I WONDER WHAT IS INSIDE?

THE ROLE OF IMAGINARY PLAY IN

YOUNG CHILDREN'S DEVELOPMENT OF

EMOTION REGULATION

A thesis presented in partial fulfilment

of the requirements for

the degree of

Master of Arts in Psychology

at

Massey University, Wellington,

New Zealand

by

Johanna Alice Pibal

June, 2008

Abstract

Imaginary play is one form of social interaction whereby young children are able to develop skills and strategies for regulating emotions. This research aimed to extend an earlier study (Galyer & Evans, 2001), and further explore the relationships between children's play, emotion regulation and social skills, within a natural setting and in a wider context. The participants were 40 preschool boys and girls who were assessed by means of the imaginary play questionnaire, Emotion Regulation Checklist, Social Skills Rating System: Preschool Form, as well as observations of imaginary play, emotion regulation, and social skills within storytelling and imaginary play activities. Children with more positive emotion regulation skills had well developed assertive and cooperative skills while their assertive, cooperative and self control skills were all related. The imaginary play activity showed children who continued pretence and who were less reliant on visual confirmation were more able to regulate their emotions. The findings add further support for the relationship between imaginary play and emotion regulation, however additional research is recommended to define the qualities of the parent's/caregiver's and children's social interaction within imaginary play and how this influences children's development of emotion regulation.

Acknowledgements

Foremost, I would like to thank Professor Ian Evans who allowed me the opportunity to undertake this thesis. I have really appreciated the ideas, guidance and support from a wise, very clever and still very human man. The process and the end product have provided me with invaluable learning on many levels, as a result of Ian's supervisory approach.

I would like to thank the Hutt Playcentre Association for approving this research within the Playcentres. I am also very grateful to all the parents/caregivers, children and teachers within the Playcentres who participated. Not only was I able to gather important information but I was also warmly welcomed into Playcentres. It has been a very reassuring experience to observe and interact with so many healthy cared for children.

I would also like to thank my partner Grant for believing in me, my three children for inspiring me, my family for enquiring about my progress, Lucy for 'knowing' and encouraging me and Peggy for reassuring me.

Contents

List of Tables

List of Figures

List of Appendices

Foreword

My interest in young children and families began when I became a mother. Having children allowed me opportunities to interact with a wide range of people due to wanting to provide varied learning experiences for my children. The most important learning experience for my young children and for myself was with Playcentre.

Within the twelve years that I was an adult member of Playcentre, I was able to experience many roles at Centre and Association levels including parent, student, tutor, education convenor and honorary advisor, to mention a few. The various roles enabled me to observe and interact with diverse groups of children and families, both informally and formally through receiving and providing early childhood education. Every one of the roles I undertook gave me a different perspective on the relationships between parents/caregivers and children.

When working in Playcentres I would notice the children and families who needed extra care and support. I came to realise that career wise I didn't want to give a little to many of people, rather, I wanted to work professionally with fewer families giving them as much specialised help as possible. I started studying at universities, as I wanted evidence-based knowledge to complement my experience in order to develop a competent, respectful working approach. The training and qualifications I have completed include the Playcentre Federation Certificate, BA psychology/education, BA (Hons.) psychology, Postgraduate Certificate in Child Mental Health, Family Therapy Certificate and now an MA psychology, which together with my early childhood experience have given me a solid foundation for beginning specialised work with children and families.

For the past few years I have been employed as a Child and Family Therapist, providing parent education programmes for groups of parents (usually Child, Youth and Family Services referred), and assessments/interventions for individual children and families. Parents or other involved agencies make contact, as they are concerned about children who are generally presenting with emotional difficulties and accompanying behaviours. As parents and their relationships with the children are hugely influential on children's development, I have always included them in the process. The goals we set, learn about, and practice within our time together are always more readily achieved when the parents are 'on the same page', when everyone feels valued and supported, and when the learning is transferred and reinforced in the home.

Every intervention has included at least one aspect of learning about managing emotions. Whether the overwhelming, unpleasant emotions present through anger, anxiety, or grief, children and their families need extra help learning to recognise how they feel, what their emotions are named, how to regulate the level of arousal, and how to appropriately express or communicate their emotions within the context of their family, and elsewhere.

In an ideal world there would not be a need to provide interventions for children who are yet to develop adequate strategies and skills for managing their emotional experiences; unfortunately this is not the case. The next best approach for helping children is a preventive one. By studying young children's normative development and gaining understanding of influential variables, it becomes possible to educate parents/caregivers with evidence-based knowledge that informs their social interaction with children, thereby enhancing children's development. Hence, the focus of this research is young children's development of emotion regulation.

Introduction

The human experience of emotion has been a longstanding area of interest both within the lay community and the academic world. Although there are individual and cultural differences in beliefs regarding emotions, people generally tend to seek out opportunities that evoke pleasant emotions, and avoid experiences that may result in unpleasant emotions. Emotions can be thought of as an internal monitoring system that informs us of potential or actual comfort or discomfort, and even safety. Being able to adjust the intensity of emotional arousal to a level that is tolerable yet flexible enough to enable adaptive behaviour has been referred to as emotion regulation in much of the literature. Competency in emotion regulation is considered to be a fundamental aspect of positive mental health.

Limited development of the ability to regulate emotions can have far reaching implications, which present as emotional and behavioural difficulties from early childhood to adulthood. Various difficulties associated with emotion regulation can stem from an infant's biological predispositions and parent/caregiver responsiveness (Zeidner, Matthews, Roberts, & MacCann, 2003), yet it can also emerge from constraints in language and social skills (Calkins, 1994). Without the successful acquisition of adequate emotion regulation skills and strategies in childhood, individuals are more vulnerable to developing mood disorders such as anxiety and depression as they reach adolescence or adulthood.

Along with recognition that the ability to regulate emotional arousal begins to develop in early childhood, comes an appreciation of the important role that parents[1] provide in assisting this development. Social interaction between parents and children brings many opportunities for children's socio-emotional learning, which is primarily through the modes of language, modelling/observation and reinforcement

---

[1] Parents also includes legal guardians and de facto caregivers.

(Eisenberg, et al., 2003; Galyer, & Evans, 2001; Zeidner, et al., 2003). Although the child's learning of emotion regulation can occur through social interaction in everyday living, one particularly influential means of learning to regulate emotional arousal is through imaginary play (Berk, 2004; Cutting, & Dunn, 2006; Galyer, & Evans).

Imaginary play has been identified in previous literature as being a learning context that has great potential for children's development of emotional regulation skills (Berk, 2004; Galyer, & Evans, 2001; Lindsey, & Colwell, 2003; Russ, 2004), especially when experienced play partners are involved (Galyer, & Evans). As intense emotions are interwoven throughout children's imaginary play experiences, learning to regulate emotional arousal within this process is highly probable.

Research-based knowledge of the role of imaginary play and the development of emotion regulation and social skills is potentially of great value for parents who are committed to encouraging children's optimal development of emotion regulation, alongside support for professionals who provide play therapy interventions for children who need extra assistance in this area of development.

Emotion in Children's Development

The concept of emotion regulation has been receiving considerable attention due to changes in perceptions and definitions regarding emotions (Gross, 1999; Keltner, & Gross, 1999; Thompson, 1994). Previously, the approach towards understanding emotional development was primarily focused on intra-personal processes such as the regulation of the intensity of a discrete set of feelings and the management of their expression. More recently however, the focus has shifted towards a functional approach, in which the relationships between people and their environments provide further context for exploring and understanding emotions and their development (Campos, Mumme, Kermoian, & Campos, 1994).

The earlier emphasis on intra-personal processes provided physiological descriptions of neural activity, and descriptions of behaviours, facial expressions and moods that were labelled and categorised into a limited set of distinct affect states by psychologists and psychiatrists (Kagan, 1994). This set of affect states was further differentiated by the notion of the existence of "bad" feelings like anger, disgust and fear, and "good" feelings like excitement, joy and love (Campos, Frankel, & Camras, 2004), or, as otherwise described by Kagan, feelings of "displeasure" or "pleasure."

Although labelled affective states can provide a reasonable starting point for general communication regarding emotions, the potential for subjectivity is vast and ever-present, and consequently there has been much debate in psychology and other related professions regarding the validity of the categorisation of emotions based on response characteristics (Matthews, Zeidner, & Roberts, 2002; Keltner, & Gross, 1999). The need for the development of a credible framework that enables objective understanding and communication of individual experiences of emotions became clear (Kagan, 1994), bringing a change of focus in the classification of emotions from response characteristics to that of functions (Keltner, & Gross).

The functionalist approach to emotions provides a framework for understanding emotions in a relational context (Campos, et al., 1994; Campos, et al., 2004; Keltner, & Gross, 1999; Mayer, Salovey, Caruso, & Sitarenios, 2001; Thompson, 1994). Functions themselves are proposed to be systems in which causes and particular consequences for goal-directed behaviours are contained (Keltner, & Gross). It is therefore important to understand the functions that certain behaviours may fulfil in order to attempt interpretation of an individual's experience of emotions (Campos, et al., 2004).

The relational phenomenon of emotion is thought to be the outcome from a person-event transaction that is of particular significance to the individual (Campos,

et al., 1994; Campos, et al., 2004). So central is this relational context of emotion that Campos, et al., (1994) described the individual and the event as an "indissociable whole". It appears that the meaning of the event for the individual determines the emotion that is experienced (Campos, et al., 1994). Why then, might a person-event transaction be considered significant to an individual?

Keltner and Gross (1999) contend that person-event transactions hold importance for an individual when the context is one of adaptation to challenges and opportunities to physical and social survival within the human environment. Challenges and opportunities can arise through person-event transactions that are related to goals, hedonism, social communication, or memories of past experiences (Keltner, & Gross).

The intensity and quality of an individual's emotion can be influenced through the potential or actual effectiveness of an event contributing to a goal (Campos, et al., 1994; Campos, et al., 2004). For instance, if a child has the goal of winning the birthday party game of Pass the Parcel, the potential of achieving this goal through the behavioural event of participation would arouse either anticipation or excitement. The event of passing the parcel to the next child would block the goal resulting in disappointment, and the event of opening the last layer of wrapping would achieve the goal, thus inducing happiness.

Hedonism can contribute to the generation of emotion in terms of motivation. Previous stimulation of auditory, olfactory, tactile and visual senses, that have resulted in pain or pleasure tend to motivate aversion or desire respectively, when the potential for similar experiences arise (Campos, et al., 1994; Campos, et al., 2004). The child who has previous experience of disappointment for not winning Pass the Parcel may have some aversion to playing the game again, whereas the child

who has previous experience of happiness from winning the game will be more likely to have a desire to play.

Social communication can also be influential on emotions and behaviour (Gross, 1999; Campos, et al., 1994; Campos, et al., 2004), either with or without intention (Gross; Campos, et al., 1994.). Facial expressions, physical gestures and language can each be social signals through which emotions can be present or observed (Campos, et al., 2004). Social signals allude to whether person-event transactions have the potential to be, or are being experienced, as "good or bad" (Gross), which in itself, is largely determined by the context and by the culture (Campos, et al., 2004). Social signals also have the capacity to induce emotions in another individual, potentially influencing both the intensity and the quality (Campos, et al., 2004), again highlighting the relational context of emotions. An example is emotional contagion, whereby the evident emotion of one individual gives rise to a similar emotional experience in another individual, which can be observed even from infancy through contagious crying. Social referencing also influences an individual's emotions and behaviour through their perceived approval or disapproval from another and the consequent adaptation of responses (Campos, et al., 1994; Campos, et al., 2004).

Memories of previous experience is a theme that is present within goals, hedonism and social communication, as well as being significant in the generation of emotions in itself. The connection between previous experience and current self-management defines the functionalist approach from other theories of emotions (Campos, et al., 1994). An example of this connection is the concept of the working model developed by attachment theorists such as Bretherton (as cited in Campos, et al., 1994; Cassidy, 1994; Laible, & Thompson, 1998; Oppenheim, Nir, Warren, & Emde, 1997), in which parent child interactions influence socialisation (Campos, et

al., 2004). Early experiences of parent child interactions are thought to create a social, emotional internal representation, which in turn influence later emotional approaches and responses in social interactions.

Knowledge of possible significant challenges and opportunities to physical and social survival that result in the generation of emotions brings us to the individual's management of their emotional experiences, their emotion regulation (Keltner & Gross, 1999).

Emotion Regulation

Emotion regulation as a concept originated in the developmental studies of the early 1980's (Gross, 1999). The regulation of emotion has been described as a "complex, multi-dimensional process" (Cole, Michel, & O Donnell Teti, 1996) that can occur even before an emotion becomes observable (Campos, et al., 2004; Gross), within an unconscious to conscious continuum (Gross). As defined by Thompson (1994), "Emotion regulation consists of the extrinsic and intrinsic processes responsible for monitoring, evaluating and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals" (p.27-28).

In accordance with the functionalist approach, emotion regulation entails the utilisation of processes and strategies to manage the intensity of emotional arousal to a level that is acceptable yet also flexible enough to enable the outcome of adaptive, social behaviour (Calkins, 1994; Campos, et al., 1994; Cicchetti, Ganiban, & Barnett, 1991; Suveg, & Zeman, 2004; Zimmerman, & Stansbury, 2003). Internal processes have been described as involving the initiation, maintenance and modulation of physiological emotional responses and cognitive processes, while external strategies have been described as behaviours enlisted to regulate the actual emotional experience (Grolnick, Bridges, & Connell, 1996; Kalpidou, Power, Cherry, & Gottfried, 2004; Penza-Clyve, & Zeman, 2002). Emotion regulation is therefore

comprised of both internal processes and external behavioural strategies (Grolnick, et al.), which work together to "avoid, displace, transform, minimise, inhibit or intensify" emotional experience (Campos, et al., 1994).

The regulation of emotions is a continuous, active process (Campos, et al., 1994; Thompson, 1994), which can influence both the intensive and temporal qualities of emotional experience (Thompson). Various "response dynamics" of emotion regulation include the pace of onset, intensity or magnitude, duration, lability and recovery time (Gross, 1999; Thompson). Differences between individual experiences of emotions can be attributed to the person's management of these intensive and temporal qualities, and from the functionalist perspective, the individual's goals.

Individuals are thought to be able to regulate their emotional experiences at three different stages; input, central processing and output. Input regulation is at the sensory level whereby the individual can either enhance or subdue emotional arousal through strategies such as focus of attention, denial, distraction and choice of environment. At the central processing level, information can be appraised and reappraised to change meanings and goals in order to enhance, subdue, adapt and transform emotions. Defence mechanisms including displacement, conscious suppression, unconscious repression and reaction formation, along with arousal transfer, intensification and humour can each be utilised in the central processing level. The output level is where individuals select a response to meet the emotional demands of a person-event transaction. Emotion can be regulated at output through disguise, inhibition, restraint, and transformation (Campos, et al., 1994). In essence, emotion regulation can be described as "the ways individuals influence which emotions they have, when they have them and how they experience and express these emotions", (Gross, 1999, p.557). Individual development of processes and

strategies at the input, central processing and output stages of this continuous, dynamic process of emotion regulation begins in early childhood and continues progressively through an individual's lifespan.

The Development of Emotion Regulation in Early Childhood

Early childhood is considered to be a vital time in the development of emotion regulation (Dennis, 2006; Grolnick, et al., 1996; Kalpidou, et al., 2004; Shields, & Cicchetti, 1997). In infancy, children depend on parents to regulate their arousal; then gradually throughout early childhood children start to develop the processes and skills that enable them to increasingly self-regulate (Calkins, 1994; Cole, Zahn-Waxler, Fox, Usher, & Welsh, 1994). The early development of emotion regulation is an incremental and ongoing multi-dimensional process that ultimately integrates biological, cognitive and socio-emotional components (Calkins,1994; Galyer, & Evans, 2001; Denham, Zoller, & Couchoud, 1994).

Calkins (1994) outlined internal sources of individual differences in emotion regulation including the neuroregulatory systems of brain activity, endocrine activity and vagal tone, alongside the behavioural traits of attentiveness, adaptability/reactivity to novelty, resistance/reactivity to frustration, level of interest, sociability and soothability. The principal nerve in the parasympathetic nervous system, the vagus nerve, can decrease physiological processes such as the heart rate, through its tonic firing. Children's baseline vagal tone has been associated with their approach to novelty, attention, behavioural reactivity, soothability and self-soothability (El Shiek, Harger, & Whitson, 2001).

