positive social–emotional skills with their children. This provides an example of a learning influence for internal working model change, as described by Bowlby (1980). Ellis, Alisic, Reiss, Dishion and Fisher (2014) demonstrated the efficacy of such specific training with mothers in high-risk families, in which emotion coaching skills were successfully taught, to foster children’s emotional competence. Therefore, the difference between parents in Categories 2 and 3 may have been one of discrepancy in their ability to shift their internal working models when challenged by the home parent program. SET scores for participants were not compared between this third category and those of categories one and two due to small numbers overall, however this may be a worthwhile endeavour for future research.

6.12 Support for Theoretical Perspectives

The findings of the current study support Bronfenbrenner’s theory in its second phase (1980–1993), since they provide an example of how an individual’s development (e.g., social–emotional skills) can be influenced by his/her interactions with the environment (school and home). Under Bronfenbrenner’s model, the actions of teachers and parents as members of home and school community systems, worked in parallel towards the common goal of developing children’s social-emotional skills, as demonstrated most effectively through the combined group. This partnership aspect between families, communities and teachers appears especially

important in current times and according to Campbell-Evans, Stamopoulos and Maloney (2014), leads a growing societal expectation for early childhood educators to go beyond current classroom practices to facilitate these partnerships and lead decision making, which integrates these elements for service delivery to promote children's learning.

Saarni's (2008) functionalist and dynamic systems perspective is also supported by the study since the findings provide evidence for the assertion that an individual's responses are adaptive and assist in reaching goals. That is, social-emotional skills developed with children in the study assisted them to manage their emotional arousal to effect problem-solving. The skills also helped children to discern what others felt, respond sympathetically and recognise how their emotional communication and self-representation affected their relationships. Findings from the research support Saarni's view that each (social-emotional) skill acquired by a child develops from its own social context (school and home) and aligns with the cultural values and belief systems of the child's communities. Saarni's position that children's skills and behaviours change over time in accordance with their maturity (cognitive development) and changing environmental interactions was also supported.

6.13 Limitations

Both schools had cultures in which social-emotional skills were perceived as important for students (by both staff and parents), however as previously noted, the principal from School One expressed an interest in introducing a formal social-emotional program into the school's curriculum at a future point, as a longer-term goal. School One was therefore allocated the teacher group and combined group programs in the study. While this was not ideal for random assignment, School One was permitted to engage in these groups since the teachers were unaware of their principal's longer-term goals for introducing a social-emotional program into their school.

The intervention period of nine months (for the school program) and 15 weeks (for the parent program) may have been too short a time frame for children to acquire the necessary foundation to sustain their social–emotional skills into a new grade. This may be perceived as a limitation of the study which possibly contributed to the overall decline in ratings at the follow-up phase. As previously noted, research has suggested that a longer time frame might elicit longer-lasting effects (Greenberg et al., 2003) over a short-term preventative intervention. This is particularly relevant in the early learning years when foundational social–emotional skills require more time to be actively taught.

The absence of independent observations of children’s social–emotional skills is also a limitation, as there were no objectivity measures used in the study. According to Renk (2005), the use of independent observations provides a more complete and valid picture of the child. As such, these observations may have added objectivity and balance to the ratings of teachers and parents in the study. Any respondent biases observed in parent and teacher raters may also have been addressed through the use of multiple informants (Renk, 2005; Renk & Phares, 2004). Additional observation ratings provided by the child or the child’s peers (Rose-Krasnor, 1997), were not possible however due to practical issues such as time constraints. Additionally, the researcher was not able to act as an independent rater given that she had developed the parent home program and may have held a subconscious bias when rating the children as a result. The observational duration required for the researcher to make such assessments was also beyond the scope of the study.

6.14 Implications for Practice

Overall, the findings of the research highlighted the effectiveness of a combined approach for developing social–emotional skills with pre-primary aged children when teachers and parents engaged in concurrent programs to influence these skills. This offers a way forward for teachers and parents to engage in combined approaches to develop effective social–

emotional skills with children when they commence formal education in low-risk, mainstream schooling. An investment in these skills at this developmental and transitional education point may also affect other key growth areas for children including academic learning (Denham, 2006), cognitive and neurological functioning (Fischer & Bidell, 2006; Immordino-Yang & Damasio, 2007) and mental health (Hertzman, 2004; Moore, 2006; Sosna & Mastergeorge, 2005). Moving forward, a combined social-emotional learning skills approach with parents and teachers requires good planning and coordination, ideally within a school-family partnership (SFP) framework. This ensures that these skills are relevant and reinforced across home and school contexts (Bouffard & Weiss, 2008). It is acknowledged however, that this may prove challenging to integrate into school programming and curriculums for practice given the challenges of resources, implementation, funding and staff professional development. In itself, this may be an issue to address through formal school staff training to perform these tasks and importantly, school leadership skills to facilitate and oversee these. That is, leaders within a school system may mentor and advocate (programs such as these) within the school context while in partnerships with families and children (Stamopoulos, 2012).

The purpose-designed parent coaching program in the study which was offered as a home-based, individual program rather than a group-based delivery approach, also proved successful as a means by which parents were able to develop their children's social-emotional skills cumulatively over time. While further development of the program is required, it is considered to hold potential as a self-paced tool for use with parents in the home or in combination with a school-based social-emotional program.

The current research also points to the potential effect of family-of-origin influences on parents' social-emotional practices with their own children. That is, the findings highlight the importance of parents deconstructing those family-of-origin influences that may have negatively affected their current social-emotional parenting practices. Professional learning

techniques such as emotion coaching may prove valuable in assisting these parents to develop effective social–emotional competencies with their own children.

6.15 Future Research

Regarding design for future studies, it is recommended that complete randomisation of schools to groups be applied and also for longer follow up assessment periods. Ideally, where possible, a randomised double-blind control style design is suggested. A longer time frame is also recommended for the implementation of social–emotional programs with this age group, to assess the effectiveness of maintenance effects thereafter. This is especially important when focusing on children in the early learning years when foundational social–emotional skills may require longer time frames for skill development and consolidation. The study was also conducted in a predominantly upper middle–class metropolitan community, with the two schools displaying similar religious, socio-economic and school culture foci. This raises the query of whether similar results might be achieved in future investigations with low-risk, mainstream schools of various school cultures and religious (or non-religious) affiliations. Therefore, it is suggested that future studies explore the same parent and teacher group influences for social–emotional skill development with children commencing formal schooling, however, across various religious and socio-economic environments, including those of different school cultures and family configurations. Regarding the purpose-designed, parent coaching program in the study, it is additionally acknowledged this is a first iteration only and as such, also requires further development in future studies, for example, additional EK, EX and ER skills appropriate to the target age group together with assessments of parent attitudes and motivations towards social-emotional education practices. Additionally, family of origin questions may be more open-ended to allow for richer detail in parent responses.

Independent raters are also recommended for future studies, to complement those ratings obtained from parents and teachers. This would allow children’s social–emotional skills

to be assessed more objectively, thereby reducing respondent biases and error variance and providing a wider, more balanced perspective of overall skill development. Future research should also include ratings from child peers and children themselves.

The study's overall dropout rate of 15 per cent indicated a normal attrition rate for multi-focused studies i.e., between 15 and 30 per cent (Ştefan & Miclea, 2013). However, dropout rates were different across the groups, with parent dropout rates presenting as an issue despite the attractive incentives offered and the schools' endorsements of the research. Increased efforts to retain parent participants in future research would prove beneficial. To address this issue, it is recommended that researchers consider the stressors that may affect parents' abilities to complete a program (e.g., time, stress, communication, conflict and problem-solving difficulties) and work to address these specific challenges with parents where possible. This approach was successfully demonstrated in a study by Webster-Stratton (1998), in which parent retention rates were increased for a program when parents were taught to manage their own lifestyles and personal issues.

Chapter 7: Conclusion

This study investigated the effects of separate and combined influences of parents and teachers on the development of young children's social-emotional skills. As such, it directly compared the extent to which each of these influential components in specific combinations added value to the development of social-emotional skills for young children in their first year of compulsory education. The study's original contribution lay within the application of a new purpose-designed parent coaching program to promote children's social-emotional skills within the home environment as an individual approach. Additionally, the study offered a new presentation of four intervention approaches for comparison with mainstream children commencing formal schooling in the pre-primary year, while engaging the Devereux Student Strengths Assessment Mini instrument (DESSA-Mini) (LeBuffe et al; 2009) as a standardised social-emotional skill assessment measure not previously used, to determine skill progression.

As anticipated, findings showed that the social-emotional skill programs enhanced pre-primary children's social-emotional skills over a nine-month intervention phase, which was a shorter time frame than most comparative studies. This demonstrated the positive effects of social-emotional interventions for young children, even when shorter time frames are used. Within this finding, particular improvements were found with the combined parent-plus-teacher approach. While the effects of the interventions were not maintained into the next school grade in the study's follow-up phase, there proved to be less decay of social-emotional skills for children in the combined group at this final phase. Overall, findings suggested that while skill improvements may be achieved for children with interventions over shorter time frames, the maintenance of these skills is more likely to occur with longer intervention time frames. In particular, it was determined that combined parent and teacher approaches for

developing social-emotional skills are especially important and that benefits are maximised for children's development in this area through such pairings.

Findings also demonstrated that parents were able to develop social–emotional skills with their children most effectively when using emotion coaching strategies, with parents' abilities to teach these skills being influenced by their own family-of-origin social–emotional practices. The importance of professional learning for parents in developing social–emotional skills with their children was also highlighted.

