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**CHILDREN'S EMOTION REGULATION  
IN UNFAIR SITUATIONS:  
USING REGULATORY FOCUS THEORY**

A thesis presented in partial fulfilment of the requirements for the degree of  
Doctor of Clinical Psychology  
at Massey University, Manawatu  
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People will forget what you said, people will forget what you did, but people will never forget how you made them feel.

-Maya Angelou b.1928



## ABSTRACT

Children's strategies for emotion regulation in different unfair situations were investigated using principles from Regulatory Focus Theory (RFT) (Higgins, Shah, & Friedman, 1997). RFT explains how our orientations (promotion or prevention) towards self-regulatory goals can affect our selection of different strategies used for self-regulation (approach or avoidance). The thesis contains three studies that investigated children's emotional responses to different unfair situations and their strategies for regulating emotion. The four goal outcomes: no gains, gains, losses and no losses, formed the different unfair situations in this research. Novel vignettes describing different unfair situations were used in two interview studies, conducted with 162 children aged between 8 and 12 years. The vignettes elicited different intensities of happiness between the outcomes. Losses were judged most unfair, with expected happiness also lowest in this condition. By contrast, unfair gains were perceived fairer, with happiness highest in this condition. In the main vignette study, more approach strategies were reported than avoidance strategies overall and no differences were found between the outcomes. Seeking teacher support was the most frequently reported strategy for prevention-oriented outcomes (losses and no losses). Strategies for prolonging or maintaining positive emotion were frequently reported in the gain situation, and seeking another opportunity was frequently reported in the no gain situation. In a third experimental study involving an actual behavioural task, 52 children participated in a computer game that unfairly delivered erroneous scores. Under these conditions the children reported no gains were most unfair and happiness was lowest. Unlike the vignette studies, differences in avoidance and approach strategies were observed, with approach strategies more frequently reported in the gain, no loss and loss outcomes, and avoidance strategies were more frequently reported in the no gain outcome. Despite the limitations associated with

using a novel approach, the overall findings suggested children were more inclined to report approach strategies for regulation; however, some children have a preference for avoidance strategies in unfair situations. RFT was a useful framework for explaining children's emotion regulation in unfair situations. The findings of this research have implications on emotion regulation development in children, particularly for children who use avoidance strategies to cope with unfair events.

**KEYWORDS:** emotion regulation, approach and avoidance strategies, regulatory focus theory, self-regulatory goals, fairness

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## CHAPTER ONE

### GENERAL INTRODUCTION

#### CHILDREN'S EMOTION REGULATION

The goal of emotion regulation is to attenuate affect so that it maximises and does not impair daily functions. Children learn this ability to manage their emotions and its expression in their development. This emotion regulatory ability is a key aspect of emotional competence - a collection of abilities that help a person act with self-efficacy in emotionally arousing situations (Saarni, 1999). This does not mean emotions are problematic as they are functional and purposeful (from the functionalist perspective of emotions). For instance, anxiety or fear motivates vigilance and allows people to sense threat and danger (Campos, Mumme, Kermoian, & Campos, 1994). Moreover, sadness allows reflection of related events, and anger motivates people to face goals despite obstacles (Campos et al., 1994).

Theoretically, the functionalist perspective of emotion regulation proposes it is the ability to change 'emotion dynamics' by dampening, maintaining, or intensifying emotions to suit individual goals, using processes that are automatic or controlled (Gross & Thompson, 2007). Eisenberg similarly theorises emotion regulation as the:

“process of initiating, avoiding, inhibiting, maintaining, or modulating the occurrence, form, intensity, or duration of internal feeling states, emotion-related physiological, attentional processes, motivational states, and/or the behavioural concomitants of emotion in the service of accomplishing affect-related biological or social adaptation or achieving individual goals” (2004, p. 338).

In simpler terms, emotion regulation is the ability to control how we express our feelings and involves internal or external processes.

Research on this topic has explored regulated emotions (outcomes), the regulatory effect emotions have on other processes (regulated behaviours, attention, and memory), as well as examining beliefs about coping with emotions. There is also a significant amount of research on coping, which is usually defined as thoughts and behaviours that people engage in so as to manage, tolerate, or reduce internal or external demands that are appraised as exceeding an individual's resources (Lazarus, 1993). It is a more broadly defined term that incorporates both problem-focused coping and emotion-focused coping abilities (Lazarus, 1993). In the present investigation I was interested in the process involved in managing and controlling emotions, and a useful way of considering this is to look at the emotion regulation strategies children employ to achieve this. In other words this investigation was interested in *effortful* emotion regulation, rather than automatic regulatory strategies (Eisenberg & Spinrad, 2004; Gross, 1998b). Effortful strategies are typically explored in research of emotion regulation rather than automatic strategies as they are easier to objectify and measure by researchers. Behaviours are often observable, and strategies used deliberately can be gathered from children by means of self-report. Automatic emotion regulation processes, conversely, are often determined through inferences made from behavioural and physiological data (Gross & Thompson, 2007).

### **Benefits of Emotion Regulation**

The benefits of emotion regulation support the importance of mastering this ability in child development. Effective regulatory ability is highly correlated with more positive social outcomes (Calkins & Hill, 2007; Chaplin, Cole, & Zahn-Waxler, 2005; Eisenberg et al., 1995; Rydell, Berlin, & Bohlin, 2003); including, school adjustment

(Calkins & Hill, 2007), better problem solving skills (Kraag, Van Breukelen, Kok, & Hosman, 2009), better ability to respond to negative feedback (Raftery & Bizer, 2009), and a significant amount of research supports more improved mental health outcomes (e.g., Izard, Stark, Trentacosta, & Schultz, 2008; Kovacs, Joormann, & Gotlib, 2008; Kraag et al., 2009; Kraag, Zeegers, Kok, Hosman, & Abu-Saad, 2006; Suveg, Southam-Gerow, Goodman, & Kendall, 2007). Psychotherapy and pharmacotherapy or medications are designed to target emotional dysregulation to improve mental wellbeing (Blackledge & Hayes, 2001; Gratz, 2007). Affecting social outcomes is the development of relationships (Hackenbracht & Tamir, 2010; Rimé, 2007), such as peer attachment (Contreras, Kerns, Weimer, Gentzler, & Tomich, 2000), and promotion of self-presentation (Watling & Bourne, 2007). Appropriate emotional expression is important for relationships, as anger or laughter towards another are considered to threaten relationships, when compared to emotions such as sadness and anxiety (Chaplin et al., 2005). Understandably, the absence of an emotional response can also impair relationships. Therefore, good emotion regulation ability is important for relationship development, which subsequently contributes to more positive social outcomes for a child.