The biological predisposition of an infant was considered by Zeidner, et al., (2003) to be the foundation that emotion regulation skills are built upon. When an infant is born with a low threshold for arousal, this predisposition can challenge parenting responsiveness and consequently influence the growth of neural circuits in

the child impacting on their emotional competence. Although children's neural

circuits are generally malleable throughout childhood, the critical time for emotional

learning is in the first two to three years of life. Highly inadequate parent-child

interactions at this time may therefore result in a diminished capacity of neural

substrates for emotion regulation (Zeidner, et al., 2003). The meta-emotion

philosophy of parents also influences parenting, which in turn is thought to affect

children's regulatory physiology and subsequent ability to regulate their emotions

(Gottman, Fainsilber Katz, & Hooven, 1996).

Children's ability to regulate emotion is increasingly influenced by the

maturing of their cognitive processes (Calkins, 1994; Campos, et al., 2004; Denham,

et al., 1994; Laible, & Thompson, 1998; Stansbury, & Sigman, 2000; Zimmerman, &

Stansbury, 2003) and consequently older children increasingly deploy cognitive

strategies instead of behavioural responses to regulate emotions (Zeidner, et al.,

2003). Various cognitive components are involved in the development of emotion

regulation strategies and skills including internal working models (Calkins, 1994;

Cassidy, 1994; Laible, & Thompson; Thompson, 1994), social referencing,

recognition of appropriate regulation, individual potential for utilising strategies

(Calkins, 1994), theory of mind (Stansbury, & Sigman), and awareness of

consequences (Zeman, & Penza, 1997). The complex strategy of cognitive

reappraisal, whereby children become increasingly able to re-interpret information is

an emotion regulation strategy that also emerges in early childhood (Stansbury, &

Sigman; Thompson). Together, these cognitive components interweave to become

an intricate set of information processing skills for young children's understanding

and subsequent deployment of emotion regulation responses (Calkins, 1994).

There is widespread support for the social interaction between parents and

children in infancy and early childhood being of utmost importance in children's

developing capacity to understand and regulate emotions (Calkins, 1994; Cassidy, 1994; Dennis, 2006; Eisenberg, et al., 2003; Galyer, & Evans, 2001; Laible, & Thompson, 1998; Stansbury, & Sigman, 2000; Thompson, 1994; Valiente, & Eisenberg, 2006; Zeidner, et al., 2003; Zeman, & Penza, 1997). Functionalist theory asserts social interaction to be pivotal for the development of emotion regulation skills. Early relationships and experiences within families provide children with opportunities both for learning about emotions and their functions, and for the development and practice of strategies and skills for managing their emotions adaptively (Cole, et al., 1994; Zeman, & Penza). The three central modes of socio-emotional learning include language (Denham, Zoller & Couchoud, 1994; Eisenberg, et al.; Galyer, & Evans; Laible, & Thompson; Oppenheim, et al., 1997; Zeidner, et al.), modelling and observation (Berk, 2004; Calkins, 2004; Cole, et al.; Denham, et al.; Eisenberg, et al.; Galyer, & Evans, Zeidner, et al.), and reinforcement (Cole, et al.; Calkins, 2004; Eisenberg, et al.; Galyer, & Evans; Laible, & Thompson; Zeidner, et al.; Zeman, & Penza).

The rapid development of comprehension of emotion regulation in early childhood is largely due to children's improved proficiency in language (Campos, et al., 2004; Cole, et al., 1994; Denham, et al., 1997; Zeidner, et al., 2003). When parents engage children in conversations rich with explanations for emotion experiences, children develop understanding of emotion (Berk, 2004; Denham, et al.; Laible & Thompson, 1998), which alongside increased coherency and fluency in language, enables children to identify and articulate emotions (Denham, et al., 1997; Laible, & Thompson,) that describe the emotive state of themselves and of other people (Laible, & Thompson; Oppenheim, et al., 1997). Language also enables children's understanding of feedback on emotions from others (Denham, et al.) and provides them with the means for processing and understanding the causality of

emotions (Denham, et al.. 1997; Laible, & Thompson, 1998). Hence, the child with a developmental delay in language will subsequently be very likely hindered in their development of emotional regulation (Zeidner, et al., 2003).

Emotion regulation modelled by parents and significant others, and observed by young children provides opportunities for indirect learning of skills (Denham, et al., 1994; Eisenberg, et al., 2003; Zeidner, et al., 2003; Zeman, & Penza, 1997). "Teaching by example" (Zeidner, et al.) can contribute to children learning both functional and dysfunctional emotion regulation skills depending on whether they primarily observe positive or negative emotion expression and responses (Cole, et al., 1994; Galyer, & Evans, 2001; Zeidner, et al.). Children can indirectly learn feeling, coping and display rules that are context specific, or socially and culturally appropriate, from observing the modelling of others (Zeidner, et al; Zeman, & Penza).

Varied, direct reinforcement from different social contexts also influences children's developing understanding of emotion regulation and expression. From early childhood, children's knowledge and use of emotion display rules are shaped by previous reinforcement then consequent expectations of the probability of support from others, which is goal oriented behaviour and therefore functional in nature (Laible, & Thompson, 1998; Zeman, & Penza, 1998). Children's emotional behaviour can be reinforced or extinguished by the responses from parents and significant others, either with or without intention (Zeidner, et al., 2003). For instance, children's positive expression of emotion may be responded to with encouragement and support while dysfunctional emotional expression such as tantrums may receive little or negative attention (Dennis, 2006; Eisenberg, et al., 2003; Galyer, & Evans, 2001; Zeidner, et al.).

With social interaction asserted by functionalist theory to be vital in young children's acquisition of emotion regulation strategies and skills, establishing modes of interaction that are particularly influential is important. The relationship between children's imaginary play and development of emotion regulation is one such mode (Berk, 2004; Cole, et al., 1994; Cutting, & Dunn, 2006; Galyer, & Evans, 2001; Laible, & Thompson, 1998; Lindsey, & Colwell, 2003; Moore, & Russ, 2006; Oppenheim, et al., 1997; Russ, 2004; Russ, 2005; Russ, Pearson, & Sacha, 2007) especially when parents are actively involved (Bornstein & Tamis-Le Mond, 1995; Fein, & Fryer, 1995; Galyer, & Evans; Keren, et al., 2005).

Imaginary Play

The numerous names for imaginary play including fantasy play, free play, pretend play, make believe play, and symbolic play reflect the numerous possibilities within the play itself. However, these names all allude to play in which feelings, behaviours, thoughts and objects are symbolic representations and transformations of previous experiences. Being able to participate in imaginary play assumes the child has developed two mind processes, the first in the literal sense and the second with an enriched meaning (Fein, 1989).

Imaginary play is influential in children's development of cognition (Cole, et al., 1994; Fein, 1989; Galyer, & Evans, 2001; Russ, 2004; Russ, 2005; Russ, et al., 2007), a coherent sense of self (Keren, et al., 2005), creativity (Keren, et al.; Moore, & Russ, 2006; Russ, et al.), emotion regulation (Berk, 2004; Cole, et al.; Cutting, & Dunn, 2006; Galyer, & Evans; Keren, et al., 2005; Laible, & Thompson, 1998; Lindsey, & Colwell, 2003; Moore, & Russ; Oppenheim, et al., 1997; Russ, 2004), linguistics (Cole, et al.; Cutting, & Dunn; Keren, et al.; Laible, & Thompson) and social skills (Galyer, & Evans; Keren, et al.; Lindsey, & Colwell; Russ, 2004; Russ,

2005). In the current research, however, the focus was on the relationship between imaginary play and the development of emotion regulation and social skills.

The context of imaginary play is one in which there is great potential for children to learn how to competently regulate their emotions (Berk, 2004; Galyer, & Evans, 2001; Lindsey, & Colwell, 2003; Russ, 2004). With intense emotions interwoven throughout imaginary play (Russ, 2004), Fein and Fryer's (1995) claim that the primary function of imaginary play is learning how to regulate the arousal of emotions seem highly plausible. Children are able to practice regulating their emotions, experimenting with both the intensive and temporal qualities, indirectly through imaginary play (Moore, & Russ, 2006). The rudimentary purpose of imaginary play lies with the emotions to be explored and mastered and not with the particulars of the play itself (Russ, et al., 2007).

Through the spontaneous process of imaginary play, children are able to safely re-visit experiences enabling them to express and work through any resultant, unresolved pleasant or unpleasant emotions and thoughts in a non-threatening environment (Keren, et al., 2005; Moore, & Russ, 2006). Imaginary play ultimately provides the opportunity where children are able to explore their perception of reality through reproducing and modifying the meaning of affectively arousing events (Fein, 1989; Lindsey, & Colwell, 2003; Russ, et al., 2007). By managing conflict, emotions, and even trauma adaptively (Keren, et al., 2005; Moore, & Russ), such play allows children to gain a sense of mastery over a situation (Moore, & Russ, 2006; Russ, et al., 2007). Imaginary play is a mode of communication, which was described by Gottman (as cited in Bretherton, 1989) as "young children's version of self disclosure". Children's mastery of emotions through imaginary play helps them to develop emotion regulation skills and strategies that may later be applied in real life situations.

Support for the relationship between emotion regulation in an imaginary play context and emotion regulation in daily life was one of the findings from Galyer and Evan's (2001) research whereby young children's emotion regulation within an imaginary play experimental setting was correlated with the children's emotion regulation in everyday living. Miles and Reiss (as cited in Russ, 2005) also found support when young children in three varied, separation themed imaginary play groups became better able to regulate their separation anxiety in real life compared to children in a neutral group.

Imaginary play has also been shown to influence various aspects of children's adaptive functioning such as coping in medical settings. A review of literature by Moore and Russ (2006) reflected the role of imaginary play in the prevention and decrease of anxiety and distress in both inpatient and outpatient settings. Christiano and Russ (as cited in Russ, 2005) found that children who had high scores on the Affect in Play Scale were able to utilise a greater amount and range of cognitive coping strategies to manage invasive dental procedures. Further support for the influence from imaginary play on emotion regulation arises from the children who attended therapeutic play-groups then self reported a subsequent significant decrease in their hospital fears (Rae, et al., as cited in Russ, 2005). These combined findings support the existence of the relationship between imaginary play and children's development of emotion regulation being transferred to real life situations.

One question that has emerged is how does young children's emotion regulation relate to their ability to differentiate pretence from reality? The cognitive availability hypothesis was put forward by Johnson and Harris (1994) who contended that individual differences result in two groups of children of which availability of memory is the deciding variable. In comparison, Golomb and Galasso (1995)

reinforce Fein's (1989) model of pretence continuation in which children who continue play do so as they are able to regulate their emotions.

Harris, et al., (1991) completed a series of experiments to assess children's ability to discern pretence from reality. In their fourth experiment, young children first confirmed boxes were empty, and then were asked to imagine one box had either a friendly rabbit or a scary monster inside while the remaining box had neutral contents. When the experimenter was out of the room, approximately half of the children still looked in one or both of the boxes, which Harris, et al. attributed to the children being unsure of whether the imagined entities were pretend or real. The children therefore managed their feelings of uncertainty by looking in the box. Uncertainty is thought to be related to worry, which is central to anxiety and therefore important to research further (Dugas, Freeston, & Ladoucer, 1997).

In a comparable study, Johnson and Harris (1994, Expt 3) also found that nearly half of the young children looked inside the boxes in the experimenter's absence. Additionally, the majority of children also directly expressed doubt regarding the pretend-reality status of the box contents. The results lead to Johnson and Harris deducing the two following groups of children:

Credulous children wondered if the imagined entity might be in the box, tested that possibility by opening it, and sometimes evoked magic by way of explanation.

Sceptical children denied that the imagined entity would be in the box, did not check whether it was, and justified their scepticism in terms of ordinary spatial or physical considerations (p. 46).

Golomb and Galasso (1995) renounced the availability hypothesis and further researched young children's ability to distinguish pretence from reality through two experiments involving monsters, bunnies, or children's chosen negative or positive

entities in a box. All of the 75 children were able to discern pretence from reality. The children however, did consistently modify the themes within the pretence to seemingly regulate the intensity of their emotions. Themes were modified to avoid and decrease unpleasant emotions, or to approach and increase positive emotions. Emotion regulation was not however, reliably measured.

In a study by Carrick and Quas (2006), 128 children aged between three and five years were shown illustrations of both pretend and real situations then asked if each image could really happen along with how they felt towards each of them. The children were also rated with the Play Behaviour questionnaire and Pretend Action Tasks. As expected, the older children were more able to discern between pretend and real, however there was no interaction between age and the emotions in the illustrations. A finding of interest was that the emotional valence in the illustrations influenced the children's differentiation between pretend and real situations. For both the pretend and real situations children stated that the neutral and happy events could happen more often than the frightening and angry events, which Carrick and Quas contended was due to the children's attempts to regulate their emotions. That is, the children desired to approach or engage with pleasant emotions, and avoided or retreated from unpleasant emotions.

Bourchier and Davis (2000) completed a series of three experiments designed to examine the effects of emotion and cognitive availability on children (aged 5 to 6 years), and their ability to discern pretence from reality. In the first experiment the children were initially asked to confirm whether three identical, opaque boxes were empty then to pretend each box contained positive, neutral or negative contents respectively. The children then rated the order in which they would open the boxes and then the order that they would throw the boxes away. Most of the children clearly distinguished pretence from reality yet still opened the

boxes in the positive, neutral then negative order, and threw the boxes away in the negative, neutral then positive order, suggesting the children were attempting to decrease or avoid negative emotions and to increase or approach positive emotions.

In the second experiment the boxes were transparent in order to increase cognitive availability by constantly affirming the boxes were empty and therefore the pretence of the contents. Although the children had visual empirical evidence they still significantly responded in the same way as in the first experiment. The children again tried to avoid negative emotions and approach positive emotions.

To further examine the effects from emotions, only two opaque boxes were used in the third experiment. The children were first asked to imagine one box had positive contents while the other box had negative contents then to hypothetically and actually open or throw away both boxes and explain why. Hypothetically and actually, most children opened both boxes, which Bourchier and Davis (2000) attributed to either performance bias or pretence continuation, however the children's explanations reflected beliefs, desires and the intended use of the imaginary contents.

Overall, increased cognitive availability appears to affect the children's pretence beliefs as well as children having individual differences in discerning pretence from reality. Bourchier and Davis (2000) therefore concluded that there might be two complementary subgroups of children; sceptical, in control children who behave in line with pretence continuation, and credulous, unsure children who have behaviour that reflects increased cognitive availability.

When Galyer and Evans (2001) researched the emotion regulation skills of 47 preschool children, they also investigated pretence continuation but in comparison to conflict resolution. The children who were able to continue play when a negatively valenced event was introduced within pretend play had well developed emotion regulation in a wider context. Conflict resolution was not found to be related to the

children's emotion regulation. A positive relationship was also found between the children's social skills and their emotion regulation. Furthermore, the results showed that children's increased frequency of pretend play alone and with caregivers was related to greater emotion regulation skills.

Pretence continuation has therefore often been implicated as an observable behaviour that reflects young children's attempts to regulate their emotions. It also appears however, that some children tend to rely on cognitive availability as an emotion regulation strategy. Bourchier and Davis' (2000) explanation of complementary subgroups of children is an inclusive possibility inviting further exploration.

As noted previously by Galyer and Evans (2001), common aspects of earlier studies that could have been limiting include the lack of reliable emotion regulation measures and naturalist observations. It would therefore be prudent to follow Galyer and Evan's design and specifically evaluate emotion regulation with the Emotion Regulation Checklist and by means of an emotion regulation task within imaginary play in settings familiar to children in order to gather empirical data. While Galyer and Evans did incorporate pretence continuation as one measure of emotion regulation, cognitive availability was not considered. As previous findings by Bourchier and Davis (2000), Harris, et al., (1991) and Johnson and Harris (1994) support, cognitive availability as a form of emotion regulation, investigating both pretence continuation and cognitive availability will provide further information for understanding young children's emotion regulation. Exploring both approaches is compelling due to Bourchier and Davis' claim of their possible complementary nature.