The findings build on previous research by confirming parents' abilities to develop social–emotional skills with young children, however also contribute new knowledge by demonstrating the effects of a combined parent-plus-teacher approach in the development of these skills at an important transition point for children. Findings from the study may also offer a path forward for policymakers in Australia to advocate for the mandatory inclusion of mental health programs from the first year of compulsory schooling for children to facilitate the development of early mental health practices. Active efforts in establishing and implementing social-emotional standards within a school system for what students should know and be able to do, already exists internationally e.g., Singapore.

The impetus for this thesis, as stated in the prologue, was a desire to understand the dynamics of what may be occurring 'upstream' for individuals in their early social–emotional development as children, which may consequently influence their ability to cope emotionally later 'downstream' in life as adults. Since parents and teachers are often the key influencers of children in their early years, the query became, how best might these individuals influence children in this key area of development in their 'upstream' years, either separately or in combination? This study explored the 'upstream' phase, with parents and teachers regarded as key influencers of children's early mental health through the development of social–emotional skills as expressive components of the EI construct. The importance of such work, which

nurtures young children's mental health from an early age is clear, since these efforts serve as an investment for equipping children with valuable psychological tools for coping as adults when they are presented with life's challenges and adversities.

'Let's raise children who won't have to recover from their childhoods.'

Pam Leo.

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List of Appendices

Appendix A. Assessment Stories

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Appendix B. Parent Manual

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Appendix C. Pilot Study Information Form to Parents for Objective 1.

Dear Parents/Guardians

I am currently completing a PhD in Psychology at Edith Cowan University and am investigating the development of social-emotional skills in young children. This research has been approved by the Edith Cowan University Human Research Ethics Committee.

You may be aware that research describes many benefits of social and emotional skills in early childhood including the promotion of lifelong health, wellbeing and skill competence over many areas. A child's social-emotional development is essential to their ability to interact with others and form relationships. As such, it has been viewed as the building block of emotional intelligence in the early childhood years, leading to positive peer relationships and school preparedness including learning, school readiness, cognitive and language development.

The research I am undertaking is focussed on investigating children's social-emotional skills. It is hoped that the results of the study will provide new evidence for the benefits of social-emotional programs to nurture early childhood social-emotional skills and mental health for the future.

Your consent has been requested for me to work with your child on 1 occasion in order to evaluate a new parent social-emotional program with young children. The program's activities are fun and interactive and have been developed to be easy to administer and non-time consuming. Feedback from your child on the effectiveness of these activities will assist me in making suitable adjustments before it is used in selected schools for a larger research study next year.

Each activity should only take approximately 15-30 minutes. Please be aware that I would like to video record my interactions with your child on the day as we play these games to assist me in making detailed observations after the session is over.

Please be assured that all information will be kept in strict confidence with myself and my research team at the university at all times and not shared with anyone outside this team. Once the research is completed all information collected will be appropriately destroyed after the legally required period of time.

If you have any questions concerning the project please contact myself on Ph: XXXXX or either of my PhD supervisors: Dr J.D at the School of Psychology and Social Sciences, Edith Cowan University on Ph: XXXXX or Dr E.S at the School of Education, Edith Cowan University on Ph: XXXXX. If you wish to contact someone who is independent of the research project about the study please contact the Edith Cowan University Research Ethics Officer, K.G (Ph: XXXXX).

The incentives for completing this research are two-fold – firstly you will be thanked with a Target voucher for your consent and secondly your child will be rewarded for taking part with stickers.

If you consent to your child's participation in the research, please sign the attached consent form.

Yours sincerely
Nichola Webb
Clinical Psychologist, PhD Candidate

Appendix D. Pilot Study Consent Form to Parents for Objective 1.

The Development of Social-Emotional Skills in Young Children.

I _____ (the parent/guardian) have read and understood the information provided with this consent form and any questions I have asked have been answered to my satisfaction.

I agree to allow my child _____ (name) to participate in the activities associated with this research. I also understand that the activities will be video recorded for the study and viewed by the researcher/research team for additional interaction detail.

I understand that at the conclusion of the research project all information supplied in relation to my child, including the video recording, will be destroyed after the required period of time.

If I have any concerns, or questions I understand that I can contact the Principal Researcher Nichola Webb on Ph: XXXXX or nwebb2@our.ecu.edu.au

I agree that the research data gathered in this study may be published, provided my child is not identifiable in any way.

Parent/Guardian's Signature

Date

If you require further information about this project please contact Nichola Webb (Ph: XXXXX), Dr J.D, School of Psychology and Social Sciences, Edith Cowan University (Ph: XXXXX) or Dr E.S, School of Education, Edith Cowan University (Ph: XXXXX) If you wish to contact someone who is independent of the research project about the study, please contact the Edith Cowan University Research Ethics Officer, K.G (Ph: XXXXX).

Appendix E. Pilot Study Information Form to Parents for Objective 2.

Dear Parents/Guardians

I am currently completing a PhD in Psychology at Edith Cowan University and am investigating the development of social-emotional skills in young children. This research has been approved by the Edith Cowan University Human Research Ethics Committee.

You may be aware that research describes many benefits of social and emotional skills in early childhood including the promotion of lifelong health, wellbeing and skill competence over many areas. A child's social-emotional development is essential to their ability to interact with others and form relationships. As such, it has been viewed as the building block of emotional intelligence in the early childhood years, leading to positive peer relationships and school preparedness including learning, school readiness, cognitive and language development.

The research I am undertaking is focussed on investigating children's social-emotional skills. It is hoped that the results of the study will provide new evidence for the benefits of social-emotional programs to nurture early childhood social-emotional skills and mental health for the future. Your valuable assistance has been requested to aid me in evaluating a new parent social-emotional program with young children. The program's activities are fun and interactive and take place with you. They have been developed to be easy to administer and are non-time consuming. Your feedback on the effectiveness of these activities will assist me in making suitable adjustments before it is used in selected schools for a larger research study next year.

Your participation in the research would be entirely voluntary and as such you would be free to withdraw from the study at any time, without consequence. Each activity should only take approximately 15-30 minutes and you may complete them as many times as you wish over a week. I have also provided a demonstration DVD for your activity to give you an example of how it may look. Please be assured that all information will be kept in strict confidence with myself and my research team at the university at all times and not shared with anyone outside this team. Once the research is completed all information collected will be appropriately destroyed after the legally required period of time.

If you have any questions concerning the project please contact myself on Ph: XXXXX or either of my PhD supervisors: Dr J.D at the School of Psychology and Social Sciences, Edith

Cowan University on Ph: XXXXX or Dr E.S at the School of Education, Edith Cowan University on Ph: XXXXX. If you wish to contact someone who is independent of the research project about the study please contact the Edith Cowan University Research Ethics Officer, K.G (Ph: XXXXX).

The incentives for completing this research are two-fold – firstly you will be thanked with a Target voucher for your participation and secondly your child will be gaining some preliminary formalised social-emotional skills training to continue building on at home with your family. If you consent to your child’s participation in the research, please sign the attached consent form and return to school as soon as possible.

Yours sincerely

Nichola Webb

Clinical Psychologist, PhD Candidate

Appendix F. Pilot Study Consent Form to Parents for Objective 2.

The Development of Social-Emotional Skills in Young Children.

I _____ (the parent/guardian) have read and understood the information provided with this consent form and any questions I have asked have been answered to my satisfaction.

I agree to allow my child _____ (name) to participate in the activities associated with this research.

I understand that at the conclusion of the research project all information supplied in relation to my child, will be destroyed after the required period of time.

I understand that I can withdraw consent at any time.

If I have any concerns, or questions I understand that I can contact the Principal Researcher Nichola Webb on Ph: XXXXX or nwebb2@our.ecu.edu.au


I agree that the research data gathered in this study may be published, provided my child is not identifiable in any way.

Parent/Guardian's Signature

Date

If you require further information about this project please contact Nichola Webb (Ph: XXXXX), Dr J.D, School of Psychology and Social Sciences, Edith Cowan University (Ph: XXXXX) or Dr E.S, School of Education, Edith Cowan University (Ph: XXXXX) If you wish to contact someone who is independent of the research project about the study, please contact the Edith Cowan University Research Ethics Officer, K.G (PhXXXXX).

Appendix G. The Devereux Student Strengths Assessment, Mini – DESSA-Mini (Sample Form 1) LeBuffe, Shapiro and Naglieri, (2009)



DESSA MINI
DEVEREUX STUDENT
STRENGTHS ASSESSMENT
K-8TH GRADE

**Devereux Student Strengths Assessment-mini
(DESSA-mini)**

Jack A. Naglieri, Paul A. LeBuffe, and Valerie B. Shapiro

FORM 1

Child's Name _____ Gender _____ DOB _____ Grade _____
 Person Completing this Form _____ Relationship to Child _____
 Date of Rating _____ School/Organization _____ Classroom/Program _____

This form describes a number of behaviors seen in some children. Read the statements that follow the phrase: *During the past 4 weeks, how often did the child...* and place a check mark in the box underneath the word that tells how often you saw the behavior. Answer each question carefully. There are no right or wrong answers. Please answer every item. If you wish to change your answer, put an X through it and fill in your new choice as shown to the right.

		Never	Rarely	Occasionally	Frequently	Very Frequently	
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Item # During the past 4 weeks, how often did the child..

		Never	Rarely	Occasionally	Frequently	Very Frequently	
1.	accept responsibility for what she/he did?	0	1	2	3	4	_____
2.	do something nice for somebody?	0	1	2	3	4	_____
3.	speak about positive things?	0	1	2	3	4	_____
4.	pay attention?	0	1	2	3	4	_____
5.	contribute to group efforts?	0	1	2	3	4	_____
6.	perform the steps of a task in order?	0	1	2	3	4	_____
7.	show care when doing a project or school work?	0	1	2	3	4	_____
8.	follow the advice of a trusted adult?	0	1	2	3	4	_____

Raw Score Sum _____
 Turn over to finish scoring →

Recommendations: _____

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Product Code #40000

Original DESSA-mini forms are printed in red and black. If this form is only in black and white, it is an unauthorized photocopy, which is a violation of the copyright.