A large source of knowledge about emotion regulation comes from studies on dysregulated emotions, which have a well-established role in the development of psychopathology (Izard et al., 2008; Keenan, 2000; Kovacs et al., 2008). For example, preschool children (around four-years-old) with low levels of peer interaction as well as poor emotion regulation behaviour demonstrated more wary and anxious behaviours during free play and exhibit more internalising behaviour problems (Rubin, Coplan, Fox, & Calkins, 1995). Children with high levels of social interaction and poor emotion regulation ability demonstrated more externalising behaviour problems. By comparison,

less behavioural difficulties were observed in preschool children with good emotion regulation. Other studies on disruptive behaviours observed in children have similar findings (Keenan, 2000).

Some researchers have referred to dysregulation as poor emotion regulation (Rubin et al., 1995), and is considered to be as normal regulatory processes operating in a dysfunctional manner. Dysregulation does not imply unregulated emotion or the absence of regulation, because people do make efforts to regulate emotion even if it is through automatic or unconscious processes. Emotional expressions may be over controlled, or under controlled (Cole, Michel, & O'Donnell Teti, 1994), for example, chronic suppression of emotional expression (or unwillingness to express emotions), expressing emotion in an unfavourable ways (i.e., culturally inappropriate outbursts), or unusual expressions. There is evidence to suggest children and adolescents who are “at risk” (problematic behaviours include impulsivity, delinquency, antisocial behaviours, and aggression), possess these limiting emotion regulatory qualities (Keenan, 2000; Southam-Gerow & Kendall, 2002), and these negative outcomes explain why emotion regulation is an important part of child development.

## **Emotion Regulation Strategies**

Human beings generally prefer positive emotional experiences over negative ones and people can easily dichotomise their experiences into positive or negative categories (Watson & Tellegen, 1985). Naturally, emotion regulation strategies reflect this preference, where people tend to minimise and avoid negative emotional experiences with down-regulation strategies (Cole, Martin, & Dennis, 2004), and maximise and maintain positive emotional experiences with maintenance or enhancement strategies (Isen, 2003; Tugade & Frederickson, 2007).

Examples of down-regulation strategies observed in children include ignoring salient cues, avoidance behaviours, and using cognitive and behavioural distraction techniques (Boekaerts, 2007). For example, ignoring salient cues are observed in children when they turn their attention away from stressful situations, and this is considered to be avoidance behaviour (Bronson, 2000). Children also use self-soothing strategies to distract themselves from negative emotion and examples include touch, sucking (on thumb, food or object), and movement (Bronson, 2000). Children prefer to use escape-avoidance, and distraction for dealing with frustration (Op t' Eynde, Corte, & Verschaffel, 2007). Seeking support from adults is another strategy preferred by children for managing frustration (Op t' Eynde et al., 2007).

When children are unable to self-regulate, they depend on external regulation that comes from attentive, caring adults (Bronson, 2000; Calkins & Hill, 2007; Sroufe, 2005). Parental or caregiver influence on emotion regulation ability is profound. By responding consistently to children's emotional needs, these caregivers influence the child's development of a secure attachment style (Sroufe, 2005). Observations of children seeking support have involved pre-school aged children (Eisenberg et al., 1993), and children in the middle childhood age range (Schutz & Pekrun, 2007). Support was sought from parents in a home environment (Eisenberg et al., 1993), as well as peers and teachers in a classroom environment (Chu, Saucier, & Hafner, 2010; Harvey & Evans, 2003; Kochenderfer-Ladd & Skinner, 2002; Yan, Evans, & Harvey, 2011).

Seeking support can include an array of particular strategies; for example, talking to someone about you feel, otherwise known as venting, is an effective emotion regulation strategy and its effectiveness depends on the listeners' response modes (Nils & Rimé, 2012). Other tactics in seeking support involve getting help, asking for advice,

and sharing similar experiences (Causey, 1992). Girls are more likely than boys to disclose their experiences to supporters and have different expectations for their disclosure (Zeman & Shipman, 1997). Girls are likely to expect practical help, whereas boys are likely to disclose for the purpose of meeting external demands. Moreover, boys are more likely to seek support as a distraction from the stressor. More recently, the use of social-networking websites have been an avenue for older children to seek peer support (Leung, 2007). Seeking support for coping with emotional experiences increases self-efficacy (Zeman & Shipman, 1997), and higher perceived levels of support is associated with children being less likely to attribute life events negatively (Jackson & Warren, 2000). However, a known barrier to seeking support for people is the experience of self-conscious emotions such as embarrassment (Bohns & Flynn, 2010).

Also used for down-regulation of emotion, strategies such as cognitive reappraisal and suppression have been the focus of Gross's research on emotion regulation (Gross, 1998a; John & Gross, 2004). Reappraisal involves changing thoughts about emotional events, and suppression involves masking expression despite changes in emotional physiology (John & Gross, 2004). Reframing events positively (i.e., positive reappraisal), enhances positive emotion as well as minimises negative emotion (Tugade & Frederickson, 2007). Reappraisal is more beneficial than suppression for the development of relationships (Gross & John, 2003), reducing subjective experience of the emotion (measured physiologically) (Gross, 1998a), and affecting cognitive processes such as short-term memory (Richards & Gross, 2000). Gross also proposed the Process Model of Emotion Regulation, where emotion regulation strategies are organised into five temporal categories: situation selection, attentional deployment, cognitive change, and response modulation strategies (Gross & Thompson, 2007).

Examples of maintenance strategies for prolonging positive emotion include sharing positive events with others, also known as ‘capitalising’ (Langston, 1994). This strategy overlaps with seeking support from others, as using this strategy involves sharing successes and accomplishments with others (including caregivers, peers and other adults), and is effective when external sources respond with positive affect. Another strategy - ‘savouring’ - involves using cognitive resources such as memory and attention to prolong the emotional experience (Bryant, Smart, & King, 2005), and is considered a maintenance strategy that does not require external factors to be effective. By reminiscing on positive events, attending to, or thinking about anticipatory events, positive emotion is induced in the individual (Bryant et al., 2005). Children in the middle childhood age range are able to think of positive events in order to feel good.

Reminiscence and rumination are similar in that they involve thinking about past events, but one involves positively-valenced memories and the other involves negatively-valenced memories (Seegerstrom, 2011). Having repetitive thoughts or mulling over past events leads to rumination, which is considered symptomatic of depression and enhances negative thinking styles (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). Understandably, rumination is considered a maladaptive regulation strategy as it involves prolonging the experience of negative emotion, whereas reminiscence can be effective for prolonging the experience of positive emotion.