The Present Study

Following Galyer and Evan's (2001) findings, this study aimed to further explore the relationships between children's imaginary play, emotion regulation and social skills by means of an emotion regulation event within imaginary play in a natural setting, and in a wider context. Children's responses to a potentially moderate or highly pleasant emotion arousing event were rated according to their level of continuing play, and further to Galyer and Evan's study, the influence from cognitive availability is also rated. On the basis of previous findings it was anticipated that the children who continued the play and/or were less reliant on cognitive availability would also have greater emotion regulation in everyday living. Children's frequency of imaginary play with siblings/friends and parents were also measured in relation to their emotion regulation with a positive correlation expected due to Galyer and Evan's earlier results.

The present study also aimed to explore whether an affective prime of either moderate or highly pleasant arousal would influence children's haste with which they approached the emotion regulation event. It was expected that children who experienced the highly pleasant affective prime would be more likely to open the box (the emotion regulation event) with ambiguous contents more quickly to ease feelings of uncertainty. Further to this, the box in this study was directly relevant to the imaginary play of a known activity in a natural setting whereas previous studies have utilised boxes and/or contents in an indirect or irrelevant manner. The expectation was that children's knowledge and experience in a directly relevant imaginary play activity would enable them to participate more fully.

Tentative exploration of qualities of children's imaginary play included re-visiting daily living experiences, and the presence of emotions, which were rated with the expectation that they would be related to each other and well developed

emotion regulation. Information regarding the themes of children's imaginary play at home was also gathered in order to provide relevant imaginary play activities for future research.

Method

Participants

The consenting parents of the children provided the demographic data. The sample of 40 children was aged between four and five years ($M = 54.1$ months, $SD = 4.7$ months) and was comprised of 21 boys and 19 girls. The culture the families predominantly identified with was New Zealand/European (66%). The other cultures the families identified with were New Zealand/European/Maori (11%), and New Zealand/European/Other (23%). People living in the children's family homes included mothers (n=40), fathers (n=36), grandmothers (n=4), one sibling (n=24), two siblings (n=9), three siblings (n=3) and four siblings (n=1). The children attended Playcentre two times (n=3), three times (n=9), four times (n=24) and five times (n=4) each week. The 40 preschool children in this research all assented to participation in the storytelling and imaginary play activities (see Appendix F) with myself at their Playcentres. The participants were treated in a manner, which reflected the ethical standards of the New Zealand Psychological Society and the American Psychological Association.

Materials

Demographic questions. (See Appendix C). The parents were requested to provide information about their child's date of birth, gender, people living in the family home, cultural identification and frequency of attendance at an early childhood centre.

Imaginary play questionnaire. (See Appendix D). The imaginary play questionnaire completed by the parents consisted of both fixed choice and open-ended items. Fixed choice questions were asked to ascertain the frequency of the child's imaginary play alone, with siblings or friends, or with adults in the household and were estimated by the five options of rarely, weekly, several times weekly, daily,

and several times daily. Fixed choice questions were also used to measure the duration of children's imaginary play through the options of 10 minutes, 20 minutes, 30 minutes and other, while types of imaginary play were measured through the options of physical (no props), toys for props, and items transformed into props. Open-ended questions were used to gather information on the children's underlying play themes, whether they re-visit life experiences, and whether emotions had been observed in the children's imaginary play.

   Emotional Regulation Checklist. (see Appendix E). Shields and Cicchetti's (1997) Emotional Regulation Checklist was completed by the parents of the participating children. The Emotional Regulation Checklist is comprised of both negatively and positively weighted items, which are rated on a 4-point Likert scale. The 24 items are distributed into an emotional regulation subscale and a lability/negativity subscale. Appropriate affective displays, empathy, and emotional self-awareness are rated with the emotional regulation subscale, while dysregulated negative effect, lack of flexibility, and mood lability are rated through the lability/negativity subscale. Four items were excluded from this study, as the cohort of children was not a clinically referred group for whom more serious problems were not expected. These were: B (Is difficult to predict mood swings, moving quickly from positive to negative emotional states), M (Has disruptive bursts of energy and excitement), R (Displays flat emotion e.g., expression is vacant, child seems emotionally absent), and S (Responds negatively to neutral or friendly approaches by peers). Shields and Cicchetti used Cronbach's alpha to assess internal consistencies, reporting alpha values of 0.83 for the emotional regulation subscale and 0.96 for the lability/negativity subscale.

   Storytelling and imaginary play activities. (Appendix F). At an appropriate time within each child's Playcentre, I introduced myself to individual children and

initiated telling the story then introduced the semi-structured imaginary play activity, which together took approximately 15 minutes. In order to maintain consistency, I was the only person to interact with all of the children. A Panasonic NV-GS150GN digital video camera supported by a tripod stand was used to video record the children's behaviour during the story and the imaginary play activity.

The process of the introduction and telling the story took approximately five minutes and was intended to create ease between the child and myself, while the content of the story; a treasure hunt ending in finding either toy golden coins or chocolate golden coins, was designed to activate the child's imagination and to affectively prime either moderately or highly positive feelings within the child. The main character in the story was named Ellen/Alan and was referred to as either a girl or boy according to the gender of the child. The children's attention to the story was calculated by subtracting the distraction times from the focused times and this value was reported as a percentage of the total time. The frequency of verbal responses was counted to establish the children's engagement with the story. The children's excitement towards the treasure was rated on a 4-point Likert scale as follows: 1 = Mild response, 2 = Moderate interest, non-verbal but facial expression, 3 = Strong interest, verbal and facial expression, 4 = Intense interest, verbal comments and elaboration, heightened facial expression and physical expression such as clapping.

I then initiated the semi-structured imaginary play activity based on the theme of a birthday party, which took approximately 10 minutes. A plastic crate with the appearance of a bus was used to transport the seven toys to the birthday event. The toy characters were chosen for their emotionally ambiguous characters and included Grey Bear, Tiger Boy, Dolphin Girl, Elf, Sleepy Bear, Captain Adventure and Annie Bear. A box (11cm x 15cm x 9cm) with a lift-off lid, wrapped in green paper and decorated with Grey Bear stickers was used for the present. The

children used purple playdough with gold glitter, five candles and a Happy Birthday decoration to make the birthday cake for Grey Bear. A musical birthday card, and a present (a wooden train whistle, blackboard/chalks, ball-catcher or French ribbon ladder) wrapped in three layers of paper were used for the games of Pass the Parcel and given as thank you gifts to the children. Purple and gold balloons were also given to the children to signify the end of the game.

Children's attention to the imaginary play activity was measured by the frequency of distractions. Social skills were rated with a seven-point Likert scale with coding as follows: 1 = Distant, hard to warm up, wary, fails to follow simple instructions, 2 = Clings to parent, slow to warm up, little positive affect, needs prompting, 3 = Quiet but engaged, follows directions yet doesn't add much, 4 = Engaged, looks up when spoken to and replies quickly, 5 = Actively engaged, replies in some detail to questions, smiles and shows enjoyment, 6 = Confident and assured, no sign of anxiety or hesitation, adds details, initiates actions, 7 = Assertive and very comfortable with the researcher, gives the researcher instructions or suggestions, elaborates on the play, shows excitement and seems to be enjoying the play.

Emotion regulation in the sense of cognitive control was operationalised as the time the children took to open the birthday present box. Because of large variations in time to open the box from immediate to not at all, this numerical value was re-formatted as a series of discrete, more descriptive categories, according to the following 5-point Likert scale: 1 = Immediately, snatched the box from the researcher's hands, 2 = Within a few seconds, demanded to look, tried to get the box before it was placed down, 3 = Attended to the box in the active part of the play but before the game of Pass the Parcel, 4 = Left the box until after pass the parcel at the end of the imaginary play then asked to open it or opened it, 5 = Needed to be

prompted at the end of the imaginary play to see what was in the box but was otherwise going to ignore it.

The children's emotion regulation in the context of the imaginary play was assessed by their ability to integrate the (opened or unopened) birthday present box into the play, coded according to a 5-point Likert scale. Integration of the box into the play activity was considered a measure of emotion regulation by virtue of allowing the play, the goal, to be continued with minimal interruption. The categories coded were: 1 = Shows displeasure, moves the box away or throws it down, 2 = No interest in the box, ignores, 3 = Tries to keep the box in the pretend play by putting it next to Grey Bear without prompting, 4 = Actively keeps the box in the play by keeping it as a present for Grey Bear and not for the child, 5 = Actively keeps the box in the play as in 4 and keeps the original theme and/or elaborates on the theme.

Social Skills Rating System: Preschool Form. Early childhood teachers at the Playcentres of the children completed the Social Skills Rating System: Preschool Teacher Form (Gresham, & Elliot, 1990). There are 40 items on the teacher scale, which has been designed to assess desired (assertion, cooperation & self-control) and challenging (internalising and externalising) social behaviours of the child. Typical examples are as follows: Item 3: appropriately tells you when he or she thinks you have treated him or her unfairly; Item 9: participates in games or group activities; and Item 18: uses free time in an acceptable way.

As two of the items have previously been noted as irrelevant to early childhood centres within New Zealand (Galyer, & Evans, 2001), they were omitted from this study. The omitted items were Item 10 (produces correct schoolwork) and Item 22 (finishes class assignments within time limits).

Internal consistencies for the Social Skills Rating System (SSRS) have been calculated using Cronbach's alpha. Coefficients of 0.83 to 0.94 were found for the teacher rated social skill forms, while coefficients of 0.73 to 0.88 were found for the teacher rated problem behaviour forms, which show a reasonably high degree of scale homogeneity (Gresham, & Elliot, 1990). Test-retest reliability was measured by Gresham and Elliot using a 4-week interval with the correlations for the teacher ratings being 0.85 for social skills and 0.84 for problem behaviours, indicating good to excellent temporal stability. The items in the SSRS were assessed for content validity through ratings of importance by teachers, parents and secondary students and found to be acceptable (Gresham, & Elliot, 1990). Gresham and Elliot found moderate to high correlations between the teacher forms of the SSRS and the Child Behaviour Checklist – Teacher Report Form (Achenbach, & Edelbrock, 1983), the Harter Teacher Rating Scale (Harter, 1985) and the Social Behaviour Assessment (Stephens, 1978), which supports its criterion validity. Various methods are outlined in the manual that substantiates acceptable construct validity for the SSRS (Gresham, & Elliot).

Procedure

Ethical approval for this research was sought and granted by Massey University Human Ethics Committee: Southern B. The information letter (see Appendix H) was then posted to the Hutt Playcentre Association to outline the research proposal. I was invited to attend a Hutt Playcentre Association General Meeting to introduce myself and to discuss the intended research. Following permission from the Hutt Playcentre Association, the information letter (see Appendix H) and the information pamphlets (see Appendix A) were distributed to the eighteen Playcentres. Interested parents were able to leave contact details in a collection box at their child's Playcentre, which were collected by myself. The

consent forms (see Appendix B), demographic forms (see Appendix C), Imaginary

Play Questionnaires (see Appendix D) and Emotion Regulation Checklists (see

Appendix E) were then posted to the parents to be completed and returned in a

prepaid envelope. Returned forms and questionnaires were coded with numbers to

respect anonymity and confidentiality. I contacted all of the consenting parents by

telephone to arrange a suitable date and time to visit their child at Playcentre, which

was then agreed to by the early childhood teacher at the Playcentre also via the

telephone.

On arrival to the Playcentres, I introduced myself to the early childhood

teachers, parents, and the children that were present. An area for the storytelling and

the imaginary play activity (see Appendix F) would be agreed upon, one that had a

clear boundary, however in full view of people to meet safety regulations. With the

adults' assistance, the individual children with parental consent were identified and

invited to participate. After an introduction the children were asked, "Would you

like me to tell you a story and then play a game? I have asked your mum (or

appropriate parent/caregiver) if it is OK with her and she said it was. Is this OK with

you? Please tell me if you change your mind." As Playcentres are parent led

cooperatives, the children's parents were often close by in an observer role. With the

children's verbal assent, the researcher then showed them the video camera, allowing

them time to wave to themselves or dance before the screen before asking them if

they would like to turn it on for the story.

I sat with each child then told the treasure hunt story (see Appendix F) in an

enthusiastic and expressive manner, asking questions at regular intervals to engage

the child and to connect their experiences to the story, thereby activating their

imagination. For instance, when in the story Alan/Ellen was playing outside in the

garden, the question was asked, "Do you have a garden at your home?" or upon

Alan/Ellen finding a clue in the treasure hunt, I asked "Do you know what was on this clue?" was asked. The treasure hunt story ended with the box in the sandpit being opened to find either 10 chocolate or toy golden coins, which was a condition randomly assigned to the children. I then transitioned from the story to the imaginary play activity by saying Alan/Ellen could hear his/her mother calling to come inside because his/her friends were here to pick him/her up for the birthday party at Playcentre then 'drove' out the bus crate with the toy characters inside.

I maintained an enthusiastic and expressive approach for the imaginary play activity (see Appendix F). The toy characters were introduced to the child and according to the child's interest were either passed to the child to play with or were placed on the ground. After the toy characters and the birthday party activity were introduced, the potentially emotion arousing event commenced. The birthday present box 'that arrived in the letterbox this morning' was shown to the child, with the contents randomly described as, a wet, slimy frog or, a warm, little kitten. The birthday present box was then placed on the ground with my comment, "Where it is safe for Grey Bear to open later," but where it could be seen and accessed by the child. I then attempted to continue the imaginary birthday party by encouraging the child to create a birthday cake from the playdough, candles and a decoration, after which either the child or myself pretended to light the candles then sang the Happy Birthday song with the child helping Grey Bear to blow out the candles. Next, I initiated the Pass the Parcel game, with the child usually choosing to control the musical birthday card. The child was asked by the toy characters to please help open the first two layers of paper while the third and final layer was always the child's to open meaning that they were the winner and therefore supposed to keep the prize, which was an indirect way of thanking the child for participating. Grey Bear would then give the child a gold or purple balloon to thank them for coming to the birthday

party and to acknowledge the end of the game. I responded to the child's desire to open the present box whenever in the imaginary play activity that occurred. If the child did not initiate opening the box, I reminded him or her about the box after Pass the Parcel, which prompted the child to open the box.

Upon my departure from the Playcentre I gave the early childhood teachers at the Playcentres the Social Skills Rating System: Preschool Forms to complete and return to myself in the stamped envelopes provided.

After the data was analysed, the summarised results were posted to the participating families, the participating Playcentres and the Hutt Playcentre Association. I provided e-mail and telephone details to allow for any further questions and discussion.

Results

Descriptive statistics for each variable are presented, followed by the results of statistical analysis of relationships between the variables. The parametric statistical tests were analysed with 0.05 and 0.01 levels of significance. Assumptions of homogeneity and normal distribution were found satisfactory for the analysis of variance (ANOVA). The Statistical Package for the Social Sciences (SPSS 16) was used to analyse all data

Observations of the Children's Behaviour during the Storytelling and Imaginary Play Activities

The forty children assented to participate in the storytelling and imaginary play activities, although two children did initially keep a little distance between us. Prior to recording, nearly all of the children were very interested in watching themselves on the video camera screen. During the storytelling some interest was still shown, however the children did not pay any attention to the video camera during the imaginary play activity.

All of the children listened intently to the treasure hunt story. Distractions were very short, with the children quickly returning their focus to the story. The children's engagement to the story was shown through their body positions, eye gaze, facial expressions, hand gestures, and verbal elaborations and responses to the researcher's questions. Children often imitated my story telling actions, and one child became the main character enacting the entire story.

The children were highly engaged with the imaginary play activity with minimal distractions present. When I brought out the bus (crate of toy characters and props) the children were eager to look inside. As the toy characters were introduced, many of the children held them and helped to arrange them on the floor. The toy characters Tiger Boy and Shark Girl were often undressed then dressed into their

party costumes. When I took the present box out of the crate the children had varied responses, ranging from taking it from my hands, opening it immediately, opening it some time later with a reminder, and two children did not open it at all.

The children also had a high level of engagement while creating the birthday cake. Many different shaped cakes were made, yet nearly every cake had five candles and the Happy Birthday words placed on them. Most of the children wanted to light the candles (imaginatively) by themselves or have me light them, then sang the Happy Birthday song. Only one child did not help Grey Bear to blow out the candles. Many children cut the cake and shared it between the toy characters, themselves, and I.

