

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**Do Unfair Experiences Contribute to Anger and Hostility in
Young Children? Young Children's Perception of
Unfairness and Its Associated Feelings.**

A thesis presented in partial fulfilment of the requirements for the degree
of Master of Arts in Psychology, at Massey University,
Palmerston North, New Zealand

Tomoko Yamaguchi

2005

Abstract

Being able to cope in emotionally demanding situations is a necessary skill for both children and adults. Parents use many disciplinary techniques to help children manage their misbehaviour and overtly expressed negative emotions. Although numerous parenting strategies have been described by researchers and professionals, there are limited numbers of studies looking at aspects of disciplinary practices from young children's perspectives. By understanding children's affective responses to discipline practices, it is possible that parents can provide more effective help for their children, and reduce negative moods such as hostility. Based on Evans' model of the development of hostility, the present study investigated how young children's experiences of unfair treatment might influence their predominant affective expression or attitudes toward a parent who is being unfair. Thirty-two children, aged between five and nine years, were recruited from local primary schools and a summer holiday programme. Using a story about unfairness, the children were able to make judgements about the story and report feelings associated with such experiences. Three original tasks were introduced as an indirect measure of level of hostility in response to the experiences of unfair treatment. Although statistical analysis supported the hypotheses that hostility in children increases as a result of unfair experiences, judging from their verbal responses, there is a complex interactive effect of the mother-child relationship on children's feeling.

Acknowledgements

First of all I would like to thank my supervisor and mentor Professor Ian Evans for his guidance, hard work, and encouragement he has given me in the past two and half years.

Thanks also to the members of the Clinical Psychology Lab for their advice in the past year and to my research assistants, Serafine and Michelle, for their time and help. Many thanks to all the children who helped me to learn their culture and shared with me many unique ideas. I appreciate to the childcare centres and kindergartens for allowing me to visit their classes, particularly the school principals and teachers in Parkland school and Tiritea school for their time and assistance.

To my mum for unconditional love; my step-dad and my grandparents for their support for my many years of education in New Zealand.

Finally, I would like to thank my young sister, Yasuyo, for spending very long hours and many days to help me create the materials for this research project, and for being patient with me during the past years. Without your support, I would not be able to rise to the challenge of completing many difficult tasks.

Table of Contents

Abstract

Acknowledgements

Table of Contents

Introduction	1
Personal Prologue	1
The Role of Parents in Influencing Their Children	2
Hostility and Angry Feelings in Young Children	4
A Model of Origin of Hostility in Children	6
Morality, Justice, and Fairness in Psychology	8
Children's Perception of Fairness Unfairness	12
Affective Experiences of Unfairness in Adults and its Consequences	15
Children's Perception of Unfairness and Origin of Angry Feelings and Hostility	16
Material Development and Piloting the Procedures	18
Observation of Children's Typical Behaviour	18
Piloting Materials and the Procedure	20
The Present Study	26
Method	26
Materials	28
Procedure	33

Results	36
Description of Children's Engagement in Research Activities	36
Basic Judgement of the Stories	37
Feelings of Unfairness	39
Strength of Feelings as Result of Unfairness	40
A Measurement of Hostility	43
Children's Verbal Responses	45
Discussion	47
Children's Perception of Unfairness in Social Relationships	47
Feelings of Unfairness	50
Measuring Hostility in Children	53
Limitations of the Present Study	55
Individual Differences and Origin of Hostility in Children	57
Conclusion	58
References	60

Appendices

A- Letter to Kindergarten	66
B- Doll house and dolls	67
C- Letter to School Principal and Classroom Teacher	68
D- Letter and an Information Sheet to Parent/Guardian	74
E- Stories of Unfairness	78
F- Drawings of the Unfairness Stories	80
G- Feelings Thermometer	82
H- Task 1: Sharing task	83
I- Task 2: Empathy task	85
J- Task 3: Trusting task	87
K- Children's Assent	89
L- Coding sheet	90

Lists of Tables

- | | |
|---|----|
| 1. Categories of Children's Reasons of Unfairness | 39 |
| 2. Intercorrelations Between Three Tasks and the Total Hostility scores | 44 |

Lists of Figures

- | | |
|---|----|
| 1. Percentage of Emotion Reported across Different Age Groups and Story Types | 41 |
| 2.1 Mean Ratings of How Strongly a Child Protagonist Felt the Feeling of Sadness across Age Groups and Gender | 42 |
| 2.2 Mean Ratings of How Strongly a Child Protagonist Felt the Feeling of Anger across Story Types and Gender | 42 |
| 3. Mean Hostility Scores of Parent and Sibling Stories across Age Groups and Gender | 45 |

Introduction

A Personal Prologue

Once in a while, everyone wonders why and how we come to act, think, and feel the ways we do. Some people might not ask themselves such questions, because, after all, many of the answers to these questions seem philosophical and impossible to find. But, it has been important for me to search for some kinds of answers and try to make sense of my own feelings and to think about the origin of my personality. How did I learn to communicate with people the ways I do? Why do I get emotional when I face certain issues? A list of the questions will go on. My curiosity to find some answers was so strong that it brought me to study the science of mind, psychology. After a few academic years and a few phases of self-discovery, many psychological theories and research findings gave me opportunities to see myself from new perspectives, especially a growing realisation of how much mother-child relationship could affect the personality of a child. Since then, whenever I have thought about the *origins* of certain characteristics of myself, I have come to the conclusion that my mother's disciplinary style had a strong influence on my personality.

Being brought up with a strict style of maternal discipline, it was a rather shocking and challenging task for me to understand the idea of positive parental discipline practices as Professor Ian Evans stressed in his studies. However, the more I learn about this style of parenting practice, and how fair and encouraging it would be for the well-being of the child, I have started to wonder what would be the psychological consequences of not receiving fair parental treatments or positive parenting practices? Discussing this question with Professor Evans and reading through his thesis on the origin of hostility in children, it was important enough for

me to investigate the role of fair or unfair parental disciplinary practices in the psychological development of children in general and the emergence of angry feelings and hostility in particular.

The Role of Parents in Influencing Their Children

Parents play a powerful role in psychological as well as physical well-being of their children. Mother-infant attachment in particular has been thought of as the foundation to a child's emotional and social development. Based on Bowlby's (1969) attachment theory, many child development researchers have stressed important aspects of the early mother-child relationships and examined the effects of attachment styles (e.g., secure, avoidant, resistant, and disorganised) on children's organisation of and adjustment to the social world. Recently, Kochanska (2001) conducted a longitudinal study of the relationship between children's attachment history and their emotional development, and reported that young children who had higher attachment security in toddler-hood, at 14 months of age, were less likely to express angry and fearful emotional responses in early childhood, at 33 months of age. The importance of developing a strong bond between mother and a child during early childhood was emphasised. Attachment studies have been widely accepted by developmental psychologists that establishing a close mother-child relationship has been thought of as a fundamental factor for bringing up a "well-behaved" or a "good" child.

Parents, however, influence the socialisation of their children in many ways. A child's emotional and social development is strongly influenced by parental teaching strategies, for example. Developmental studies have suggested that a caring and warm emotional environment is an optimal learning environment for a child

(Eisenberg & Fabes, 1998; Eisenberg, 1992). To understand what aspects of these positive environments might be influencing a child's prosocial behaviours, some studies have observed mother-child interactions at home or in a laboratory setting and examined types of the parental disciplinary strategies that mothers might be used to manage own child when they confronted with emotionally demanding situations (Crockenberg & Litman, 1990; Kuczynski & Kochanska, 1990). Results of these studies consistently indicated that maternal power-assertive strategies (e.g., control, physical enforcement, and inconsistent use of positive reinforcement) influenced on emergence of non-compliance or defiance in young children, whereas less powerful methods of parental practice (e.g., guidance or indirect commands) promoted compliance and self-assertive behaviours in young children. The positive conflict resolution between a mother and a child invite the child to freely express his/her needs and wishes and encourage mother to acknowledge autonomy of her child. Thus, positive discipline practices would strength a mother-child relationship and would enhance socialisation of children.

In recent years, child development researchers have also started to focus on the effects of young children's emotional regulation on their social functioning (e.g., Eisenberg, Fabs, Murphy, Maszk, Smith, & Karnon, 1995). Shipman and Zeman (2001) in particular studied the role of mothers on children's emotional regulation abilities. Comparing maltreated children and non-maltreated children, the researchers concluded that the children whose mothers were sensitive to their emotionality were able to apply better coping strategies in emotionally demanding situations.

Thus, numbers of developmental studies have informed us just how positive early parent-child relationships are to socialisation of young children. However, theses studies tend to suggest what might be good or bad parenting practices rather

than why certain aspects of the parental discipline tactics were effective or not effective for some young children. Also, those 'good' parenting practices suggested in developmental research are based heavily on attachment studies, such that they would only be a useful resource for those parents who have already established a positive and secure relationship with their children; they will be less helpful for those parents whose relationships with their children seem negative and their children's mood is predominantly hostile (Evans, Heriot, & Friedman, 2002).

Thus, the next question might be: what is its origin of hostility and angry feelings in young children? Why do those children with predominantly hostile and angry feelings not comply with their parent's request? How can we help those parents who seem to have difficulties communicating with their young children?

Hostility and Angry Feelings in Young Children

Hostility in children has been rarely talked about as such in the child development literature. Perhaps, however, concepts such as "defiance" (Crockenberg & Litman, 1990; Kochanska, Aksan, & Koenig, 1995), "passive compliance" (Kuczynski & Kochanska, 1990), or "relational aggression" (Crick, 1996) may capture some of connotation of what is meant by hostility and angry feelings in the present study. One of the highest items that loads on Crick's relational aggression concept is the desire for retribution or revenge (e.g., "When this child is mad at a peer, she or he gets even by excluding the peer from his or her clique or peer group"). Young children who are hostile and occupied with angry feelings are believed to have distinctive ways of thinking and feeling about their world.

Angry feelings and aggressive behaviours are generally studied in children who are characterised as "hard-to-manage" (Dunn & Hughes, 2001), or those

children who have “externalising” behaviour problems, antisocial problems, or conduct problems. To give effective help to these children with angry feelings, researchers have been investigating some of the factors or “disruptors” (Patterson, DeBaryshe, & Ramsey, 1989) that might be influencing young children’s externalising behaviour problems. These studies have reported that young children with externalising behaviours problems tend to judge ambiguous social cues as hostile or threatening (Dodge & Somberg, 1987; Dodge & Bates, & Pettit, 1990), or create themes in pretend play that are associated with violence (Dunn & Hughes, 2001).

Cognitive theory further gave us insight into what might be the internal orientation of children with higher tendencies towards aggression and hostility. It explains violence and hostile aggression in children on the basis of their fixed image or perception of the world. In parent-child conflict situations, both child and parent tend to have a negative image of each other, such as the child may think that the parents are mean, and the parents might think that their child is evil. As a result, both parents and children experience an intense and acute state of anger. Angry thoughts and feelings eventually disappear if children or parents do not experience frustrating situations frequently. However if latter continue to be exposed to episode of intense anger, temporally feeling can transformed into chronic anger (Beck, 1999).

Buss’ (1961) insightful analysis of aggression distinguished hostility from anger and aggression. Buss refers to aggression as a response that delivers noxious stimuli to another organism, and anger as an emotional reaction or a “driving state” (p. 9) of aggression. Hostility, according to Buss, is an attitude and defined as “an implicit verbal response involves negative feelings (ill will) and negative evaluations of people and event” (p. 12). If aggression is externalised responses to a stimulus,

and anger is a driving state of that aggression, then hostility could be thought of as cognitive responses or negative language responses to the stimulus. An important point is that anger may cause typically aggressive responses, but hostility does not necessarily result in aggression. Izard (1991) also differentiated between anger, aggression, and hostility. He also agreed with Buss' view that hostility should be defined as affective cognitive process rather than expression of affect (anger) or aggressive act.

Thus, young children who are predominantly hostile and angry may have distinctive ways of perceiving the world. Next question is how such cognitive and affective responses were acquired by young children.

A Model of Origin of Hostility in Children

Evans' (2001) model of hostility in children proposes that children who are constantly treated unfairly by parent or caregiver would become hyper-vigilant to unfairness, and have stronger feeling of "injustice", and then, as a result of unfairness, children would be motivated to seek "restitution" through some kind of retaliation, which we describe as hostility. His model emphasises children's individual affective responses to being treated unfairly, and how this response influence children's emotion, cognition, and behaviours.

Imagine a situation where a young girl has received a good mark in her classroom activities. She is very excited to show it to her mother and hopes that her mother will be very proud of her. Her mother always promised to take her to MacDonald's on Saturday for lunch if she does good work during weekdays. After school, at home, the little girl shows her mother the good work, but her mother is pretty occupied with her household jobs that she is careless and tell her not to disturb

her. The child is unhappy. Just before dinner time, mother asks the girl to set the table, but the girl just ignores mother and continues to play in her bedroom. She hears her mother calls her again and again, but the girl does not want to help her at all. When she does come down to see her mother, her mother is angry, and says to her she may not watch TV until she helps more around the house.

The above short scenario tries to illustrate a mother-child interaction involving the theme of unfairness and how such an experience impacted on the affective experience of the child. If I were to continue to make sense of emotional experience of the girl in the story, the main questions that I would be asking myself are “Was the mother fair or unfair? Did the child receive a fair treatment?”, and “How did she feel about it?” If I were to answer these questions, I would certainly say that her mother was unfair and this experience of unfairness made the child mad or sad. These negative feelings motivated the child to ignore her mother’s request, which was her way of paying her mother back. The child’s negativity towards the mother was her way to retaliate by expressing attitudes of hostility. If the mother wanted her child to help her set the table, she needed to be fair to the girl. If her mother was fair, the child deserved to be praised for her excellent work and, certainly, she did not deserve to be ignored. Her mother’s treatment did not deliver justice to the child.

Evans’ model of the origin of hostility in children is a new approach to understand hostility and angry feelings in young children. In terms of parent-child relationships, it emphasises positive parenting, especially *fairness* in parental discipline practices. In order to fully understand what we mean by fair discipline practices, a careful exploration of a concept of fairness might be essential. Thus, the next question is what do we mean by fairness in psychology?

Morality, Justice, and Fairness in Psychology

Morality in psychology. The concept of fairness might belong to the topic of morality in psychology. From cognitive-developmental perspective, Piaget (1997) and later Kohlberg (1969) contributed enormous information about young children's development of morality.

Piaget's early work with children's moral development informed us of the *egocentric* or self-centred nature of judgements of fairness in young children. From his perspective, young children have developmentally less advanced cognition, so that their moral judgement is based on fixed rules, duties, and necessary obedience to authority (Turiel, 1998). Kohlberg (1969) also stressed cognitive maturation in moral development of young children. For him, a true meaning of justice and fairness (i.e., orientation to relations of liberty, equality, reciprocity, and contract between persons) is not fully acquired by young children until they progress into more cognitively mature individuals (e.g., formal operational thinker).

Both Piaget and Kohlberg stressed the importance of socialization for the development of moral judgement, Family environments and institutions were described as "moral atmosphere" (Kohlberg, 1969), where young children learn rights, values and duties of society. Through interactions with others, children experience "cognitive conflict" (Kohlberg, 1969), which in turn allows the children to improve empathy and perspective taking.

Based on the above theoretical orientation, numerous moral development studies have investigated a relationship between maternal socialisation and children's internalisation of conscience (Kochanska, 1997); the effects of maternal parenting practices on children's generalisation of moral judgements and emotions (Smetana, Toth, Cicchetti, Bruce, Kane, & Daddis, 1999), or a relationship between parental

socialisation practices and moral sensitivity in children (Dunn, Maguire, & Brown, 1995). Kochanska and Aksan (1995), for example, studied how parental discipline contributed to young children's internalisation of behaviour control. They observed mother-child interactions in two distinctive contexts: "do" demand context (mother request child to do something the child does not prefer) and "don't" demand context (mother request child to not do something enjoyable), and examined children's behavioural responses to their mothers and frequencies of mother-child mutually positive affect. The children's behavioural responses were categorised into either "situational compliance" (situational form of compliance) or "committed compliance", (wholehearted form of compliance) and the children's and the mothers' quality of shared positive affects were coded as one of four categories (highly positive, neutral/pleasant, neutral/negative, highly negative). Findings from the study reported a strong association between quality of mother-child dyads, such as mother-child shared positive affect and children's committed compliance. The children who showed committed compliance were also frequently indicated internalisation of maternal requests and prohibitions. Kochanska, Aksan, and Koenig (1995) replicated above study as a longitudinal study and reported that children's committed compliance at 26-41 months predicated their levels of internalisation at 45-56 months. Thus, young children's emergencies of morality are strongly linked to quality of early mother-child relationships. Children are better able to internalise moral principles and learn to regulate their behaviours when they share mutually positive affective environment with their mothers.

Although Piaget's and Kohlberg's theories remind us of developmental trends in understanding moral justice and reasoning, and moral studies further informed us how much positive mother-child relationships may contribute to the moral

development of young children, morality in psychology tends to focus on a large picture of what we consider as a moral society and reports how such complex moral principles are acquired by young children rather than tapping into an important dimension of fairness.

Justice in psychology. Concerning what is morally “right” or “wrong” and deciding what is “good” or “bad”, and “fair” or “unfair” might represent issues of justice. What would be a just thing to do if someone breaks moral principles of a society? What would be a just thing for a single mother who could not afford to pay her rental? Would it be fair for the single young mother to pay rental without any support from government? How much benefit would be a fair amount for them? Justice can be thought of as social application of morality.