For the up-regulation of emotion, behavioural techniques that involve creating positive emotional expressions, such as a smile, can also increase positive emotional experience, as well as down-regulate negative emotion (Quoidbach, Berry, Hansenne, & Mikolajczak, 2010; Tugade & Frederickson, 2007). This has been demonstrated with smiles, where enacting a slight smile can induce physiological responses associated

with happiness (Quoidbach et al., 2010). Some people also smile in the midst of sadness to attenuate negative emotional experience (Tugade & Frederickson, 2007). This savouring strategy can be observed in children who continue to smile or grin after a positive event has elapsed.

Mindfulness techniques have also been taught to children as strategies for emotion regulation (Greco & Hayes, 2008; Thompson & Gauntlett-Gilbert, 2008), and the literature greatly supports the benefits of mindfulness (Blackledge & Hayes, 2001). However, mindfulness techniques are typically taught to children by professionals, rather than strategies they acquire in their development in a New Zealand context. Whilst useful, children in this country may report aspects of mindfulness such as “pay attention to how you are feeling now,” but are unlikely to say “be mindful.”

Another type of strategy found in the clinical literature with children with experiences of significant traumas is dissociation. Dissociation is considered a protective mechanism from overwhelming emotional distress (Cole et al., 1994). However, dissociation often leads to emotional dysregulation in adulthood, as the learned ability to disconnect from familiar negative emotions is usually generalised to other emotions as well. This makes it difficult for the person to regulate emotion when they have little awareness for their emotional experiences.

There is a myriad of strategies possible for emotion regulation and several factors that contribute to the repertoire of strategies which children acquire in their development. Younger children have very different methods of regulating their emotional experiences compared to older children and adolescents. The following reviews the literature on how children develop these regulatory skills and the factors that influence this development.

## Emotion Regulation Development

As children develop and gain independence, a gradual shift occurs where they are less likely to cry and seek help from others for regulation, and they increasingly apply cognitive and self-soothing strategies (Calkins & Hill, 2007; Denham, 1998). The first period of significant development of emotional regulation ability occurs in the preschool years, as toddlers acquire the ability to seek help, use social referencing, distraction, avoidance, ignore salient cues, problem solve, play with the emotional stimulus and self-soothe (Calkins & Hill, 2007; Diener & Mangelsdorf, 1999). Emotion regulation strategies in this part of development undergo a major transition from dyadic regulation where children relying largely on caregivers to more independent and self regulation of emotion (Denham, 1998). Another significant transition in emotion regulation development takes place during the middle-childhood years (Denham, 1998), where children gain increased sophistication in representational thought, information processing skills, and abstract thinking ability (Saarni & Harris, 1989). Language development is said to contribute to this change as children of the middle childhood age acquire more efficiency in their ability to verbalise how they feel and use ‘emotion talk’ (e.g., “I feel mad when...”). There is a shift from labelling emotions as ‘good, bad, mad and sad’ to include more self-conscious emotions such guilt, and embarrassment, as well as other emotions such as ‘happy, frustrated, and angry’ (Bullock & Russell, 1984; Dale, 1996). The parental axiom “use words to say how you feel” is also proposed to help shape this learning (Gross & Thompson, 2007). Verbalising feelings is also considered to be regulatory strategy of emotion processes (Cole et al., 1994), as the ability involves understanding what emotion is experienced and attenuating the emotional experience in order to voice feelings. This contrasts with the difficulty

individuals have in voicing their feelings when they experience extreme intensities of emotion.

It is widely understood that children have individual differences in the way they develop, which can make it difficult for adults to determine the level of emotional competence their child should be in the middle childhood age range. Unfortunately, some adults underestimate children's competence and understanding of emotions at this time, and assume children of this age are unable to have discussions about emotions (Eisenberg, Fabes, & Murphy, 1996). Influencing emotion regulation development includes social influences and maturational influences (for instance cognitive development).

*Social.* As mentioned earlier, the nurture and care provided by a caregiver is empirically related to good emotion regulation ability (Calkins & Hill, 2007; Silk, Shaw, Forbes, Lane, & Kovacs, 2006). Those in the field of child development refer to attachment styles, where children with secure attachment styles understandably have better emotion regulation ability (Panfile & Laible, 2012). Social referencing is a term used to describe the modelling that takes place in a parent-child relationship (Saarni, 1999). Many parents are familiar with the example where young children tend to look towards their parents or primary caregivers before responding to emotional events themselves. For example, when a child falls over, the child first looks at the parent's reaction before reacting themselves. If the parent reacts with distress the child similarly reacts with distress. Social referencing behaviour is proposed to continue until the child develops their own repertoire of learned emotional responses (Saarni, 1999).

Children's increasing awareness for social display rules and recognition for the implications their emotional behaviours can have on social relationships also implicates their use of emotion regulation strategies (Hackenbracht & Tamir, 2010; Rimé, 2007).

Children quickly learn that people prefer displays of positive affect rather than negative emotional expressions (Shipman, Zeman, Nesin, & Fitzgerald, 2003), and adopt strategies to fit social display rules from as early as three to four years of age. Children of this age have the ability to mask negative emotions (Cole, 1986), and around age six they can differentiate between real and masked emotions in others (Gross & Ballif, 1991; Gross & Harris, 1988). Children between seven and ten years of age have reported that verbal and facial expressive strategies are more appropriate than crying, sulking and aggression for emotions such as sadness and anger (Shipman et al., 2003). They also state it is more appropriate for girls to cry than boys (Shipman et al., 2003). A child's social environment can influence their emotion regulation ability, and for children raised in the same environment, maturational factors influence individual differences in emotion regulation development.

*Maturational.* According to Erikson's model of psychosocial development, children in middle childhood experience a stage with two conflicting processes to address, and they include industry versus inferiority. This is a stage children find their place in their social surroundings, and consequently make rapid gains in emotional self-regulation ability as they are increasingly seeking support from their peers, but continue to require some co-regulation support from their parental figures (Erikson, 1980; Webster-Stratton, 1999). Children's progression through Erikson's stages varies, and the social influences discussed above affect the outcomes of this development.

There is also growing evidence that neurological development influences children's emotional abilities, including regulation (Lewis, Lamm, Segalowitz, Stieben, & Zelazo, 2006; Ochsner & Gross, 2008; Watling & Bourne, 2007). By age 10, evidence suggests lateralisation of emotional processes in the brain is associated with children's greater appreciation for the need to regulate negative emotions in social

situations (Watling & Bourne, 2007). Watling and Bourne found children develop this appreciation for regulating negative emotions at the same time they develop goals to preserve their self-image, and try to control what others may think of them (2007). There is also increasing evidence of neural pathways that link emotions with regulatory behaviour; particularly approach and avoidance behaviour proposed in reinforcement sensitivity theory (traditionally understood as BIS/BAS systems of the brain by Grey, 1982) (Corr, 2004). This is a theory of personality that proposes individuals have a sensitivity to reward or punishment. This sensitivity subsequently influences the individual's use of approach or avoidance behaviours, which include behaviours used to regulate emotions. An alternative theory that emphasises the use of approach and avoidance strategies was reviewed in more detail, as the following demonstrates the relevance goal-direction and motivation has with emotion regulatory behaviour.