NORMS TABLE FORM 1

FORM 1

T-score	Raw Score Sum	Percentile	
71	32	98	S T R E N G T H
67	31	95	
65	30	93	
63	29	90	
61	28	86	T Y P I C A L
59	27	82	
57	26	76	
55	25	69	
53	24	62	
51	23	54	
49	22	46	
48	21	42	
46	20	34	
45	19	31	
43	18	24	
42	17	21	
41	16	18	N E E D
39	15	14	
38	14	12	
37	13	10	
36	12	8	
34	11	5	
33	10	4	
32	9	4	
31	8	3	
29	7	1	
28	<7	1	

SOCIAL-EMOTIONAL TOTAL

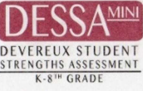
T-score _____

Percentile _____

Description _____

Fold over here. Fold to this line.

Appendix H. The Devereux Student Strengths Assessment, Mini – DESSA-Mini (Sample, Form 2) LeBuffe, Shapiro and Naglieri, (2009)



DESSA^{MINI}
DEVEREUX STUDENT
STRENGTHS ASSESSMENT
K-8TH GRADE

Devereux Student Strengths Assessment-mini
(DESSA-mini)

Jack A. Naglieri, Paul A. LeBuffe, and Valerie B. Shapiro

FORM 2

Child's Name _____ Gender _____ DOB _____ Grade _____
 Person Completing this Form _____ Relationship to Child _____
 Date of Rating _____ School/Organization _____ Classroom/Program _____

This form describes a number of behaviors seen in some children. Read the statements that follow the phrase: *During the past 4 weeks, how often did the child...* and place a check mark in the box underneath the word that tells how often you saw the behavior. Answer each question carefully. There are no right or wrong answers. Please answer every item. If you wish to change your answer, put an X through it and fill in your new choice as shown to the right.

		Never	Rarely	Occasionally	Frequently	Very Frequently	
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Raw Score Sum _____
 Turn over to finish scoring →

Recommendations: _____

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NORMS TABLE FORM 2

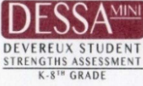
T-score	Raw Score Sum	Percentile
71	32	98
69	31	97
66	30	95
64	29	92
62	28	88
60	27	84
58	26	79
56	25	73
54	24	66
52	23	58
50	22	50
48	21	42
47	20	38
46	19	34
44	18	27
42	17	21
41	16	18
40	15	16
39	14	14
38	13	12
36	12	8
35	11	7
34	10	5
32	9	3
31	8	3
30	7	2
28	<7	1

FORM 2

SOCIAL-EMOTIONAL TOTAL

T-score _____
 Percentile _____
 Description _____

Appendix I. The Devereux Student Strengths Assessment, Mini – DESSA-Mini (Sample, Form 3) LeBuffe, Shapiro and Naglieri, (2009)



DESSA MINI
DEVEREUX STUDENT
STRENGTHS ASSESSMENT
K-8TH GRADE

Devereux Student Strengths Assessment-mini
(DESSA-mini)

Jack A. Naglieri, Paul A. LeBuffe, and Valerie B. Shapiro

FORM 3

Child's Name _____ Gender _____ DOB _____ Grade _____
 Person Completing this Form _____ Relationship to Child _____
 Date of Rating _____ School/Organization _____ Classroom/Program _____

This form describes a number of behaviors seen in some children. Read the statements that follow the phrase: *During the past 4 weeks, how often did the child...* and place a check mark in the box underneath the word that tells how often you saw the behavior. Answer each question carefully. There are no right or wrong answers. Please answer every item. If you wish to change your answer, put an X through it and fill in your new choice as shown to the right.

	Never	Rarely	Occasionally	Frequently	Very Frequently	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	0	1	2	3	4	

Item #	During the past 4 weeks, how often did the child...	Never	Rarely	Occasionally	Frequently	Very Frequently	Score
1.	show good judgment?	0	1	2	3	4	_____
2.	take steps to achieve goals?	0	1	2	3	4	_____
3.	try to do her/his best?	0	1	2	3	4	_____
4.	focus on a task despite a problem or distraction?	0	1	2	3	4	_____
5.	prepare for school, activities, or upcoming events?	0	1	2	3	4	_____
6.	do routine tasks or chores without being reminded?	0	1	2	3	4	_____
7.	learn from experience?	0	1	2	3	4	_____
8.	express high expectations for himself/herself?	0	1	2	3	4	_____

Raw Score Sum _____

Recommendations: _____

Apperson
SEL+

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FORM 3

NORMS TABLE FORM 3

T-score	Raw Score Sum	Percentile	
71	32	98	STRENGTH
69	31	97	
67	30	95	
65	29	93	
62	28	88	
60	27	84	
57	26	76	TYPICAL
55	25	69	
53	24	62	
52	23	58	
50	22	50	
49	21	46	
48	20	42	
47	19	38	
46	18	34	
44	17	27	
43	16	24	NEED
41	15	18	
40	14	16	
39	13	14	
38	12	12	
36	11	8	
35	10	7	
33	9	4	
32	8	3	
31	7	3	
29	6	1	
28	<6	1	

SOCIAL-EMOTIONAL TOTAL

T-score _____

Percentile _____

Description _____

Appendix J. Demographic Information Questionnaire for Parents

Dear Parents

In order to place your valuable information into a research context, I invite you to complete the following brief questions.

Which of the following best describes your family situation?

- Single parent family
- Two-parent family
- Other (please indicate)

Please indicate the birth order of the pre-primary child in your family.

- First child
- Second child
- Third child
- Fourth child
- Fifth child

Which ethnic group you best identify with?

Which main language do you speak at home with your child/children?

Mothers – is English your first language?

- Yes
- No (please state)

Fathers – is English your first language?

Yes

No (please state)

In order to place your information into a further research context, **please indicate the ages of the children in your family situation.**

Single child _____

First child's age _____

Second child's age _____

Third child's age _____

Fourth child's age _____

Fifth child's age _____

Please supply your email below for feedback and PRIZE DRAW

Thankyou
Nichola Webb

Clinical Psychologist

Appendix K. Information Form to School 1 (Main Study)

Dear Principal

Re: Approval to conduct research at _____ School.

I am currently completing a PhD in Psychology at Edith Cowan University and am investigating how the effects of an aligned partnership between parents and teachers in the development of social-emotional skills in young children. The research is being conducted under the supervision of Dr J.D and Dr E.S and has approval from the Edith Cowan University Human Research Ethics Committee.

My request at this time is whether your school may be interested in taking part in this new research which holds the potential for valuable contributions to early education.

You may be aware that existing research describes numerous benefits of social and emotional skill development in early childhood including the promotion of lifelong health, wellbeing and competence. A child's social-emotional development is essential to their ability to interact with others and form relationships. As such, it has been viewed as the building block of emotional intelligence in the early childhood years, leading to positive peer relationships and school preparedness. There exists an absence of studies however focussed on the combined childhood settings of home and school environments acting in aligned partnership to develop early childhood social-emotional skills.

My proposed research aims to investigate pre-primary children's social-emotional skills over time when parents undertake a social-emotional program at home (emotion coaching) in conjunction with a Kidsmatter PATHS social-emotional program implemented by teachers within the school classroom. There will also be further investigation as to whether these outcomes sustain into a new school year (year 1). The pre-primary cohort has been specifically chosen given the introduction of compulsory formal education in Western Australia commencing with the pre-primary year as of 2013. This new foundational entry point holds potential for examining important social-emotional developmental skills alongside the required academic benchmark achievement points within the Australian Curriculum.

It is hoped that the information obtained will provide new evidence for the benefits of a parent social-emotional program in collaboration with a school based social-emotional development program to nurture early childhood social-emotional skills and mental health. Results from the study may also have practical implications in relation to the Australian National Quality Standard and its Seven Quality Areas, one of which is the encouragement of Collaborative Partnerships with Families and Communities. Research has also shown that social-emotional skills acquired in childhood also support virtually every other aspect of a child's development such as learning, school readiness, cognitive and language development. It is hoped that this study may also make a contribution to the development of these specific skills important to education.

An external pilot study (separate to the current research) will be initially undertaken later this year with children in the community aged five -six years investigating the effectiveness of the parent social-emotional program (emotion coaching) intended for use with the current research study. These activities are user friendly, age appropriate, of an adequate time length and relevant for eliciting children's social-emotional responses with their caregiver. They will also be independently reviewed by 2 academics with early education knowledge prior to administration.

The intended study with your school will involve parent home participation in the above social-emotional program together with the implementation of a class based social-emotional program, PATHS, which has been well researched internationally within school contexts for over 20 years and is anchored in evidence-based practice using strong experimental designs.

Teachers will be given full training free of charge over one professional development day conducted by Statewide PATHS trainers and offered ongoing support with this program through the research period as they implement the lessons with their classes. Trainers have kindly offered to conduct this training on site at the school working alongside your school psychologist/s if preferred. PATHS lessons are designed to complement existing class lessons and are play-based. Administration time is approximately 20 minutes per lesson with two lessons suggested per week over the research period (May to October). This will complete Module One (three-six year olds) for the PATHS program consisting of a total of 44 lessons.