Every child participated enthusiastically with the Pass the Parcel game with many of the children wanting to control the music. All of the children helped the toy characters to open the first two layers of wrapping before opening the third layer with excitement as they won the prize. Not one child showed any awareness that they may have known their winning was pre-arranged. The children usually wished to share exploring and playing with their prize with myself. All of the children accepted a balloon from Grey Bear as a thank you for coming to the birthday party. A few children requested balloons for their siblings. Some children helped to tidy the toy characters away. Many children wanted to have another turn.

Measures of Imaginary Play

The Imaginary Play Questionnaire completed by the parents measured the children's imaginary play, the children's engagement with the storytelling and imaginary play activities, and their ability to integrate the birthday present box into the imaginary play activity.

Imaginary play questionnaire. The five options for measuring the frequency of children's imaginary play; rarely, weekly, several times weekly, daily and several

times daily, received increasing scores of one to five respectively. Imaginary play alone ranged from 2 to 5 ($M = 4.33$, $SD = 0.97$). Imaginary play with siblings or friends had a range from 2 to 5 ($M = 4.15$, $SD = 0.92$) while imaginary play with adults ranged from 1 to 5 ($M = 3.43$, $SD = 1.19$). The total frequency of imaginary play had a range from 2 to 20 ($M = 15.45$, $SD = 3.31$).

The duration of children's imaginary play was allocated increasing scores of 1 to 5 for no time, 10 minutes, 20 minutes, 30 minutes and other. The range for duration of imaginary play was between 2 and 5, with a mean of 3.34 and a standard deviation of 1.01.

Eighty five percent of the children re-visited daily life experiences in their imaginary play at home, while emotions were reported to be present in the imaginary play of eighty percent of the children.

The underlying themes within children's imaginary play were each given a score of 1 and given a frequency count, then compared for any gender differences. The number of females and males within each underlying theme of imaginary play are presented in Table 1.

Engagement and integration during the storytelling and imaginary play activities. The children's engagement in the storytelling was measured by the percentage of time they were engaged, the number of times they were distracted and by the amount of the children's verbal responses. The percentage of time the children were engaged with the storytelling ranged from 64% to 100% ($M = 94\%$, $SD = 8\%$). The range of frequencies of distractions from the storytelling was between 0 and 7 ($M = 2.55$, $SD = 2$). The frequency of children's verbal responses to the storytelling ranged from 0 to 15 ($M = 4.35$, $SD = 3.24$). The range of children's distractions from the imaginary play activity was between 0 and 5 ($M = 1.7$, $SD =$

Table 1

Gender Comparisons of Themes in Imaginary Play

Themes	Females[a]	Males[b]
Animals (cats, dogs, rabbits, dinosaurs, dragons)	4	7
Baddies and goodies	2	2
Characters (book or movie, fairies, other people)	6	8
Doctors (accidents, death, illness, hospital)	3	3
Dress ups	2	3
Emergency rescue (fire, police)	1	6
Families (mothers, fathers, babies)	16	8
Physical fighting (rough & tumble, guns, swords)	2	1
Places, experiences (birthdays, cafes, camping, circus, hairdressing, houses, shopping, zoo)	10	6
Superheroes	1	6
Vehicles (4WD, cars, planes, ships, trains)	1	7
Other	3	0

Note. The values represent a frequency count of the themes of imaginary play for females and males.
[a]$n = 19$. [b]$n = 21$.

1.54). The children's ability to integrate the birthday present box and continue play was rated through the five categories of shows displeasure, no interest, tries to keep the box in play, actively keeps the box in play as present, and actively keeps box in play and elaborates ($M = 3.05$, $SD = 1.4$).

Measures of Emotional Regulation

The Emotional Regulation Checklist, which was completed by the parents, described the children's everyday emotion regulation. The children's level of excitement towards the treasure in the storytelling, the time the children took to open

the birthday present box, and their continuance of play, as above in the measure of integration were the measures of emotion regulation in the imaginary play activity..

The Emotional Regulation Checklist. The raw scores for the children in the lability/negativity subscale and in the emotion regulation subscale of the Emotional Regulation Checklist were each analysed. The lability/negativity subscale scores ranged from 10 to 24 ($M = 17.4$, $SD = 3.05$), while the emotional regulation subscale had a range between 22 and 40 ($M = 31.15$, $SD = 4.63$). The frequencies of the children's scores in the lability/negativity and emotion regulation subscales are shown in Figure 1.

Children's level of excitement and time taken to open the box. The children's level of excitement towards the treasure in the storytelling was rated through the five options of no response, mild response, moderate interest, strong interest and intense interest, which each received increasing scores of 1 to 5. The scores for the level of excitement ranged from 1 to 5 ($M = 1.95$, $SD = 1.18$). Children's reliance on cognitive availability was measured by the time taken to open the box and was rated between 1 and 5 accordingly for, immediately with snatching, within a few seconds, before Pass the Parcel, asked after Pass the Parcel, and needed prompting. The children's responses ranged between 1 and 5 with a mean of 3.75 and a standard deviation of 1.21. The children's verbal responses and interaction with myself upon opening the box were recorded (see Appendix H).

Measures of Social Skills

The social skills of the children were measured with the Social Skills Rating System: Preschool Form, which was completed by the early childhood teachers and through the social skills displayed during the storytelling and imaginary play activities.
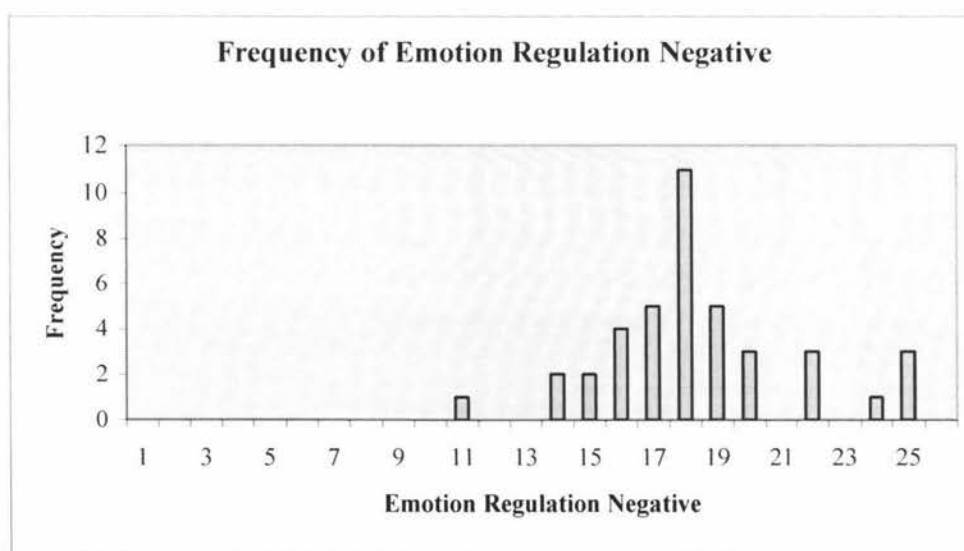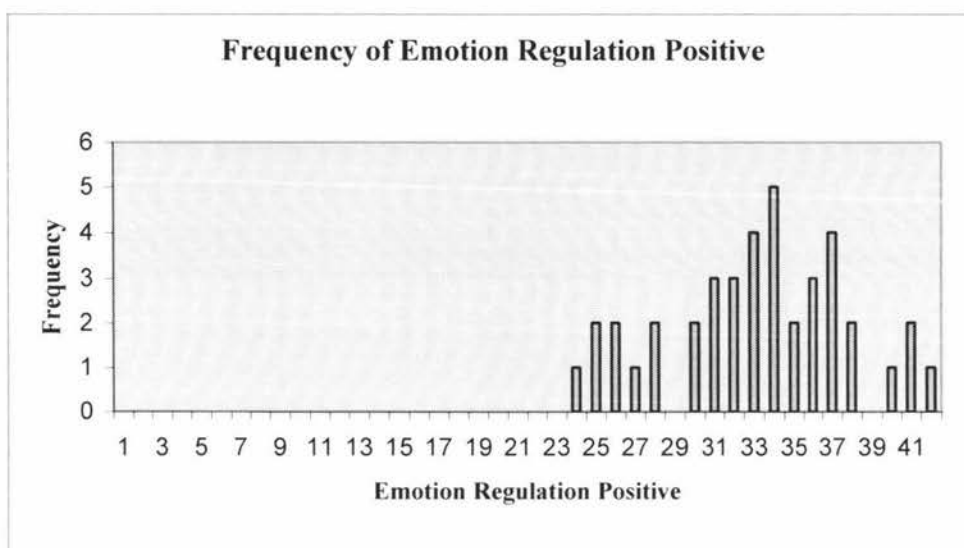
Figure 1. Frequencies of the children's scores for the positive and negative

subscales in the Emotion Regulation Checklist.

Social Skills Rating System: Preschool Form. Each of the subscales for both desired and challenging behaviours in the Social Skills Rating System was scored individually. For the desired behaviours, the range for the cooperation subscale was between 7 and 20 ($M = 13.75$, $SD = 3.61$), the assertion subscale ranged from 3 to 18 ($M = 12.08$, $SD = 3.34$), and the self control subscale had a range from 4 to 18 ($M = 11.58$, $SD = 3.41$). The challenging behaviours ranged between 0 and 7 ($M = 3.03$, $SD = 1.82$) for the externalising subscale, and 0 and 6 ($M = 1.18$, $SD = 1.36$) for the internalising subscale.

The children's scores were then grouped into fewer, average or more categories in order to compare them with a normative sample of children. Overall the children had average ratings for both the desired behaviours and challenging behaviours subscales however there was some variability.

Within the desired behaviours, for the cooperative subscale, there were 26 children in the average group, 13 children with more skills and 1 child with fewer skills. Thirty-two children were rated as average and eight children had fewer skills in the assertive subscale, while 30 children were rated as average and 10 were rated as having fewer skills for the self-control subscale. Within the challenging behaviours, there were 36 children in the average group and four children with more behaviours in the externalising subscale, while 39 children had average ratings and one child was rated as having more behaviours in the internalising subscale.

Across the five subscales there were 14 children who were rated as average for all five, and 13 children who were rated as average for assertion, self-control, externalising and internalising behaviours, and as having more cooperative skills. The remaining 13 children were rated as having fewer desired social skills or more challenging behaviours. One child was average except for having more externalising behaviour. Of the three other children with more externalising behaviour, one had

fewer skills in self-control while all three had fewer assertion skills. The one child who had more internalising behaviour also had fewer skills in assertion and self-control. The five children who only had fewer desired social skills were all rated low in self-control, with four being low in assertion skills and one being low in co-operative skills.

Social skills within the imaginary play activity. The children's social skills within the imaginary play activity were given scores from 1 to 7, which increased with their presenting confidence with interaction. The ratings of social skills ranged between 1 and 7 with a mean of 5.03 and a standard deviation of 1.82.

Interaction Between Variables

Intercorrelations between the emotion regulation, social skills and imaginary play variables are presented in Table 2. Various significant relationships between the Emotion Regulation Checklist and the Social Skills Rating System-Preschool Form were found. Children's high ratings on the positive emotion regulation subscale were significantly positively related to high ratings of assertion and cooperation, and significantly negatively related to negative emotion regulation, externalising and internalising social behaviours. High ratings in the negative emotion regulation subscale were significantly related to low cooperation, and high externalising and internalising social behaviours.

Significant positive correlations were found between assertion and cooperation, assertion and self-control, and cooperation and self-control. Externalising and internalising social behaviours were both significantly negatively correlated with assertion, cooperation and self-control.

The frequency of children's imaginary play alone at home was significantly positively related to the frequency of their imaginary play with siblings/friends, and

Table 2

InterCorrelations Between Measures of Emotion Regulation, Social Skills and Imaginary Play

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. Emotion Regulation Positive	-------	-0.43**	0.30*	0.28*	0.16	-0.41**	-0.40**	0.13	-0.28*	-0.04	-0.09	0.14	0.14	0.18
2. Emotion Regulation Negative		-------	-0.19	-0.28*	-0.08	0.43	0.37**	0.19	0.05	0.11	0.00	0.54	0.00	0.16
3. SSRS Assertion			-------	0.81**	0.87	-0.49**	-0.55**	-0.21	-0.01	-0.24	0.06	0.12	-0.09	0.07
4. SSRS Cooperation				--------	0.82**	-0.53 **	-0.49**	-0.32*	0.90	-0.39**	-0.05	0.00	0.00	0.00
5. SSRS Self Control					-------	-0.35*	-0.54*	-0.39**	0.09	-0.33*	0.08	0.22	-0.06	0.10
6. SSRS Externalising						-------	0.27*	0.10	0.00	0.13	0.10	0.03	0.03	0.26
7. SSRS Internalising							--------	0.11	-0.06	0.22	-0.16	0.40	-0.21	0.11
8. IP at home alone								--------	0.29*	0.61**	0.00	-0.09	0.10	0.03
9. IP at home with siblings									--------	0.24	0.02	0.07	0.10	-0.03
10. IP at home with adults										--------	0.22	0.17	-0.16	0.00
11. Excitement in story											--------	0.41*	-0.24	-0.14
12. Social confidence												--------	-0.37**	0.19
13. Time to open box													-------	-0.36 *
14. Integration of box														-------

*p<0.05

**p<0.01

with adults. Both cooperation and self-control were significantly negatively related with the frequency of imaginary play at home alone, and with adults. A significant negative relationship was found between the frequency of children's imaginary play with siblings/friends and their ratings on the positive emotion regulation subscale.

There was a significant positive relationship between children's ratings of excitement in the storytelling activity and ratings of social confidence in the imaginary play activity. Low ratings in social confidence were significantly related to waiting longer to open the box. Children who were more able to wait to open the box were significantly correlated with being more able to more fully integrate the box into the imaginary play activity.

Further to the results in Table 2, there were significant findings for the qualities within imaginary play at home. Revisiting daily experiences was negatively correlated with negative emotion regulation sills ($r = -0.27$, $p<.05$), and positively correlated with imaginary play with siblings/friends ($r = +0.30 p<.05$) and the presence of affect ($r = +0.31$, $p<.05$). Affect in play was also positively correlated with imaginary play with siblings/friends ($r = +0.29$, $p<.05$).

The two (toy or chocolate golden coins) by two (frog or kitten) analysis of variance that compared means between the groups of children showed there were no significant differences in children's responses to the emotion regulation event in the imaginary play activity between the group receiving the affective prime and the group receiving the neutral prime.

Discussion

The aim of the present study was to examine the role of imaginary play in relation to young children's emotion regulation and their social skills. Children's responses to an emotion regulation task within an imaginary play activity was rated through two observable emotion regulation strategies; continuing to play, and reliance on cognitive availability, with the results expected to reflect emotion regulation in daily living.

Within the imaginary play activity, children who were able to regulate their emotions enough to continue the imaginary play were also able to wait to open the box, providing support for Fein's (1989) proposal of pretence continuation, Johnson and Harris' (1994) cognitive availability hypothesis, and Bourchier and Davis' (2000) claim of the complementary nature of the two approaches. The children's emotion regulation in the imaginary play activity was not however significantly related to their reported emotion regulation in everyday life. Further support was not found for children having well developed positive emotion regulation skills when they play imaginatively with siblings/friends and parents more frequently at home. The affective prime did not directly influence the time that it took for the children to open the present box.

Analysis of Observations

After the initial excitement of being videotaped, the children were comfortable and focused on the storytelling and imaginary play activity. The storytelling had the desired effect of creating ease between the children and myself. The children became increasingly engaged with the story through the questions I asked relating aspects of the story to their memories of everyday living experiences. The children who heard the story that ended with finding 10 chocolate golden coins rather than 10 toy golden coins did appear to be more interested, shared memories of eating chocolate golden coins and seemed to experience greater intensity of pleasant emotions.