## **REGULATORY FOCUS THEORY**

Different emotions tend to emerge in different contexts and Regulatory Focus Theory (RFT) proposes our emotional responses vary according to the orientation we take to achieve our self-regulatory goals (Higgins et al., 1997). The theory refers to two types of goal orientations: promotion-focused or prevention-focused. Promotion strategies are associated with reaching ideals, advancement, and achieving gains (Brodscholl, Kober, & Higgins, 2007; Santelli, Struthers, & Eaton, 2009). A person is more likely to engage in new tasks and risks to achieve goals in a promotion-focused orientation. Prevention strategies are associated with maintaining current states, preventing losses, and meeting safety and security needs (Brodscholl et al., 2007; Santelli et al., 2009). Usually, individuals in a prevention-focused orientation already possess the “goal,” and therefore likely engage in vigilance behaviour, and are more sensitive to threats and dangers to protect it. To illustrate the two orientations, imagine

two children who share the same goal – coming first in a school cross-country running race. One child may think they are a good runner, but not a great runner, and wants to win the race. They use promotion strategies that involve thinking about what they can do to improve their running. This may involve training more often, as well as gaining running tips from an experienced runner. A second child may think they are a great runner, and know they possess the ability to come first in the race (perhaps having come first in past races and maintaining their reputation). The second child adapts prevention strategies such as maintaining their routine and making sure nothing happens to them prior to the race. While both children share the same goal, they have different orientations in achieving their goal, one is promotion-focused and the other is prevention-focused. Promotion and prevention foci form the goal orientations proposed in RFT. The former refers to *ideals*, whereas the latter refers to *oughts*.

As RFT proposes how different orientations can influence emotional outcomes, this is relevant to the study of emotion regulation in children. Research using RFT has yet to apply the theory to children's goal orientation and subsequent emotional outcomes. However, in the following section I review the literature conducted with adults, as similar emotional responses are anticipated in children as well. RFT is a relatively new theory and has recently been incorporated into the clinical literature to explain mechanisms underlying psychopathological symptoms found in generalised anxiety disorder (GAD) (Klenk, Strauman, & Higgins, 2011). Chronic avoidance in depression is proposed to be associated with decreased approach behaviour and increased avoidant behaviour (Pizzagalli, Jahn, & O'Shea, 2005; Taylor Tavares et al., 2008).

RFT is a theory of self-regulation and proposes three hierarchies – systemic, strategic and tactical – where different levels of self-regulation are possible (Scholer &

Higgins, 2010). This is the point of difference between RFT and other theories of approach and avoidance motivation. The original theory proposed promotion and prevention goal orientations were either characteristic or fostered in the environment (having either trait-like and state-like qualities) and have since included the tactical level of self-regulation (Scholer, Stroessner, & Higgins, 2008).

Promotion and prevention orientations at the systemic level refer to preferences or sensitivities for one direction in achieving a goal. The orientation reflects a person's perspective of the process involved in goal attainment; also referred to as their "ways of seeing" (Scholer & Higgins, 2010). Parenting styles influence the development of regulatory focus in individuals, where those whose parents used critical and punitive methods of parenting tended to develop prevention orientations, and those with parents who used fostered aspirations and ideals tended to develop promotion orientations (Keller, 2008). In the running race example, both children shared the same desired end-state and shared avoidance of undesired end-states, but they had different perceptions of goal achievement. The first child thought they could be a better runner (a promotion orientation), thus having something to *gain*; and the second child thought they possessed the ability come first in a running race (a prevention orientation), therefore having something to *maintain*. The implication of the systemic orientation is that individuals with the same goal may employ different strategies and tactics to achieve the goal. Another implication is some desired end-states are more relevant to one system over another (Higgins, 2002). For example, coming first in a cross country running race may be valued by promotion-focused individuals more than prevention-focused individuals. This is associated with the risky biases people hold when in a promotion orientation, compared to conservative biases held in a prevention orientation (Scholer et al., 2008).

Strategies used to achieve goals can be associated with the chronic regulatory focus orientation, for instance, individuals in a promotion focus orientation tend to have better memory for approach strategies and individuals in a prevention focus orientation tend to have better memory for avoidance strategies (Higgins, Roney, Crowe, & Hymes, 1994). However, because a person tends to hold a chronic promotion orientation, does not mean a person with a promotion orientation will always employ promotion or approach strategies to achieve their goals. Promotion or approach strategies, and prevention strategies or vigilant avoidance strategies refer to the means or process in goal achievement (rather than the end-points). For example, a child with a promotion orientation may employ vigilance or avoidance strategies to achieve their goal. The first runner may think they are a good runner, but not a great runner; and wants to win the race by maintaining their current running routine, ensuring they do not suffer an injury prior to the race. The first runner has a promotion orientation of wanting to gain (win) the race, and uses avoidance strategies (avoiding injury) to reach their goal. The strategies employed in this example are independent of the orientation a child possesses. The context or situational pressures, as well as the child's available skills can impact on the strategies adopted (Scholer & Higgins, 2010).

More recently, literature discusses the tactical level of self-regulation, which refers to specific instantiations of approach and avoidance strategies and these are context-dependent (Scholer et al., 2008). For example, the one runner may aim to come first in a running race by maintaining their current running routine (vigilance/avoidance strategy), and their tactic involved running a fast pace for the first kilometre (an approach or risky tactic) opposed to adapting the tortoise philosophy of running and maintaining a steady slow pace from the beginning (an avoidance or conservative tactic). The same tactic (or behaviour) may serve an approach or avoidance strategy, or

two different tactics (risky or conservative behaviours) can serve the one strategy (Scholer & Higgins, 2010).

When regulatory focus is manipulated, ‘framing’ is commonly used to describe the instructions given to establish the goal orientation – either promotion or prevention (i.e., the motivation contingency). Task instructions ‘framed’ or given using promotion principles (e.g., your goal is to gain a prize) are proposed to elicit greater motivation than instructions given using prevention principles (e.g., your goal is to keep your prize). In academic achievement, students with a promotion-style orientation tend to persist on tasks significantly longer than students in a prevention-style orientation (Sideridis & Kaplan, 2011). According to RFT, the motivation is associated with a match or fit between the orientation or system level and strategy level. When an individual adopts approach strategies in a promotion focus orientation, or avoidance strategies in a prevention focus orientation, they experience increased engagement with a given task (Higgins, 2006).