Teachers and parents will be required to complete a brief before and after questionnaire aimed at obtaining individual children's levels of social-emotional skill i.e., in March/April and again

in November/December. This will allow me to track their improvement upon completion of the programs. The questionnaire is specifically designed to be quick and easy to administer and will take teachers and parents one-two minutes to complete for each child. This means a class teacher will ideally be able to complete the questionnaires for all children in their class within approximately 40 minutes according to the research. Since I will be following this pre-primary cohort into their following year one class to track the sustained effects of the programs I will also require year one teachers to complete this one-two minute questionnaire in June of that year for all children in their classes. Once again this should ideally take 40 minutes of the teachers' time on that one occasion. All questionnaires and information obtained will be kept strictly confidential and destroyed appropriately after the legally required time period of seven years.

Parent's participation in the research would be entirely voluntary and as such they would be free to withdraw from the study at any time, without consequence. In order for parents and teachers to participate it would be necessary to obtain their written permission since confidential and potentially sensitive information may arise as a result of the questionnaire assessments and programs over the research period. Please find attached a sample consent letter and an informed consent statement to be given to parents.

I will also be required to meet with each of the parents engaged in the home program on an individual basis at the school prior to the research taking place for approximately 15 minutes in order to brief them about the activities they are required to undertake and to clarify any questions they may have. This will facilitate their understanding and participation in the program. At that time I will also request an email contact from each participating parent in order to offer ongoing support if required as they progress through their activities.

I have enclosed a copy of my research proposal which provides more detailed information. However, if you have any questions concerning the project please contact myself on Ph: XXXXX or either of my Phd supervisors Dr J.D at the School of Psychology and Social Sciences, Edith Cowan University on Ph: XXXXX or Dr E.S at the School of Education, Edith Cowan University on Ph: XXXXX. If you wish to contact someone who is independent of the research project, please contact the Edith Cowan University Research Ethics Officer, K.G (Ph: XXXXX).

At the conclusion of the study, a copy of the final results and report will be available to your school upon request.

I hope you and your staff will be interested in participating in this valuable, new research and I look forward to organising an opportunity to meet with you in person to discuss the finer details of the project.

Yours sincerely

Nichola Webb

Clinical Psychologist, PhD Candidate

Appendix L. Information Form to School 2 (Main Study)

Dear Principal

Re: Approval to conduct research at _____ School.

I am currently completing a PhD in Psychology at Edith Cowan University and am investigating the effects of an aligned partnership between parents and teachers in the development of social-emotional skills in young children. The research is being conducted under the supervision of Dr J.D and Dr E.S and has approval from the Edith Cowan University Human Research Ethics Committee.

My request at this time is to whether your school may be interested in taking part in this new research which holds the potential for valuable contributions to early education.

You may be aware that existing research describes numerous benefits of social and emotional skill development in early childhood including the promotion of lifelong health, wellbeing and competence. A child's social-emotional development is essential to their ability to interact with others and form relationships. As such, it has been viewed as the building block of emotional intelligence in the early childhood years, leading to positive peer relationships and school preparedness.

My proposed research at your school aims to investigate pre-primary children's social-emotional skills when parents undertake a social-emotional program at home (emotion coaching) compared with the natural maturation effects of social-emotional skills which occur over time. There will also be further investigation as to whether these outcomes sustain into a new school year (year one). The pre-primary cohort has been specifically chosen given the introduction of compulsory formal education in Western Australia commencing with the pre-primary year as of 2013. This new foundational entry point holds potential for examining important social-emotional developmental skills alongside the required academic benchmark achievement points within the Australian Curriculum. The intended study with your school will involve parent home participation in the above social-emotional program.

It is hoped that the information obtained will provide new evidence for the benefits of parent social-emotional programs to nurture early childhood social-emotional skills and mental

health. Results from the study may also have practical implications in relation to the Australian National Quality Standard and its Seven Quality Areas, one of which is the encouragement of Collaborative Partnerships with Families and Communities. Research has also shown that social-emotional skills acquired in childhood also support virtually every other aspect of a child's development such as learning, school readiness, cognitive and language development. It is hoped that this study may also make a contribution to the development of these specific skills important to education.

An external pilot study (separate to the current research) will be initially undertaken later this year with children in the community aged five-six years investigating the effectiveness of the parent social-emotional program (emotion coaching) intended for use with the current research study. These activities are user friendly, age appropriate, of an adequate time length and relevant for eliciting children's social-emotional responses with their caregiver. They will also be independently reviewed by two academics with early education knowledge prior to administration.

Teachers and parents will be required to complete a brief before and after questionnaire aimed at obtaining individual children's levels of social-emotional skill i.e., in March/April and again in November/December. This will allow me to track their improvement upon completion of the programs. The questionnaire is specifically designed to be quick and easy to administer and will take teachers and parents one-two minutes to complete for each child. This means a class teacher will ideally be able to complete the questionnaires for all children in their class within approximately 40 minutes according to the research.

Since I will be following this pre-primary cohort into their following year one class to track the sustained effects of the programs I will also require year one teachers to complete this one-two minute questionnaire in June of that year for all children in their classes. Once again this should ideally take 40 minutes of the teachers' time on that one occasion. All questionnaires and information obtained will be kept strictly confidential and destroyed appropriately after the legally required time period of seven years.

Parent's participation in the research would be entirely voluntary and they would be free to withdraw from the study at any time, without consequence. In order for parents and teachers to participate it would be necessary to obtain their written permission since confidential and potentially sensitive information may arise as a result of the questionnaire assessments and

programs over the research period. Please find attached a sample consent letter to be given to parents and teachers.

I will also be required to meet with each of the parents engaged in the home program on an individual basis at the school prior to the research taking place for approximately 15 minutes in order to brief them about the activities they are required to undertake and to clarify any questions they may have. This will facilitate their understanding and participation in the program. At that time I will also request an email contact from each participating parent in order to offer ongoing support if required as they progress through their activities.

I have enclosed a copy of my research proposal which provides more detailed information. However, if you have any questions concerning the project please contact myself on Ph: XXXXX or either of my Phd supervisors: Dr J.D at the School of Psychology and Social Sciences, Edith Cowan University on Ph: XXXXX or Dr E.S at the School of Education, Edith Cowan University on Ph: XXXXX. If you wish to contact someone who is independent of the research project about the study please contact the Edith Cowan University Research Ethics Officer, K.G (Ph: XXXXX).

At the conclusion of the study, a copy of the final results and report will be available to your school upon request.

I hope you and your staff will be interested in participating in this valuable, new research and I look forward to organising an opportunity to meet with you in person to discuss the finer details of the project.

Yours sincerely

Nichola Webb
Clinical Psychologist, Phd Candidate

Appendix M. Main Study Information Form to Parents (Parent Group)

Dear Parents/Guardians

I am currently completing a PhD in Psychology at Edith Cowan University and am investigating:

THE DEVELOPMENT OF SOCIAL-EMOTIONAL SKILLS IN YOUNG CHILDREN.

This research has been approved by the Edith Cowan University Human Research Ethics Committee. Your school principal and class teacher have also approved this research.

Why conduct this research?

You may be aware that research describes many benefits of social and emotional skills in early childhood including the promotion of lifelong health, wellbeing and skill competence over many areas. A child's social-emotional development is essential to their ability to interact with others and form relationships. As such, it has been viewed as the building block of emotional intelligence in the early childhood years, leading to positive peer relationships and school preparedness including learning, school readiness, cognitive and language development.

The research I am undertaking (at X School) over a nine month period is focussed on investigating pre-primary children's social-emotional skills. I am seeking your permission at this time for your child to be involved in this program. It is hoped that the results of the study will provide new evidence for the benefits of social-emotional programs to nurture early childhood social-emotional skills and mental health for the future.

Your pre-primary class has been chosen to undertake a parent home based social-emotional program.

The program with you at home

- The program's activities are fun, simple, interactive and take place with you at home. They have been developed to be easy to administer and are non-time consuming.

- Your participation in the research would be entirely voluntary and as such you would be free to withdraw from the study at any time, without consequence.
- Since your involvement in the home program is so important to the study, I would appreciate an opportunity to meet with you briefly for 15 minutes within school time (where possible) to take you quickly through the fun activities you will be doing with your child during the research period. Alternately, I am able to arrange to meet with you at a mutually agreeable time. This meeting is not intended to be time consuming or difficult but a chance to show you how it works and give you an added opportunity to ask me any questions you may have.
- A CD and workbook will be supplied to you at the meeting time. Each activity at home should only take approximately 15-20 minutes every two weeks.
- I will also be asking the teacher in your child's pre-primary class and yourselves as parents to additionally complete a very brief questionnaire about your child's social and emotional skills before the activities take place. This very simple questionnaire will take you one-two minutes and I will also ask you to complete it again in November/December when all the activities are finished. This will allow me to see how much your child has improved as a result of the home program being offered.
- Since I will be following your child's progress into their following school year (year 1), I will also require you to complete this very quick one-two minute questionnaire in June 2016. The year one class teacher at that time will also be asked to complete the same questionnaire for your child to track the ongoing effects of the program.

Confidentiality

Please be assured that all information will be kept in strict confidence with myself and my research team at the university at all times and not shared with any staff member or parent at your school. You may also withdraw your participation at any time. Once the research is completed all information collected will be appropriately destroyed after the legally required period of time.

Questions

If you have any questions concerning the project please contact myself on Ph: XXXXX or either of my Phd supervisors: Dr J.D at the School of Psychology and Social Sciences, Edith Cowan University on Ph: XXXXX or Dr E.S at the School of Education, Edith Cowan University on Ph: XXXXX. If you wish to discuss the research with someone who is independent of the project please contact the Edith Cowan University Research Ethics Officer, K.G (Ph: XXXXX).

At the conclusion of the study, I would be happy to provide you with a summary of your class progress should you wish upon request.