One of the main areas of justice research in psychology concerns distributive justice. Distributive justice is based on the principals of equity, equality and need (e.g., Deutsch, 1985). It has been studied mainly by asking young children about their reasoning of allocating certain goods. Previous studies have been interested in how children’s judgement of distributive justice could be influenced by contextual information or characteristics of the persons (McGillicuddy-De Lisi, Watkins, & Vinchur, 1994; Wong & Nunes, 2003), and how children justify their allocation of resources (e.g., money, space, time) in households (O’Brien, 1995). Sigelman and Waitzman (1991), for examples, asked children, 5, 9, and 13 of age, to allocate resources to three different characteristics of the recipients (a older child, a poor child, and a meritorious child) in three different situations (reward-work, voting, and charity), and then asked the children to rate fairness of four alternative decision rules (equity, equality, need, age entitlement) for allocating the resource. Although all children were able to make decision of the distributive justice by taking

consideration of contextual information in the reward-work situation (e.g., a meritorious child received the largest amount of resource for his/her hard work), only older age children were able to include the contextual information for their judgement of allocation of resources in the two other situations (e.g., a poor child received the largest amount of resource because of he/she needs in charity situation). As to the judgement of fairness, older children flexibly applied different types of the decision rules to examine fairness of three different situations, however, young children predominantly applied the concept of equality for their judgement of the situations.

Thus, these studies informed us of developmental trends in understanding of distributive justice and how children's judgement of justice and fairness might be influenced by contextual information. Some of the findings from justice studies are valuable and interesting, however, these studies were based strongly on children's abstract principles of justice rather than investigating more personal elements of the experience of justice.

Fairness in psychology. Children's ability to understand a concept of fairness has been studied by examining children's perception of the fairness of parental preference treatments (Kowal, Krull, Kramer, & Crick, 2002), children's evaluation of different types of maternal disciplinary practices (Konstantareas & Desbois, 2001), and children's perception of allocation of resources in the family (O'Brien, 1995). These studies showed that children were actively monitoring treatment of others and they were sensitive to fairness or equality in social relationships. Although these studies informed us children as young as four year-olds could apply a concept of fairness in social relationship, but they do not investigate it in terms of personal element.

Children's Perception of Fairness

Pioneer work by Thorkildsen (1989a,b) introduce how children's perception of fairness personally impacts on their attitudes towards learning. She is interested in a role of education sectors (e.g., schools) in fostering children's well-being. She particular believes that schools are able to offer more effective helps to children if they are able to have better understanding of individual differences in personality of children (Thorkildsen, 2004).

Her early work with children examined fairness experiences in classroom settings from the perspective of the students (Thorkildsen, 1989a,b). Using semi-structured interviews with some drawings, students judged fairness of classroom practices and gave a justification for their judgements. In one study, students judged fairness of five different classroom practices. Each practice involved different treatments for the fast learners and the slow learners (i.e., acceleration for fast learner, fast learner wait for slow learner, peer tutoring, enrichment, and slow learner never finishes). The results indicated that all students thought peer tutoring was the fairest practice, and the least preferred practice was having the slow worker not finish their works.

In Thorkildsen's other study, students were asked judge fairness of three classroom practices (i.e., peer tutoring, competition, and independent performance) under three different contexts (i.e., fostering learning, having a contest, and having a test). The results indicated that children judged fairness of each practice according the context. For example, students judged giving help in order to foster learning as fair, but it was not fair for a context involving competition. Thus, pluralistic conception of justice in children was reported (Thorkildsen, 1989b)

The findings of these studies inform us that children are actively monitoring fairness of practices that they receive in everyday social interactions. Although children's judgement of fairness tend to change from equality to equity as they become older (Thorkildsen, 1989a), children generally judge a treatment as fair when it is presented on the basis of individual abilities. Also, fair practices are thought of as harmless for learning by children (Thorkildsen, 1989b).

Later, Thorkildsen, Nolen, and Fournier (1994) extended previous studies and examined how children's perception of fairness influenced their motivation of academic achievement. The results indicated that all children judge that a teacher who encouraged task focus was effective and fair, whereas extrinsic rewards for only excellent performance was the least effective and fair. Also, motivation was more likely to sustain if a practice helped to encourage children's interests in the study. Although majority of the children in this study preferred practices that acknowledge each child's levels of skills rather than a practice that stresses goal achievement (e.g., grades, marks), some children's judgement of fairness were influenced by a type of school curriculum that their schools use. For example, children from the school emphasising on self-direction and collaboration preferred practices that focused on problem-solving process whereas children from the school focusing on goal achievement preferred practices that stressed rewards for a good work. This finding suggests that children's perception of and judgement of fairness are influenced by their everyday experiences, and then, through such experiences, children generalise their understanding of fairness in characteristic ways.

Based on the pioneering works of Thorkildsen and her colleagues, Evans, Goldberg, and Dickson (1998) conducted a study about children's perception of equity in a parent and siblings interaction. Twenty-nine children, aged between 6- 13

years old, in New Zealand were participated. As a part of the study, they compared children's perception of fairness by including children who have a disabled sibling to compare this. In order to investigate fairness, they heard four stories about an interaction between siblings and a parent. Two stories described the situation involving unequal punishment between siblings, and the other two stories described the situation involving differences in parental attention. The children made fairness judgements of each situation and gave their rationales for their decisions. Also, they reported feelings they thought would be associated with unfair treatment. The results showed that the children with a disabled sibling and the children without a disabled sibling justified fairness of treatment differently from each other; the children with a disabled sibling were more tolerant and accepting of unfair situations and they also judged those situations as fairer than the children without a disabled sibling.

Following this study, Evans, Galyer, and Smith (2001) studied perception of fairness in primary school children, aged 9-11 years, in New Zealand. Four stories that described two unfair situations (unfair rewards and unfair punishment) were created and children heard one story from each situation. Children judged the fairness of the situations and reported feelings that might be associated with experiences of unfairness. To have a better understanding of affective experiences as a result of unfairness, the children were grouped into either mood induction or non-mood induction groups. To induce mood, the children in the first groups were asked to report their own personal experiences of unfair treatments while the other group reported their own experiences of unfairness only after they had responded to the story. Although the majority of children justified unfairness of a situation in terms of actual unfair treatments in a story, some children thought that degree of punishment or rewards was not fair. This indicated an effect of contexts on the judgement of

fairness in children. As for affective experience of unfairness, the children reported negative feelings (i.e., sad, mad, upset) more than positive emotions; particularly, anger was the most intensely felt emotion.

Evans and his colleagues' studies showed how the concept of fairness might be related to justice studies, and most importantly, they have emphasised the concept of fairness have different connotation from morality or justice. Fairness contains more personal element and subjective feelings: the degree to which justice is seen to be done to oneself and the associated feelings (Evans, Galyer, & Smith, 2001). Young children actively monitor fair treatments in social relationships and emotionally engage in such situations.

Although previous studies of fairness have investigated children's perception of unfairness and their affective experiences in interpersonal relationships, there have been no studies that try to understand how such subjective experience of unfairness influence the children's pursuit of fairness in their own social relationship, especially in mother-child interaction. Since affective experiences of unfairness and its consequences in children's social relationship have not been well investigated, drawing some inference from referring adult samples might be useful.

Affective Experiences of Unfairness in Adults and its Consequences

The experience of unfairness is not a pleasant one; rather it is associated with negative responses. Mikula, Scherer, and Athenstaedt (1998) studied how seven different emotions (joy, fear, anger, sadness, disgust, shame, guilt) were associated with an individual's judgement of fairness or injustice of events. The results showed anger was elicited most when individuals thought that the events were unfair, and negative feelings experienced from unfairness were more intense and lasted longer

than without unfair judgement. Behavioural responses of unfairness were studied by Kennedy, Homant, and Homat (2004). With adult samples, the researchers asked the participants to make judgement of fairness of work place treatments, and then they were asked to decide how justified each of eight aggressive responses (e.g., punch the owner, tell and do mean things to the owner) are in order to make the situation fairer. The main finding of this study was that the greater the perception of the injustice, the greater the support for workplace aggression. Beck (1999) also stated that a person feels angry and is motivated to retaliate when the person perceives a punishment as unjustified and the punisher as wrong. Thus, refer to these studies with adults, it is possible to assume that experiences of unfairness elicit feelings of anger, and then that affective experience motivates the individual to retaliate.

Children's Perception of Unfairness and Origin of Angry Feelings and Hostility

So far, based on Evans' model of the origin of hostility in children, I have tried to introduce what I mean by the concept of fairness and how such experience of unfairness might be associated with the emergence of negative affect or mood, such as angry feelings and hostility.

For the present study, the main focus was to investigate how such feelings of anger or hostility might be elicited and generalised in everyday parent-child interaction, specifically experiences of unfair maternal treatment. It was expected that: (a) young children are sensitive to the experiences of unfairness, particularly a situation where they are punished for something they did not do; (b) experiences of unfairness would elicit negative affect in young children; and (c) increased level of hostility toward caregiver could be observed in parent-child relationship when the children were punished for something they did not do.

Understanding children's perception of fairness is an important aspect of their prosocial development because having to learn fairness would allow children to be considerate of perspectives, feelings, and wellbeing of others (Bazerman, White, & Loewenstein, 1995). Also, understanding children's perception of unfairness allows parents to provide more effective support for their young children's emotional and social development. By investigating children's experience of unfair treatment and the emotional experiences associated with it, it is hoped this research project will encourage positive disciplinary practice and fairness in everyday parent-child interaction.

Material development and Piloting the Procedures

Carrying out a research project with young children is not an easy task because; (a) young children's language skills are limited; (b) young children's attention span is shorter than older children; (c) young children might be more shy in a testing situation. In addition, investigating young children's negativity towards parental figures involves a complex process. It would be convenient for us as the researchers if we could directly ask the children how much they dislike or hate their mothers, however, it is threatening and it is not ethically sound methodology. Thus, investigating young children's feelings towards parental figure requires some creativity.

Taking these issues into consideration, preliminary work was important for designing a methodology for this research project. As the first step, it was necessary for me to familiarise myself with the early childhood education system in New Zealand, because early education provides the first formal environment where by young children socialise with others. Therefore, pilot work began contacting childcare centres and kindergartens. The pilot work had two main phases: observation of "children's culture," and piloting age-appropriate materials and procedure for this research project.

Observation of Children's Typical Behaviour

In order to have a better understanding of children's intellectual skills and some of the ways they interact with adults and peers, I visited kindergarten and childcare centres in Palmerston North. To cover the wide range of cultural backgrounds that children might share, I selected one kindergarten from inside the

city and the other one from outside the city. Each kindergarten runs a morning class and an afternoon class. A morning session is designed to teach 4-5 year-olds, and the afternoon session teaches 3-4 year-old children. I visited a morning class at each kindergarten for once or twice a week for a period of three weeks. Two childcare centres in the city were selected. Unlike kindergarten, young children aged between 3 and 5 years of age were combined together in the childcare centres.

I observed children during a “mat time” and interacted with them for about two hours each visit. During mat time, children were divided into small groups and each group was taught by a teacher. A typical mat time activity was story time. A teacher read some picture books to the children and asked them a few questions about the story. Children were encouraged to listen carefully to the teacher as well as their peers’ responses, and, as a rule, children were advised to raise their hand before they express their opinion. Since New Zealand education emphasises the bicultural education curriculum, Te Whāriki, every group had a time to learn Maori culture and language through a story and a song.

Observing children during mat time, I learned the types of vocabularies young children use, types of misbehaviours for which they were disciplined, (e.g., some of the behaviours resulted in receiving a time-out), how they have taught to express their negative feelings (e.g., anger, fear, sadness, frustration), and how they interacted with teachers and other adults. In addition, I was able to learn some of the strategies that teachers use as discipline. Individual differences among the children and unique but distinctive emotional environment of each kindergarten and childcare centres were noticeable.

Do young children understand a concept of fairness? It was obvious from observing and playing with young children that they did not like to be treated

unequally to other children. For example, in a childcare setting, young children were frustrated when they did not have equal opportunities to play with water. In the kindergarten, a young child was frustrated and said, "It's not fair!", when her friends did not share Play-Doh® with her. How about their understanding of fairness in an adult-child relationship? It would be unfair for a child if he or she was sent to time-out for something that he or she did not do. Also, it would be unfair for a child if he or she is told to be quiet when he or she was not actually talking during a mat time. These situations were usual events during a session and teachers were less likely to realise how much these unfair treatments might impact on the children. Observing these events from the outside of a circle, I was able to note young children's reactions to the unfair treatment. A main finding was that children certainly obeyed the teachers, however, as opposed to their compliance towards the teachers, the children's body language indicated some signs of frustration (e.g., pouting). In fact, a boy was upset by a teacher who harshly treated him during mat time, so that he went back to the teacher afterwards and responded to her with angry comments.

Piloting Materials and the Procedure

Piloting work with very young children. After spending some time with young children and being part of the early education system, I introduced a story about unfairness to a kindergarten. (Refer Appendix A for a letter to a kindergarten). The story was presented with a few colour drawings. The purpose of this trial was to make sure the story could be easily understood by kindergarten students. A theme of this unfairness story was that a child protagonist was punished for something she or he did not do (a cat jumps on the shelf and knocks over mother's plate. Mum thought that it was the child's fault, so she tells the child that she won't be holding a birthday

party for the child). The story was tested with a few groups of 4-year-old children. The children seemed to understand what had happened to a child in the story, however, it was difficult for me to know how negatively the children really thought about the mother in the story; measuring children's negative affective expression as a result of unfair treatment was complicated.

In order to overcome this major difficulty, a new story of unfairness was presented by a set of family dolls with a doll house (Appendix B). It was thought that the children would have more opportunity to openly express their thoughts and feelings if they could be actively involved in the story rather than passively listening to it. Also, this 'hands-on' experience of the story would help children to sustain their focus on the story. The next step in the pilot work was to make a story that could be enacted by the dolls, and to make sure the new materials (i.e., the dolls and the doll house) were readily used by young children. I visited a childcare centre to examine how young children respond to the materials. Following this trial, the story was tested individually with two 3 ½-year-olds in the playroom at Massey University Psychology Clinic with their parent present. These practice sessions were videotaped and observed by my supervisor and an experienced clinical child psychologist. The main finding from these individual practice sessions was the usefulness of the materials. This interactive way of presenting the story allowed very young children to maintain their interest during a testing session and motivated them to elaborate their own story. However, the most critical part of the study, the theme of unfairness itself, wasn't fully understood by these very young children, because they had only limited cognitive capacities. Thus, the highlight of the piloting work with very young children was recognising the important relationship between cognitive maturation and affective experiences.

Piloting work with 5-year-old children. It was concluded from this initial pilot work with very young children that the story of unfairness needed to be tested with much older children. Thus, I contacted two local primary schools in Palmerston North and requested the opportunity to conduct piloting with some 5-year-old children. It was thought that 5-year-olds would have better understanding of the concept of fairness and be able to express their feelings associated with the experience of unfairness. Both school principals showed their interest in children's perception of fairness and resulting affective experiences.

In the first school, a small rural school, 18 five-year-old students contributed to the next pilot study. As requested by the school principal, these children were divided into five small groups to participate in group-based piloting sessions. All sessions were conducted in the school library, where children were less likely to be disrupted. With permission from the principal, and their parents, the participating children, the entire session was audio-recorded. In the second school, a large school in the city, a small number of 5-year-old children participated in the pilot session. Five children were selected by their classroom teacher. The teacher was informed about the details of the piloting work and some of the things the children might be asked to do. She then selected five children whom she thought would have capacities mature enough to understand a concept of unfairness. The session was conducted in the school library during a school assembly time. A teacher aide accompanied the children in order to ensure their safety. The entire session was audio-recorded with permission.

In both schools, a story of unfairness—punishment for something the child did not do—was enacted with the dolls in front of the children. After the story, children were asked to judge the fairness of the events they had just seen, and the

feelings that might be experienced by the child protagonist in the story. Following these questions, the children were invited to use the dolls to show what the child protagonist might do after experiencing unfair treatment. Three judgement tasks designed to measure the affective consequences of unfair experiences in children were introduced. The three tasks were designed to measure either sharing, empathy, or trust. It was thought that these three characteristics of children would be diminished by the experiences of unfairness. After these tasks, children were thanked by receiving a small sticker. All children seemed to enjoy the sessions.

The majority of the children in the first year of primary school were able to understand the concept of unfairness (i.e., punishment for something child did not do). The feeling they reported would be associated with such experience was predominantly that of sadness. This was contrary to my initial hypothesis that children might experience a feeling of anger towards the mother in a story. Although two boys said that an unfair punishment would make the child protagonist mad, they also stated that the child might be feeling sad as well.

Regarding gender differences in response to the story, the girls seemed to be more sympathetic towards the mother in the story and stated that, for example, "it could be the child's fault to make the mother angry." It became apparent that young children somehow forgive a mother for treating a child unfairly, and they tend to feel sorry for the mother rather than getting angry at her. The complex nature of the mother-child relationship was observed.

Pilot work with older age children. One reason for this result might be that young children's judgement of fairness is influenced by values that parents are less likely to be wrong or make mistakes. If this was the main reason for the previous findings, then it seemed necessary to continue pilot work with older children. A pilot

trial for 7-year-olds was conducted with 10 children at a rural primary school. Again, on to request of the school principal, the session was conducted as a group work in the school's resource room. The children were divided into two separate groups for the trial. The procedure was the same as for the 5-year-old children. All children were happy to participate in the pilot work. In addition to the school-based pilot, I was able to carry out an individual session with a 6-year-old girl. She enjoyed the session and wished to play with the dolls again.