When considering whether the goal was achieved or not, there are four goal outcomes, two for each orientation. In a promotion orientation, where strategies are associated with gains and accomplishments, the goal outcomes are either Gains or No Gains. In a prevention orientation, where strategies are associated with maintenance, the goal outcomes are either No Losses or Losses. Gains and No Losses represent goal achievement, and No Gains and Losses represent non-achievement.

### **RFT and Emotional Responding**

Higgins and colleagues have identified emotional outcomes associated with each goal orientation (1997). According to RFT, a preference or sensitivity for one direction in goal achievement results in distinct emotional sensitivities. Emotional outcomes from goals that used a promotion-focused orientation include cheerfulness-related emotions

such as happiness and satisfaction when goals were achieved (Gain); and dejection-related emotions such as disappointment or discouragement when goals were not achieved (No Gain) (Higgins et al., 1997). Emotional outcomes from goals that used a prevention-focused orientation included quiescent-related emotions including calm, relief, and relaxation when goals were achieved (No Loss); and agitation-related emotions such as tension and uneasiness when goals were not achieved (Loss) (Higgins et al., 1997). The emotions associated with each orientation are dimensional rather than reflecting a hedonic tone (i.e., only negative and only positive).

Theories of approach and avoidance have predicted similar emotional responses. Carver and Scheier proposed that emotional responses ranged between elation and disappointment in an approach dimension (comparable to a promotion-focus orientation), and fear to relief and serenity in the avoidant dimension (comparable to prevention-focus orientation) (Carver, 2006). Anxiety, helplessness, and shame have also been reported in a study investigating unsuccessful classroom performance-avoidance situations (Pekrun & Stephens, 2009). The research on the emotional outcomes of goals using RFT differs to these alternative theories of approach and avoidance, as the theory includes the value of fit between a goal orientation and strategy used and its impact on emotional responding (Higgins, 2006; Scholer & Higgins, 2008, 2010).

RFT additionally proposes emotional responses are more intense when the outcome is related to the focus of the goal orientation (i.e., Gain or Loss) (Idson, Liberman, & Higgins, 2004; Liberman, Idson, & Higgins, 2005). When a person tried to prevent a loss from occurring and failed, the Loss outcome would result in more intense negative emotions compared to a No Gain outcome. When someone has tried to achieve a gain, and successfully achieved a gain, the Gain outcome would result in more intense

positive emotions compared to a No Loss outcome. For instance, two children may share the same goal – achieving 100% on a spelling test. One child might actively practice their words every evening to achieve their goal, and a second child might relax and tell himself he can do as well as he can on the test. Both children share the same positive outcome and received 100% on their spelling test, and therefore achieved their goal. According to the principles in RFT, the first child is likely to experience more intense positive emotion (Gain outcome) compared to the second child (No Loss outcome).

Another factor influencing the intensity of emotional outcomes is whether a person's chronic orientation (whether promotion or prevention) matches the situational or contextual orientation (whether promotion or prevention). Regulatory Fit Theory proposes when the two match, then a person “feels right” and emotions associated with goal outcomes have higher intensities (Broscholl et al., 2007). However, measures of regulatory focus orientation have been designed for adults rather than children (Higgins et al., 2001; Higgins et al., 1997).

## **RFT and Emotion Regulation**

The original theory of approach and avoidance are considered action tendencies and behavioural responses linked to our emotional or affective systems (Carver, 2006). These behaviours would occur at the tactical level of RFT. However, strategic levels of approach and avoidance are also supported in the literature. Approach strategies rather than avoidance strategies can alleviate feelings of loneliness in children who are bullied by peers (Kochenderfer-Ladd & Skinner, 2002). Examples of approach strategies included seeking social support for girls and problem solving for boys. Distancing was an example of avoidance strategies and was a strategy related to greater loneliness in girls who are bullied by peers. Approach behaviour is defined as direction towards

positive stimuli, whereas avoidance is direction away from negative stimuli (Elliot, 2006). Approach and avoidance behaviours are considered strategies for emotion regulation as the behaviour itself can modify or change emotional states (Campos, Frankel, & Camras, 2004). For example, avoidance coping is effective for short-term, mild experiences of negative emotion (and used for managing symptoms of eating disorders) (Fitzsimmons & Bardone-Cone, 2010). As mentioned earlier, individuals with a promotion orientation were likely to use approach strategies for regulation, particularly in the context of failure (Scholer & Higgins, 2010), whereas individuals with a prevention orientation are more likely to use avoidance strategies, except in the context of failure where prevention oriented individuals who have suffered a loss tend to adopt risky tactics to return to the status quo (an approach strategy/tactic) (Scholer, Zou, Fujita, Stroessner, & Higgins, 2010). Further supporting mis-matches between regulatory focus orientation and strategy were possible (i.e., promotion orientation and avoidance strategy, or prevention orientation and approach strategy).

Analysing processes and outcomes of an event using principles of RFT requires goal-driven situations. For most New Zealand children, their main environments include their home and school environments. This is where they develop and acquire regulatory skills for managing emotions. A recent study found that fairness could impact on the process between goal motivation and emotional outcomes (Cropanzano, Paddock, Rupp, Bagger, & Baldwin, 2008). As moral development is pertinent to children, unfair situations provide a context where the regulation of related emotions could be investigated. Before reviewing the literature available on the emotional implications of fairness, I will address the implications of fairness for children.

## FAIRNESS

The concept of fairness has great relevance to emotions and emotion regulation, and is a concept that is receiving increasing attention in the literature. Humans are generally sensitive to any violation of fairness (Dunn, Makarova, Evans, & Clark, 2010) and tend to react with intense emotion. Possible emotional reactions to injustice include anger and hostility as they are commonly observed in people (Barclay, Skarlicki, & Douglas, 2005). Experiencing injustice could be considered a stressor, a triggering event whereby related emotions can be difficult to manage.

The implications of fairness make it relevant to the study of emotion regulation as they share similar consequences. Fairness has implications on social relationships (Cecchini, Montero, Alonso, Izquierdo, & Contreras, 2007), empathy (Okin & Reich, 1999), school performance (Gorard, 2011), decision making (Bicchieri & Xiao, 2009), and children's general social and emotional development (Browne & Jenkins, 2012). Promoting fairness in an organisational context creates a sense of belonging within the organisation, opposed to feelings of exploitation or rejection amongst people (Greenberg & Cropanzano, 2001). Children similarly identify with these feelings in a school environment (Evans, Salisbury, Palombaro, & Goldberg, 1994), particularly as experiences at school can shape children's perceptions of fairness later in life (Gorard, 2011; Thorkildsen, Nolen, & Fournier, 1994).