The incentives for completing your part in the research include:

- Firstly, you will be giving your child a great opportunity to enhance and develop important lifelong skills for mental health and resilience;

- Secondly, this research (with your valuable help) will be recognised in the wider community and potentially lead to similar programs in schools for early learning and development;

- Thirdly, you will be placed in the draw to win a \$100 Coles gift voucher upon completion of the two questionnaires and home parent program by December, 2015.

- Fourthly, you will be placed in the draw to win an Apple ipad mini upon completion of your final brief questionnaire in June 2016.

If you consent to your child's participation in the research, please sign the attached consent form and return to your child's teacher as soon as possible.

Yours sincerely

Nichola Webb
Clinical Psychologist, PhD Candidate

Appendix N. Main Study Information Form to Parents (Control Group)

Dear Parents/Guardians

I am currently completing a PhD in Psychology at Edith Cowan University and am investigating:

THE DEVELOPMENT OF SOCIAL-EMOTIONAL SKILLS IN YOUNG CHILDREN.

This research has been approved by the Edith Cowan University Human Research Ethics Committee. Your school principal and class teacher have also approved this research.

Why conduct this research?

You may be aware that research describes many benefits of social and emotional skills in early childhood including the promotion of lifelong health, wellbeing and skill competence over many areas. A child's social-emotional development is essential to their ability to interact with others and form relationships. As such, it has been viewed as the building block of emotional intelligence in the early childhood years, leading to positive peer relationships and school preparedness including learning, school readiness, cognitive and language development.

The research I am undertaking (at X School) over a nine month period is focussed on investigating pre-primary children's social-emotional skills. I am seeking your permission at this time for your child to be involved in this program. It is hoped that the results of the study will provide new evidence for the benefits of social-emotional programs to nurture early childhood social-emotional skills and mental health for the future.

Your pre-primary class will provide valuable information about how children's social-emotional skills develop naturally over time.

This means that I will be asking:

1. The teacher in your child's pre-primary class and yourselves as parents to complete a very brief questionnaire about your child's social and emotional skills before the research takes place. This very simple questionnaire will take you one-two minutes to complete and again in November/December when the research is finished. This will

allow me to see how much your child has improved naturally over the course of time with their social and emotional skills.

2. Since I will be following your child's progress into their following school year (grade one), I will also ask you to complete this very quick one-two minute questionnaire again in June 2016. The year one class teacher at that time will also be asked to complete the same questionnaire for your child.

Confidentiality

Please be assured that all information will be kept in strict confidence with myself and my research team at the university at all times and not shared with any staff member or parent at your school. You may also withdraw your participation at any time. Once the research is completed all information collected will be appropriately destroyed after the legally required period of time.

Questions

If you have any questions concerning the project please contact myself on Ph: XXXXX or either of my Phd supervisors: Dr J.D at the School of Psychology and Social Sciences, Edith Cowan University on Ph: XXXXX or Dr E.S at the School of Education, Edith Cowan University on Ph: XXXXX. If you wish to discuss the research with someone who is independent of the project please contact the Edith Cowan University Research Ethics Officer, K.G (Ph: XXXXX).

At the conclusion of the study, I would be happy to provide you with a summary of your class progress should you wish upon request.

The incentives for completing your part in the research will be:

Firstly, your child's inclusion in a new study which may potentially lead to social-emotional programs in schools for early learning and development.

Secondly, you will be placed in the draw to win a \$50 Coles gift voucher upon completion of your two questionnaires by December, 2015.

Thirdly, you will be placed in the draw to win a \$50 Coles gift voucher upon completion of your final brief questionnaire in June 2016.

If you consent to your child's participation in the research, please sign the attached consent form and return to your child's teacher as soon as possible.

Yours sincerely

Nichola Webb

Clinical Psychologist

PhD Candidate

Appendix O. Main Study Information Form to Parents (Combined Group)

Dear Parents/Guardians

I am currently completing a PhD in Psychology at Edith Cowan University and am investigating:

THE DEVELOPMENT OF SOCIAL-EMOTIONAL SKILLS IN YOUNG CHILDREN.

This research has been approved by the Edith Cowan University Human Research Ethics Committee. Your school principal and class teacher have also approved this research.

Why conduct this research?

You may be aware that research describes many benefits of social and emotional skills in early childhood including the promotion of lifelong health, wellbeing and skill competence over many areas. A child's social-emotional development is essential to their ability to interact with others and form relationships. As such, it has been viewed as the building block of emotional intelligence in the early childhood years, leading to positive peer relationships and school preparedness including learning, school readiness, cognitive and language development.

The research I am undertaking (at X School) over a nine month period is focussed on investigating pre-primary children's social-emotional skills. I am seeking your permission at this time for your child to be involved in this program. It is hoped that the results of the study will provide new evidence for the benefits of social-emotional programs to nurture early childhood social-emotional skills and mental health for the future.

Your pre-primary class has been chosen to undertake a 'combined' social-emotional program involving your class teacher and yourselves as parents at home.

This means that:

- The teacher in your child's class will be taking short lessons with all the children as a group designed to develop their social-emotional skills over the next nine months. These lessons are designed to enhance their social-emotions skills.

- As parents you are invited to undertake the all-important home based social-emotional program activities. These activities are fun, simple, interactive and take place with you at home. They have been developed to be easy to administer and are non-time consuming.
- Your participation in the research would be entirely voluntary and as such you would be free to withdraw from the study at any time, without consequence.
- Since your involvement in the home program is so important to the study, I would appreciate an opportunity to meet with you briefly for 15 minutes within school time (where possible) to take you quickly through the fun activities you will be doing with your child during the research period. Alternately, I am able to arrange to meet with you at a mutually agreeable time. This meeting is not intended to be time consuming or difficult but a chance to show you how it works and give you an added opportunity to ask me any questions you may have.
- A CD and workbook will be supplied to you at the meeting time. Each activity at home should only take approximately 15-20 minutes every few weeks.
- I will also be asking the teacher in your pre-primary class and yourselves as parents to also complete a very brief questionnaire about your child's social and emotional skills before the research takes place. This very simple questionnaire will take you one-two minutes to complete and again in November/December when all the activities are finished. This will allow me to see how much your child has improved as a result of the two programs (home and school) being offered.
- Since I will be following your child's progress into their following school year (grade one), I will also require you to complete this very quick one-two minute questionnaire again in June, 2016. Your child's year one class teacher at that time will also be asked to complete the same questionnaire for your child to track the ongoing effects of the program.

Confidentiality

Please be assured that all information will be kept in strict confidence with myself and my research team at the university at all times and not shared with any staff member or parent at your school. Once the research is completed all information collected will be appropriately destroyed after the legally required period of time.

Questions

If you have any questions concerning the project please contact myself on Ph: XXXXX or either of my Phd supervisors: Dr J.D at the School of Psychology and Social Sciences, Edith Cowan University on Ph: XXXXX or Dr E.S at the School of Education, Edith Cowan University on Ph: XXXXX. If you wish to contact someone who is independent of the research project, please contact Edith Cowan University Research Ethics Officer, K.G (Ph: XXXXX).

At the conclusion of the study, I would be happy to provide you with an individual summary of your child's progress should you wish upon request.

The incentives for completing your part in the research include:

- Firstly, you will be giving your child a great opportunity to enhance and develop important lifelong skills for mental health and resilience;

- Secondly, this research (with your valuable help) will be recognised in the wider community and potentially lead to similar programs in schools for early learning and development;

- Thirdly, you will be placed in the draw to win a \$100 Coles gift voucher upon completion of your two questionnaires and home parent program by December, 2015.

- Fourthly, you will be placed in the draw to win an Apple ipad mini upon completion of your final brief questionnaire in June 2016.

If you consent to your child's participation in the research, please sign the attached consent form and return to your child's teacher as soon as possible.

Yours sincerely

Nichola Webb

Clinical Psychologist, PhD Candidate

Appendix P. Main Study Information Form to Parents (Teacher Group)

Dear Parents/Guardians

I am currently completing a PhD in Psychology at Edith Cowan University and am investigating:

THE DEVELOPMENT OF SOCIAL-EMOTIONAL SKILLS IN YOUNG CHILDREN.

This research has been approved by the Edith Cowan University Human Research Ethics Committee. Your school principal and class teacher have also approved this research.

Why conduct this research?

You may be aware that research describes many benefits of social and emotional skills in early childhood including the promotion of lifelong health, wellbeing and skill competence over many areas. A child's social-emotional development is essential to their ability to interact with others and form relationships. As such, it has been viewed as the building block of emotional intelligence in the early childhood years, leading to positive peer relationships and school preparedness including learning, school readiness, cognitive and language development.

The research I am undertaking (at X School) over a nine month period this year is focussed on investigating pre-primary children's social-emotional skills. I am seeking your permission at this time for your child to be involved in this program. It is hoped that the results of the study will provide new evidence for the benefits of social-emotional programs to nurture early childhood social-emotional skills and mental health for the future.

Your pre-primary class has been chosen to undertake a social-emotional program with your child's class teacher.

This means that:

- The teacher in your child's class will be taking short lessons over the next nine months with all the children as a group which are designed to develop and enhance their social-emotional skills.

- I will be asking the teacher in your pre-primary class and yourselves as parents to complete a very brief questionnaire about your child's social and emotional skills before the class lessons take place. This very simple questionnaire will take you one-two minutes and I will also ask you to complete it again in November/December when the class lessons have finished. This will allow me to see how much your child has improved as a result of the in-class social-emotional lessons being offered.
- Since I will be following your child's progress into their following school year (grade one), I will also ask you to complete this very quick one-two minute questionnaire again in June, 2016. Your child's year one class teacher at that time will also be asked to complete the same questionnaire for your child to track the ongoing effects of the program.