The evocation of previous memories continued through the transition of 'travelling to Playcentre for a birthday party', and through the birthday party theme of the imaginary play activity. In previous studies the emotion arousing box was irrelevant to the activity whereas in this study the box was directly relevant to the known pleasant theme of the imaginary play activity producing interesting results. One would assume that children's memories of opening birthday presents would have accompanying pleasant emotions, however, according to Evans and Galyer (2008), the uncertainty of not knowing the contents is unpleasant, and consequently, a powerful motivator. Children seek information in order to reduce discomfort from uncertainty (Evans, & Galyer), which in this context meant opening the box.

Even though Grey Bear's birthday party was an imaginary play activity, for approximately one third of the children, memories of previous birthday parties and opening presents seemed to create a collision between the imaginative and real worlds. When finally opening the box, children made comments such as, "A terrible present, it's empty", or, "There's nothing inside, it's just a box". For some young children, it seems then that previous experiences created expectations that made it difficult for them to discern make-believe from reality.

For parents of young children, it is important therefore, not to assume that children know what is imagination, and what is real, and to take care when communicating in contexts where children do have previous experience. Even saying, "Put your tooth under your pillow for the tooth fairy", can confuse young children, especially when their teeth have previously been replaced with a gold coin by the 'tooth fairy'. Characters such as Easter Bunny and Santa Claus represent the spirit of the season to adults yet for many children who witness their widespread appearances, they are, for all intents and purposes, real and therefore influencing children's perceptions and differentiation of make-believe and real.

In this study, when I commented to children, "I wonder where it went", this was clearly imaginative play for me, yet for the children who looked around there was an element of reality. Approximately two thirds of the children however, were able to recognise that we were playing imaginatively and continued with the make-believe contents of the box. Perhaps these children have better developed emotion regulation strategies that helped them to manage unpleasant emotions more rapidly, allowing them to adapt their behaviour and continue with the imaginary play.

Although only two thirds of the children were able to continue with the pretence, regarding the contents once the box was opened, all of the children did participate in the rest of the imaginary play activity. The children could see that we were only pretending to light the candles, yet they all still 'blew' them out. The children knew that the toys did not whisper in my ear that they wanted the child to help with opening the layers of the Pass the Parcel yet the children were always very obliging. When the potential for pleasant emotions arose, the children were mostly willing to approach and continue the pretence however, when unpleasant emotions were evoked through seeing the empty box, many children discontinued play until they recovered and regulated their emotional arousal to a tolerable level. The children's behaviour reflects that goals, hedonism, social communication and memories of previous experiences were all present and probable descriptions of the functions of their emotions.

Qualities of Children's Imaginary Play at Home

Presence of daily life experiences and emotions. Of the children who engage in imaginary play at home, emotions are present for 80% of them, alongside 85% of the children revisiting daily experiences. Most of the children are therefore exploring and working through the emotional content of their everyday experiences within the non-threatening medium of imaginary play, which is in line with previous literature. Such a

high percentage supports Russ, Pearson, and Sacha's (2006) claim that the exploration and mastery of emotional experience is the fundamental purpose of imaginary play.

Imaginary play offers children the opportunity to safely re-visit experiences and process any residual pleasant or unpleasant emotions (Keren et al., 2005; Moore & Russ, 2006), thereby practicing emotion regulation skills and strategies. The children in this study whom re-visited daily life experiences less frequently in their imaginary play displayed more negative emotion regulation behaviours as measured by the Emotion Regulation Checklist. It is likely these children have not been able to resolve challenging experiences or develop helpful emotion regulation skills and strategies that could be transferred back to life outside of play. This relationship highlights the importance of valuing children's imaginary play and its potential role in the development of positive emotion regulation behaviours.

The imaginary play qualities of affect and re-visiting everyday experiences were greater with children who play more frequently with their siblings/friends. A central feature of the functionalist theory of emotion regulation is social interaction, which is consistent with these findings. Young children often share time and experiences with their siblings/friends so it seems logical that they would re-visit these experiences together in their play, processing their emotions therein. Children and their siblings/friends are both in the process of developing social skills, allowing them ample opportunities for learning and practicing varied emotion regulation responses, and flexibility, a key skill described by Thompson (1994).

Themes within children's imaginary play. The underlying themes present within this sample of children's imaginary play provides future research with a reasonable starting point for creating imaginary play activities relevant to children and subsequently, more likely to be engaging. There was a clear distinction between genders in many of the naturally occurring themes, therefore researchers would be wise

to consider the neutral themes rather than creating activities that may be biased due to gender differences. Interesting to note is the stereotypic themes emerging in early childhood. The girls were more interested than boys in families and places/experiences, while the themes more frequent for the boys included emergency rescue, superheroes and vehicles. Conversely, the themes most similar for boys and girls were baddies and goodies, characters, doctors, dress ups and physical fighting, which does not reflect typical gender stereotypical behaviour.

Solitary and Dyadic Children's Imaginary Play

The children in this study were regularly active in imaginary play, playing alone and with siblings/friends at least daily, and with parents several times weekly and sometimes daily. Children who frequently play imaginatively on their own also play frequently with their siblings/friends and parents. According to Galyer and Evan's (2001) findings, children who frequently engage in imaginary play with experienced play partners will have well developed positive emotion regulations skills, however in the present study and with the measures I used, this was not replicated with these children.

Although the children play frequently with siblings/friends and parents, and some children have very well developed positive emotion regulation skills, the only significant relationship found was between more imaginary play with siblings/friends and less positive emotion regulation skills. The questions to ask are, "Were these siblings/friends older or younger?" and, "How much older or younger?" Perhaps the siblings/friends are still in the early stages of learning emotion regulation themselves and are therefore not partaking in helpful social interactions that enhance the development of emotion regulation of the children in this study.

Social interaction, or lack of, is also a possible explanation for the significant relationship between children who often engage in solitary play, or dyadic play with

parents, and also had limited development of cooperation and self-control. Children who frequently play alone may do so as they have not yet developed adequate skills in cooperation and self-control, however without the opportunities afforded within social interaction, developing these skills is hindered. Further to this, the children may engage more frequently in imaginary play with parents as they are perhaps more tolerant of the children's limited cooperation and self-control.

Too much tolerance from parents may actually have the disadvantageous effect of decreasing the child's need or desire, and furthermore the goal, of learning to cooperate and manage one's self when interacting with others. Parents and other adults therefore need to be attuned to children's developmental level of social and emotion regulation skills, and take care with the manner in which they communicate, model and reinforce behaviour when they scaffold children's learning, especially if they perceive behaviour from a functionalist viewpoint.

Children's Emotion Regulation Strategies During Imaginary Play

One intention of this study was to assess children's responses to an emotionally arousing event through their ability to continue play, and through the influence of cognitive availability. The two proposed observable emotion regulation strategies were then examined to gauge whether they could be complementary explanations for children's responses.

Emotion regulation and continuance of play. Fein's (1989) description of pretence continuation is a measure for an emotion regulation strategy that involves the approach, appraisal and modulation of emotions in response to an arousing person-event transaction. When emotional arousal can be regulated to a level that is tolerable, activity or play can then continue; however if the emotional experience, whether pleasant or unpleasant, is not successfully modulated and becomes overwhelming, play discontinues.

The average response from children in this study when exposed to the potentially arousing event of being shown a mysterious present box, perhaps wondering about its contents yet not being invited to open it or look inside, was to keep the box in the play by placing it close to Grey Bear. This behaviour would indicate that the children were able to modulate their probable anticipation, excitement, or uncertainty enough to continue to play. The children were therefore able to regulate the intensity of their emotions to a tolerable level and to display pro-social behaviour enabling them to continue in the imaginary play activity. This behaviour reflects the functionalist description of emotion regulation.

According to Campos, et al. (1994), emotions can be regulated at the stages of input, central processing and output. Strategies observed at the sensory input level included the children changing focus of attention and distraction by placing the box down. As central processing is largely unseen, particular strategies could only be inferred with young children, however one would assume their presence. The children's responses observed at the output level were the strategies of inhibition and restraint from opening the box. Altogether, the variety of strategies enlisted by the children in this one emotion regulation event highlight how emotion regulation is the 'complex, multi-dimensional process', as described by Cole, Michel, and O Donnell Teti (1996).

The earlier studies of Bourchier and Davis (2000), Carrick and Quas (2006), Galyer and Evans (2001), and Golomb and Galasso (1995) showed that children tend to continue or discontinue imaginary play based on the hedonistic goals of approaching, increasing or engaging with pleasant emotions, and avoiding, decreasing or retreating from unpleasant emotions respectively. Once the children in this study opened the present box and discovered it was empty, just over half of them regulated their emotions enough to continue pretence regarding the supposed contents, and furthermore, the goal of continuing the game. Some children also modified or transformed the contents to

further regulate the intensity of their emotions as in the Golomb and Galasso study. The other children however, were not able, or perhaps willing, to continue with the pretence of the contents probably due to retreating from the unpleasant emotion of disappointment. These children did recover with reassurance from the researcher and continued the imaginary play activity with ease, reflecting the important role of adults in assisting children until they can self regulate as professed by Calkins (1994) and Cole, et al., (1994).

Emotion regulation and cognitive availability. The cognitive availability hypothesis described by Johnson and Harris (1994) suggested that children's emotion regulation is related to their reliance on visual confirmation and memory. Sceptical children are thought to be more able to regulate their emotions as they are less reliant on cognitive availability and are consequently less inclined to seek visual evidence. Credulous children however will attempt to ease their emotional arousal through visual confirmation, which effectively increases cognitive availability.

The children who followed the average pattern of placing the present box close to Grey Bear were then generally able to wait until either before or after the Pass the Parcel game before opening the box. It seems that these children were able to further regulate their emotions without needing to immediately acquire visual confirmation of the contents. Not only could the children manage to modulate their emotions, they were also able to maintain the level of arousal for some time.

With further consideration of Campos, et al. (1994) various possible stages of regulation, most of the strategies utilised by the children with regards to cognitive availability were similar to the observations from continuing pretence. At the sensory input level, the children were again observed re-focusing their attention and distracting themselves by engaging with the next part of the imaginary play activity. As cognitive availability was this measure for emotion regulation, it is assumed to be one of the

central processing strategies enlisted by some of the children. The children's behaviour at the output level reflected the use of inhibition and restraint. That was, until curiosity, excitement, or uncertainty, and the goal of opening the present box took precedence, which may have been partly due to the decreasing interesting distractions.

In both of the studies by Harris, et al., (1991) and Johnson and Harris (1994, Expt 3), approximately half of the children resorted to looking in the boxes to ease their feelings of uncertainty. The children in those studies managed to regulate their emotions enough to restrain themselves from looking in the boxes, until the researcher left the room. Although the children in this study generally waited to open the present box, nearly all of them did open it either immediately or just before the activity ended, and always in my presence. The social communication of researchers via social signals such as facial expressions, physical gestures and language could have influenced the children's level of engagement and/or induced performance bias in this study and in the two studies above. Social referencing may have occurred, whereby the children perceived the researchers' approval or disapproval and behaved accordingly.

Competing or complementary hypotheses? Bourchier and Davis (2000) surmised that the results from previous literature and from their own research indicate that pretence continuation and cognitive availability can be viewed as complementary, in that there are two possible subgroups of children that can be identified when using these two measures of emotion regulation. One subgroup being the 'sceptical, in control children who behave in line with pretence continuation' and the other subgroup being the 'credulous, unsure children who have behaviour that reflects increased cognitive availability'. A significant relationship between the children's pretence continuation and their cognitive availability was found in this study, whereby children who were more able to continue play after the emotion regulation event were also able to wait longer to open the box, reflecting less reliance on cognitive availability. These

findings therefore support Bourchier and Davis' (2000) claim of two complementary subgroups, however neither of these emotion regulation measures was found to be significantly related to the children's emotion regulation measured by the Emotion Regulation Checklist.

The subgroup of sceptical, in control children displayed their well-developed emotion regulation skills and strategies through their greater ability to continue in the imaginary play activity, which was then reinforced by their maintenance of a tolerable level of arousal, as they were able to wait longer to open the present box. While the children were waiting, they were likely to be managing a mixture of pleasant and unpleasant emotions such as anticipation, excitement and uncertainty yet managed to rise to the challenge of social survival and maintain a positive relationship with the researcher, an important goal according to functionalism.

The subgroup of credulous, unsure children, however, appeared less able to regulate their emotions, which was observed through their behaviour that showed less ability to continue the imaginary play activity, and by their need to open the box more quickly for visual confirmation. The children's low tolerance of uncertainty in particular, is a variable that Dugas, et al. (1997) contend leads to worry, which features highly in anxiety. Children's imaginary play therefore, is an important consideration for prevention and interventions concerned with anxiety. Providing opportunities and valuing the role of imaginary play in children's optimal, normative emotion regulation development would be beneficial, alongside support for professionals, and their direct and indirect play therapy intervention programmes.

With the children showing well-developed emotion regulation through the pretence continuation and cognitive availability, as well as having average to high scores in the emotion regulation subscale, it was expected that there would be significant positive relationships found between them, which surprisingly was not the

case. Although the correlations showed insignificant results, the relationships were still positive, indicating the possibility that some children were rated highly for emotion regulation skills in both the imaginary play activity and in everyday life.

As Galyer and Evans (2001) did find a significant positive relationship between children's pretence continuation and everyday emotion regulation, considering various possible explanations for the contrasting results is necessary. First, any of the emotion regulation ratings may have been biased. The parents may have completed the Emotion Regulation Checklist with a social desirability bias resulting in their children either appearing more well developed in emotion regulation than they really are, or, perhaps the parents perception of the children's emotion regulation was more discerning, and consequently some of the children were given lower ratings than they deserved.

Secondly, the ratings for the children's emotion regulation in the pretence continuation and cognitive availability measures may have been unintentionally affected by experimenter bias. Inter-rater reliability checks would have curtailed this possibility, however due to ethical constraints regarding the privacy of the participants and the video recording, checks were not undertaken.

A third possibility for the inconsistent results between the Galyer and Evans (2001) study and this one could be that there were different imaginary play activities and emotion regulation events. The pretend play game used by Galyer and Evans was reasonably neutral until a negatively valenced emotion regulation event was introduced, which threatened the end of the game. In this study however, there may not have been enough contrast between the imaginary play activity of a known enjoyable occasion of a birthday party, and the more positively valenced emotion regulation event of waiting to open a present box. Furthermore, children very likely have experience at waiting to open a present whereas they probably do not have any experience at all of a crocodile

threatening to eat them. Previous memories and current self-management is a defining feature of functionalism (Campos, et al., 1994).

Another possibility is that the children's imaginary play and emotion regulation behaviour was simply influenced by interacting with a new play partner and different toys in a fairly structured activity, even though the setting was familiar. Finally, although the children's engagement reflected otherwise, perhaps they were just not interested, rather than regulating emotional arousal, when the emotion regulation event was occurring.

The Affective Prime and Children's Emotion Regulation Responses

Affective priming occurs when the presentation of an event or particular experience effectively creates a responsiveness or sensitivity to later presented stimuli. The storytelling before the imaginary play activity concluded with either 10 toy golden coins or 10 chocolate golden coins to explore the influence from affective priming on the children's responses to the emotion regulation event. There were no significant differences between the children's responses in the groups experiencing either low to moderate moderate emotional arousal (toy coins) or high emotional arousal (gold chocolate coins).

The lack of difference in children's responses to the emotion regulation event from the affective priming may have been in part due to there being too little contrast between the toy golden coins and the chocolate golden coins in terms of producing arousal, as may have been the case in the imaginary play activity and the emotion regulation event. The dilemma in designing research that involves children is an ethical one, requiring a balance between the well being of the children being paramount, and obtaining large effects by means of more potent variables.

Although the affective priming did not have a differential effect on the children's responses to the emotion regulation task, the more excited the children were

when hearing about the golden coins, whether toy or chocolate, the more socially confident they were in the imaginary play activity. Further to this, the children with greater social confidence also had well developed emotion regulation displayed through being able to wait longer to open the present box. It appears that while the various conditions did not produce directly comparable results from the influence of affective priming, excitement from exposure to the golden coins was related to greater social confidence, which was then related to better emotion regulation. Hence social confidence could be viewed as a moderating variable linking the affective priming and emotion regulation.

Imaginary Play, Emotion Regulation and Social Skills

Social interaction is widely considered to be central in the process of learning how to regulate emotions; therefore children who have well-developed social skills are at an advantage when it comes to developing emotion regulation skills and strategies. Support for this important relationship was found in the research by Galyer and Evans (2001) through the significant correlations between the children's scores on the Social Skills Rating System and the Emotion Regulation Checklist.