Children generally understand the concept of fairness, and can easily distinguish fair events from unfair events (Evans, Galyer, & Smith, 2001; LoBue et al., 2009; Thorkildsen, 1993; Thorkildsen et al., 1994). Fairness as defined by Tyler and Lind (1992) proposes that people will judge procedures as being fair when their experience includes neutrality, a lack of bias, honesty, efforts to be fair, politeness and respectful behaviour. Using a goal-by-process-by-outcome approach, fairness has been found to

moderate the relationship between regulatory goal orientation and emotional outcomes (Cropanzano et al., 2008), by exploring whether the process of the event was perceived fairly or not, in fair and unfair circumstances. Low levels of fairness were reported when individuals were in a promotion orientation and the outcome was unfavourable (i.e., goal was not achieved), and the process involved was unfair (i.e., the result was an unfair No Gain). Low levels of fairness were also reported when individuals were in a prevention orientation and the outcome was unfavourable, but the process was fair (i.e., the result was a fair Loss). The following will review the literature on fairness, including the factors that influence our perceptions of what is fair.

### **The Emotional Implications of Being Fair**

Negative emotional arousal is a typical reaction to unfairness, and unfavourable emotions such as guilt, anger and frustration are elicited in non-achieved outcomes (i.e., No Gain and Loss) that involved unfair procedures (Cropanzano et al., 2008; Murphy, 2009). It appears as though unfair processes can exacerbate the intensity of emotional reactions to goal outcomes involving different orientations proposed in RFT.

Anger is considered to be the most significant emotion in conditions where the participants perceive biases against them (Shipman et al., 2003). For disadvantaged children who have significant histories of unfair experiences, hostility is one of the strongest emotions elicited in unfair experiences (Evans, Heriot, & Friedman, 2002). Anger is proposed to be the emotion behind the rejection of unfair offers in the ultimatum game (despite the decision to reject offers would lead to greater disadvantage for the individual making the rejection) (Yamagishi et al., 2009). Emotions such as anger, sadness, and less happiness are children's reported reactions to other unfair contexts such as cheating (Rubin & Hubbard, 2003), and peer rejection (Hubbard, 2001). Furthermore, children who have been rejected tend to express more anger (facial

and verbal expressions), and boys tend to portray anger more frequently than girls (Hubbard, 2001).

In situations where unfair procedures were involved, but favourable outcome were achieved (i.e., goals were achieved), feelings of guilt were reported (Cropanzano et al., 2008). Guilt and embarrassment are considered socially appropriate feelings when one receives an undeserved reward or avoided punishment for wrongful behaviour. However, positive emotional reactions are also possible when goals have been achieved through unfair means. Happiness can be felt in unfair situations when the participants perceived small violations in the fairness of the procedure (Krehbiel & Cropanzano, 2000; Weiss, Suckow, & Cropanzano, 1999), even when the child is aware the acts were wrong and the victims of these acts suffered and experienced negative affect (Arsenio & Kramer, 1992). Less serious transgressions tended to be associated with more neutral affective responses by children (Royzman, Leeman, & Baron, 2009). This principle is based on the happy victimiser paradigm, where young children expect a perpetrator (e.g., a child stealing lollies) to be happy, even though they understand this action breaches a moral rule (Arsenio & Gold, 2006). Evans, Galyer and Smith predicted children would report feeling guilty when they were unfairly rewarded (i.e. unfair Gain), and happy when avoiding punishment for a transgression (i.e., unfair No Loss) (2001). Instead they found that when one received an undeserved reward, 89% would feel positive, 9% guilty, and 2% did not know. The difference in proportion between positive and negative feelings appears to be quite significant. If someone was clearly harmed (perhaps physically) during the unfair process (in goal achievement), this is likely to elicit more negative emotional responses (Royzman et al., 2009).

## **Behavioural Implications of Being Fair**

Unfair treatment is associated with people having a tendency to behave out of self-interests and a sense of entitlement, resulting in increased selfish behaviour (Zitek, Jordan, Benoit Monin, & Leach, 2010). The implications of feeling wronged can be significant for children, as selfish behaviour is found to be associated with learning and behavioural difficulties at school (Malti & Keller, 2009). Other behavioural implications for young children who experienced unfairness include aggressive behavioural reactions (Hubbard, 2001; Rubin & Hubbard, 2003), and this is the case for children who attributed fewer negative emotions to themselves compared to their peers (Malti, Gasser, & Buchmann, 2009). Irritability, hostility and inhibited empathy are also observed behavioural difficulties that result from unfair experiences (Evans et al., 2002).

A study with undergraduate students similarly highlight the implications of unfairness, and found behavioural responses to unfair classroom practice have included dissent and complaints (52.1% of the time), inaction or acceptance (31.4% of the time), hostility (6.5% of the time) and withdrawal from activity (6.5% of the time) (Horan, Chory, & Goodboy, 2010).

## **Fairness Judgements**

School is a place where children have the opportunity to acquire and develop emotional skills, and unfair situations elicit emotions that require regulation. Factors that moderate perceptions of what is fair at school include academic ability, fair teachers, and the presence of bullying (Gorard, 2011). For instance, highly able academic students tend to perceive school as being a fair place 1.27 times more often than other students (Gorard, 2011).

Relevant to the study of unfairness in the school context is the research on classroom justice. Classroom justice is a term that refers to “perceptions of fairness regarding outcomes or processes that occur in the instructional context” (Chory-Assad & Paulsel, 2004, p. 254). This concept includes notions of distributive justice, procedural justice and interactional justice, which relate to the dimensions of justice proposed by Colquitt (2001).

Distributive justice reflects upon the outcomes distributed, whilst taking into account principles of allocation such as equity and equality. In 1965, Piaget proposed children progress from equality- to equity-based judgements of fairness in their moral development. Young children begin with perceptions of distributive justice based on principles of equality, where all individuals receive equal shares no matter what inputs and contributions were made. Their perceptions progress into principles of equity, where shares reflect inputs, efforts, and skills made by the individual. Children clearly demonstrated consideration for equality and equity concepts in their middle and later years of primary school (Okin & Reich, 1999). Primary school age children (6 to 9 years of age) tend to apply principles of equality with friends, and use principles of equity with acquaintances when determining fairness (Frederickson & Simmonds, 2008). Violations to fair distribution of outcomes can have consequences on a child’s development. For siblings who experience different parenting styles, the disadvantaged sibling would suffer more negative impacts in their emotional and social outcomes, and the impact is increasingly negative with increasing differentiation in parenting styles (Browne & Jenkins, 2012).