Confidentiality

Please be assured that all information will be kept in strict confidence with me and my research team at the university at all times and not shared with any staff member or parent at your school. You may also withdraw your participation at any time. Once the research is completed all information collected will be appropriately destroyed after the legally required period of time.

Questions

If you have any questions concerning the project please contact myself on Ph: XXXXX or either of my PhD supervisors: Dr J.D at the School of Psychology and Social Sciences, Edith Cowan University on Ph: XXXXX or Dr E.S at the School of Education, Edith Cowan University on Ph: XXXXX. If you wish to discuss the research with someone who is independent of the project please contact the Edith Cowan University Research Ethics Officer, K.G (Ph: XXXXX).

At the conclusion of the study, I would be happy to provide you with a summary of your class progress should you wish upon request.

The incentives for completing your part in the research include:

Firstly, your child's inclusion in a new study which may potentially lead to social-emotional programs in schools for early learning and development.

Secondly, this research will be recognised in the wider community and potentially lead to similar programs in schools for early learning and development;

Thirdly, you will be placed in the draw to win a \$50 Coles gift voucher upon completion of your two questionnaires by December, 2015.

Fourthly, you will be placed in the draw to win a \$50 Coles gift voucher upon completion of your final brief questionnaire in June 2016.

If you consent to your child's participation in the research, please sign the attached consent form and return to your child's teacher as soon as possible.

Yours sincerely

Nichola Webb

Clinical Psychologist

Phd Candidate

Appendix Q. Consent Form to Parents (Main Study)

The Development of Social-Emotional Skills in Young Children.

I _____ (the parent/guardian) have read and understood the information provided with this consent form and any questions I have asked have been answered to my satisfaction.

I agree to allow my child _____ (name AND class) to participate in the in-class activities associated with this research. I also agree to complete the required brief questionnaire for my child before and after the program.

At the conclusion of the research project all information supplied in relation to my child will be destroyed after the required period of time.

I understand that I can withdraw consent at any time.

If I have any concerns or questions (or need for support completing my part in the research), I understand that I can contact the Principal Researcher Nichola Webb on Ph: XXXXX or nwebb2@our.ecu.edu.au

I agree that the research data gathered in this study may be published, provided my child and my child's school is not identifiable in any way.

Parent/Guardian's Signature

Date

If you require further information about this project please contact Nichola Webb (Ph: XXXXX), Dr J.D, School of Psychology and Social Sciences, Edith Cowan University (Ph: XXXXX) or Dr E.S, School of Education, Edith Cowan University (Ph: XXXXX) If you wish to contact someone who is independent of the research project about the study, please contact the Edith Cowan University Research Ethics Officer, K.G (Ph: XXXXX).

SOCIAL-EMOTIONAL STUDY 2015/2016

Nichola Webb
Clinical Psychologist, PhD Candidate
Edith Cowan University

School of Arts and Humanities

BACKGROUND

The study commenced in 2015 as part of a PhD thesis examining the effects of parents and teachers on pre-primary aged children's social-emotional skills across various group combinations. The following is a brief progress report of the research procedures which took place in 2015 and the outcomes so far.

**THE ROLE OF PARENTS IN CHILDREN'S SOCIAL-EMOTIONAL
DEVELOPMENT**

According to Eisenberg (2006) the central importance of emotion in childhood development is increasingly being emphasised given the significant changes which occur for children at this time including language, cognitive and social development which begin to expand and influence the development and refinement of emotions. Research has demonstrated that the home/family environment is important to this development together with the need strengthen parents'/caregivers' knowledge in this area.

Parents initially provide primary attachment figures for children and promote the understanding of basic emotions (Denham, 2000) and mixed emotions in early development (Steele, Steele, Croft & Fonagy, 1999). Research has demonstrated that social relationships, particularly with parents, contribute to a child's emotional development and provide the context within which children learn to understand and regulate emotion (Cole, Martin & Dennis, 2004). Parents may often also be life-experienced adults and as such may possess a more advanced knowledge of emotion and strategies for regulating emotions. This places them in a better position to initially teach emotional competence skills to children (Dunn, Brown, Slomkowski, Tesla & Youngblade, 1991). Consequently, parents have the capacity to provide children with valuable opportunities within which they can learn to interpret and synthesize emotion.

THE ROLE OF EDUCATION IN CHILDREN'S SOCIAL-EMOTIONAL DEVELOPMENT

According to Weissberg and Greenberg (1998) education should address the increasingly complex situations children face today regarding their academic studies, social relationships, health and the community, necessitating skills for negotiating diverse contexts and challenges within each developmental level. As such, social-emotional skills are important when children begin school and set the stage for early learning.

This has generally been challenging to accomplish within the education system (Denham, 2005) since there has been increasing pressure upon educators to meet various academic standards, leaving little time to develop social-emotional skills with children in the classroom setting. Research by Taylor and Dymnicki (2007) demonstrated that teachers have long recognised that it is not enough for children to simply acquire traditional cognitive/academic skills but that they also need to be able to choose and utilise this knowledge and skill in the broader context of their everyday lives.

It therefore follows, as recognised by Hinton, Miyamoto and Della-Chiesa (2008) that if schools are involved in intellectual development with children that they are also inherently involved in their social-emotional development.

AIM OF THE CURRENT RESEARCH

Given the recognised importance and benefits of social-emotional skill development for children within the home and education school environments and the risks associated with its absence, there is a need for continued research into supporting parents and teachers to promote these skills for children beyond the academic requirements.

The current study examined the effects of parents and teachers in the development of social-emotional skills with pre-primary aged children across various group combinations i.e.,

- A teacher only social-emotional program (Promoting Alternative Thinking Strategies).
- A parent only social-emotional program (manual developed by the researcher).

- A combined teacher and parent program (Promoting Alternative Thinking Strategies and parent manual).
- A control group (no program offered).

The pre-primary year was selected given that children's entry into formal schooling took place within this year. As such, a sound social-emotional foundation may be required in order to take on wider inter-personal and academic challenges.

RESEARCH METHOD

SCHOOLS

Two private, independent, co-educational K-12 metropolitan primary schools in Perth, Western Australia were selected for the study. The schools were in neighbouring suburbs with similar socio-economic populations for children attending. The schools' religious denominations were also similar.

STUDENTS AND PARENTS

Pre-primary year children were the focus of the study, comprising two pre-primary classes per school i.e., a total of four pre-primary classes took part in the study. Ninety children and parents agreed to participate in the study from February, 2015 to October, 2015.

TEACHERS

Four pre-primary teachers participated in the study with each teacher assigned to one of the four groups.

MATERIALS

Four resources were used in the study.

1. *The Devereux Student Strengths Assessment (DESSA) Mini (LeBuffe, Shapiro & Naglieri, 2009).*

In February and October, 2015 all teachers and participating parents were asked to complete the DESSA-mini questionnaire. Designed for use with children in kindergarten through to year eight, the DESSA-mini supports universal screening, assessment, intervention planning, progress monitoring and outcome evaluation in the social-emotional domain. It has been designed to help schools meet emerging social-emotional learning standards and can also be completed by parents. It contains four eight-item behaviour rating scales.

2. *Demographic Information Questionnaire*

Parents were asked to complete a brief one page form alongside their DESSA questionnaires, requesting demographic information. This was important in placing the information into context in terms of family configuration and ethnic origin, language spoken at home and birth order of the pre-primary child in their family.

3. *PATHS (Promoting Alternative Thinking Strategies), Kusche and Greenberg (1994).*

Module 1 of PATHS (ages 3-6 years) was used as the social-emotional program for the classroom. The PATHS curriculum as a whole presents a coherent and complex model of emotional development in education, developed with reference to developmental models of competencies. It has been well researched internationally within school contexts for over 20 years and is anchored in evidence-based practice using strong experimental designs. PATHS has been found to have a positive impact on emotional understanding, interpersonal skills and behaviour with children (Kelly, Longbottom, Potts & Williamson, 2004). At the core, PATHS is based on the proposal that a child's adaptation is a function of both their individual skill level together with the environmental context in which they reside (Bronfenbrenner & Crouter, 1983; Cicchetti & Toth, 1997).

According to Domitrovich, Cortes and Greenberg (2007), the program expands on existing social-emotional developmental tools within the classroom by including instruction in multiple skill domains delivered in a developmentally appropriate sequence, allowing for continuity

across year levels. PATHS developers report on an emotional component to the program which emphasizes affective awareness in oneself and others while supporting children's abilities to self-regulate through meaningful real-life opportunities. This allows for generalization of these skills through activities that highlight writing, reading, storytelling, singing, drawing, science and maths concepts. PATHS is currently used in selected Perth schools, typically as a whole-school approach.

4. Parent social-emotional skills manual

A social-emotional skills manual for parents was developed by the researcher. This manual contained five social-emotional skill activities and a demonstration DVD.

PROCEDURE

Following ECU ethics approval, the study commenced in week four of the new school year in 2015 which allowed for children, teachers and parents to settle in and also for teachers to develop important child-teacher relationships which would facilitate the study. The procedure took place as follows:

Initial Assessments - Teachers and parents from all four groups completed the DESSA questionnaire for each participating child at the commencement of the study in February, 2015.

Teacher Training - PATHS training was provided to designated class teachers over one day of professional development. This training was conducted independently by Statewide PATHS Project Trainers.

Social-emotional programs - Following the initial DESSA assessments with teachers and parents, the social-emotional programs were initiated in March, 2015 and undertaken over a nine month period. Parents and teachers completed a second DESSA questionnaire in October, 2015.