The children in this study were rated with the Social Skill Rating System: Preschool Form and the Emotion Regulation Checklist, which also produced significant results, adding support to Galyer and Evans' (2001) earlier findings. Children who had high assertive and cooperative social skills, and low externalising and internalising behaviours, also had well developed emotion regulation, whereas children with low cooperative social skills and high externalising and internalising behaviours displayed less effective emotion regulation, according to ratings by adults who knew them well.

Assertive communication involves respectful giving and receiving of information between individuals, therefore children who are able to communicate assertively will feel heard and valued when they express themselves, rather than feeling

frustrated. Cooperative behaviour reflects the ability to collaborate with others and to compromise to reach solutions. It is therefore possible to suggest that children who are assertive and cooperative, and have few externalising and internalising behaviours, are more appealing play partners, which would increase opportunities for social interaction and play, thereby allowing more practice of emotion regulation skills and strategies. The relationship between high assertion and cooperation, and low externalising and internalising behaviours, with well-developed emotion regulation is of no great surprise.

It is also of no great surprise that children who are yet to develop cooperative social skills and have high externalising and internalising behaviours are also going to display negative emotion regulation, however it may be of little value to focus on whether one variable causes the other. From my perspective, the practical importance of being able to assess children's social skills and emotion regulation is not to denigrate these children, but to allow for the provision of baselines for both professionals and parents to create helpful interventions and support for the children's development in both essential areas.

High assertive, cooperative and self control social skills were all found to be related to each other, alongside being related to low externalising and internalising behaviours. Although there were relationships between the social skills, the variance within the desired social skills is also worth noting. While approximately 75% of the children had average assertive and self control skills, there were approximately 25% of the children with fewer skills. As these children are yet to develop an average level of assertion and self-control, they too would benefit from extra assistance to enable them to achieve this level. Improving these social skills may also have an influence on their ability to regulate emotional arousal, as with greater assertion they would be more able to communicate effectively, which would decrease frustration, and with more self-

control they would be better at managing their behaviour, and accompanying emotional arousal.

Also of interest were the children's groupings in the cooperative category. Two thirds of the children had average cooperative skills, while one third of the children had greater cooperative skills when compared to a normative sample. When one considers that socio-emotional learning occurs primarily through language, modelling/observation and reinforcement, and according to Campos et al. (2004), the context and culture within which one lives, it is important to acknowledge that the early childhood centres these children attend with their families are Playcentres. Playcentres are licensed early childhood centres in New Zealand that are parent-led cooperatives where all of the positions within the centres, Associations and Federation are undertaken by a diverse group of current or past parents. This commitment requires sincere practice of cooperative behaviours, and usually under the observing eyes and other senses of children. It may be that the cooperative philosophy and practice in Playcentres is positively influencing the development of the children's cooperative skills. This speculation might be worth exploring in future research.

Assessment of the children's social confidence within the imaginary play activity showed that on average, the children were observed as being actively engaged, that they replied to my questions with some detail, and they smiled and showed enjoyment. The children's social responses to me, a comparative stranger, in the imaginary play activity could be considered a reflection of the children's internal working models, the concept developed by Bretherton (as cited in Campos, et al., 1994; Cassidy, 1994; Laible, & Thompson, 1998; Oppenheim, et al., 1997). The earlier socio-emotional experiences of the children with their primary caregivers will have created internal representations within the children that influenced their approach and responses in this social interaction. This connection between previous experience and the

children's self-management in the imaginary play activity is another defining feature of the functional theory of emotion (Campos, et al., 1994), which brings attention to the importance of quality social interactions between parents and children, particularly in early childhood.

Methodological Issues

The imaginary play questionnaire. Frequency of play with experienced play partners was previously related to well developed emotion regulation in young children (Galyer, & Evans, 2001) whereas in this study the positive relationship found between these two variables was not significant, indicating the presence of variance within the imaginary play interaction. With language, modeling/observation and reinforcement being the primary modes of social communication and learning about emotions, gathering information about the parent's meta-philosophy of emotions would provide knowledge and understanding of their parenting approach, and of which features are more influential on the children's development of emotion regulation.

The Emotion Regulation Checklist. The Emotion Regulation Checklist ratings of the children provided a single measure of the children's present development, and as previously mentioned, could have been influenced by social desirability bias. The average rating within this sample of children can not be assumed to reflect the average rating of peers, as there were no norms for comparison; likewise the results should not be generalised elsewhere in the future. Any data that are accumulated to create norms for comparison will need to take into account both obvious and subtle cultural differences within and between countries in order to establish validity and the ability to be generalised appropriately.

As noted by Galyer (1999), the Emotion Regulation Checklist is primarily a descriptive measure of children's emotion regulation behaviour and does not consider the strategies and skills that children use to regulate their arousal. Incorporating

structured assessment of the range and frequency of the strategies and skills enlisted by children to regulate their emotions would show whether they tend to use a select few, or many. Being able to use a variety of skills and strategies reflects the ability to respond flexibly, which increases the range of adaptive responses. An easily achievable starting point would be through observing the input and output processing levels described by Campos, et al. (1994), as was included in this discussion. It would be important to assess children's emotion regulation skills and strategies over a range of contexts in order to provide some ecological validity to the results.

The Emotion Regulation Checklist is a descriptive measure of the socio-emotional behaviours of emotion regulation only, and as emotion regulation is comprised of biological, cognitive and socio-emotional components (Calkins, 1994; Galyer, & Evans, 2001; Denham, et al., 1994), a more thorough approach would also include a biological and/or cognitive measure. Although children's heart rates have previously been measured and associated with children's emotion regulation (Gottman, et al., 1994), biological measures such as these can be very intrusive and as such are not practical or appropriate. Furthermore, as they in themselves could influence children's emotional arousal, results can easily be confounded. Including a measure of the cognitive component of children's emotion regulation would be more achievable. Previously recognised areas of importance include recognition of appropriate regulation (Calkins, 1994), theory of mind (Stansbury, & Sigman, 2000), and internal working models (Calkins, 1994; Stansbury ,& Sigman), any of which would add more valuable information if also included in future research.

Imaginary play activity. The previous methodology of Galyer and Evans (2001) and Golomb and Galasso (1995) involved the use of a negatively valenced emotionally arousing event to measure the children's emotion regulation, whereas in this study the emotion regulation event was potentially positive. It is important to study children's

emotion regulation responses to pleasant emotions as well as unpleasant emotions in order to attain a balanced knowledge base. Although it appears the contrast between the imaginary play activity and the emotion regulation event was too minor, and the emotion regulation event itself could have been more significant, the children still had to regulate the level of the intensity of their emotions in order to continue interacting adaptively. Future research could improve and extend this methodology further by ensuring greater contrast between imaginary play activities and emotion regulation events, and to also design emotion regulation events that have the potential to evoke various other pleasant and unpleasant emotions. It is still however, vital to be mindful of the children's vulnerability and to prioritise their comfort rather than the attainment of significant results.

The measures within the imaginary play activity were designed to assess the children's imaginary play, emotion regulation and social skills behaviours, and the ratings did correspond with the imaginary play questionnaire, the Emotion Regulation Checklist, and the Social Skills Rating System: Preschool Form. Nevertheless, there was no exact match between them; therefore there could have been method and content variance that affected construct validity. Modifications to prevent this possibility would need to include, for example, incorporating assertion, cooperation and self-control measures of social skills within the imaginary play activity to match the subscales within the Social Skills Rating System. In this way correlations between the measures might be more stable and reliable.

The standardised procedure for the imaginary play activity meant that variance in my approach was kept to a minimum, so that the children's emotion regulation was measured within a consistent situation, at one point in time. If this first procedure was followed by the random assignment of the children into two playgroups with one focused on emotional learning, and then at a later date, all of the children were exposed

to another standardised imaginary play activity with an emotion regulation event, this could provide useful before-and-after data regarding the influence of imaginary play on children's emotion regulation.

Conclusions

In conclusion, this study supports previous findings of positive relationships between imaginary play, and children's development of emotion regulation and social skills. Children who have well developed, desirable social skills are also able to regulate their emotions adaptively in everyday living. A positive relationship between the children's frequency of play with parents and good emotion regulation was found, which although not statistically significant, points to a relationship and indicates that the qualities within this mode of social interaction would benefit from further investigation to refine how parent/caregiver and child interaction influences the development of emotion regulation in children.

The children's emotion regulation skills within the imaginary play activity were assessed through the two measures of pretence continuance and reliance on cognitive availability. Children who were able to regulate their emotions enough to continue playing when an emotionally arousing event was introduced were also able to maintain their regulation and wait longer to open the pretend present, supporting the proposal of two possible subgroups of children, sceptical and credulous, and that the measures are complementary in nature.

It has been important to examine the influence from parent and children socio-emotional communication in order to gain understanding of how this impacts on the development of competent emotion regulation. With evidence-based knowledge of particularly influential forms of social interaction such as imaginary play, parents can be given reliable, informative guidance alongside support for one of their very important caregiving, educative roles, which ultimately results in children's optimal development.

This evidence-based knowledge is also valuable for when children are yet to develop emotion regulation skills, to the extent where this is limiting the quality of their daily living. Understanding the usual development of children helps enable professionals to create play therapy interventions intended to work with the present challenges, and to prevent any long-term mental health difficulties.

Altogether, the findings show that social skills and subsequent social interaction do play an important part in young children's development of emotion regulation, and that the role of imaginary play is one mode of social interaction that enables and supports this development.

References

American Psychological Association. (2001). *Publication Manual of the American Psychological Association* (5th Ed.). Washington DC: American Psychological Association.

Berk, L. E. (2004). *Development through the lifespan (3rd Ed.).* Los Angeles, CA: Pearson Education Inc.

Bornstein, M. H., & Tamis-Le Monda, C. S. (1995). Parent-child symbolic play: Three theories in search of an effect. *Developmental Review, 15,* 382-400.

Bourchier, A., & Davis, A. (2000). The influence of availability and affect on children's pretence. *British Journal of Developmental Psychology, 18,* 137-156.

Bretherton, I. (1989). Pretence: The form and function of make-believe play. *Developmental Review, 9,* 383-401.

Calkins, S. D. (1994). Origins and outcomes of individual differences in emotion regulation. In N. A. Fox (Ed.), *The development of emotion regulation: Biological and behavioural considerations* (pp. 53-72). *Monographs of the Society for Research in Child Development, 59, (2-3, Serial No. 240).*

Calkins, S. D. (2004). Temperament and emotional regulation: Multiple models of early development. In M. Beauregard (Ed.), *Consciousness, emotional self-regulation and the brain.* Amsterdam, Holland: John Benjamins.

Campos, J. J., Mumme, D. L., Kermoian, R. K., & Campos, R. G. (1994). A functionalist perspective on the nature of emotion. In N. A. Fox (Ed.), *The development of emotion regulation: Biological and behavioural considerations,* (pp. 284-303). *Monographs of the Society for Research in Child Development, 59, (2-3, serial No. 240).*

Campos, J. J., Frankel, C. B., & Camras, L. (2004). On the nature of emotion regulation. *Child Development, 75,* 377-394.

Carrick, N., & Quas, J. A. (2006). Effects of discrete emotions on young children's ability to discern fantasy and reality. *Developmental Psychology, 42,* 1278-1288.

Cassidy, J. (1994). Emotion regulation: Influences of attachment relationships. In N. A. Fox (Ed.), The development of emotion regulation: Biological and behavioural considerations, (pp. 284-303). *Monographs of the Society for Research in Child Development, 59, (2-3, serial No. 240).*

Cicchetti, D., Ganiban, J., & Barnett, D. (1991). Contributions from the study of high risk populations to understanding the development of emotion regulation. In J. Garber & K. A. Dodge (Eds.), *The development of emotion regulation and dysregulation* (pp. 15-47). New York: Cambridge University Press.

Cole, P. M., Michel, M. K., & O Donnell Teti, L. (1994). The development of emotion regulation and dysregulation: A clinical perspective. In N. A. Fox (Ed.), The development of emotion regulation: Biological and behavioural considerations, (pp. 284-303). *Monographs of the Society for Research in Child Development, 59, (2-3, serial No. 240).*

Cole, P. M., Zahn-Waxler, C., Fox, N. A., Usher, B. A., & Welsh, J. D. (1996). Individual differences in emotion regulation and behaviour problems in preschool children. *Journal of Abnormal Psychology, 105,* 518-529.

Cutting, A. L., & Dunn, J. (2006). Conversations with siblings and friends: Links between relationship quality and social understanding. *British Journal of Developmental Psychology, 24,* 73-87.

Denham, S. A., Zoller, D., & Couchoud, E. A. (1994). Socialisation of preschoolers' emotion understanding. *Developmental Psychology, 30,* 928-936.

Dennis, T. (2006). Emotion self-regulation in preschoolers: The interplay of child approach reactivity, parenting, and control capacities. *Developmental Psychology, 42,* 84-97.

Dugas, M. J., Freeston, M. H., & Landoceur, R. (1997). Intolerance of uncertainty and problem orientation in worry. *Cognitive Therapy and Research, 21,* 593-606.

Eisenberg, N., Valiente, C., Morris, A. S., Fabes, R. A., Cumberland, A., Reiser, M., et al. (2003). Longitudinal relations among parental emotional expressivity, children's regulation, and quality of socioemotional functioning. *Developmental Psychology, 39,* 3-19.

El-Sheikh, M., Harger, J., & Whitson, S. M. (2001). Exposure to interparental conflict and children's adjustment and physical health: the moderating role of the vagal tone. *Child Development, 72,* 1617-1637.

Evans, I.M. & Galyer, K. T. (2008). Are you sure there isn't a monster in the closet? Regulation of children's worrying in uncertain contexts. "in press" *Child and Family Behaviour Therapy.*

Fein, G. G. (1989). Mind, meaning, and affect: Proposals for a theory of pretense. *Developmental Review, 9,* 345-363.

Fein, G. G., & Fryer, M. G. (1995). Maternal contributions to early symbolic play competence. *Developmental Review, 15,* 367-381.

Galyer, K. T. (1999). *Dyadic pretend play and the development of emotion regulation in pre-school children.* Unpublished master's thesis, University of Waikato, New Zealand.

Galyer, K. T., & Evans, I. M. (2001). Pretend play and the development of emotion regulation in preschool children. *Early Child Development and Care, 166,* 93-108.

Golomb, C., & Galasso, L. (1995). Make believe and reality: Exploration of the imaginary realm. *Developmental Psychology, 31,* 800-810.

Gottman, J. M., Fainsilber Katz, L., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology, 10,* 243-268.

Grolnick, W. S., Bridges, L. J., & Connell, J. P. (1996). Emotion regulation in two-year olds: Strategies and emotional expression in four contexts. *Child Development, 67,* 928-941.

Gross, J. J. (1999). Emotion regulation: Past, present, future. *Cognition and Emotion, 13,* 555-573.

Harris, P. L., Brown, E., Marriott, C., Whittal, S., & Harmer, S. (1991). Unexpected, impossible and magical events: Children's reactions to causal violations. *British Journal of Developmental psychology, 12,* 1-7.

Johnson, C. N., & Harris, P. L. (1994). Magic: Special but not excluded. *British Journal of Developmental Psychology, 12,* 35-51.

Kagan, J. (1994). On the nature of emotion. In N. A. Fox (Ed.), The development of emotion regulation: Biological and behavioural considerations, (pp. 7-24). *Monographs of the Society for Research in Child Development, 59, (2-3, serial No. 240).*

Kalpidou, M. D., Power, T. G., Cherry, K. E., & Gottfried, N. W. (2004). Regulation of emotion and behaviour among 3- and 5- year-olds. *Journal of General Psychology, 131,* 159-178.

Keltner, D., & Gross, J. J. (1999). Functional accounts of emotions. *Cognition and Emotion, 13,* 467-480.

Keren, M., Feldman, R., Namdari-Weinbaum, I., Spitzer, S., & Tyano, S. (2005). Relations between parents' interactive style in dyadic and triadic play and

toddlers' symbolic capacity. *American Journal of Orthopsychiatry, 75,* 599-607.