Compared to 5-year-olds, older children were able to express their ideas more clearly. The theme of the story (i.e., a child is punished for something she or he did not do) was well understood by all children. Again, there were gender differences in response to the unfairness story. Boys were more likely to express anger towards the mother in the story than girls (e.g., "Mum's fault! because she knocked it over"). Girls were more empathic toward the mother and felt responsible for what might happen to her (e.g., "It could be the child's fault because he made a mess and his mother accidentally tripped over and spilt the milk"). One 6-year-old said of the child in the story: "she will forgive if mother said sorry when they have tea." An additional finding was that children's ideas about sibling relationships were somehow different from their ideas about mother-child relationships. For example, one child introduced an older sibling into her story during the free play period and created her own version of the unfairness situation. The theme was that an older brother had broken a plate and blamed it on the child protagonist. When I asked the child how she thought that the child in the story was feeling, she quickly responded by saying "Mad! Very very mad!" Considering sibling relationships in general, and referring to some specific comments the child made during the story, it was understandable that children may have different degrees of regard towards mothers

and siblings. That is, when children's regard for a person is high, they are more likely to forgive and less likely to express negativity towards that person even when being unfairly treated by them. On the other hand, when children have lower regard for someone they are less hesitant to express their negativity and more likely to retaliate or reveal hostile attitudes.

What did we learn from the pilot work? Overall, concluding from all the pilot work with younger and older children, it was clear that children's understanding of unfairness in parent-child relationships related to age. It appeared that young children believed that children should not act against mothers and should be nice to them. In other words, younger age children seemed to hold an internalised rule of morality, the rules of parent-child hierarchical relationship. Given this, older children will be more likely to experience and express feelings of anger compare to younger children. Also, there is a possibility of gender differences in responses to unfair treatment. As other developmental studies have reported, it is possible that girls are more accepting than boys.

The piloting also suggested that the nature of relationship between the child and different family members might be important. It might be assumed that children's level of regard towards mother would be much higher than toward an older sibling and that this would influence the level of negative affect after experiencing unfair treatment. Children might express stronger negativity towards a sibling, and be more likely to retaliate as a result of unfairness.

The Present Study

The aim of the present study was to have a better understanding of the origin of angry feelings in children. It was expected that children would experience angry feelings and show hostile attitudes when they encountered unfair treatment. Another purpose of this study was to report on the usefulness of a task-based measure of children's negativity towards a parent or a caregiver, as an indirect way of assessing children's affective expression. It was thought that young children would respond to the task-based materials as a more spontaneous and acceptable way of expressing their negativity towards a parent.

Method

Participants. The children who participated in this study were all attending primary school and were aged between five and nine years ($M = 7.2$ years, $SD = 1.09$). They were recruited from two local primary schools and a summer holiday programme in Palmerston North (population 76,000). The city is situated in the lower half of North Island of New Zealand and surrounded by large rural areas. The city is known as "knowledge city", on account of the large university and polytechnic situated here. The education sectors play a vital part of the city economy. The public schools selects enrol children from middle- to low-income families in suburban settings.

For this study, I chose children from Year One (5-6 year-olds) and Year Three (7-8 year-olds) for the following two reasons: (a) junior primary school children have already been exposed to adult-imposed punishment situations through everyday social interactions; (b) by these ages, children are able to use their verbal

skills to express their thought about events and describe their feelings. A letter was sent to the school principals, a sample of which is presented in Appendix C. Prior to sending out a consent form to the children's families, the school principals and the holiday programme coordinator agreed to participate in the study. They indicated a huge interest in learning about children's perception of fairness as well as their expression of angry feelings.

A total of ninety-two consent forms were distributed by six classroom teachers to parents or legal guardians of their pupils. Along with the consent form, a letter describing the researcher and an information sheet about the study was attached. The information sheet was designed as a brochure and printed on a colour sheet. A small note section was included in the consent form for the parent or the guardian, so that they had opportunities to give some feedback or comments about the topic of the study. A few parents gave me positive comments to support this research project. The parent wrote that she has always wondered why her child became angry for something she thought was not a big deal. Another parent also hoped to have a better understanding of his child's emotionality. Judging from the numbers of parents who requested to have a summary of the result, the topic of this study interested many of them. A sample consent letter and information sheet is presented in Appendix D.

All children who were interested in this project were eligible to participate in this study. All children who returned the consent form were recruited in the present study. Parents were encouraged to talk to their children about the study and asked to make sure they were willing to be included in the study. The consent forms were returned to the school receptionist and then placed in a collection box that I provided. Thirty-two children (16 girls and 16 boys, mean age = 7.2 years), were willing to participate in the study. They were drawn from two grades: 9 boys and 9 girls in

Year 1 (mean age = 6.3 years), and 7 boys and 7 girls in Year 3 (mean age = 8.3 years). The majority of them were New Zealanders of European origin ($n = 26$). The other children were of mixed Maori/European heritage ($n = 3$) and non-specified ($n = 2$). The study was not designed to investigate cross-cultural differences, because the participating schools are relatively homogeneous. The data analysis of this study was not conducted on the basis of ethnic groups.

Materials

Stories of unfairness. Two types of unfairness stories were developed for this study. One story described a typical everyday interaction between a child and his/her mother, and the other story presented an interaction between two siblings and their mother. Both stories described a situation where a child protagonist experienced unfair treatment by either their mother or an older sibling. The unfairness arose from the fact that the child protagonist was punished for something he or she did not do. Full stories are presented in Appendix E. The stories were used throughout the pilot work that they were easily comprehended by young children of the different age groups. The main theme of each the story was as follows:

Parent Story: A child was playing on the kitchen floor. He or she has been very good. Mother was busy getting tea ready. Because mother was in hurry, she accidentally knocked the milk over. She was very upset and lost her temper, and she told the child to tidy up and go to his/her bedroom until tea time.

Sibling Story: A child and his/her older brother/sister were playing in the lounge. Their mother had told them not to play with her special plate on the shelf. One child was behaving well. However, his/her older brother/sister was being naughty and reached for mum's plate and dropped it on the floor. When the mother

came into ask whose fault it was, the older sibling said to the mother that it was the innocent child's (protagonist's) fault. Both children were sent off to their bedroom until tea time.

Each story started with description of the child protagonist by saying "This is a story about Joshua/Emma. He/she is just like you". By presenting the story in this way, it was thought that a participating child would more easily be able to imagine a story and be emotionally engaged. Each story was accompanied by large and colourful drawings on A3 (42 x 59.4 cm) size paper. The size and style of the drawings were similar to the big picture books that school teachers use in their classroom. During the pilot work, I had noticed that young children liked to hear and see a story with a big picture book. They were emotionally engaged in the story because of the presentation of the pictures helped the story to be more entertaining and exciting. A set of four pictures illustrated main themes of a story of unfairness. A sample of the drawings is presented in Appendix F. Each story had a boy's and girl's version to match the gender of each participant.

Strength of feelings. In order to assess the child's affective response as a result of unfair treatment, the child replied to an open-ended question about the most likely feelings of the child protagonist after the unfair treatment and the strength of such feelings. It was thought that young children would freely describe their thoughts about the child protagonist's feelings if they were given an open-ended question. To accompany the child's verbal answer, four faces of emotions (sad, angry, happy, and neutral) were presented, so that the child could use them to visually indicate the feeling of the child protagonist. This type of emotion faces scale has been widely used with children in previous studies (Brenner, 2000). These four feelings were selected because children in the pilot work most often expressed these emotions.

Although a majority of the children used the terms “happy”, “sad”, or “angry” to express their feelings, some children preferred to use a term that may describe an aspect of sadness, anger, or happy. Thus, the terms “miserable”, “unhappy”, and “not happy” were included in feeling of sadness; “annoyed”, and “upset” were categorised as a feeling of anger; and “embarrassed” and “good and bad half” were grouped as other feelings.

To indicate strength of experienced feelings, I created a scale that looked like a large thermometer with a movable arrow. It was called “the feelings thermometer”, (see Appendix G). Similar to the drawing of the story, it was drawn on A3 size paper, which was laminated. On the surface of the thermometer, a magnetic sheet was placed, so that the child was able to move the arrow to a point representing what he or she thought the strength of the child protagonist’s might be, based on a scale ranging from “a little bit” (1) to “very very” (5). When the feelings thermometer was introduced to the child, it was explained as a special slide because it can measure how strongly a child might be feeling as a result of unfair treatment. All the children were familiar with a thermometer, and understood how to rate their feelings.

Measurement of hostility. Three play-based scenarios were created to measure angry feelings and hostility in children as a result of unfairness. Play-based clinical interviews have been used to examine young children’s emotional and behavioural problems (Warren, Oppenheim, & Emde, 1996) as well as for an assessment of young children’s views of the family (McHale, Neugebauer, Asch, & Schwartz, 1999). Using play-based tasks is ideal for measuring negativity in young children because they might find it threatening to directly express their negative feelings towards adults, especially towards a caregiver.

Each scenario was aimed at assessing a different factor of hostility in children; sharing, empathy, and trust. These three aspects of young children's socialisation were selected because the term hostility was defined as wanting to hurt someone or do them harm (Evans, Heriot, & Friedman, 2002); an inhibition or a diminution of these attitudes in young children was thought of as emergence of retribution and an indication of an increase in angry feelings and hostility. In fact, a measurement of hostility was internally consistent with the measurements of resentment and suspicion in an evaluation of the Children's Hostility Inventory (CHI) by Kazdin, Rodgers, Colbus, and Siegel (1987).

The sharing scenario task was based on the idea of distributive justice (Piaget, 1997). Three different sized slices of chocolate cake (big, medium, and small) were presented to the child. To make the cake look as realistic as possible, each slice was created with a thick cardboard and was painted and glossed. A drawing of the child protagonist, mother, and an older sibling was presented to the child, and the task was for the participant to divide the cake by giving each person a slice. (see Appendix H for a sample of the task). Children judged which slice of cake might be appropriate for a person who was unfair. Before distributing three slices of the cake, the child was reminded that the child protagonist had the right to decide who gets what (e.g., "Joshua can decide, who gets which piece of cake). It was thought that young children would be less likely to hesitate to show their decision when the control of an authority figure was low and the child's own rights were clearly articulated.

Before conducting an analysis, the child's judgement of the distribution of the slices was converted into a score. This was done by comparing the size of the slice for a child protagonist and the size of the slice for a person being unfair. For example, if mum or an older sibling received a two-size bigger slice (e.g., child had a smallest

and mum had the biggest) from the child protagonist, it was considered as indication of little hostility (score = 1); if mum or a older sibling had one size bigger slice than the child protagonist, it was as an indication of moderate hostility (score = 2); and if mum or an older sibling had a smaller slice than the child protagonist, it was an indication of extreme hostile reaction (score = 3). The child's judgement of the size of cake but deserved was thought of as equivalent to the degree of his or her feelings of anger and hostility. If the child decided to give the smallest slice to mum or an older sibling as a result of unfairness, then it was interpreted as an act of retribution.

The empathy scenario was based on an idea that even young children may inhibit caring behaviours as a mean of retribution when they experience unfair treatment. Participants were described a situation where the mother or an older sibling had a minor cut. An open-ended question was presented to ask the participant to estimate the protagonist's response to the injured mother or an older sibling in the story. Following the open-ended question, three drawings were presented in which each drawing described a typical response of a child in such situation (see Appendix I for a sample of this task). Each choice was converted into a three-point score as follow; "give mum a plaster" (score = 1); "not care" (score = 2); and "laugh at the person who is being hurt" (score = 3). If children increased their hostile attitude, it was thought that they would inhibit or diminish their empathy as a means of retribution (Evans, Heriot, & Fridman, 2002). Thus, not indicating any concern for a person behaving unfairly was thought to represent the emergence of angry feelings and hostility.

The trusting task scenario was derived from the idea that young children's experience of unfair treatment may motivate them to distrust a person to whom they led hostile. Participants were exposed to a situation in which the child protagonist

was thinking of the best way to keep his or her special treasure (a painting) safe. Using the same procedure as the empathy task, the child answered an open-ended question, and then selected a drawing of the choice that the child protagonist in the story might select (see Appendix J). Each choice was converted into three points scores as follow; ask mum (or an older sibling) to take care of it, (score = 1); put it on the wall to keep an eye on it by him or herself (score = 2); or hide it in their own secret place, so that nobody will take it away (score = 3). The interpretation of these scores was the same as the empathy previous tasks. If the child decided that the protagonist would keep his or her treasure in a private secrete place rather than asking mum or an older sibling to look after it, then it could be inferred that an experience of unfairness was increasing angry feelings and hostility in children.

Procedure

Children were tested in a quiet room in their own school with myself and a research assistant, a female psychology student. School principals helped me to find the quite room and the classroom teachers were consulted about a time best suited for the children's work schedule. The sessions started from early in the morning, just after classroom teachers took a roll. The research assistant accompanied the first child into the testing room. Afterwards, previously tested child called the next child to come to the testing room.

Before a session began, the research assistant and I talked to the child for a short while as a means of building rapport. The child was welcome to sit on a chair or on the floor. When the child seemed comfortable with the setting, I informed the child what would happen during the session and asked him or her verbally if he or she was happy to continue the testing session. A standardised statement was used for

every child to give assent (see Appendix K). Once the child had given assent, the parent story or the sibling story was introduced. Each child heard either the parent or the sibling story. The main actions of the characters were pointed out in the pictures as they were being mentioned in the story. After hearing a story, every child was asked a series of questions:

Tell me what just happened to Emma/Joshua (child protagonist)?

Do you think the Emma's/ Joshua's mum (or the older brother/sister) was fair or unfair?

Why?

How do you think Emma/Joshua might be feeling right now?

How strongly might she/he be feeling this? (using the visual rating scale)

What do you think she/he might do next?

After these questions has been asked and answered, the three scenarios were presented to the child in random order. When all these choice tasks were carried out, the child was thanked, allowed to choose a sticker, and returned to their own classroom. The entire testing session took approximately 15 minutes. This was just the right amount of time for the children to maintain their concentration and to minimise the time missed from their classroom works. In fact, the school principals were pleased that the sessions fitted well with their classroom timetable.

Children from the young age group (5-6 year-olds) and from the older age group (7-8 year-olds) were randomly assigned to one of two groups. In the first group, called the parent story, children's negativity toward an unfair parent was examined. For the second group, called the sibling story, negativity toward an unfair older sibling was examined. The main finding was the same for both stories: unfair treatment for something a child did not do. These two groups were created to

examine the effects of a child's level of regard for the unfair person. As I mentioned in the findings from the pilot work, young children seemed to have a higher level of regard for a parent than a sibling, which might mediate angry feelings and hostility. By testing the children in these groups, the experiment utilised a 2 (parent/sibling stories) x 2 (younger/older age) x 2 (boys/girls) between-subject design.

The research assistant videotaped the entire session and wrote down verbatim as many of the child's responses as possible. A sample of the coding sheet is presented in Appendix L. I went through the coding sheet with the research assistant prior to the testing sessions, so that she was aware of the main focus of the study. All tapes were reviewed and coded when all the testing sessions were finished. The research assistant's records were compared with my coding as a reliability check.

Results

A total of 32 children participated in the testing session. All children's responses were included for the data analysis because: (a) they were able to describe the story, (b) they expressed their thoughts and feelings about the story, and (c) they successfully selected a response for or provided an alternative choice in the scenario for three experiment tasks. In order to make sure the children's understanding of a story of unfairness, all children answered an open-ended question, "Tell me what just happen to Emma/Joshua", immediately after listening to the story of unfairness. If a child had found it difficult to follow the story, the story was read again on request from the child. Among 32 participating children, only one younger-aged child requested to hear the story twice. All children were able to explain the main theme of the story.

Description of Children's Engagement in Research Activities

The room used for the testing session was familiar to all children, so that they seemed comfortable to enter the room. Some children were so excited to participate in the testing session that they often ran into the testing room and spontaneously chatted and made small talk with the research assistant or myself. All children preferred to sit on a large comfortable chair rather than on the floor. We assumed that it was something special for the children to sit on the large chair because they were normally asked to sit on the floor in their classroom. All children settled down into the testing session without any trouble adjusting themselves. They quietly listened to my instructions and to the story. None of the children found that videotaping was uncomfortable, indeed, some children were very happy to be recorded on video. At

the beginning of the story, when the child protagonist was introduced as “Just like you”, many children smiled and nodded their head every time the main theme of the story was pointed out on the drawings. This was positive indication of the children’s engagement in the story.

All children understood how to use the feelings thermometer. A few young children did not know the word thermometer, but, when I explained to them a purpose of the thermometer (e.g., “it tells you how cold or hot things are”) they seemed to recognise the object. Some older age children said they have a thermometer in their classroom. All children understood the procedure of its tasks, and seemed to enjoy placing their choice of the answers directing on to the drawings. When the chocolate cake task was introduced some children said “Oh! They get a chocolate cake!” or “I like chocolate cake!” to show their interest in the task. Thus, the scenario’s materials were familiar to the majority of children. At the end of the testing session, every child was invited to give feedback about the story and the tasks. Many children thought that the materials were enjoyable and a few girls gave me some positive feedback; “It was exciting because you would not know what would happen on the next page. I wanted to know what would happen next”, “story was fun”, or “I think that it was good idea” All children ended the session with a positive mood and none of them had trouble getting back to their classroom work.

Basic Judgement of the Stories

All children judged that the content or theme of the story was unfair to the child protagonist. This result confirmed that both the parent story and sibling story were unambiguously described as the child’s experience of unfair treatments. When the participants were asked to explain their reasons for judging the situation as unfair,

each child's initial response seemed to vary according to the age groups. Younger age children tended to report what they thought of the emotional experiences of the child protagonist rather than giving a constructive description of the story or retelling the story as the older age children did. The children's verbatim responses were categorised into four groups. Table 1 presents brief descriptions and some examples of each category. In the parent story, 40% of the younger age children and 37% of the older age children thought that the mother was unfair, but at the same time, they felt responsible for upsetting the mother. A category, being blamed for something the child did not do, was articulated by 20% of the younger age children and by 62% of the older age children. In the sibling story, 62% of the younger age children and 83% of the older age children reported that it was unfair for the child to be blamed for something that he/she did not do. Breaking rules as a reason of unfairness was reported by 37% of younger age children and by 16% of older age children.