RESULTS

The first aim of the study was to examine whether the parent and teacher social-emotional programs enhanced pre-primary children's social-emotional skill development over the proposed nine month intervention phase. Specifically, it was anticipated that the highest social-

emotional improvements would be achieved for children in the combined (parent plus teacher) group, followed by the teacher, parent and finally control groups. Overall, teachers' and parents' ratings following the interventions reflected improvements in social-emotional skills for all children in the study over nine months. The most significant improvements were seen however for children in the combined (parent plus teacher) group, which supports the expectation of the study at this point.

FOLLOWUP ASSESSMENTS IN 2016

Teachers and parents from all four groups will be given a final DESSA questionnaire to complete in **May 2016** for participating children who will then be in year one. This will provide information about the sustained effects of the social-emotional interventions from 2015 and will therefore complete the ECU study.

Final outcomes and further details will be reported in June, 2016.

The Development of Social-Emotional Skills in Pre-Primary
Children: A Comparison of Parent, Teacher and Combined Coaching
Programs.



Acknowledgements

Thankyou to the principals and teachers who participated in the study.

Sincere gratitude to the parents and children who took part in the study and shared their thoughts, feelings and experiences. Their trust in the research program and willingness to stay involved over 18 months is truly appreciated.

EXECUTIVE SUMMARY

In 2015, Edith Cowan University researchers conducted a research project as part of a PhD study to investigate the impact of parents and teachers on the development of **social-emotional skills in pre-primary aged children** using two social-emotional development programs in various combinations.

Parents' perceptions of their children's social-emotional skill development through the research project was also examined together with **parents' social-emotional experiences** from their own families of origin. The latter explored the extent to which parents were consequently able to develop social-emotional skills with their children in the study.

The researchers found that even after a limited nine month exposure to social-emotional training at home and/or at school, the children benefitted, with **the most successful intervention being that of a 'combined teacher + parent approach'**.

The findings were consistent with existing research in **multi-focussed classroom interventions for social-emotional skill development** which shows that the transfer and generalisation of acquired social-emotional skills for children between the home and classroom settings are more effective with combined interventions (Hughes, Cavell, Meehan, Zhang & Collie, 2005). Additionally, past findings

demonstrated that multi-focussed approaches comprising child-centred activities within a curriculum, teacher training and parent training are the most likely combination of elements to effect child outcomes (Ştefan & Miclea, 2012).

Our study also showed the **impact of professional learning for parents** in being able to adopt new practices for developing positive social-emotional skills with their children. Professional learning complemented the social-emotional skills being taught in the classroom. An unexpected finding included those parents who developed positive parenting practices through the program despite originating from negative family influences.

BACKGROUND TO THE RESEARCH

THE ROLE OF PARENTS IN CHILDREN'S SOCIAL-EMOTIONAL DEVELOPMENT

The central importance of emotion in childhood development is increasingly being emphasised given the significant changes which occur for children at this time. Such changes include language, cognitive and social development which can influence the development and refinement of emotions for children. Research has shown that the home/family environment is important to this social-emotional development together with the need to strengthen parents'/caregivers' knowledge in this area.

Parents provide primary attachment figures for children and promote the understanding of basic emotions (Denham, 2000) and mixed emotions in early development (Steele, Steele, Croft & Fonagy, 1999). Research shows that social relationships, particularly with parents, contribute to a child's emotional development and provide the context within which children learn to understand and

DEVELOPMENT OF SOCIAL-EMOTIONAL SKILLS IN CHILDREN

regulate emotion (Cole, Martin & Dennis, 2004). Parents as life-experienced adults possess more advanced knowledge of emotion and strategies for regulating emotions than their children. This places them in a better position to initially teach emotional competence skills to children (Dunn, Brown, Slomkowski, Tesla & Youngblade, 1991). Consequently, parents have the capacity to provide children with valuable opportunities within which they can learn to interpret and synthesize emotion.

THE ROLE OF EDUCATION IN CHILDREN'S SOCIAL-EMOTIONAL DEVELOPMENT

According to Weissberg and Greenberg (1998) education should address the increasingly complex situations children face regarding their academic studies, social relationships, health and the community, necessitating skills for negotiating diverse contexts and challenges within each developmental level. As such, social-emotional skills are important when children begin school and set the stage for early learning.

This has generally been challenging to accomplish within the education system (Denham, 2005) since there has been increasing pressure upon educators to meet various academic standards, leaving little time to focus on developing social-emotional skills with children in the classroom setting. Research by Taylor and Dymnicki (2007) shows that teachers have long recognised that it is not enough for children to simply acquire traditional cognitive/academic skills but that they also need to be able to choose and utilise this knowledge and skill in the broader context of their everyday lives. It therefore follows, as recognised by Hinton, Miyamoto and Della-Chiesa (2008) that if schools are involved in intellectual development with children they are also inherently involved in their social-emotional development.

Given the recognised importance and benefits of social-emotional skill development for children within the home (with parents/caregivers) and school environments (with teachers) there is a need for continued research examining how parents and teachers promote these skills for children beyond the academic requirements.

Previous studies have examined the influences of parents, teachers and peers on social-emotional skill development compared with control groups however they have either focussed on high risk child populations or compared these influences with each other in a limited way. There was a clear need to purposefully explore the separate influences of teachers and parents on social-emotional skill development in addition to a combination of these influences with a control group, focussing on low risk children within a general classroom population.

The current study addressed this gap and investigated the extent to which each separate or combined element of 'teacher' and 'parent' influenced children's social-emotional development when focussing on a general classroom setting. The study was the first known investigation of its kind using this unique combination of groups and within an Australian school population. Additionally, the study focussed on social-emotional competency outcomes for children as opposed to the social-behavioural outcomes examined in previous research.

THE RESEARCH PROJECT

The study took place in 2015 and 2016 as part of a Clinical Psychology PhD thesis. We examined

DEVELOPMENT OF SOCIAL-EMOTIONAL SKILLS IN CHILDREN

whether home based (parent) and school based (teacher) social-emotional programs enhanced pre-primary children's social-emotional skills using a multi-focussed primary prevention approach over the course of a school year. The effects of these programs after six months were also investigated. The pre-primary age group was selected given that children's entry into formal schooling in Australia took place within this year.

Parent perceptions of their children's social-emotional skill development through the parent program were additionally examined together with the extent to which parents were influenced by their own family of origin social-emotional experiences in childhood. The impact of this upon their ability to develop social-emotional skills with their children in the study was further explored.

RESEARCH APPROACH

Four group combinations were formed i.e;

- A teacher only social-emotional program (Promoting Alternative Thinking Strategies, PATHS).
- A parent only social-emotional program (a parent manual developed by the researchers).
- A combined teacher and parent program (PATHS plus the parent manual).
- A control group (no program offered).

RESEARCH METHOD

SCHOOLS

Two private, co-educational K-12 metropolitan primary schools in Perth, Western Australia were

selected for the study. The schools were in neighbouring suburbs with similar socio-economic populations for children attending. The schools' Christian-based religious denominations were also similar.

STUDENTS AND PARENTS

Pre-primary children in four classes took part in the study i.e., two classes per school. Eighty six children and parents completed the study.

TEACHERS

Four pre-primary teachers in the two schools participated in the study (one teacher per class). An additional four, year one teachers in the two schools provided follow up assessments (again, one teacher per class).

MATERIALS

Four resources were used in the study. These are described below.

The Devereux Student Strengths Assessment (DESSA) Mini (LeBuffe, Shapiro & Naglieri, 2009).

Teachers and participating parents completed the DESSA-mini questionnaire. Designed for use with children in kindergarten through to year eight, the DESSA-mini supports universal screening, assessment, intervention planning, progress monitoring and outcome evaluation in the social-emotional domain. It has been designed to help schools meet emerging social-emotional learning standards and can also be completed by parents. It contains four eight-item behaviour rating scales.

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Demographic Information Questionnaire

Parents completed brief demographic information about their child and family. This was important in placing the information into context in terms of: family configuration, ethnic origin, language spoken at home and birth order of the pre-primary child in their family.

PATHS (Promoting Alternative Thinking Strategies), Kusche and Greenberg (1994).

Module One of the PATHS program (ages three-six years) was used as the social-emotional program for the classrooms. The PATHS curriculum as a whole presents a coherent and complex model of emotional development in education, developed with reference to developmental models of competencies. It has been well researched internationally within school contexts for over 20 years and is anchored in evidence-based practice using strong experimental designs. PATHS has been found to have a positive impact on emotional understanding, interpersonal skills and behaviour with children (Kelly, Longbottom, Potts & Williamson, 2004). At the core, PATHS is based on the proposal that a child's adaptation is a function of both their individual skill level together with the environmental context in which they reside (Bronfenbrenner & Crouter, 1983).

According to Domitrovich, Cortes and Greenberg (2007), the program expands on existing social-emotional developmental tools within the classroom by including instruction in multiple skill domains delivered in a developmentally appropriate sequence, allowing for continuity across year levels. PATHS developers report on an emotional component to the program which emphasizes affective awareness in oneself and others while supporting children's abilities to self-regulate

through meaningful real-life opportunities. This allows for generalization of these skills through activities that highlight writing, reading, storytelling, singing, drawing, science and maths concepts.

Parent social-emotional skills manual

A social-emotional skills manual for parents was developed by the first author. This manual contained social-emotional skill activities and a demonstration DVD. The skills were largely cumulative and sequential with maturation from basic skill levels, assisting children to blend emotions, increase emotional knowledge, emotional expression and to develop self-regulation and problem solving skills through the progressive activities. They were designed to be consistent with developmental milestones and complementary to the classroom-based PATHS program.

PROCEDURE

Following university ethics approval, the study commenced in 2015. All parent, child and teacher information was kept private and confidential. The procedure took place as follows:

Initial Assessments - Teachers and parents from all four groups completed the DESSA-mini questionnaire for each participating child at the commencement of the study in February, 2015 (time 1).