Laible, D., & Thompson, R. A. (1998). Attachment and emotional understanding in preschool children. *Developmental Psychology, 34,* 1038-1045.

Lindsey, E. W., & Colwell, M. J. (2003). Preschoolers' emotional competence: Links to pretend and physical play. *Child Study Journal, 33,* 39-52.

Matthews, G., Zeidner, M., & Roberts, R. D. (2002). *Emotional Intelligence: Science or myth.* USA: Massachusetts Institute of Technology.

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence. *Emotion 1,* 232-242.

Moore, M., & Russ, S. W. (2006). Pretend play as a resource for children: Implications for pediatricians and health professionals. *Journal of Developmental and Behavioural Pediatrics, 27,* 237-261.

Oppenheim, D. Nir, A., Warren, S., & Emde, R. N. (1997). Emotion regulation in mother-child narrative co-construction: Associations with children's narratives and adaptation. *Developmental Psychology, 33,* 284-294.

Penza-Clyve, S., & Zeman, J. (2002). Initial validation of the emotion expression scale for children (EESC). *Journal of Clinical Child and Adolescent Psychology, 31,* 540-547.

Russ, S. W. (2004). *Play in child development and psychotherapy: Toward empirically supported data.* Mahwah, NJ: Lawrence Erlbaum Associates.

Russ, S. W. (2005). Building an empirical foundation for the use of pretend play in therapy. In C. Schaefer, J. McCormick, & A. Ohnogi (Eds.), *International handbook of play therapy: Advances in assessment, theory and research.* Lanham, MD: Rowman & Littlefield Publishers.

Russ, S. W., Pearson, B. L., & Sacha, T. J. (2007). Play assessment. In S. R. Smith & L. handler (Eds.), *A clinical assessment of children and adolescents: A practitioner's handbook.* Mahwah, NJ: Lawrence Erlbaum Associates Inc.

Shields, A., & Cicchetti, D. (1997). Emotion regulation among school-age children: The development and validation of a new criterion Q-Sort Scale. *Developmental Psychology, 33,* 906-916.

Stansbury, K., & Sigman, M. (2000). Responses of preschoolers in two frustrating episodes: Emergence of complex strategies for emotion regulation. *Journal of Genetic Psychology, 2,* 182-192.

Suveg, C., & Zeman, J. (2004). Emotion regulation in children with anxiety disorders. *Journal of Clinical Child and Adolescent Psychology 33,* 750-759.

Thompson, R. A. (1994). Emotion regulation: A theme in search of a definition. In N. A. Fox (Ed.), The development of emotion regulation: Biological and behavioural considerations, (pp. 24-52). *Monographs of the Society for Research in Child Development, 59, (2-3. serial No. 240).*

Valiente, C., & Eisenberg, N. (2006). Parenting and children's adjustment: The role of children's emotion regulation. In D. K. Snyder, J. A. Simpson, & J. N. Hughes (Eds.), *Emotion regulation in couples and families: Pathways to dysfunction and health* (pp. 123-142). Washington, DC: United Book Press.

Zeidner, M., Matthews, G., Roberts, R. D., & MacCann, C. (2003). Development of emotional intelligence: Towards a multi-level investment model. *Human Development, 46,* 69-96.

Zeman, J., & Penza, S. (1997). Preschoolers as functionalists: The impact of social context on emotion regulation. *Child Study Journal, 27,* 41-68.

Zimmerman, L. K., & Stansbury, K. (2003). The influence of temperamental reactivity and situational context on the emotion-regulatory abilities of 3-year-old children. *The Journal of Genetic Psychology 16*, 389-409.

Exploration of Children's Imaginations

Introduction

Hi (name of child), my name is Johanna. I have a story about a treasure hunt to tell you and I have brought some toys to share with you as well. I have asked your mummy and daddy (or appropriate caregiver), and your teacher if this is OK and they said that it is. Is this OK with you? Please tell me if you change your mind. Would you like to hear my story and then play with the toys?

The Treasure Hunt (Story)

One day when the sun was shining warm and bright, a child named Ellen/Alan was playing outside in the garden. Do you have a garden at your home?

Ellen/Alan was picking up some red and golden leaves that had fallen from a large tree when she/he felt something smooth amongst the crunchy leaves. What do you think it could be?

It looked like a piece of paper with torn edges. Ellen/Alan picked up the piece of paper and saw a picture of the swings that were in the garden. Could this be a treasure hunt?

Quickly Ellen/Alan ran on her/his strong legs to the swings. Do you know what she/he found there? Another picture! This time the picture was of the vegetable garden.

Again, Ellen/Alan ran on her/his strong legs all the way to the vegetable garden. She/he looked through the orange carrots, the green lettuces, the yellow corn, and there, hiding in amongst the red tomatoes was … another piece of paper. Ellen/Alan reached in with her/his careful fingers and picked up the paper. And, guess what this picture was of? The sandpit, with a little box half buried in the sand. What could be inside?

Once again, Ellen/Alan ran on her/his strong, fast legs, this time to the sandpit. There it was, the box, half hidden by sand. Using her/his fingers, Ellen/Alan dug the soft, dry sand away from the box and opened the lid. What do you think was inside? Let me tell you.

A   One, two, three, four, five, six, seven, eight, nine, 10 toy
     golden coins.
B   One, two, three, four, five, six, seven, eight, nine, 10 golden coins,
     the ones with chocolate inside that you can eat.

The Birthday Party (Imaginary Play)

I have brought some of my special toys from home to share with
you. Would you like to have a look? This is Sleepy Bear, Elf, Captain
Adventure, Dolphin Girl, Tiger Boy, Ellen/Alan, Annie Bear and Grey
Bear. Actually, today is a special day for Grey Bear. It is her/his birthday.
Look she/he has her/his special party clothes on. I would like to give
her/him a birthday party. Would you like to help me? Mmm, what do we
have at birthday parties, food and birthday cake, presents and games?

Look at this box; here is a birthday present for Grey Bear that arrived
in the letterbox today. I wonder what is inside.

C   It feels like something is sliding about inside, it must be wet and
     slimey. Ooh, I think I heard something, like a gribbet, gribbet. It
     sounds like it might be a frog.
D   This present feels a little warm like there is something inside that is
     warm. Ooh, I think I heard something, like a little soft meow, meow.
     It sounds like it might be a little kitten.

I had better put this present over here where it is safe and wait for
Grey Bear to open it.

Maybe we could use the blocks to make a table for the food and
some chairs. I have some playdough and candles to make the birthday
cake.

How about a game of 'Pass the Parcel?' Have you played this game
before? Let's put all of the toys in a circle. You can play too if you want.
I'll do the music. (Stop for the first three times on toys then the final stop
on the child's turn). This is for you to keep.

I would really like it if you help me put the table and chairs away
then perhaps we could give the toys a balloon each to say thanks for
coming to Grey Bear's birthday party. You can have a balloon too, it you
want. Thank you for your help today. I liked having your company at
Grey Bear's party.

PLEASE INTRODUCE YOUR CHILD.

PARENTS/CAREGIVERS: If you have given consent for your child to participate in this research, please answer the questions below.

The information you give will be kept **strictly confidential.**

1. Child's name **(First name/s)** _____ **(Surname)** _____

    (Preferred name) _____

2. Child's date of birth ____/____/____

3. Child's gender   **Girl/Boy**   (please circle one)

4. Who lives at home with your child?
    (mother, father, step mother/father, grandmother/father, aunt, uncle, siblings, etc.).

    _____

    _____

    _____

5. With which culture do you and your child identify with?

    _____

    _____

    _____

6. How many times per week does your child attend an early childhood centre?

    _____

**THANK YOU FOR GIVING YOUR TIME TO COMPLETE
THE QUESTIONS IN THE FORMS AND QUESTIONNAIRES!**

Imaginary Play in Early Childhood

Parent/Caregiver Questionnaire

Imaginary play.
Young children play imaginatively in many varied ways. I am particularly interested in imaginary play where children are creating 'make believe' experiences therefore please do not include television or video game experiences. These questions will help me to understand your child's imaginative play.   Please circle the answer that is most true for your child.

1. How often does your child play imaginary games alone?

Several times daily   Daily   Several times weekly   Weekly   Rarely

2. How often does your child play imaginary games with siblings or friends?

Several times daily   Daily   Several times weekly   Weekly   Rarely

3. How often does your child play imaginatively with you or another adult in your household?

Several times daily   Daily   Several times weekly   Weekly   Rarely

4. How long does your child remain engaged in imaginary play?

10 minutes   20 minutes   30 minutes   Other

5. What type of imaginary play does your child primarily engage in?

Physical (no props)   Toys for props   Items transformed into props

6. Are there any underlying themes in your child's imaginary play?

_____

_____

_____

7. Does your child re-visit daily life experiences in imaginary play? Please explain.

_____

_____

_____

8. Are emotions a feature within your child's imaginary play? If so, please describe your child's approach?

_____

_____

_____

Emotional Regulation Checklist

The following items ask about different aspects of children's emotions. Each item is rated according to the scale below. Please answer all items by writing the number that best describes your child in the space provided.

1~NEVER   2~SOMETIMES   3~OFTEN   4~ALMOST ALWAYS

A ___ Is cheerful.

B ___ Is difficult to predict mood swings, moving quickly from positive to negative emotional states.

C ___ Responds positively to neutral or friendly approaches by adults.

D ___ Changes well from one activity to another, without becoming anxious, angry or overly excited.

E ___ Recovers quickly from upset or distress, and does not pout or remain sulky, anxious or sad.

F ___ Is easily frustrated.

G ___ Responds positively to neutral approaches by peers.

H ___ Has angry outbursts or tantrums.

I ___ Waits for things they want without a fuss.

J ___ Takes pleasure in the distress of others (for example laughs when others are hurt or punished: enjoys teasing others).

K ___ Can control excitement in emotionally arousing situations (for example, does not get carried away in high energy play situations, or overly excited in inappropriate contexts).

L ___ Is whiny or clingy with adults.

M ___ Has disruptive bursts of energy and excitement.

N ___ Responds angrily to limit setting by adults.

O ___ Says when he or she is feeling sad, angry or mad, fearful or afraid.

P ___ Is sad or lacking in energy.

Q ___ Is overly excited when attempting to engage others in play.

R ___ Displays flat emotion (Eg. expression is vacant, child seems emotionally absent).

S ___ Responds negatively to neutral or friendly approaches by peers.

T ___ Is impulsive.

U ___ Shows concern when others are upset or distressed.

V ___ Displays excitement that others find intrusive or disruptive.

W ___ Displays appropriate negative emotions (for example, anger, fear, frustration, distress in response to hostile, aggressive or intrusive acts by peers).

X ___ Displays negative emotions when attempting to engage others in play.

THANK YOU! YOUR TIME AND EFFORT ARE MUCH APPRECIATED!

Imaginary Play, Emotions and Early Childhood

Dear Members of the Hutt Playcentre Association,

My name is Johanna Pibal and I am presently a postgraduate student completing a Masters of Arts degree in Psychology at Massey University. I have a background in Playcentre, first as a child, then as a parent completing the Playcentre Federation Certificate (1996) and as an Honorary Advisor for the Hutt Playcentre Association (1998-2003).

I am writing to let you know about the research that I am about to begin and to invite you and the families within the Hutt Playcentre Association to be included. The aim of this research is to increase understanding of imaginary play and how it influences the development of emotions in early childhood. The knowledge that will be gained from questionnaires and natural observations of children (approximately 40) and their emotions in imaginary play may later be used to support the emotional development of other children. The supervisor of my research is Dr. Ian Evans from Massey University who has a strong interest in children. Dr. Ian Evans can be contacted through his secretary Robyn Knuth ph. 801-5799 ext. 2042.

I would like to personally introduce myself to families within the centres and explain my research. I will provide information pamphlets for distribution to families who have children between four and five years old (approximately) and who are capable speakers of English. I will leave a collection box within centres for interested families. Consent forms and questionnaires about the child's imaginary play and emotions will be posted to the interested parents/caregivers, which when completed can be returned in a sealed envelope (provided) to the collection box. With parent/caregiver consent, I will contact the appropriate supervisor/team leader and provide a questionnaire about the child's social skills for them to complete. The forms and questionnaires should take the parents/caregivers and the supervisors/team leaders approximately 15 minutes each to complete. I will then arrange a suitable time with the supervisor/team leader and parents/caregivers to come and visit the child on session to tell them a story and to initiate an imaginary play activity with

them, which will take approximately 15 minutes. The story and imaginary play activity will be discretely videotaped for later analysis. The children will be given a small present within the imaginary play activity to thank them for their participation.

All information that is collected through forms, questionnaires and the video analysis will be kept strictly confidential. The information that is gathered will be transformed and written in a way that ensures confidentiality. The original information and video will be destroyed at the completion of this research.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 06/01. If you have any concerns about the conduct of this research, please contact Professor Sylvia Rumball, Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5249, email humanethicsouthb@massey.ac.nz

Thank you for your time and consideration of my request. I would appreciate a response as soon as possible so that I can begin my research in Term Two, 2006. Please contact me if you have any questions or would like to discuss this research further.
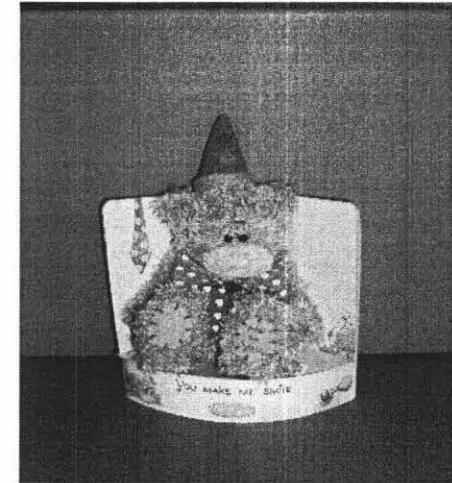
Johanna Pibal,

Would you like me to tell your child a story about a treasure hunt?

Would you like me to play an imaginative game with your child?

Would you like your child to help other people learn about children's emotions?

Imaginary Play, Emotions and Early Childhood.

Greetings, Kia ora,

My name is Johanna Pibal and I am a postgraduate student completing a Masters degree in Psychology through Massey University. The supervisor of my research is Dr. Ian Evans at Massey University who has a strong interest in children and can be contacted through his secretary Robyn Knuth, telephone 801-5799 ext. 2042.

This research involves telling a story, and sharing some toys in an imaginary game with children between four and five years of age (approximately) and who are capable speakers of English. The story and game will be video taped at their early childhood centres for later analysis of the imaginary play and of how children express their emotions. The children will be given a small present as part of the imaginary game.

I have an extensive background in Playcentre and early childhood education, and will be considerate and respectful of all children who have parent/caregiver consent, and who are willing to participate. The well being of children is a high priority for me.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 06/01. If you have any concerns about the conduct of this research, please contact Professor Sylvia

Rumball, Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5249, email humanethicsouthb@massey.ac.nz

All information collected through forms, questionnaires and the video analysis will be kept strictly confidential. The information that is gathered will be transformed and written in a way, which ensures confidentiality. My supervisor and associated university colleagues will assess the written thesis. Only the transformed information may be shared and/or included in future relevant studies. My supervisor and myself will retain a copy of the written information.

If you would like your child to be a participant in this research, please complete the last page of this pamphlet and place it in the box provided at your centre. I will then send you a consent form and questionnaires to fill out, which when completed and signed can be sealed in the envelope (provided) and returned to the early childhood centre. The early childhood teacher will also complete a social skills questionnaire. I will contact you and the early childhood teacher to arrange a suitable time to visit and play.

If you have any questions or would like to discuss any aspect of this research further, please tick the appropriate box on the last page and I will contact you.
Kind regards,
Johanna Pibal.

Imaginary Play, Emotions and Early Childhood.

I (name) _____

am willing for my child to be a participant in

this research.

Child's name _____

Child's date of birth _____

Child's gender _____

Please post the consent form and questionnaires

to the following address.

_____

_____

_____

Phone contact

_____

Please contact me, as I would like more details.

Imaginary Play, Emotions and Early Childhood

Parent/Caregiver Consent Form

You are invited to give consent for your child to participate in this research on imaginary play and emotions in early childhood.

~ I have read the information pamphlet, which explains this research.