Feelings of Unfairness

How did children think that the child protagonist in the story felt when he or she experienced unfair treatment? An open-ended question allowed children to use their own words to express what they thought of the feelings of the child protagonist in the story. The majority of children verbally reported at least one emotion, however, a small number of the younger children preferred to choose their answer from the face pictures. I asked "What else might Emma/Joshua be feeling?" to give children an opportunity to report as many emotions as they could think of. The percentages of children reporting more than one emotion were 5-6 year-olds parent story, 40%; 5-6 year-olds sibling story, 62%; 7-8 year-olds parent story, 62%; and 7-8 year-olds

Table 1

Categories of Children's Reasons for Unfairness.

Category	Description and Examples
Taking responsibility of what had happened	<p>Children know that a child protagonist did not cause any problems, but they think that he/she might cause trouble.</p> <p>Examples: "He made her look what he is doing. He made her do that, but she certainly done it"; "Emma was playing and her mum thought she has done it" "She probably thinks he gets in the way. So she angry with him"</p>
Blamed for something he or she did not do	<p>Children know that the child protagonist was punished for something he or she did not do.</p> <p>Examples: "Emma's mum got angry, but Emma did not do anything, but she sent her to her bedroom"; "Her big brother blamed Emma for breaking a plate. He blamed a little girl, but she did not do".</p>
Degree of a punishment was severe	<p>Children thought the degree of punishment was much too severe for a misdeed that the child protagonist may or may not have done.</p> <p>Examples: "He has to go to his bedroom"</p>
Breaking rules	<p>Children made judgement of an event on the basis of what is "right" and "wrong" and "good" or "bad".</p> <p>Examples: "Big sister telling lie. Sister wants Joshua to get into trouble"; "Her big brother lied to mum and Emma has to go to her room"</p>

sibling story, 50%. Age group and the story type did not influence children's reporting of the numbers of emotions. Figure 1 shows the percentages of emotion reported across different age groups and the story types. As Figure 1 indicates, the feelings of sadness and anger were commonly expressed across both age groups and story types.

To investigate the percentages of reported emotions were the same for younger age children or older age children, a Chi-square test was carried out for each emotion. A Chi-square test of independence was calculated by comparing the percentages of sadness reported by younger age children and older age children. The test indicated no significant relationship, $\chi^2(1, N = 32) = .146, p > .05$. The numbers of younger age children who reported a feeling of sadness was not significantly different from the numbers of older age children who reported a feeling of sadness. In contrast to a feeling of sadness, the numbers of the children who reported a feeling of anger were significantly associated with age groups of children $\chi^2(1, N = 32) = 9.79, p < .05$, showing that significantly more of the older age children reported feeling anger than did the younger age children.

The story types and gender were further selected to study how these variables might be association with the percentages of reported feeling of sadness and anger. A Chi-square test indicated that neither story types nor gender differentiated the percentages of reported emotions.

Strength of Feelings as a Result of Unfairness

How strongly did the children rate the feelings of sadness or anger while they attributed to the child treated unfairly? To answer this question, mean strength of each emotion was calculated from among children who either reported the feeling of

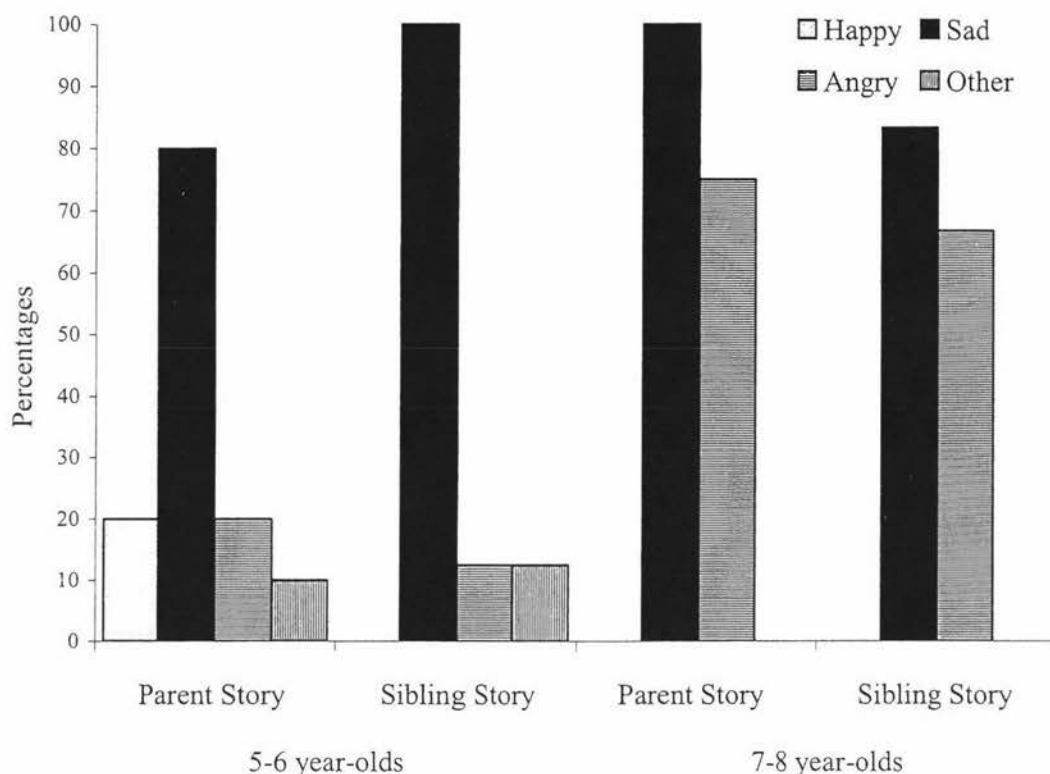


Figure 1 Percentages of Emotion Reported across Different Age Groups and Story Types.

sadness or anger. Of 32 children, 91% of children reported feeling of sadness while 41% of them reported feeling of anger as a result of unfairness. Figure 2.1 and 2.2 show children's rating of how strongly the feelings of sadness or anger might be felt by a child protagonist.

A 2 (age groups) x 2 (story types) x 2 (gender) between-subject factorial analysis of variance (ANOVA) was conducted to investigate mean degree of sadness across age groups and story types. There was a statistically significant main effect for age groups, $F(1, 22) = 7.82, p < .05$. As Figure 2.1 shows, younger children ($n = 17$) expressed higher mean degree of sadness ($M = 4.68, SD = 1.27$) than older children ($n = 13, M = 3.39, SD = 1.04$). Using the partial Eta squared as measure of the effect size, a large effect of age groups was observed, partial $\eta^2 = .26$, which means that age groups accounts for 26.2% of the variability in the mean degree of sadness. There

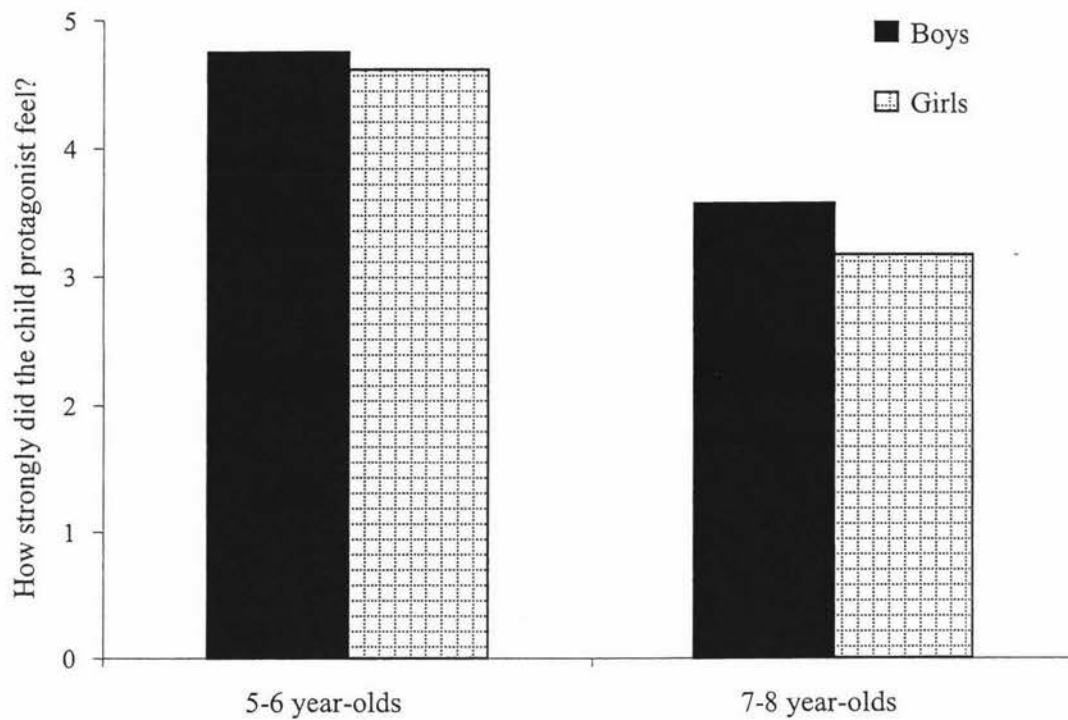


Figure 2.1 Mean Ratings of How Strongly a Child Protagonist Felt the Feeling of Sadness across Age Groups and Gender.

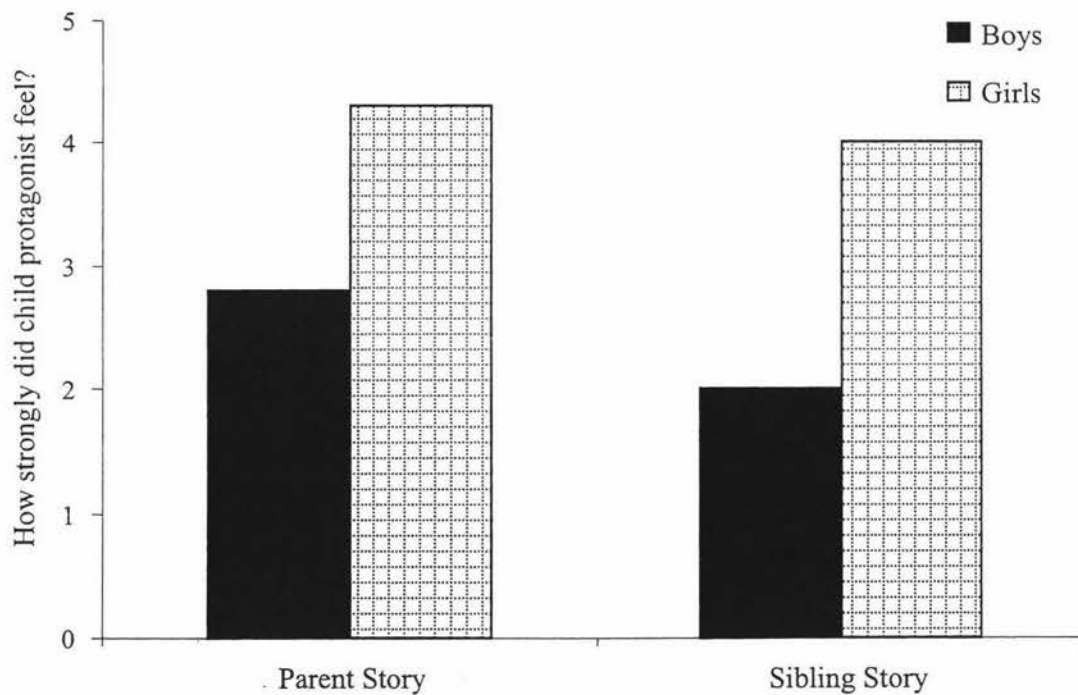


Figure 2.2 Mean Ratings of How Strongly a Child Protagonist Felt the Feelings of Anger across Story Types and Gender.

was no significant main effect of story types, $F(1, 22) = .01, p > .05$, and of gender, $F(1, 22) = .28, p > .05$. The interaction effect was also non-significant, $F(1, 22) = .16, p > .05$.

As to the mean degree of anger, a 2 (age groups) x 2 (story types) x 2 (gender) between-subject factorial ANOVA yielded non-significant main effects for these three variables. Because a number of the subject who reported the feeling of anger was only 12, which made only a small number of children in each cell, I then performed a 2 (story types) x 2 (gender) between-subject ANOVA. The main effect of story was non-significant, $F(1, 8) = .46, p > .05$. However, the main effect of gender was significant, $F(1, 8) = 5.6, p < .05$, partial $\eta^2 = .41$. As Figure 2.2 indicates, mean degree of anger was significantly greater for girls ($n = 7, M = 4.14, SD = .69$) than for boys ($n = 5, M = 2.6, SD = 1.34$). The effect size of the gender was large, which mean that gender accounted for 41% of the variability in the mean degree of anger. The interaction effect was non-significant, $F(1, 8) = .12, p > .05$.

A Measurement of Hostility

The total score on the three tasks was calculated as a measure of hostility. Table 2 presents the intercorrelations between three tasks and the total hostility scores. The relationships between these variables were investigated by using Pearson product-moment correlation coefficient. There was a strong, positive correlation between Task One and total hostility score, $r = .84, n = 32, p < .01$; between Task Two and total hostility score, $r = .82, n = 32, p < .01$; and between Task Three and total hostility score, $r = .76, n = 32, p < .01$. These results support the assumption that the sum of a task scores would be a good measure of hostility in children.

Table 2

Intercorrelations Between Three Tasks and The Total Hostility Scores.

Tasks	1	2	3	4
Children ($n = 32$)				
1. Sharing	—	.62	.42	.84
2. Empathy		—	.38	.82
3. Trust			—	.76
4. Hostility Scores				—

The main hostility scores across age groups and story type are presented in Figure 3. A 2 (age groups) x 2 (story types) x 2 (gender) between-subject factorial ANOVA was calculated to compare the mean hostility scores for younger age children in the parent or the sibling stories, and for older children in the parent or sibling stories. A significant main effect of story type was found, $F(1, 24) = 7.19, p < .05$, partial $\eta^2 = .23$. The children in the sibling story ($n = 14$) indicated higher mean hostile scores ($M = 5.93, SD = 1.90$) than the children in the parent story ($n = 18, M = 4.44, SD = 1.65$). The partial Eta squared was .23, a large effect size, which means that story type accounted for 23% of the variability in mean hostility scores. There was non-significant main effect of age groups, $F(1, 24) = .76, p > .05$, and of gender, $F(1, 24) = 1.92, p > .05$. However, the interaction effect of three factors (age groups, story types, and gender) was statistically significant, $F(1, 24) = 9.82, p < .05$, partial $\eta^2 = .29$. As can be seen in Figure 3, in general, boys ($n = 9$) presented higher hostility score ($M = 5, SD = 2.21$) than did girls ($n = 9, M = 3.89, SD = .78$) in the parent story. However, in the sibling story, young boys ($n = 4$) showed higher score ($M = 7.25, SD = 1.26$) than did younger girls ($M = 4.25, SD = 1.89$), while older boys

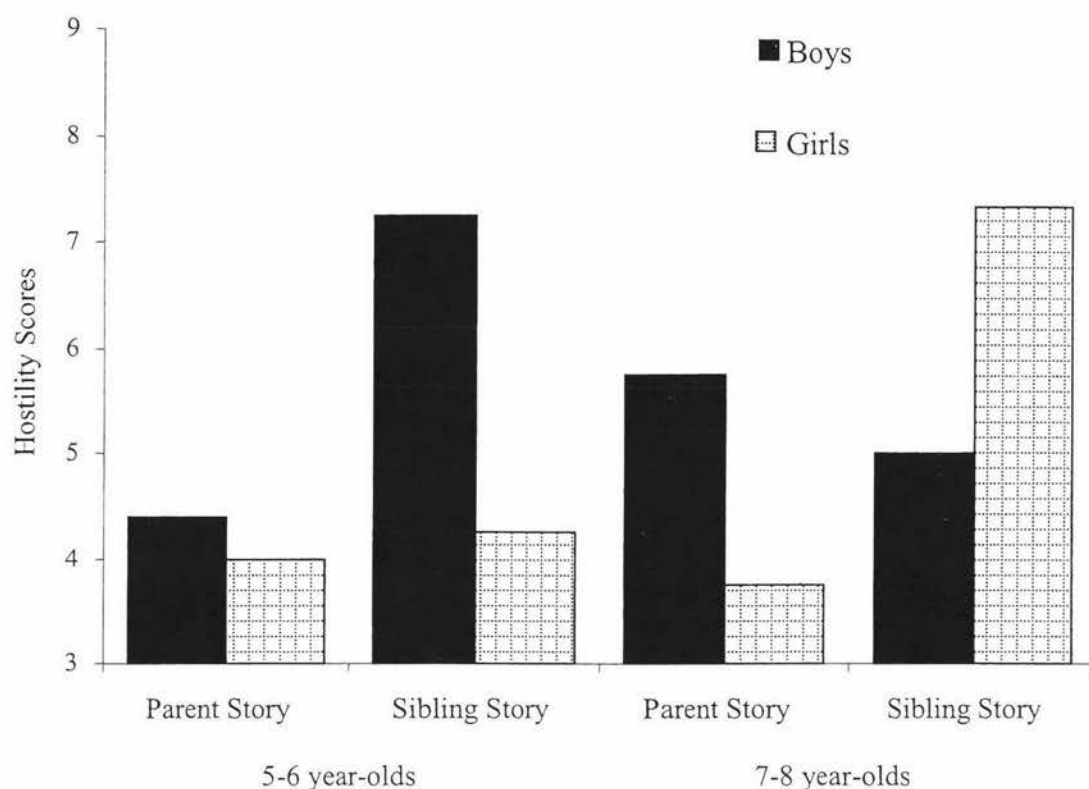


Figure 3. Mean Hostility Scores of Parent and Sibling Stories across Age Groups and Gender.