Procedural justice involves analysing the decision-making process used in determining the outcome (Lind & Tyler, 1988). Procedures are fair when individuals are offered the opportunity to voice their opinion during decision-making processes

(Geddes, 2003), as it can raise outcome expectancies, provide a sense of autonomy, and communicates respect and value (Lind & Tyler, 1988). Fair procedures also include consistency, accurate information, ethics, morality, and are representative of concerns and values held by the individuals involved. As long as procedures are conducted fairly, people generally feel a sense of belonging to an organisation (such as a school, or classroom), and people better adapt to unwanted outcomes (van den Bos, Lind, & Wilke, 2001).

Interactional justice refers to fairness determined by interpersonal experiences. Fairness is achieved when interactions are polite, respectful, encouraging, and demonstrate trust (Geddes, 2003). Fair interactions also include consideration for the other person's values, as well as appropriate eye contact, physical boundaries and distance, and use of appropriate language (Sommers-Flanagan & Sommers-Flanagan, 2003).

### **What do Children Perceive as Being Fair or Unfair in the Classroom?**

Fostering fair classroom practices is highly influenced by the classroom teacher (Chory, 2007; Harvey & Evans, 2003; Thorkildsen et al., 1994), similar to parents influencing fair practice in the family home environment (Yamaguchi, 2009). Despite many teachers' efforts to maintain fairness in the classroom, it can be difficult to achieve all the time. However, there are ways to prevent unfairness in the classroom environment by first identifying what situations are unfair. Process variables judged unfair by most children include not offering them the opportunity to voice their opinion during a decision-making process (Geddes, 2003). Children with higher cognitive abilities setting the instructional pace for slower learners is less fair than other methods of instructional learning (Thorkildsen, 1993). Peer tutoring, where faster learners assisted slower learners in the completion of work, was perceived as being the fairest

type of learning scenario (Thorkildsen, 1993). Receiving equal quantities of work and rewards (i.e., fostering equality) is considered fair for children under 10 years of age and anything different is considered unfair (Thorkildsen & White-McNulty, 2002). Individual academic competition is perceived to be fairer than team competition, and it is fair when children who worked hard are successful in a contest (Thorkildsen & White-McNulty, 2002). Teachers encouraging a task focus is also fairer classroom practice (Thorkildsen et al., 1994). Fairness is also achieved when interactions between members of the classroom are respectful, and when task instructions and explanations are appropriate for the audience (Geddes, 2003). Accuracy is another factor to consider in determining fairness of performance evaluations (Geddes, 2003). Heterogeneously diverse schools are also more likely to foster moral development (including fairness as well as tolerance, mutual respect and courtesy) more than homogenous schools (Okin & Reich, 1999). These findings place great implications on academic instruction, learning, and extrinsic reward systems in fostering fairness in the classroom.

Using principles of RFT, different teachers have different orientations to classroom management (Leung & Lam, 2003). Some teachers have a promotion orientation that involves focusing on children's possibilities; whereas a prevention orientation may focus on children's inherent strengths. Although there are some exceptions, generally an individual's approach strategies fit their promotion orientation, and avoidance strategies fit a prevention orientation (Higgins et al., 1997). Strategies that involve extrinsic rewards and praise are considered approach strategies (Leung & Lam, 2003); however, this would depend on how these rewards were used. The magnitude of the reward and punishment have proven to influence children's judgements of fairness (Evans et al., 2001). Extrinsic rewards are perceived to have a greater effect on perceptions of fairness than praise (Thorkildsen et al., 1994).

There is evidential support for children and adolescents being more responsive to approach-style behaviour management strategies (Maag, 2001; Shaw, 2009), particularly as principles of operant conditioning state that positive reinforcement is more effective than punishment for modifying behaviour (Evans, 2005). These ideas have been translated to literature on education and schools, where teachers who use approach strategies for behaviour management and learning are more preferred (Elliot & Pekrun, 2007) and this has also been the case in parenting (Eiser, Eiser, & Greco, 2004). A New Zealand study of fairness in the family environment found receiving an undeserved reward to be more unfair than receiving an undeserved punishment (Evans et al., 2001). The undeserved reward is comparable to an unfair Gain, whereas the undeserved punishment is comparable to an unfair Loss. Adults have similarly reported unfair No Gain to be the most unfair type of situation (Cropanzano et al., 2008). In the context of unfairness, the rewards appear to have greater influence on judgements of fairness, than punishment.

## **SIGNIFICANCE AND PURPOSE OF THIS RESEARCH**

The literature currently supports the idea that different emotions arise from different unfair situations and how these emotions are managed has great implications on a child's level of emotional competence. The implications of emotion regulation ability are extensive, as emotion regulation affects children's functioning at home, school and social areas. Unfairness, or a sense of injustice is a common occurrence in daily life, and children experience unfairness to varying degrees. The regulation of these unfair emotional experiences was most pertinent to the intention of this research. Sometimes unfairness occurs outside of people's control; however, children have the ability to learn to cope with unfair emotional experiences so that they do not impair their daily functions. Unfortunately, children are not consistently provided with the

opportunity to do so. There is a gap in the literature on how children regulate emotions resulting from unfairness, particularly in the classroom. Research on this topic would inform what emotion regulation abilities we can educate children to use in unfair situations.

A review of the literature on fairness with children has identified clear relationships between judgements of fairness and subsequent emotional reactions. Furthermore, particular emotional responses have been theorised to result from different goal orientations (promotion or prevention foci). The two goal orientations were associated with four different outcomes (Gain, No Gain, No Loss and Loss), which established different contexts whereby unfairness could occur.

Children's emotional development, moral development and social stage influence this complex process, of determining the fairness of events, and managing subsequent emotional responses associated with the event. The study with adults found emotional responses differed between different unfair situations (Cropanzano et al., 2008). When outcomes of the unfair situation are taken into consideration, negative, angry and hostile emotional reactions are expected when outcomes are unfavourable, and embarrassment, guilt and happiness are expected reactions when outcomes are favourable. Whether children have similar emotional responses to these different unfair conditions has yet to be explored.

## **Research Questions**

After consideration of the research literature available, I have proposed and carried out an investigation into the emotion regulation strategies children used to manage emotional responses to different unfair situations, using outcomes of promotion and prevention orientations to goals. As part of my research question, I also explored children's perceptions of situations designed to incorporate principles of RFT, to find

out whether they also perceived differences in fairness between unfair conditions (No Gain, Gain, Loss and No Loss) as found in earlier research with adults. As this topic is unique, my investigation adopted an exploratory investigation of these questions: (1) What emotions are elicited in different unfair situations? (2) What strategies do they use to regulate the emotion? (3) Are different types of situations more unfair than others? This investigation also determined the usefulness of RFT as a framework for understanding how children regulate emotions that result from different unfair situations.