~ I understand that all personal information my child, her/his early childhood teacher or I provide will be kept confidential to the researcher.

~ I understand that my child's name will not be used, and that any observations of my child will not be attributed to her/him in any way that will identify her/him.

~ I agree to the story and the imaginary play activity with my child being videotaped, and understand the videotape will be destroyed at the completion of this research.

~ I understand that I may ask any questions, decline to answer any questions or withdraw my child or any information that I have provided from this research (before the completion of data collection and analysis) without giving reasons.

~ I understand this consent form will be held for a period of five (5) years.

I would like to receive a summary of the results of this research when it is complete.
Y/N

(please, circle one)

If your answer is **Yes**, please give your contact details.
Address:_____

~ I _____ **have read this consent form and understand the terms outlined above.**
~ **I give consent for my child** _____ **to participate in this research.**

SIGNED: _____ **DATE:** _____

Verbal Responses and Social Interaction upon Opening the Box

1   (Opens the box) Empty.
Oh, empty. I wonder what could have been in there. What do you think could have been in there?
A terrible present, it's empty.

2   (Opens the box) Nothing in there.
Nothing in there. What did you think would be in there?
Nothing.
Didn't it feel quite right?
Yeah.

3   (Opens the box) None.
What might have been there?
I don't know.

4   (Opens the box) Nothing.
What could have been in there?

5   Ooh, it's something (opens the box, looks).
What might it be?
Nothing.

6   Didn't open.

7   (Opens box, looks at me, appears confused). Nothing?
It's just a game, it's just a game, a pretend one. What could have been in the box?

8   (Places in front of Grey Bear and pretends to help open the box, looks inside) Nothing.
It's a pretend game, so it's a... What could it be?
Nothing in there (closes, opens and looks again then closes).

9   Grey Bear forgot to open this (picks up box and places before him).
Grey Bear forgot to open the present. Would you like to help Grey Bear to open the present? I wonder what's in there?
A kitten (starts to open).
I wonder, just lift up the lid.
(Opens) Ooh.
Is it a kitten.
Yeah.
It is the kitten, wonder what colour the kitten is.
Grey.
A grey kitten for a grey bear. Meow, meow (I pretend to pat the kitten in the box). It's a nice kitten isn't it?
Keep it all safe (closes box).
Keep it all safe.

10   Can I open it? It's a box.
Ok, if you want to.
(Opens box).
What does that look like? Does it look like there is a frog?
It's not, it's just a box.
It's a box, just a bit of a toy one 'cause we were playing. Shall we put the lid on?
(Puts lid on) There's nothing inside, it's just a box.
It's just a box.

11   Open it.
I wonder what's inside.
(Opens the box) Nothing.
Nothing, I wonder where it went 'cause it was making a meow noise. I wonder if something jumped out really quick.
No.

12   Didn't open.

13   (Opens the box).
What do you think is inside there?
Nothing. It's a game? It felt like it was warm.
(Plays pass the parcel again).
Oh, so you can open it.
(Opens) There's nothing.
What could we pretend is in there?
Shark boy, tiger boy, clothes, too little, get him in (plays pass the parcel 3 times with toys inside and himself opening).

14   (Picks up box) Not warm.
Not warm anymore?
(Opens, looks inside then at me).
Oh, what do you think of that?
Nothing in here.
Nothing in here, if it was warm I wonder what it would be? Going meow meow.
Do you know what goes meow?
A cat.
A cat, so it could have been a pretend kitten maybe.
(Shuts, opens then looks at lid). It is a cat.
Is it? What colour is it?

15   Didn't open.

16   (Opens, looks in box, appears unsure).
It's just a surprise, a pretend one. What would be a good present if it was one?
(Touches inside of box, looks outside of box then under box). What was going gribbit, gribbit inside here? Where was it inside here?
What was going gribbit, gribbit inside here?
It was inside here (points at box).
Yeah, I wonder where it went. Maybe the frog jumped out quickly before we saw.

Yeah.

What do you think? Maybe it jumped off somewhere (I mimic jumping with my hand).

It goes in the cupboard.

17   (Opens box).

Ooh, I wonder what happened to the frog. Do you think there was a frog?

Yeah (looks in box).

Where? Did it jump out pretty quick, or something?

(Closes lid, lifts to ear to listen, opens, looks, shuts then repeats and puts the box down).

Goodness me.

18   (Opens) Huh?

Huh, the frog must have jumped out.

Yes (looks around).

Do you think?

No.

19   *Gribit, gribit. I wonder what it is making that noise. Can you feel something sliming inside?*

No.

You can't?

(Opens, looks inside).

Oh.

Nothing.

Nothing, I wonder if the frog got out.

Maybe.

And it jumped away somewhere. Where would it jump away to?

(Looks around quietly and thoroughly then picks up the train whistle).

20   *Does it feel like there's something sliming inside anymore?*

Might be (picks up box).

I wonder.

Might be not full (opens). There. Nothing in.

Ooh, what happened to the frog? Did he jump out?

No.

No. I wonder where it's gone. It did sound like it. Did you hear that? It went gribit.

Well, I just, um, um. I heard it shake it and it went but I didn't hear anything.

Oh.

I just, I but I did. I just heard it go, um and, and it was, it was kind of like a swim but it just walked.

It carefully walked. You heard that kind of sound?

It might have been big.

It might have been big.

And it big. I don't know what it was, oh, but the postman put something in there but he the postman put (opens box again) something in here.

Yeah.

(Appears puzzled).

Goodness me.
Goodness me.
Maybe it's invisible. I can't feel anything (hand in box). Can you feel anything?
No (looks).
No?
Can see there's nothing in there. There's some, some crumbs.
Some little crumbs. Were there crumbs in there?
Yeah, see (looks) some, some crumbs, crumbs (flicks out with his hands, closes box).
Maybe that's what the frog ate, the frog's food. If it was a frog. What else could make that funny noise?
Nothing. I don't get it, what it was.
Oh, what would have been good? What would Grey Bear like to have found in there?
He would have liked to found, a brand new…
A brand new…
Um, a brand new, um maybe a brand new baby bear.
A brand new baby bear.
For when he goes to sleep.
That would have been a nice thing to find, wouldn't it?
Yeah, or maybe it jumped out when it was in the mail when it was in the letterbox it jumped out on, on Playcentre and, and it jumped over the gate onto school but and then it jumped over school and here.
Yeah. Hey that's good thinking. I wonder if it did.
Yeah.
It might have jumped to find a pond 'cause it didn't really like living in a box.
No, might have jumped in a pond.
A pond somewhere. Are there any ponds round here?
It might have been a grey duck.
A grey duck, it may have been. What happens to grey ducks? What do they grow into?
Bears.
Bears. Big grey bears?
Yeah. Big grey bears, grey ones.
Like Grey Bear here? Like Grey Bear on the box? (I point to a sticker on the box).

21   (Opens, looks) Nothing.
I wonder what happened to the warm thing that was going meow. Mmm, maybe it jumped out really quick.
And we didn't see it.
Maybe. What else might have happened?
I don't know.
Mmm, maybe there's a little kitten running around somewhere at Playcentre. I wonder.
(Quiet, looks around) It was that (picks up soft toy).
Oh, this here. Oh look, what a soft little kitten.
(Puts in box).
There, safe and sound inside the box. That was great thinking.

Lets put it somewhere safe (walks away with box and places in safe place then returns).
That's a safe and sound place. Thank you.

22   (Opens)
Ooh.
(Looks at box then at me) Nothing.
Nothing. What happened to that, that noise. What was that making that noise?
Yeah (looks in box).
And it kind of felt warm.
(Looks at me).
Maybe it jumped out very quick when we weren't looking? What else might it be?
Maybe it was magic.
Magic. That's a very good idea. Maybe it was magic. A magic kitten (unclear words) 'cause, do you think it was probably a bit hard, would have been a bit hard to jump out that quick, wouldn't it? 'Cause we were pretty quick, or maybe it jumped out when we weren't looking. Maybe when we were playing pass the parcel.
Mighta jumped out.
Mmm, who knows? Never mind.
(Puts lid on).

23   *Does it feel like there's something inside?*
(Taps the box twice) It does (looks in the box).
It does. Ooh, where's it gone?
Hmm? (looks in crate of toys).
Wonder where it went.
What's this? What's this?
That's for pass the parcel. Shall we get everyone set up in a circle?
What's this?
That's for pass the parcel.
I think it is in the present here (picks up box again, opens and looks).
What do you think happened?
(Closes box) Disappeared.
Disappeared?
Disappeared.

24   (Opens the box).
Ooh.
Nothing.
Nothing. What happened to the warm thing that was going meow?
I don't know (closes box).
Did it jump out?
Yes.
I wonder where it's gone?
Probably jumped into there (looks in crate).
I wonder.
(Plays pass the parcel then has birthday cake).

(Picks up box). Hey (opens). Where's it gone? (Looks around). I know, when he's (points at Grey Bear) not looking we can put a different present in it.
(I pick up Grey Bear and tell the child I'll talk to Grey Bear, which I do).
(Fills box) I'll just put the rest of the stones in.
(I chat to Grey Bear).
Here's his present (places in front of Grey Bear).
Look Grey Bear. A present for you from...
(I pretend to be Grey Bear) Thank you for the present. Oh cool, thank you for the lovely rocks.
They're his hot water bottle. (Repeats process again for Grey Bear then becomes the birthday person and waits then open the box present for self.

25   (Picks up box)
Does it still feel warm?
(Opens, looks inside) Nothing (looks around).
Nothing, what happened?
(Feels box).
Did you hear that meow noise?
Yeah.
Goodness me, what could be making a noise like that?
Yeah.
I wonder.
Yeah maybe the cat was magicked away by that wizard.
Magicked away? That's a good idea. I wonder where the wizard magicked it away to?

26   (Picks up box)
Does it still feel warm?
It does.
I wonder what might be in there.
(Opens) Nothing.
What happened?
Disappeared.
Disappeared. I wonder what, where it disappeared to? What do you think it was?
I know (looks around). At your house.
At my house. Now that's probably a good idea. It might have jumped out quickly when we weren't looking or something.
Yes
Meow.
Where's that cat (looking around).
That cat. Maybe it jumped out in the postbox quickly before we could see.
(Shakes box) Was in here.
Is that right?

27   (Picks up box).
Does it still feel warm?
Yes.
It still feels warm so there might be something.
(Opens the box) What's inside here?

What's inside?

Nothing.

Nothing. What happened? Why was it warm and going meow? What might it have been?

A pussy cat (closes and taps box).

A pussy cat was inside. Where did the pussy cat go then?

Out.

Out? I wonder when it went out. Was it when we were playing pass the parcel, maybe, when we weren't looking.

Yeah.

Yeah, that's when it might have been, or, maybe, maybe it jumped out really quick before we saw when we opened it. What do you think? I can see you're thinking really hard there.

(Waves hand over box).

Are you saying bye bye to the pussy cat?

Making a magic trick over it. D----- spaniel, D----- spaniel.

That's a good spell.

(Opens the box).

Can you see the pussy cat now?

No.

Did your magic trick work?

No.

Even with magic words like D----- spaniel, D----- spaniel, it's still not there.

Meow, meow.

(Looks around).

Maybe it's hiding somewhere.

You're making it.

Do you think so?

Yeah.

We're playing a game aren't we?

No, think you're not making it.

Think I'm not making it. Think there's a real kitten somewhere?

Hiding somewhere.

Hiding somewhere, where would a kitten hide?

Maybe it's small as a dot.

Small as a dot.

Hey, it's purple .

It's a purple one.

Yeah, with no eyes.

No eyes.

No tail.

Without a tail, no tail.

No.

No.

Aah, here (reaches to ground and picks up small piece of playdough). Picks off the carpet.

Here, you found it. Meow, meow. Here it goes, it's a teeny weeny kitten. No wonder it got out without us seeing. What a lovely little kitten that you've got there. Meow, meow.

28   (Opens box, looks).
Ooh, what's in there?
Nothing.
Oh, what was making that noise then?
(Looks again).
Oh, it was going gribit, gribit.
(Looks at me).
What do you think happened?
(Quiet).
Mmm, maybe it jumped out.
Mmm.

29   Didn't open.

30   *Is it kind of warm still?*
Yip, kinda warm (picks up box).
Kinda warm still?
Kinda cold as well.
It's just the lift off the lid kind of present.
(Opens box, looks at me showing the inside). Nothing.
Nothing. I wonder why it was warm and making that meow sound?
Why did, why did it have nothing in it? (Puts box away in crate).
There's nothing in there, oh goodness me.

31   *What do you think is inside?*
Don't know.
You don't know, let's find out. (I open the box). Oh.
(Looks inside).
What's in there?
Nothing.
I wonder why it was all warm and going meow. What goes meow?
A cat.
A cat. Do you think there was one in there? (Unclear words). Must be running around somewhere (I look around).
(Looks around).

32   (Opens box) There isn't any frogs.
There isn't any frogs?
No.

33.   (Opens box) Aah.
(I look).
Aah.
What was making that noise, going meow?
(Shrugs shoulders, looks around).
What usually goes meow?
A cat (looks at me).
A cat, so maybe there was one. Maybe something happened to it?
Maybe it just disappeared.
Just disappeared? Kind of like, how did it just disappear?

(Shrugs shoulders, looks at me).
Might of jumped out, when it was sitting over there. Do you think that might have happened? Who knows?
(Shrugs) Who knows? (Puts lid on box).
Who knows.

34   (Opens box, looks).
Ooh.
What's in it? (Looks inside and outside the box).
Goodness me. What happened to what was going gribit, gribit?
Maybe open it all up (opens sides of box).
Goodness me.
Might find something (looks all over the box, places on ground).

35   *Can you feel something moving inside?*
(Moves box up and down) No.
Oh.
(Opens box, looks inside then at me). Nothing.
Nothing? What was making that noise? Going gribit, gribit.
You.
It was me, was it?
Yep.
It wasn't a frog after all.
No (closes box).

36   (Opens box, looks inside).
Ooh.
(Shows me).
What was going meow, meow?
Kitten did make the noise. Hey, what's this stuck? (Points at inside of lid).
That's just the box that's wrapped up. What do you think happened to the meow noise?
(Closes box).
What, where did it go? What goes meow?
A cat (opens box again).
A cat. Do you think a cat was inside?
Yeah. But where is it?
Where is it? Maybe, what could have happened to it?
Huh, a rip (touches inside of box).
Never mind, we'll just make sure it lasts a little longer.
A rip from the cat.
A rip from the cat, oh.
The cat can ripped.
The cat ripped it with it's sharp claws.
Yes.
Where did the cat go?
(Points outside).
Ran outside, maybe with the children?
(Nods head).
That must have been quick. How did the cat get out?

(No answer).

37   *Can you feel something moving inside?*
(Moves box up and down then shakes head).
That's the kind where you just lift the lid off.
(Opens) Nothing (looks at me).
Nothing there? What was making that noise, gribit, gribit? It sounded like that, didn't it? Oh what makes that kind of noise?
A frog.
A frog, maybe the frog jumped out or something. What do you think?
(Nods head).
Maybe it jumped out when we were walking in or something?
(Looks around).
What else could have happened?
(Looks away).
Who knows.

38   *Is it warm like there's something warm inside?*
(Feeling box).
Can you feel anything moving around inside? Is there something moving?
(Uses box as pass the parcel, opens). I know (secretly puts elephant glove inside box). Let's start all over again, I've got something inside.
It will be a surprise.
(Plays pass the parcel, opens box).
What went meow?
I've got no idea.
I wonder what happened to the thing that was going meow, meow inside the box before? What goes meow?
A cat, I think it was the invisible cat.
The invisible cat?
Or, maybe it was you (continues pass the parcel).
Or maybe it was me. What do you think?
(Quiet).

39   (Opens box).
Ooh.
Nothing (looks at me).
What happened to that thing that was moving around inside?
(Looks in box).
I wonder where it went?
(Puts box on ground).

40   (Opens box) Oh (looks inside).
Ooh.
Nothing.
Nothing. What was making that noise?
I don't know (looks around).
You're looking around like something's jumped out.
(Blows breath out through mouth).
Maybe something jumped out really quickly?

Yeah.
What do you think?
I don't know.
Don't know?
Maybe we'd better have the cake.