($n = 3$) show lower score ($M = 5$, $SD = 0.0$) than older girls ($n = 3$, $M = 7.33$, $SD = 1.53$). Higher hostility score of was observed in the sibling story than in the parent story in both age groups and gender, except older boys in the parent story ($n = 4$) presented higher score ($n = 4$, $M = 5.75$, $SD = 2.06$) than did older boy in sibling story ($n = 3$, $M = 5$, $SD = 0.0$).

Children's Verbal Reponses

A theme of forgiveness. All children thought that a child protagonist in the story was treated unfairly by either his/her mother or his/her older sibling, and then provided simple explanations of such judgement (see Table 1). When children were blamed for something they did not do, it was thought that they were more likely to show hostility during the three scenario-based tasks. However, the children were

less willing to show their hostility towards the mother, and, instead, more likely to forgive the mother. A theme of forgiveness was apparent from their responses during the scenario-based tasks. An older boy states that the mother in the story should have a small slice of the cake, however, he then sated “she might want it more because she did a lot to him, and then she should get better chocolate cake or, maybe, something else”. A few young children suggested giving the child protagonist’s special picture to the mother, even though they thought that the mother was unfair. They said “give the picture to mum, so that she can put it where the plate was”. Another aspect of forgiveness was stated by one 8-year-old when he gave his reason for giving mum a plaster. He sated “If he gives her a plaster, she would say sorry for what she did”.

In contrast, a theme of forgiveness was not observed from the children’s responses towards the older siblings, instead the children were more willing to show hostility towards them. For examples, majority of the children in the sibling story expressed that the older sibling was allowed to have only a small piece of the cake because he/she has been “naughty” or “mean” to the younger sibling. A few older children said “brother gets a small one because Emma wants to revenge him” or “she is getting back to him that he deserves”.

Discussion

Children who participated in this study seemed to enjoy the experience. They all listened carefully to the story, were able to describe the main theme of the story, and being able to engage in the tasks during the scenarios. The presentation of the story (e.g., colourful and big drawings) helped the children to sustain their attention to the testing session. Some older boys seemed slightly bored by the end of procedure, however, their feedback after the testing session was positive. Despite high levels of engagement and cooperation by the children, the stories and the test situations were quite complex. When presented with a story about an unfair treatment, their interpreted themes and cues in a variety of ways. One time during the testing session, for instance, a young boy said “I know what would happen next” and made up his own version of the story based on what he saw from the drawings. Observing young children during a free-play time, we often notice that they tend to have big imagination and seem to enjoy pretend play. The young children in this study certainly presented their unique ideas. Their version of a story were not necessary related to the theme of unfairness, however, I was able to learn how much young children were able to think hypnotically about a presented situation by using the drawings and how much they were capable of logically expressing own thought.

Children's Perception of Unfairness in Social Relationships

The first and the most obvious of an intrusive element in the story of unfairness was the role of the mother in the story. To emphasis how unfairly mother had treated a child protagonist in the story, mother was described as angry because of her own fault. Also, the child protagonist was described as being “a good boy” or

“being a good girl” to further emphasise the unfairness of the mother’s treatment. Even though these points were made, affective experiences of unfairness towards mother were somehow moderated by the complex nature, role, and responsibilities of mothers in parent-child relationships.

The complex nature of mother-child relationships can be explained in terms of the role of mothers in influencing a child’s life. In the present study, when the children were asked to describe why they thought the mother in the story was unfair, a number of the younger children decided that it was the child protagonist who caused mum to have bad temper or angry feelings in the parent story. Taking responsibility for what happen to mother, or obeying unreasonable and unfair orders from a parent have often studied under the subject of child maltreatment, abuse, and neglect. These studies might be extreme cases of a problematic mother-child relationship, however, these study inform us that young children generally have a view of a hieratical mother-child relationship. When a mother abuses her power in the mother-child relationship, it negatively impacts on the child’s affective experiences and his or her adjustment to social environment (Smetana, Toth, Cicchetti, Bruce, Kane, & Daddis, 1999; García-Torres & García-Calvo Guerrero, 2000). For young children, being “mum” already has special connotation, so that they are less willing to show hostility towards their mothers. During the present study, when I asked a five-year-old boy a reason why he should not laugh at mum for having cut her finger he replied “Not laugh because it is his mum, would not laugh”.

A theme of forgiveness was further apparent in the mother-child relationships. Mothers might do bad things and make mistakes, but they seem to have an affective status that compensates for, and typically overrides short-term feelings. Some of their status may derive simply from being a grown-up; for example bigger people should

have the bigger piece of cake, some children argued. It was also stated by some of the children that mothers deserve special consideration (such as the bigger piece of cake) because—to quote one—“Mum does a lot around the house.” In this latter case it seemed that children judged parents as having earned the right to make some mistakes, because on the whole they do good, kind things. Children, in positive families, may learn to be forgiving of small mistakes that parents made because a parent has earned equally positive “credit” on other occasions. The same principle might apply to a parent who forgives a child for a mishap. As we became older we tended to take a meaning of apologies or forgiveness lightly. However, for young children, being able to forgive a parent’s mistake or being able to receive apologies from a parent do just for them because young children often ask for forgiveness or tell apologies to a parent for something they might or might have done.

Compared with these in the parent-child relationship story group, the children in the sibling relationship story group expressed their negativity towards an older sibling more directly towards than the mother. In fact, one 8-year-old girl said, “Emma feels really angry at her brother. She probably gets revenge and will tease him”. One of the reasons for such explicit expression of retribution might be related to how young children perceive the role, nature, and responsibilities of a sibling in their lives. In the family environment, the status of all siblings is supposedly equal. We often hear parents saying how equally they are treating every child. In this sense, children’s level of regard towards a sibling might be lower than the level of regard towards mother. Therefore, children might be less worried about doing the right things for a sibling but for a mother, who provides physical and psychological security. Unlike the complex nature of parent-child relationships, children may strive to gain fairness in sibling interactions. Therefore, when young children experience

unfair treatment in sibling relationships, their experience of “injustice” motivates them to retaliate.

Young children thought it was unfair for a young sibling to be blamed for something she or he did not do. At the same time, however, young children judged the fairness of the situation in terms of moral principles. A typical argument was centred around the goodness of telling the truth and the badness or immorality of telling lies. One young child said “you don’t lie and say you did not do it. You always tell truth. Her brother might have to apologise”. Thus, any negativity towards the older sibling in the story is confounded with a negative judgement of his or her lying, in addition to being unfair.

Feelings of Unfairness

Feelings of sadness and anger were both commonly reported by the children. This was consistent with previous study of Evans, Galyer, and Smith (2001), which examined negative feelings children reported as a result of unfair rewards and punishments. In the present study, the children’s understanding of the feelings associated with unfairness showed a developmental trend.

Feeling of sadness as a result of unfairness. In the present study, a feeling of sadness was most commonly reported and most strongly noted by the children, especially by younger children. Young children in this study may thought the protagonist had lost their freedom (e.g., freedom to play) and thus goal reinstatement seemed impossible if experiencing unfair treatment. Levine (1995) has reported such a finding about the nature of sadness in kindergarten children. Perhaps younger age children are more likely to perceive themselves as powerless, so that they tend to think that they cannot change a situation. In contrast to younger aged children, older

children rated the degree of sadness as lower. Some children stated their reason of a child protagonist being sad was—to quote one—“she might not understand why she had been sent to her room”. When parents discipline their children they often teach the child not to act out feelings; instead the parents ask the child to “use own words” to explain why they are feeling certain way. Drawing on these everyday discipline practices, the children may expect their parent to reciprocate, such as a mother should be explaining why she is upset, rather than losing her temper. This may represent one of the fundamental principles of fairness: if you ask me to behave certain ways, then you also should be doing as you say.

Children’s affective expressions seem to become more complex as they become older. The majority of 5-6 year-olds children gave only one feeling, “sad”. However, when asked to describe what would happen next, some younger age girls replied “slamming door or stomping feet”. These behaviours are the opposite of how they described their feeling of sadness. These suggested actions are described the angry behaviours in the child development literatures (e.g., Eisenberg et al., 1999) rather than being behaviour related to sadness.

Some 7-8 year-olds children reported “sad then mad” or “sad and mad” to indicate parallel emotional process that an involved in an experience of unfairness. One 8-year-old participant articulated the frustration-aggression hypothesis, as he replied, when asked what the child protagonist would do after being sent to his room, answered “be naughty or break something of his toys”. One rather perceptive 5-year-old stated that the child protagonist would feel sad, but then added “and a little bit happy.” “Why?” prompted the researcher, and he replied: “because *he* knows he is not to blame.”

Feeling of anger as a result of unfairness. A small number of children hypothesised that feelings of anger were result from unfairness. It was expected that anger would be expressed strongly during a social interaction. However, it was not supported. Instead, gender differences were found. Generally, we tend to think that boys are more aggressive than girls. There is a stereotype belief that parents may socialise girls and boys in different ways: girls are not allowed to be aggressive and violent while these behaviours are might acceptable for boys (e.g., Brody, 1996). Many child development studies have also reported that boys tend to have more externalised behaviour problems than girls. In the book called *Social aggression among girls*, Underwood (2003) focuses special attention to girls' indirect forms of aggression, social aggression, and described these characteristics as behaviours that involve nonverbal display of social exclusion and overt and covert forms of relationship manipulation. Since hostility does not necessarily result in aggressive acts, having an understanding of the origins of angry feelings or hostility would be valuable information to understand complex nature of anger in girls.

Although there was very limited number of participants who intensely expressed the feeling of anger, one 8-year-old girls stated "she might tease him by saying 'oh you are bloody boy!' when the child protagonist saw her brother cutting his finger. Another 8-year-old boy expressed feelings of anger towards the mother who was unfair to the child protagonist said "give her (mother) the plaster and tell her that she did something quite nasty to him". His action was not aggressive or threatening in any behavioural ways, however, his rationale for caring behaviour in this situation was seen as opportunity to remind the mother how much distress the child might have experienced from her being treated unfairly.

As not all the children mentioned sadness or anger as an emotion, rating of the intensity of each of these emotions were based on a very small number of participants. This meant that one or two children's ratings could greatly influence the mean for the group. Thus the significant effect for gender, for example, with anger ratings should not be given too much weight until these effects are replicated. Another approach for further studies might be to suggest the emotion that the child in the story might be feeling (even if the participant did not identify it), and then ask the participant "If Emma was to feel *mad* at her mother/brother, how mad do you think she might feel?" In this way we could obtain a rating of the predominant emotions from every child.

Measuring Hostility in Children

The three judgement tasks that were designed to measure hostile reactions to unfair treatment seemed to meet the objective in terms of the children's general understanding. It should be remembered that the order of presentation of the three reaction contexts was randomised, because in fact some carry over effects from one situation to another were noticed. For example, one participant suggested that the big brother should get the picture that the child had drawn "because he had a cut finger", which was, of course, the test situation from the previous judgement task. Probably the strongest evidence that the three situations reflected feelings towards the characters in the story came about from impromptu comments made by the participating children regarding their reactions. The critical data, however, were how they actually assigned the various choices offered, since this required no sophisticated verbal skills or explicit rationale.

Distribution of the different sized slices of cake tended to differentiate the younger from the older participants. Younger children were like to apportion the cake according to the size or age of the individual, but older children clearly articulated the retaliation theme of this situation: "I'll give the smallest piece to the brother—he lied." One 8-year-old boy gave a reason of the mother should have the smaller as "Joshua gets bigger one because he has not done anything wrong. Mum gets middle one because she was a bit mean to him. If she made him a bit sad, then she gets a little chocolate cake, that makes it fair".

The situation designed to assess a diminution of empathy as a result of unfairness was less discriminatory because, by and large, the general empathy that children feel towards someone who is injured seemed to be far stronger than any feelings of hostility. This was particularly clearly revealed by the children's reaction to the possible option in which the child protagonist doesn't just ignore the injured person but actively laughs at their misfortune. Almost all the children, especially the older ones, shook their heads at such an idea and said that it would be very wrong.

Finally, the option of giving over a really desirable picture the protagonist had made tended not to provide a large degree of separation of responses, as the general idea that the child's picture could be hung on the wall for all to enjoy was quite widely adopted. Siblings were unlikely to get the picture to keep or look after. Hiding the picture in secret hiding place so no one could get it was a strategy mentioned by some children. One 8-year-old girl said "Tell brother, Oh mine's better than yours. Yours dumb!— perhaps those who did actually have older siblings at home were able to image more realistic picture of the event.

Limitations of the Present Study

The present study was conducted by using a novel way to investigate children's perception of unfairness and the affective experiences associated with it. Although participating children showed positive reactions to the test situation, this study has some limitation.

The first and most obvious limitation of this study was the methodology, particularly a way to elicit negativity in young children. Based on Evans and his colleagues' (2001) previous study, this study created a story of unfairness and manipulated the children's affect by reading the story with some large drawings. Although presenting the story with some large picture drawings helped the children to sustain their focus, this mood elicitation strategy was much weaker influence on the children's affective experience than using more interactive techniques. As Brenner (2000) expressed, mood induction procedure in children are complex and required some improvement.

As a future study, using more interactive ways of mood elicitation procedure might be effective. One of the possible ways to manipulate young children's affect would be to use visually rich resources, such as creating a film about unfair discipline practice. Also, a measurement of hostility can be conducted by designing a computer-based task. These days, even young children know how to use a computer. Computer-based tasks can be fun and stimulating for young children. Visually attractive and enjoyable materials may be effective for further study. In addition the content of the stories of unfairness might need some adjustment. It would be ideal if we can actually conduct a small piloting work with caregivers or have a focus group of caregivers to gather some of the events that made both a parent and a child very frustrated or angry. By gathering this information, a story can be more realistic and

then the children would be much easier to associate themselves with the story of unfairness. Therefore, more interactive procedure and realistic approach would be ideal for further study.

Second, a number of the children who participated in this study were young. Although the topic of the study may interest parents, they seemed to be hesitant to give permission for own child to participate in a psychological research project. The return rate of the consent form was limited, however it was encouraging to hear from participating children that their parents had talked to them about the study, and they were aware their own rights when attending. In order to increase the number of participants, it might be helpful to inform and educate schools and parents more about the value and harmlessness of such a study before sending out the consent form.

Final limitation and further consideration of this study was age groups of the children. Although some of the 5-year-olds were able to perceive the unfairness in term of being blamed for something one had not done, many of the younger aged children's fairness judgements seemed to be based on their perception of mother as an authority figure. These results allowed me to conclude that young children's sense of justice was still based on parental figures that they were less likely to consider themselves as active moral agents. Thus, no matter how unfair a mother might be, younger age children appeared less likely to articulate and recognise affective experience of unfairness. As Piaget stated in his early work, when children justify fairness of punishment, younger age children' justify their decision on the basis of rule of authority, *expiatory punishment*, while older age children justify it on the basis of cooperation and rules of equality, punishments *by reciprocity* (Piaget, 1997). Therefore, as Piaget (1997) and Kohlberg (1969) have stated in their theory of moral

development, cognitive maturation of children may influence young children's perception of fairness in a parent-child relationship. For future study, cognitively mature older age children might be suitable.

Individual Differences and Origin of Hostility in Children

During the pilot work and the conduct of the major study, individually different reasoning regarding justice and fairness was recognised. Some children had a strong sense of justice that they made comments such as "you always have to forgive" or "Two wrongs does not make it right". These children might be brought up in a family with high moral reasoning. It has been reported that development of high levels of moral reasoning in young children reflect a parent's use of indicative discipline rather than power-assertive discipline (Eisenberg, 2004). Parenting strategies, family environments, or religious beliefs, are all contextual factors influencing socialisation of a child.

I have stressed the role of fair parental disciplinary practices in this thesis. However, there are many other variables that may influence the origin of hostility and angry feelings in children. Some of these factors might be experiences of some type of abuse or neglect (Dodge, Bates, & Pettit, 1990; Hildyard & Wolfe, 2002), being brought up in non-supportive emotional family environment (Katz & Gottman, 1993; Matthews, Woodall, Kenyon, & Jacob, 1996), being brought up by a parent with Type A disorders (Woodall & Matthews, 1989; Kelitikangas-Järvinene & Heinonen, 2003), or economic disadvantage (Patterson, DeBaryshe, & Ramsey, 1989). Some of these factors are not easily managed, however, taking careful examinations of each child's cultural and family environment, again, I would suggest a parent, a caregiver, or any professional who communicate with children, treat each

child fairly and help the child to learn fairness as a foundation of prosocial development. Having to learn fairness would be the foundation of prosocial behaviours (e.g., perspective taking, sharing, and empathy). Through a reciprocal relationship, or “mutual responsive orientation” (Kochanska, 2002), both parents and children can support and foster the well-being of each other.

Conclusion

The present study was designed to investigate young children’s perception of unfairness in social relationships and how such judgement of unfairness increases angry feelings and hostility in children. Angry feelings and hostility were thought of a “mood” like characteristics in children, which involves distinctive cognitive and affective experiences. When children’s perception of unfairness interacted with their affective experience of injustice, they were motivated to seek some kind of retaliation.

Despite some of the limitations associated with this study, the findings inform that children’s experiences of unfair treatment could impact on their affective states and an increase in hostility and angry feelings towards a person being unfair, at least for a short-time. If children are brought up in an environment where unfair treatments are consistently practiced, then the children are most likely to become hyper-sensitive to such treatment. When children are overly sensitive unfairness of others, they are most likely to become suspicious to other’s motive and be motivated to retaliate. Developing such perceptions and attitudes is not healthy. The results of the present study but also an important one because all the findings from this study will be a useful information for parents, caregiver, and other child care professionals to provide more effective help with children’s emotional and social development.