Teacher Training - PATHS training was provided to pre-primary teachers undertaking this program in the study over one day of professional development. This training was conducted independently by Statewide PATHS Project Trainers.

DEVELOPMENT OF SOCIAL-EMOTIONAL SKILLS IN CHILDREN

Social-emotional programs - The home and school social-emotional programs were initiated in March, 2015 and undertaken over a nine month school period. Parents and teachers completed a second DESSA-mini questionnaire in October, 2015 upon conclusion of these programs (time 2).

FOLLOWUP ASSESSMENTS

Teachers and parents from all four groups were given a final DESSA-mini questionnaire to complete for participating children who had progressed to year one in 2016 (time 3). This provided information about the sustained effects of the social-emotional programs from 2015.

Parent Manuals

Parents' perceptions of their children's social-emotional skills were obtained upon completion of the parent program in 2015 through written reflective comments and rating scales. Experiences from their families of origin were also explored to investigate the extent to which parents were consequently able to develop social-emotional skills with their own children in the study.

RESEARCH FINDINGS

As expected, the outcomes for parents and teachers showed that the intervention groups undertaken at School 1 (the teacher program and the combined teacher + parent program) were the most successful in developing social-emotional skills with children after nine months of intervention compared with those undertaken at School 2 (the control group and the parent program only group). **The combined group proved the most successful overall, followed by the teacher program, parent program and lastly the control group.**

Figure 1. shows the teacher ratings at time 1 (before the study took place), at time 2 (upon conclusion of the programs) and at time 3 (six months after the programs when children were in year 1). Figure 2. shows the same three time periods, however for the parent ratings.

The parent program results revealed that **parents were able to develop the social-emotional skills of emotion labelling, emotion regulation and emotion problem solving with their children by the end of the school year** (time 2).

Furthermore, **parents were influenced by their family of origin social-emotional practices growing up** in relation to the degree of awareness shown by family members to emotional issues, emotional management practices and the level of emotional validation expressed amongst family members.

DISCUSSION OF RESEARCH FINDINGS

The results support the view that there is a transfer and generalisation of acquired social-emotional skills from the classroom to home setting especially and also indicates the strength of both programs used together (school and home).

Of note also, is that teachers rated children higher in their groups overall as opposed to parents. This is likely given teachers' specialist ability to implement new skills within a more structured environment.

After a further six months however, outcomes for all children in both schools decreased which indicated poor maintenance effects. This may

DEVELOPMENT OF SOCIAL-EMOTIONAL SKILLS IN CHILDREN

highlight a need for longer group programs for skill development and consolidation over time.

LIMITATIONS AND STRENGTHS

A recognised limitation of the study is that School 1 requested to participate in the classroom programs and therefore schools were not randomly assigned to the groups. Being involved in the PATHS program or in a school environment which emphasised social-emotional development may have influenced teachers in School 1 to rate children more positively than teachers at School 2.

Additionally, the program's intervention period of nine months may have been too short to allow for sustained maintenance effects. Also, when evaluating these maintenance effects it is worth noting that these might reflect the impact of new teacher and peer relationships formed in the initial months of the following new school year. This may have caused some uncertainty for children as they adjusted to new teaching styles and peer dynamics. In turn, this may have temporarily impacted on their social-emotional skills at school and at home and contributed to a decrease in social-emotional skill seen at the maintenance period (time 3). Similarly, there may have been limited time for year one teachers to get to know their students when rating their social-emotional skills. That is, year one teachers rated students after only three months of schooling compared to pre-primary teachers who rated their children after nine months.

A notable strength was the overall gain in social-emotional skills for children in all experimental groups by the conclusion of the program (at time two) and also six months after the program even despite the drop in results at that end time point (time

three). The effects of 'natural maturation of social-emotional skills' over time may be eliminated as a possible reason for these improvements given that the control group did not show such gains compared to the intervention programs overall.

IMPLICATIONS FOR PRACTICE

The study highlighted the importance of social-emotional programs in schools and the particular impact of combined 'multi-focussed' approaches such as those of teacher + parent.

Additionally, the importance of professional learning was noted, with skills such as emotion coaching training for parents being valuable for developing positive social-emotional skills with children.

SUGGESTIONS FOR FUTURE RESEARCH

It is recommended that a longer time frame be employed for future intervention programs in schools (more than nine months) in order to determine whether this might elicit longer lasting effects. This is especially relevant in the early learning years where foundational social-emotional skills require more time to develop. Stronger incentives for parents to participate is also suggested to encourage social-emotional skill development for children and to facilitate the transfer of these skills between the home and school settings.

Feedback from School 1 indicated that the teacher (PATHS) program did not contain sufficient material on managing bullying. As such, teachers

DEVELOPMENT OF SOCIAL-EMOTIONAL SKILLS IN CHILDREN

supplemented the PATHS program with additional material on bullying and will continue to do so in the future when using the PATHS program. Feedback from School 2 indicated that parent encouragement to return manuals proved difficult and resulted in decreased participation numbers.

CONCLUSION

Overall, the study suggests that even after a short nine month exposure to social-emotional programs at home and/or at school that children benefitted from social-emotional skills training, with the most successful combination being that of a 'combined' approach i.e., teacher + parent program, as the study expected.

The study also demonstrated the impact of professional learning for parents in being able to adopt new practices for developing positive social-emotional skills with their children which can thereby complement any social-emotional skill training being taught in the classroom.

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Figure 1. Teacher ratings for all Groups at Time 1, 2 and 3.

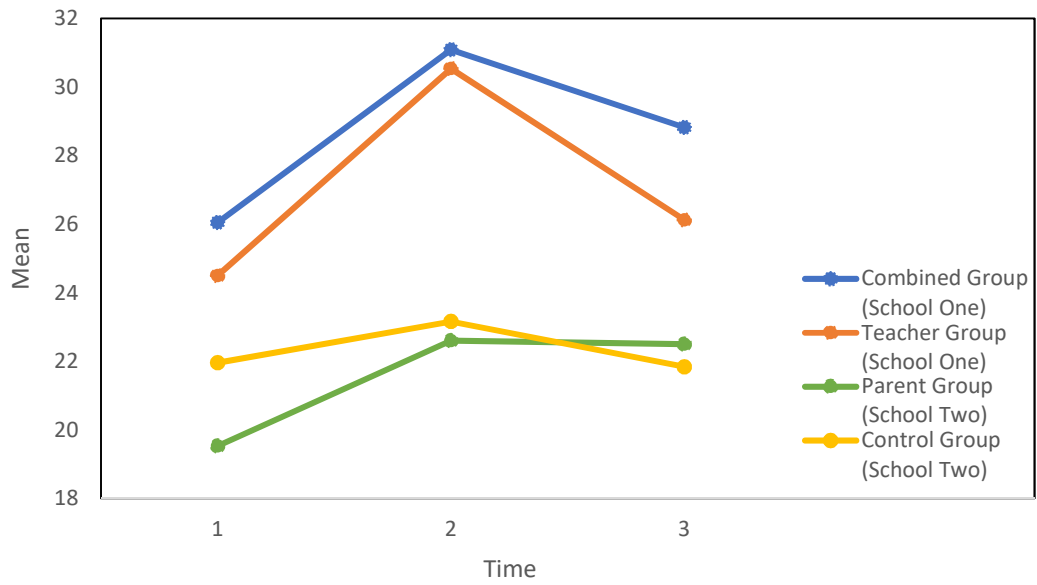
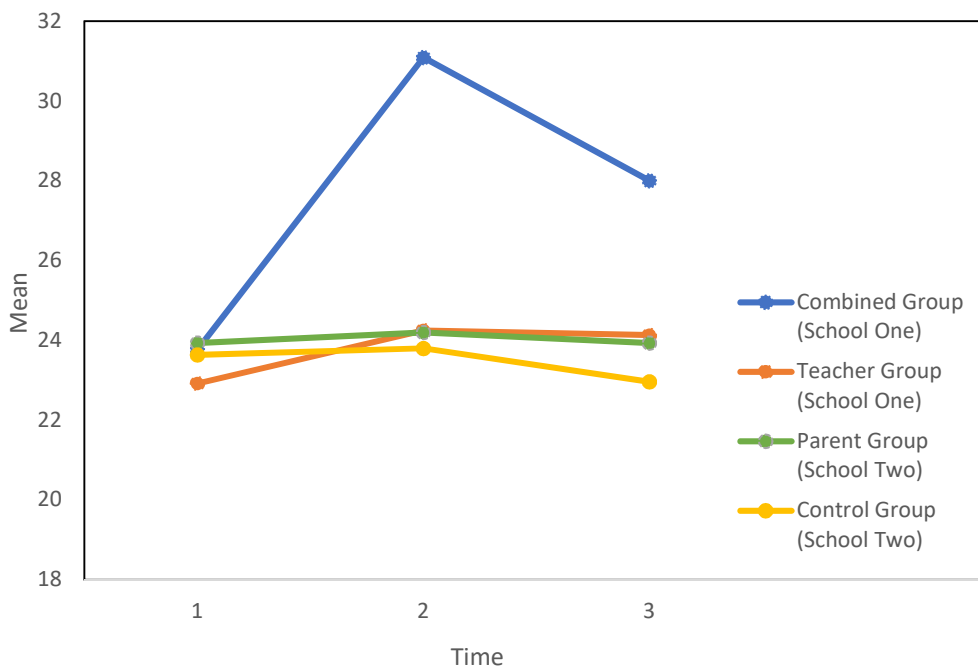



Figure 2. Parent ratings for all Groups at Time 1, 2 and 3.



DEVELOPMENT OF SOCIAL-EMOTIONAL SKILLS IN CHILDREN



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