With improvements in the methodology, the origin of angry feelings and hostility in children could be studied in more depth.

Being able to treat someone fairly means acknowledging individual difference in children. Instead of punishing children for something they may have done wrong or for things that they could not do, the parents can help children to promote healthy psychological development by fostering what they have or what they can do. As a conclusion of this study, my message is simple one; fair and positive discipline practice is a window to physically and emotionally healthy children.

References

- Bazerman, M. H., White, S. B., & Loewenstein, G. F. (1995). Perceptions of fairness in interpersonal and individual choice situations. *Current Directions in Psychological Science, 4*, 39-43.
- Beck, A. T. (1999). *Prisoners of hate: The cognitive basis of anger, hostility, and violence*. New York: Harper Collins.
- Bowlby, J. (1969). *Attachment and loss: Voll. Attachment*. London: Hogarth.
- Brenner, E. (2000). Mood induction in children: Methodological issues and clinical implications. *Review of General Psychology, 4*, 264-283.
- Brody, L. R. (1996). Gender, emotion expression, and parent-child , boundaries, In R. D. Kavanaugh., B. Zimmerberg., & S. Fein (Eds.), *Emotion: Interdisiplinary Perspectives*. New Jersey: L.Erlbaum Associates.
- Buss, A. H. (1961). *The psychology of aggression*. New York: Josh Wiley.
- Crick, N. R. (1996). The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child Development, 67*, 2317-2327.
- Crockenberg, S., & Litman, C. (1990). Autonomy as competence in 2-year-olds: Maternal correlates of child defiance, compliance, and self-assertion. *Developmental Psychology, 26*, 961-971.
- Deutsch, M. (1985). *Distributive justice*. New Haven, CT: Yale University Press.
- Dunn, J., Maguire, M., & Brown, J. (1995). The development of children's moral sensibility: Individual differences and emotion understanding. *Developmental Psychology, 31*, 649-659.

- Dunn, J., & Hughes, C. (2001). "I got some swords and you're dead". Violent fantasy, antisocial behavior, friendship, and moral sensitivity in young children. *Child Development, 72*, 491-505.
- Dodge, K. A., Bates, J. E., & Pettit, G. S. (1990). Mechanisms in the cycle of violence. *Science, 250*, 1678-1684.
- Dodge, K. A., & Somberg, D. R. (1987). Hostile attributional biases among aggressive boys are exacerbated under conditions of threats to the self. *Child Development, 58*, 213-224.
- Eisenberg, N. (1992). *The caring child*. Cambridge, MA: Harvard University Press.
- Eisenberg, N. (2004). Prosocial and moral development in the family. In T. A. Thorkildsen & H. J. Walberg. (Eds.), *Nurturing morality*. (pp. 119-135). New York: Kluwer Academic/Plenum.
- Eisenberg, N., & Fabes, R. A. (1998). Prosocial development. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Social, and personality development*, 5th ed., (pp. 701-778). New York: Wiley.
- Eisenberg, N., Fabes, R. A., Murphy, B. C., Shepard, S., Guthrie, L. K., Maszk, P., Poulin, R., & Jones, S. (1999). Prediction of elementary school children's socially appropriate and problem behavior from anger reactions at age 4-6 years. *Journal of Applied Developmental Psychology, 20*, 119-142.
- Evans, I. M. (2001) Origin of hostility in children. Unpublished manuscript, School of Psychology, Massey University at Palmerston North, NZ.
- Evans, I. M., Galyer, K. T., & Smith, K. H. (2001). Children's perception of unfair reward and punishment. *The Journal of Genetic Psychology, 162*, 212-227.
- Evans, I. M., Goldberg, J. S., & Dickson, J. K. (1998). Children's perception of equity in peer interactions. In L. H. Meyer, P. Hyun-Sook, M. Grenot-Scheyer, I.

- Schwartz, & B. Harry (Eds.), *Making friends* (pp. 133-148). Baltimore: Paul H. Brookes.
- Evans, I. M., Heriot, S. A., & Friedman, A. G. (2002). A behavioural pattern of irritability, hostility, and inhibited empathy in children. *Clinical Child Psychology and Psychiatry*, 7, 211-224.
- García-Torres, B., & García-Calvo Guerrero, P. (2000). Working models about mother-child relationships in abandoned children. *Child Abuse & Neglect*, 24, 1227-1239.
- Hildyard, K. L., & Wolfe, D. A. (2002). Child neglect: Developmental issues and outcomes. *Child Abuse & Neglect*, 26, 679-695.
- Izard, C. E. (1991). *The psychology of emotions*. New York: Plenum Press.
- Katz, L. F., & Gottman, J. M. (1993). Patterns of maternal conflict predict children's internalizing and externalizing behaviors. *Developmental Psychology*, 29, 940-950.
- Kazdin, A. E., Rodgers, A., Colbus, D., & Siegel, T. (1987). Child's Hostility Inventory: Measurement of aggression and hostility in psychiatric inpatient children. *Journal of Clinical Child Psychology*, 16, 320-328.
- Keltikangas-Järvinen, L., & Heinonen, K. (2003). Childhood root of adulthood hostility: Family factors as predictors of cognitive affective hostility. *Child Development*, 74, 1751-1768.
- Kennedy, D. B., Homant, R. J., & Homant, M. R. (2004). Perception of injustice as a prediction of support for workplace aggression. *Journal of Business Psychology*, 18, 323-336.
- Kochanska, G. (2001). Emotional development in children with different attachment histories: the first three years. *Child Development*, 72, 474-490.

- Kochanska, G. (2002). Mutually responsive orientation between mothers and their young children: A context for the early development of conscience. *Current Directions in Psychological Science, 11*, 191-195.
- Kochanska, G., & Aksan, N. (1995). Mother-child mutually positive affect, the quality of child compliance to requests and prohibitions, and maternal control as correlates of early internalization. *Child Development, 66*, 236-254.
- Kochanska, G., Aksan, N., & Koenig, A. L. (1995). A longitudinal study of the roots of preschoolers' conscience: Committed compliance and emerging internalization. *Child Development, 66*, 1752-1769.
- Kohlberg, L. (1969). Moral stages and moralization: The cognitive-developmental approach. In T. Lickona, (Ed.), *Moral development and behaviour: Theory, research, and social issues* (pp.31-53) New York: Holt, Rinehart and Winston.
- Konstantareas, M. M., & Desbois, N. (2001). Preschoolers perceptions of the unfairness of maternal disciplinary practices. *Child Abuse & Neglect, 25*, 473-488.
- Kowal, A., Krull, J. L., Kramer, L., & Crick, N. R. (2002). Children's perceptions of the fairness of parental preferential treatment and their socioemotional well-being. *Journal of Family Psychology, 16*, 297-306.
- Kuczynski, L., & Kochanska, G. (1990). Development of children's noncompliance strategies from toddlerhood to age 5. *Developmental Psychology, 26*, 398-408.
- Levine, I. J. (1995). Young children's understanding of the causes of anger and sadness. *Child Development, 66*, 697-709.
- Matthews, K. A., Woodall, K. L., Kenyon, K., & Jacob, T. (1996). Negative family environment as a predictor of boy's future status on measures of hostile attitudes, interview behavior and anger expression. *Health Psychology, 15*(1), 30-37.

- McGillicuddy-De Lisi, A. V., Watkins, C., & Vinchur, A. J. (1994). The effect of relationship on children's distributive justice reasoning. *Child Development, 65*, 1964-1700.
- McHale, J. P., Neugebauer, A., Asch, A. R., & Schwartz, A. (1999). Preschoolers' characterizations of multiple family relationships during family doll play. *Journal of Clinical Child Psychology, 28*, 256-268.
- Mikula, G., Scherer, K. R., & Athenstaedt, U. (1998). The role of injustice in the elicitation of differential emotional reactions. *Personality and Social Psychology Bulletin, 24*, 769-783.
- O'Brien, M. (1995). Allocation of resources in households: Children's perspectives. *The Educational Board of the Sociological Review, 43*, 501-517.
- Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behaviors. *American Psychologist, 44*, 329-335.
- Piaget, J. (1997). *The moral judgment of the child*, New York: Free Press Paperbacks.
- Shipman, Z. I., & Zeman, J. (2001). Socialization of children's emotion regulation in mother-child dyads: A developmental psychology perspective. *Development and psychopathology, 13*, 317-336.
- Sigelman, C. K., & Waitzman, K. A. (1991). The development of distributive justice orientations: Contextual influences on children's resource allocation. *Child Development, 62*, 1367-1378.
- Smetana, J. G., Toth, S. L., Cicchetti, D., Bruce, J., Kane, P., & Daddis, C. (1999). Maltreated and nonmaltreated preschoolers' conceptions of hypothetical and actual moral transgressions. *Developmental Psychology, 35*, 269-281.
- Thorkildsen, T. A. (1989a). Justice in the classroom: The students' view. *Child Development, 60*, 323-334.

- Thorkildsen, T. A. (1989b). Pluralism in children's reasoning about social justice. *Child Development, 60*, 965-672.
- Thorkildsen, T. A. (2004). Moral Functioning in School. In T. A. Thorkildsen & H. J. Walberg. (Eds.), *Nurturing morality*. (pp. 137-155). New York: Kluwer Academic/Plenum Publishers.
- Thorkildsen, T. A., Nolen, S. B., & Fournier, J. (1994). What is fair? Children's critiques of practice that influence motivation. *Journal of Educational Psychology, 86*, 475-486.
- Turiel, E. (1998). The Development of Morality. In N. E. W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Social, and personality development*, 5th ed., (pp. 863-932). New York: Wiley.
- Underwood, M. K. (2003). *Social aggression among girls*. New York: The Guilford Press.
- Warren, S. L., Oppenheim, D., & Emde, R. N. (1996). Can emotions and themes in children's play predict behaviour problems? *American Academy of Child and Adolescent Psychiatry, 34*, 1331-1337.
- Wong, M. A., & Nunes, T. (2003). Hong Kong children's concept of distributive justice. *Early Child Development and Care, 173*, 119-129.
- Woodall, K. L., & Matthews, K. A. (1989). Familial environment associated with Type A behaviors and psychophysiological responses to stress in children. *Health Psychology, 8*, 403-420.

Appendix A: Letter to Kindergarten



Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF PSYCHOLOGY
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 350 5799 extn 2040
F 64 6 350 5673
www.massey.ac.nz

9 March 2004

Palmerston North

Dear

Letter of Introduction of Ms Tomoko Yamaguchi

It is a pleasure to write this letter of introduction and acknowledge to you my support of Tomoko Yamaguchi's research project. Tomoko is a Master of Arts student in the School of Psychology at Massey University, and as part of her preliminary design of her research she needs to have access to observing children in a kindergarten setting.

Tomoko is currently in the preliminary stages of her Masters thesis. It will be very helpful to her to be able to observe young children in kindergarten and for her to become familiar with how such programmes in New Zealand operate. What we are hoping to do is design a study that will continue my own line of recent research which has been to look at how children judge the fairness of adult's responses (rewards and punishments) to their behaviour, and whether such judgment influences the emergence of feelings of anger and hostility in young children. This research area has implications for positive parental discipline practices.

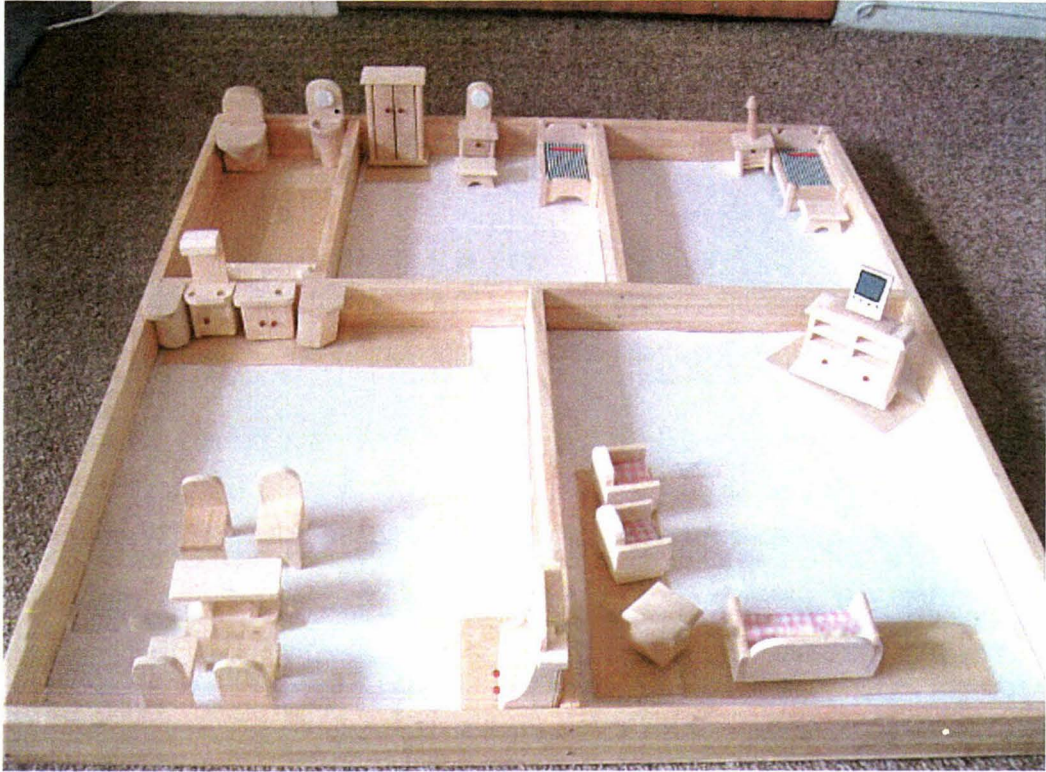
I have known Tomoko for the past two years. She is a quiet and considerate young woman who is sensitive to the needs of those around her. She is a very thoughtful and ethical person who will at all times ensure the safety of those she is observing or interacting with. Tomoko is a sound researcher and is fully aware of all ethical and confidential responsibilities regarding research. She has my utmost confidence.

Thank you for considering her request and if you require any further clarification please do not hesitate to contact me.

Yours faithfully

Ian Evans, PhD, FRSNZ
Professor and Head of School
School of Psychology – Te Kura Hinengaro Tangata

Appendices B: Doll House and Family Dolls



Appendix C: Letter to School Principal and Classroom Teacher



Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF PSYCHOLOGY
Te Kura Hinengaro Tangata
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099 extn 2040
F 64 6 350 5673
www.massey.ac.nz
<http://psychology.massey.ac.nz>

RESEARCH PROJECT "Origin of angry feelings in children."

INFORMATION SHEET TO SCHOOL PRINCIPAL

Dear

My name is Tomoko Yamaguchi and I am a graduate student, currently working on a research project as part of my Master's degree in psychology at Massey University. My supervisor is Professor Ian Evans, in the School of Psychology. Thank you very much for agreeing to meet with me so that I can explain my project to you. The purpose of this letter is to put my request in writing so that you can judge the suitability of my study and decide whether you wish your school to participate.

The research is about how children develop a hostile mood and behaviours. We are particularly interested in children's perception of "unfairness" in normal everyday parent-child interactions and their responses to being unfairly treated by a caregiver. In the study, I hope to study children's reaction to common life experiences, as well as their perception of parent's behaviours, particularly their typical disciplinary practices. I am hoping to study a total of 60 children in the age range of about 5-6 years (Year 1) and about 7-8 years (Year 3).

The research procedure includes:

FOR CHILDREN: each child listens and watches a story about an unfair situation that has happened between a child of his/her age and that child's parent. The scenario is make-believe. After the story has been enacted, the child will be asked to respond whether the situation is fair/unfair, and how the events depicted would make the main character of story feel. After this children are given opportunity to continue the story, and are provided with three possible subsequent situations in which any negative feelings towards the parent could be expressed: 1) distributing desired "goodies" (cake) to different family members; 2) offering assistance when the mother in the story has hurt herself; 3) assessing trust by enacting what the child in the story would do with a treasured object that needed safekeeping. The entire session will take about 20-30 minutes. At the end of the session, the child will be given a small gift (sticker) for his/her time and effort.

We will video-record every session in order to obtain a really accurate record of the children's responses and also to ensure that this project has no harm or risk effects for your child. All records are completely confidential. We also will ensure that each child is willing to participate and will not be upset by the experience, as each child will be told that s/he is free to stop at any time.

Appendix C: Letter to School Principal and Classroom Teacher

FOR PARENTS/CAREGIVER: they will be encouraged to go through the study information with their child and to make sure their child is willing to participate in this study. If their child wishes to take part, parents will send a consent form for their child's participation in the study.

FOR THE SCHOOL AND THE TEACHERS: I will be asking you to discuss the project with your teaching staff, encourage them to assist by distributing the consent letters to parents in class and asking the children to take the letters home, adding your endorsement and approval of the project to the letter of consent, and assisting me in finding a quiet location in your school in which I can conduct play activity and record the children's responses. When the study begins and after we know who has permission to participate, I will be asking you to introduce the researcher to your pupils and expose them what we are going to do with them (play-based activity for 20-30 minutes). Note that I will usually be accompanied by a colleague as a research assistant, and she will be trained in her ethical responsibilities and her duties as a research assistant.

At the conclusion of the study I will prepare a report of the findings that might be of interest to you and the teachers, and I will prepare another version that can either be sent to the parents who participated, or written up for your school newsletter, whichever you prefer.

By this letter, I am asking for your help by giving permission for your school and your pupils to be part of our study. The study of children's perceptions of parental behaviours is important as it can influence the children's attitudes towards others and the world in general. For these reasons, I hope you will agree to your students being part of our study.

Approval from Ethics Committee:

This project has been reviewed and approved by the Massey University Human Ethics Committee, PN Protocol 04/151. If you have any concerns about the conduct of this project, please contact Professor Sylvia V. Rumbali, Chair, Massey University Campus Human Ethics Committee: Palmerston North, telephone 06 350 5249, email humanethicspn@massey.ac.nz.

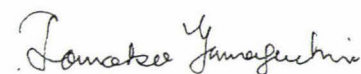
Researcher: Tomoko Yamaguchi, School of Psychology, Massey University, Private Bag 11-222, Palmerston North, can be contacted by phoning 021515926. Alternatively you can email me at: Tomoko.Yamaguchi.1@uni.massey.ac.nz

Supervisor: Professor Ian Evans, School of Psychology, Massey University, Private Bag 11-222, Palmerston North, can be contacted by phoning 356 9099 extension 2070.

If you agree to take part in this study, please fill in the consent form and return it to me in enclosed envelope as soon as convenient. I have also enclosed an information sheet to your teaching staff. Please discuss this project with them and ask them to fill the consent form if they wish to assist this study.

Thank you very much for considering our project. Your time and effort is appreciated.

Yours sincerely,



Tomoko Yamaguchi
Researcher

Appendix C: Letter to School Principal and Classroom Teacher



Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF PSYCHOLOGY
Te Kura Hinengaro Tangata
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099 extn 2040
F 64 6 350 5673
www.massey.ac.nz
<http://psychology.massey.ac.nz>

CONSENT FORM

SCHOOL

Name of School: _____

On behalf of the School named above permission is **given / not given** for the children associated with our school to participate in your project.

Signed: _____

Name: _____

Designation: _____

Date: _____



Appendix C: Letter to School Principal and Classroom Teacher



Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF PSYCHOLOGY
Te Kura Hinengaro Tangata
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099 extn 2040
F 64 6 350 5673
www.massey.ac.nz
http://psychology.massey.ac.nz

RESEARCH PROJECT "Origin of angry feelings in children."

INFORMATION SHEET TO CLASSROOM TEACHER

Dear _____

Your school principal _____ has given us permission to carry out a research project in your classroom.

The research is about how children develop a hostile mood and behaviours. We are particularly interested in children's perception of "unfairness" in normal everyday parent-child interactions and their responses to being unfairly treated by a caregiver. In the study, I hope to study children's reaction to common life experiences, as well as their perception of parent's behaviours, particularly their typical disciplinary practices. I am hoping to study a total of 60 children in the age range of about 5-6 years (Year 1) and about 7-8 years (Year 3).

The research procedure includes:

FOR CHILDREN: each child listens and watches a story about an unfair situation that has happened between a child of his/her age and that child's parent. The scenario is make-believe. After the story has been enacted, the child will be asked to respond whether the situation is fair/unfair, and how the events depicted would make the main character of story feel. After this children are given opportunity to continue the story, and are provided with three possible subsequent situations in which any negative feelings towards the parent could be expressed: 1) distributing desired "goodies" (cake) to different family members; 2) offering assistance when the mother in the story has hurt herself; 3) assessing trust by enacting what the child in the story would do with a treasured object that needed safekeeping. Entire session will take about 20-30 minutes. At the end of the session, child will be given a small gift (sticker) for their time and effort.

We will video-record every session in order to obtain a really accurate record of the children's responses and also to ensure that this project has no harm or risk effects for your child. All records are completely confidential. We also will ensure that each child is willing to participate and will not be upset by the experience, as each child will be told that s/he is free to stop at any time.

FOR PARENTS/CAREGIVER: they will be encouraged to go through the study information with their child and to make sure their child is willingness to participate in this study. If their child wishes to take part, parents will send a consent form for their child's participation in the study.



Appendix C: Letter to School Principal and Classroom Teacher

FOR THE SCHOOL AND THE TEACHERS: I will be asking you to assist this study by distributing the consent letters to parents in class and asking the children to take the letters home, adding your endorsement and approval of the project to the letter of consent, and assisting me in finding a quiet location in your school in which I can conduct play activity and record the children's responses. When the study begins and after we know who has permission to participate, I will be asking you to introduce the researcher to your pupils and expose them what we are going to do with them (play-based activity for 20-30 minutes). Note that I will usually be accompanied by a colleague as a research assistant, and she will be trained in her ethical responsibilities and her duties as a research assistant.

Before the children's assessment, we will make sure with you to choose the best time during the day to meet the children, in order to limit the amount of disturbance to your teaching programmes. There may be some disruption to your class as we make each child part for the procedure. Please let us know if this is problematic and feel free to suggest use better ways to run the study.

In the next days, I will organise to meet you and your colleagues in order answer to any question you would clarify with me and for further information, at a moment of your convenience.

Approval from Ethics Committee:

This project has been reviewed and approved by the Massey University Human Ethics Committee, PN Protocol 04/151. If you have any concerns about the conduct of this project, please contact Professor Sylvia V. Rumball, Chair, Massey University Campus Human Ethics Committee: Palmerston North, telephone 06 350 5249, email humanethicspn@massey.ac.nz.

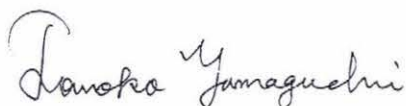
Researcher: Tomoko Yamaguchi, School of Psychology, Massey University, Private Bag 11-222, Palmerston North, can be contacted by phoning 021515926. Alternatively you can email me at: Tomoko.Yamaguchi.1@uni.massey.ac.nz

Supervisor: Professor Ian Evans, School of Psychology, Massey University, Private Bag 11-222, Palmerston North, can be contacted by phoning 356 9099 extension 2070.

If you agree to assist this project, please fill in the consent form and return it to your school principal as soon as convenient.

Thank you very much for considering our project. Your time and effort is appreciated.

Yours sincerely,



Tomoko Yamaguchi
Researcher

Appendix C: Letter to School Principal and Classroom Teacher



Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF PSYCHOLOGY
Te Kura Hinengaro Tangata
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099 extn 2040
F 64 6 350 5673
www.massey.ac.nz
http://psychology.massey.ac.nz

CONSENT FORM

TEACHER

Name of School: _____

I understand that my school principal has given a permission to carry out a research project, Origin of hostility in children, in my classroom.

I **do/do not** wish to assist the research.

I understand that the project is confidential, and that I will not be identified in any data.

I also understand that I can withdraw at any time.

Signed: _____

Name: _____

Date: _____

Appendix D: Letter and Information Sheet to Parent or Guardian



Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF PSYCHOLOGY
Te Kura Hinengaro Tangata
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099 extn 2040
F 64 6 350 5673
www.massey.ac.nz
http://psychology.massey.ac.nz

RESEARCH PROJECT "Origin of angry feelings in children."

12 January 2005

Dear Parent / Guardian

This letter is being sent to you with the approval of the coordinator of

My name is Tomoko Yamaguchi and I am a female graduate student currently working on a research project as part of the Master's degree in psychology, supervised by Professor Ian Evans, at Massey University. My project looks at the development of feelings of anger and hostility in children.

For my study, I hope to study children's reaction to common life experiences of being disciplined, as well as their perception of parent's behaviours, particularly when reprimanding them for something they might have done wrong. I am hoping to study children in the age ranges of about 5-6 years (Year 1) and about 7-8 years (Year 3), and so your child would be very well suited to participate in my study.

I am, therefore, asking you for your help by giving permission for your child to be part of our study. An outline of the study is presented on the next page. Please take some minutes to read it. Attached to this letter is participation consent form. Please fill it out and return it to your programme coordinator as soon as convenient.

Please note that, as I specify in the enclosed information letter, all identifying names will be removed from observations in order to keep strict confidentiality. Information from the observations will not be released to your child's school or others. If you do not wish your child to participate there will be no consequences for you or your child. And it will not influence your relationship with the programme in any way.

Approval from Ethics Committee:

This project has been reviewed and approved by the Massey University Human Ethics Committee, PN Protocol 04/151. If you have any concerns about the conduct of this project, please contact Professor Sylvia V. Rumball, Chair, Massey University Human Ethics Committee: Palmerston North, telephone 06 350 5249, email humanethicspn@massey.ac.nz.



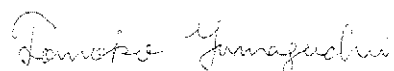
Appendix D: Letter and Information Sheet to Parent or Guardian

Researcher: Tomoko Yamaguchi, School of Psychology, Massey University, Private Bag 11-222, Palmerston North, can be contacted by phoning 021515926. Alternatively you can email me at: Tomoko.Yamaguchi.1@uni.massey.ac.nz

Supervisor: Professor Ian Evans, School of Psychology, Massey University, Private Bag 11-222, Palmerston North, can be contacted by phoning 356 9099 extension 2070.

If you have any queries or require further information please do not hesitate to contact me. Thank you very much for considering our project. Your time and effort is appreciated.

Yours sincerely



Tomoko Yamaguchi
Researcher

Consent Form

Name of research project:

Origin of Angry feelings in children.

PLEASE RETURN THIS FORM TO YOUR CHILD'S CLASSROOM TEACHER AS SOON AS CONVENIENT.

- ♦ I have read the information sheet, understand the study, and give permission for my child to participate.
- ♦ I have had the chance to ask questions and these have been answered to my satisfaction.
- ♦ I understand my right to withdraw my child from the study at any time.
- ♦ YES, I give permission for my child

boy girl (tick appropriate box)

(please print the name of your child here)

to participate in this research project under the conditions set out in the information sheet.

Signature: _____

Name (printed) _____

Date: _____

Relationship to child (e.g., mum, dad, legal guardian)

What cultural/ethnic group(s) does your family identify with? _____

- ♦ Yes, I would like a summary of the findings from this study.

Please provide a contact detail of your preferred method if you want a summary of the results.

Postal address: _____

Email address: _____

Contact phone number _____

PLEASE CUT ALONG LINE

ABOUT THE RESEARCHER

- ♦ My name is Tomoko Yamaguchi. I am a Master's student with Massey University.
- ♦ I will be assisted by _____, a student in the School of Psychology at Massey University to carry out this study.
- ♦ This research is supervised by Professor Ian Evans in the School of Psychology at Massey University.

ANY QUESTIONS?

- ♦ If you have any questions or concerns, please feel free to contact me.
 - ♦ I can be contacted by phone, on 021515926. If I am not available, please leave a message and I will get back to you.
- Or you can write me at:

Tomoko Yamaguchi
c/o School of Psychology,
Massey University,
Private Bag 11-222,
Palmerston North

- ♦ Alternatively my email address is
Tomoko.Yamaguchi.1@uni.massey.ac.nz
- ♦ This research has been reviewed and approved by Massey University Campus Human Ethics Committee, PN Application 04/151. If you have any concerns about the conduct of this research, please contact Professor Sylvia V Rumball, Chair, Massey University Human Ethics Committee: Palmerston North, telephone (06) 350 5249, email humanethicspn@massey.ac.nz

Thank you for considering our project.
Your time and effort is appreciated!!

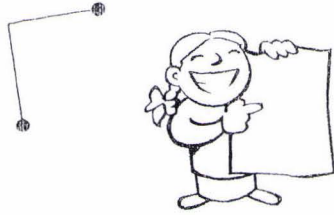


Massey University

Your child is invited to participate...



Origin of Angry Feelings in Children



WHAT IS THE STUDY ABOUT?

- ◆ We are interested in the nature and development of the emotions of anger and hostility in children. We will study children's feeling about themselves and the actions of others, and how they relate to certain aspects of discipline practices.
- ◆ This project will investigate children's reaction to imaginary but common life experiences of being disciplined, as well as their perception of parent's behaviours, particularly when reprimanding them for something they might have done wrong.

WHY IS THIS IMPORTANT?

- ◆ Being able to cope in emotionally demanding situations is a necessary skill for both children and adults.
- ◆ When we understand how children **learn** about parenting attitudes and how this **influences** their feelings about the actions of others, then we can provide more effective help with their emotional development.

WHAT WILL YOUR CHILD DO?

- ◆ Your child will be told a make-believe story that describe a typical or common experience of everyday life, involving an interaction between a child and his/her mother. Your child will be asked to judge the story in terms of its fairness. Following the story, your child will have an opportunity to continue a story and to participate in play-based activity. Your child will be asked to describe how he/she thinks the child in the story might act and feel. The entire session is conducted with play-based material, so that it will be an enjoyable experience for your child.

- ◆ A research assistant will be present all the time with the researcher to ensure safety of your child. Also, the assistant will be videotaping every session for keeping accurate records.
- ◆ At the end of the session, your child will be given a small gift (sticker) for his/her effort in participating.

HOW MUCH TIME WILL BE INVOLVED?

- ◆ The entire session takes about 20 to 30 minutes of your child's time. Your school principal will organise a quiet room in your school and your classroom teacher will choose the best time during the day for your child to participate in the session. We will make sure to limit the amount of disturbance to your child's work.

WHAT CAN YOU EXPECT FROM THE RESEARCHER?

- ◆ Massey University Human Ethics committee has prepared a statement of participant's rights as follows;
 - You are under no obligation to accept this invitation. If you agree to participate, you have the right to:
 - decline to answer any particular question
 - withdraw from the study at any time
 - ask any questions about the study at any time during the participation
 - confidentiality
 - access a summary of the results
 - ask for the videotape to be turned off at any time during the session

Note that these rights apply equally to your child.

- ◆ If you or your child do not want to participate, it will not effect your relationships with the school in any way.

WHAT CAN YOU DO TO HELP?

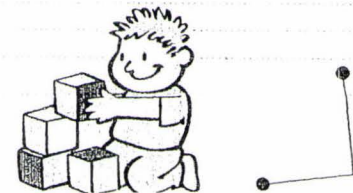
- ◆ We are wanting to study children in the age ranges of about 5-6 years (Year 1) and about 7-8 years (Year 3).

- ◆ If you wish your child to take part, please go through the study information with your child and make sure he/she is willing to be included in this study.
- ◆ If your child agrees to take part, please **fill in** the consent form and **return it to your classroom teacher**. Your classroom teacher will put your form into a collection box and the researcher will regularly check the box to collect the form.

WHAT WILL HAPPEN TO THE INFORMATION YOU PROVIDE?

- ◆ Your child's videotape will only be used for the purpose of this research topic. Tapes will be kept confidential in a locked filing cabinet. A code number will be used instead of name in order to keep strict confidentiality.
- ◆ Your child's videotape will be deleted after analysis. Tapes will only be listened to and seen by the two persons (the researcher and the female research assistant) who participate in the session, and if necessary my supervisor, Professor Ian Evans.
- ◆ You are welcome to a summary of the results. If you want a copy of the results, please tick the request box for a brief outcome report to be sent to you. Please remember to fill in your contact details so I know who and where to send the information when the project is finished.

If you have any comments or thoughts about this project or the topic of my research, please feel free to write them below:



Appendix E: A Story about Unfairness

The Parent Story

This is a story about Joshua

He is a ____ (5 / 7) year-olds little boy, just like you.

One day, Joshua was playing with some toys and blocks on the kitchen floor.
Joshua was being a very very good boy.

Joshua's mum was in the kitchen, getting tea ready. She was in a bit of hurry
and not looking at what she was doing, and she knocked over the milk bottle.

“Ooppps!!”

The milk spilled over the kitchen counter.

“Oh, No!! What a mess!!

It made her really mad and she lost her temper.

She turned to Joshua and said, “Now look at what you have made me do!!
You have to tidy up right now, and go to your room and stay there until I call you for
tea”.

Appendix E: A Story about Unfairness

The Sibling Story

This is a story about Emma

She is ____ (5 / 7) year-olds girl, just like you.

One day, Emma was playing with her big brother in the lounge. Their mum always tells them not to touch or play some special china that she keeps on a shelf in the lounge. Emma and her big brother promised they would not.

Emma was being very very good girl. She was just playing with Lego on the floor and did not touch any of the china.

But, her big brother was a bit naughty. He reached mum's special plate for his game, and knocked one of the plates in to the floor and it broken into lots of pieces.

Just then, mother came in and saw broken plate. She got very angry!!

“Oh no!! I've told you before never to play with those china! Who was playing with this?” she growled.

“Not me!! Emma did. She wanted to play with it and dropped it”, her brother quickly responded.

Mum was very angry. “Right, both of you, tidy up right now, and go to your room and stay there until I call you for tea”

Appendix F: A Sample of the Drawings about a Story of Fairness

A Sample of the Parent Story

1



2



3

4

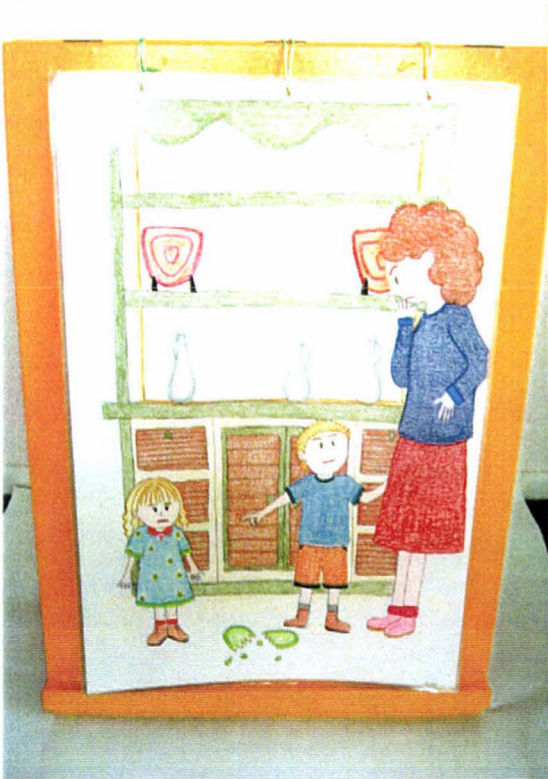
Appendix F: A Sample of the Drawings about a Story of Fairness

A Sample of the Sibling Story

1



2



3

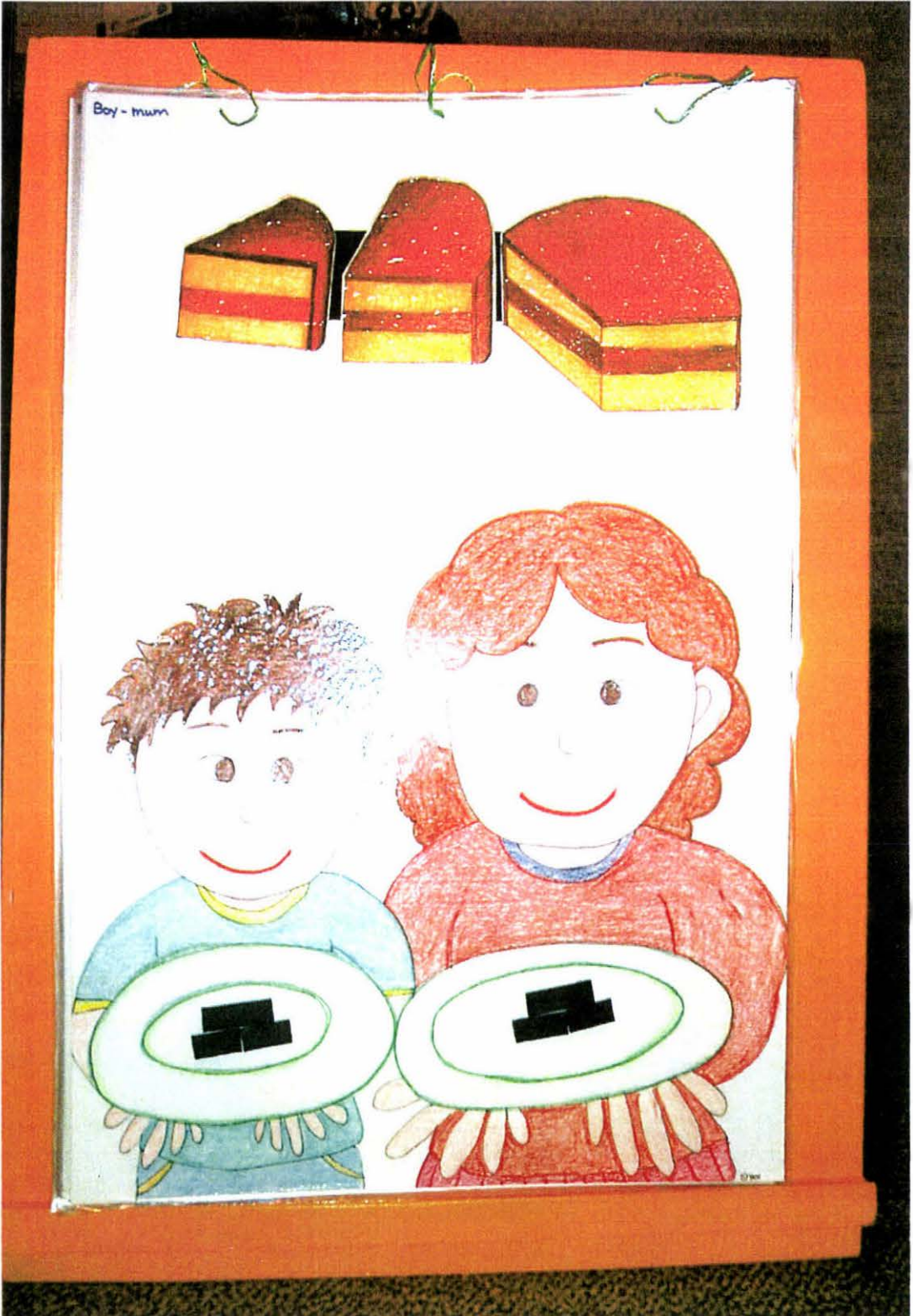
4

Appendix G: The Feelings Thermometer



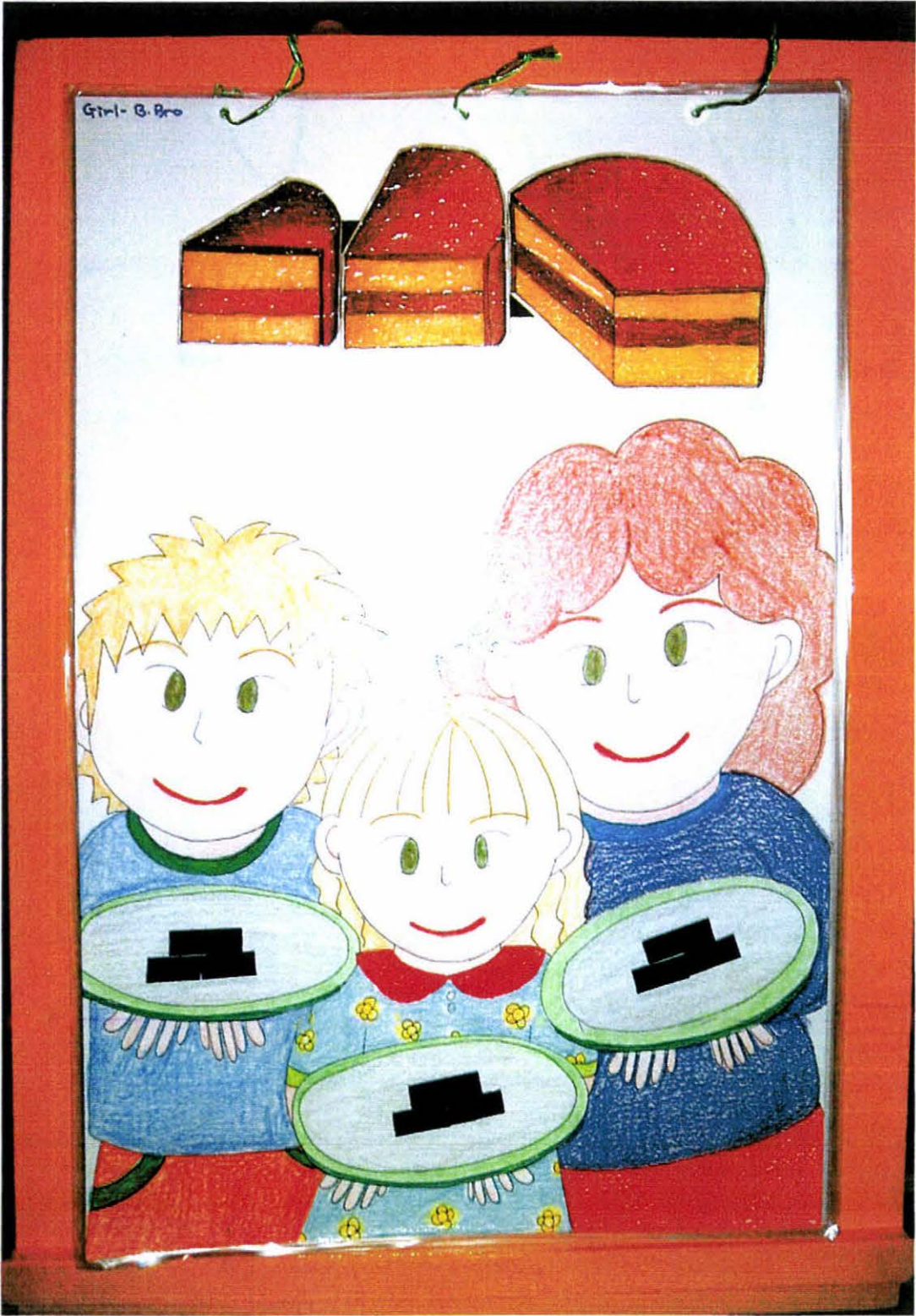
Appendix H: Sharing Task

Parent Story



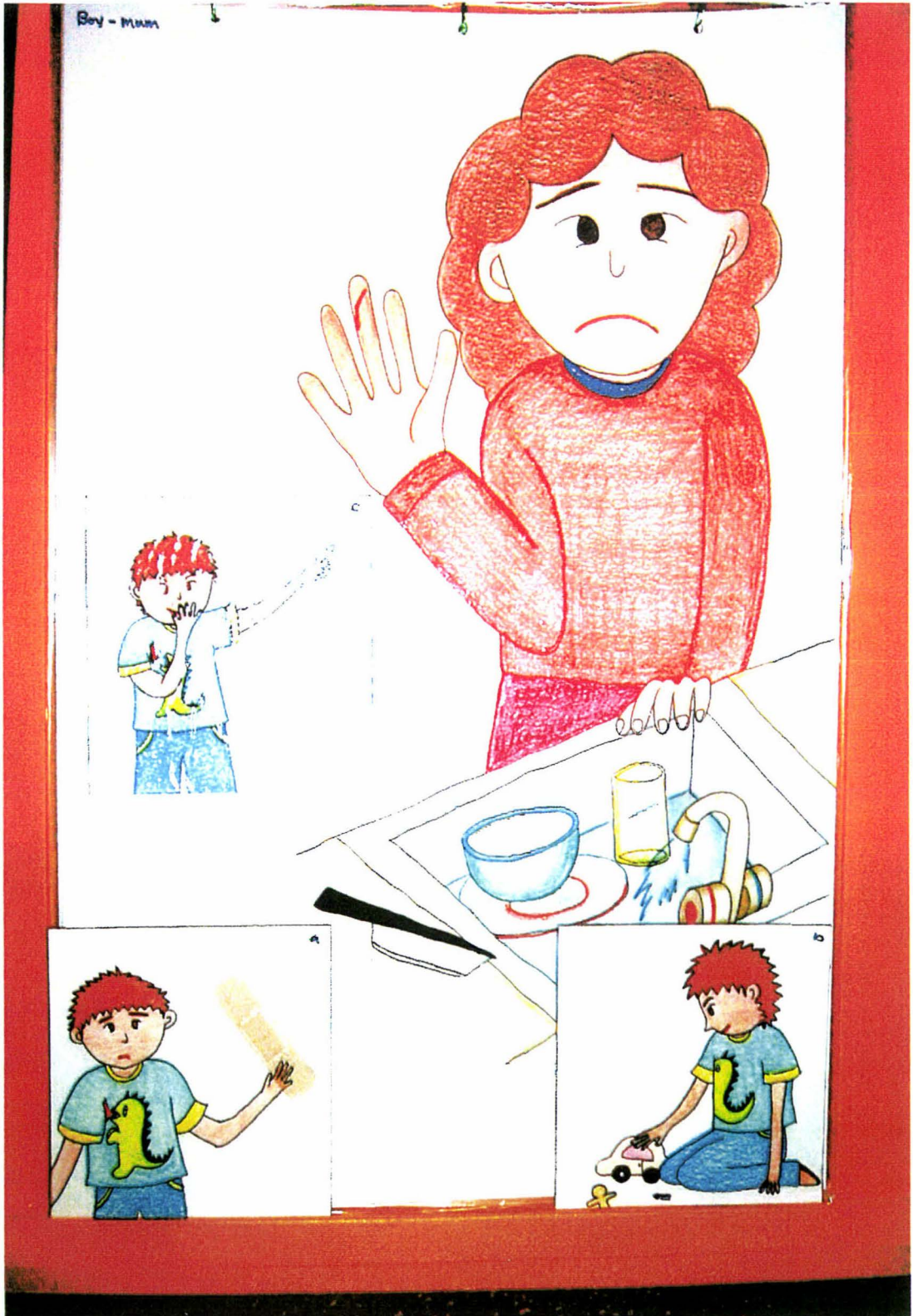
Appendix H: Sharing Task

Sibling Story



Appendix I: Empathy Task

Parent Story



Appendix I: Empathy Task

Sibling Story



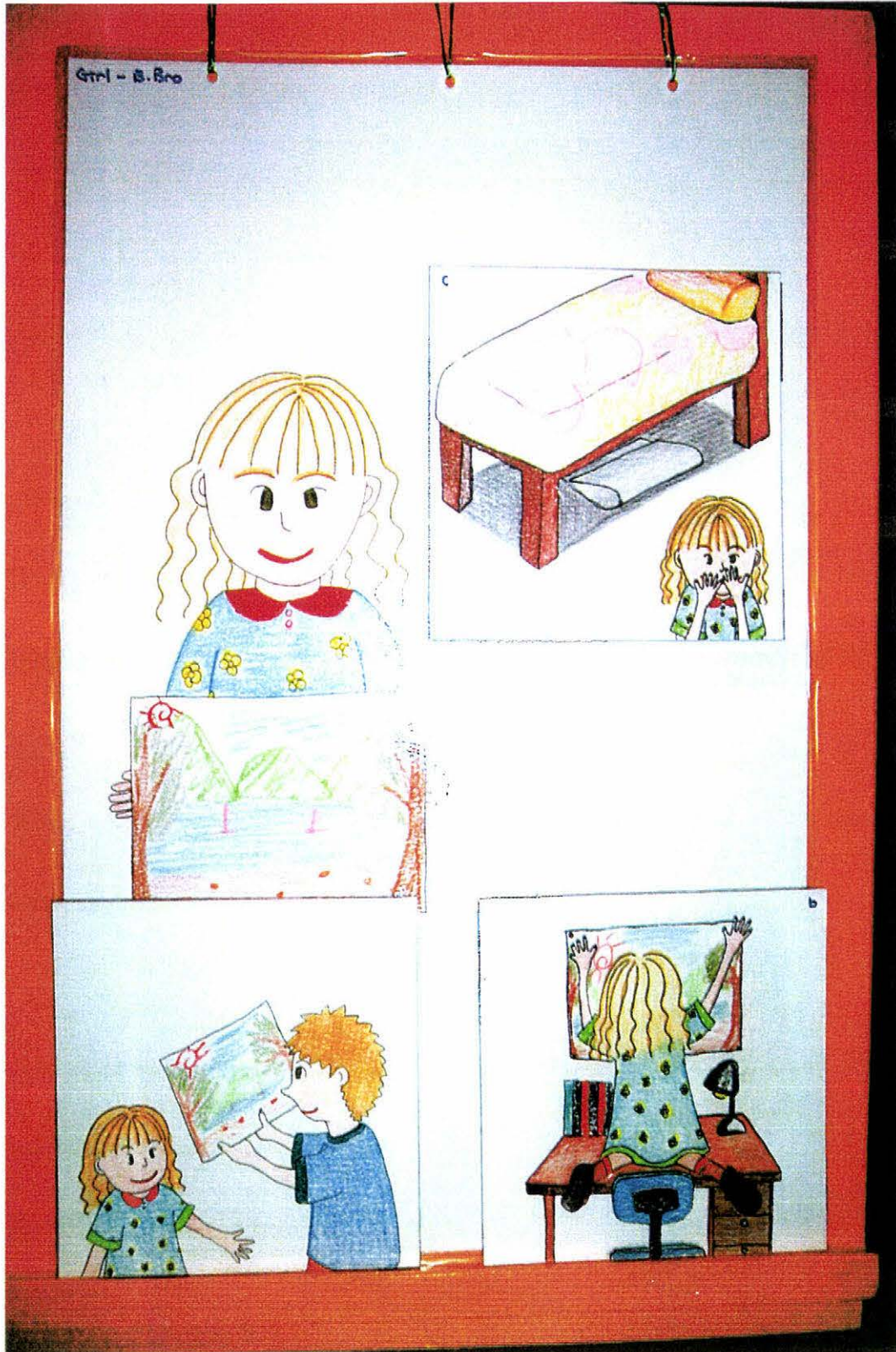
Appendix J: Trust Task

Parent Story



Appendix J: Trust Task

Sibling Story



Appendix K: Children's Assent

Children's Assent

Hello_____. How are you today?

My name is Tomoko and this is _____.

We are students form Massey University.

Today, I will be showing and telling a story about a boy/a girl and his/her mother by using this special slides.

During the story, I will ask you some questions. I want to you to tell me how you think and feel about my story. It will be great if you can help me to make up the story as well.

When we are doing the story, _____is videotaping us. So that I can study about my story again. Is that o.k. for you?

During the story, if you feel no good or want to stop, please let me know. So that I can take you back to your classroom.

Do you think you can help me?

Are you happy to help me do my story?

Appendix L: Coding Sheet

Research Project: "Origin of angry feelings in children"

Coding Sheet





Date:	Time:	
School:	Class:	Age:

Name:	Gender: F / M	Number:
-------	------------------	---------

★ Children's Assent

Willing to participate?	Yes / NO
-------------------------	----------

★ Fairness questions and associated feelings

Mum was fair or unfair?	Fair / Unfair
Why?	
Feeling?	   
How strongly?	

Appendix L: Coding Sheet

Task 1: Sharing (Chocolate Cake)



Kid	a) Big	b)medium	c)small
Mum	a) Big	b)medium	c)small
Sister/Brother	a) Big	b)medium	c)small

Task 2: Caring



Kid's response	<input checked="" type="checkbox"/>
a) Give mum a plaster	
b) Paying no attention and continue to play	
c) Thinking funny and not worry about mum	

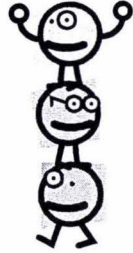
Task 3: Trusting



Kid's response	<input checked="" type="checkbox"/>
a) Give the picture to mum, so that she will take a good care of it.	
b) Hung on her bedroom, so that she can keep her eye on it. Also child does not mind showing it to everyone.	
c) Hide it to her secret hiding place, such as under the bed, so that nobody will take it away.	

Appendix L: Coding Sheet

★Ending of the Session



- Did s/he enjoy the session?