## CHAPTER TWO

### STUDY ONE: VIGNETTE STUDY TO EXPLORE EMOTION AND EMOTION REGULATION IN DIFFERENT UNFAIR CONDITIONS

Violations of fairness elicit strong emotions in children. We do not often hear children whisper or speak calmly about unfairness; they yell, “That’s not fair!” The literature recognises unfair events can lead to negative, as well as positive emotional outcomes (when fairness violations are perceived to be small). A more recent study (Cropanzano et al., 2008) applied Regulatory Focus Theory (RFT) to an investigation of fairness perceptions and emotional responses to fairness situations, and they found these emotional responses differed in different goal-oriented motivations. The possible outcomes of promotion-focus and prevention-focus (goal) orientations include either achieving gains (Gain) or failure to achieve gains (No Gain), and preventing losses (No Loss) or failure to prevent loss (Loss). Unfair events distinctively affect emotions such as happiness, where happiness for a situation where one fails to attain a deserved reward in an unfair process (i.e., unfair No Gain outcome) is lower than a situation where one loses a reward in a fair process (i.e., fair Loss outcome) (Cropanzano et al., 2008).

#### Using Vignettes to Elicit Fairness, Emotions and Emotion Regulation

##### Strategies

Children are able to share ideas on what makes a situation fair and unfair and vignettes have been used to elicit these perceptions in past research (Evans et al., 2001; Malti et al., 2009; Thorkildsen et al., 1994; Yamaguchi, Barry, & Evans, n.d.). Furthermore, studies have gathered perceptions from children as young as three years of age (Nelson, 1980). The vignette method is established as a useful approach in eliciting

emotion without compelling children into experiencing distress. For example, children can report anger without having to needlessly experience intense levels of anger themselves (Shipman et al., 2003). Another study found children between five and twelve-years-old have a good perception of affective responses (self and others) in stories or vignettes (Keller, Orlando, Tina, & Henrik, 2003). Whether their perceptions are a true reflection of actual emotional experiences is less supported by some literature (Zeman, Klimes-Dougan, Cassano, & Adrian, 2007), but this could be alleviated by ensuring written scenarios are relevant to children (Keller et al., 2003), and questions are simple rather than complex (Carter, Bottoms, & Levine, 1996). Using more informal interview styles introduced with open-ended questions can also increase children's level of comfort in the interview process (Dockett, 2009). It is well-recognised that taking a child's perspective is always important when undertaking child research, as their reports capture qualitative differences in thinking compared to adults (Greig, Taylor, & MacKay, 2007). The value in gathering children's perspectives is they can inform what effortful and cognitive strategies children employ, which are unattainable through behavioural observation or physiological methods. Furthermore, New Zealand research studies have reported children generally enjoy the interview experience (Loveridge, 2010).

### **Portraying RFT and Fairness in a Story**

Novel classroom scenarios were written for this study as there is little literature that integrates RFT with child and education research. As mentioned earlier, classroom fairness is a topic that has received attention in research and critical actions that are proposed to contribute to high levels of procedural fairness include teachers providing students with the opportunity to offer voice in classroom processes (Geddes, 2003). In a story, the absence of this consideration would intentionally lead readers to perceive the

process as being unfair (a violation of fairness), whereby intense emotional reactions are anticipated. Combining theoretical knowledge of fairness, RFT and everyday classroom situations will be important considerations when writing classroom vignettes.

Framing motivation conditions according to RFT have generally involved ascertaining a prize of some sort and individuals are asked to use promotion or prevention motivation to reach their given goals. As reward and punishment have been compared to promotion and prevention-focused conditions, one would consider a promotion-focused condition involves attending to rewards and potential gains, whilst a prevention-focused condition involves attending to punishment and potential losses (Higgins et al., 1997). Children have reported a peer receiving an underserved reward (that was meant for oneself) is deemed less fair than one receiving an undeserved punishment (that was meant for the peer) (Evans et al., 2001). According to RFT, this would mean another child receiving an unfair gain is considered less fair (or more unfair) than a child experiencing an unfair loss. However, the different subjects involved are important to note in this example. If the perspective was taken from the child who missed receiving a reward, one would presume they adopted a promotion-focus orientation, and failure to achieve the goal would result in a no-gain outcome. It could be derived from this finding that children perceive a No Gain to be more unfair than a Loss. This is a principle that has yet to be researched with children.

Another consideration is for the type of reward and punishment involved. Extrinsic rewards for performance or effort is considered to be fairer than the receipt of teacher's praise (Thorkildsen et al., 1994), and could possibly elicit stronger emotional reactions in the individual. The argument is that praise alone often directs a child's attention internally toward the self with little explanation for why the praise was received. Extrinsic rewards are often accompanied by instruction or explanation why a

reward was received; therefore, constructive feedback that accompanies praise is similarly considered fairer than the receipt of praise alone (Thorkildsen et al., 1994). This principle is aligned with the concept of informational justice.

## **Emotion Regulation Strategies**

In addition to teachers having an influence on fairness in the classroom, they also influence children's abilities to implement emotion regulation strategies, whether novel or well-learned (Harvey & Evans, 2003). To illustrate this point, children may have previously learnt to run around when nervous, read a book to calm down, and do something fun to make themselves feel better. Naturally, these strategies are impinged upon by activities set by the teacher, and the nature of the classroom environment. Children also seek support from their teacher, which has been observed in pre-school aged children (Eisenberg et al., 1993), and children in the middle childhood age range (Harvey & Evans, 2003; Schutz & Pekrun, 2007).

In some ways children of this developmental stage have yet to fully master the ability to self-soothe and regulate independently of adults (Calkins & Hill, 2007; Erikson, 1980). The availability of a caregiving adult in the classroom environment makes this strategy appropriate for a child to use, which could be why children continue to seek support from teachers despite having acquired the ability to self-soothe independently of adults. Whether seeking social support is a significant strategy used to manage unfair emotions will be explored in the present study.

Actual emotion regulation strategies used by children in classroom environments include ignoring salient cues, avoidant behaviour, entering a state of denial; and using cognitive and behavioural distraction techniques were found in one study (Boekaerts, 2007). Other recognised strategies found in the literature include down-regulation strategies, which are commonly used for managing negative emotional experience (Cole

et al., 2004). Gross has researched two primary down-regulation strategies including reappraisal and suppression, and reappraisal is found to be more effective than suppression (Gross, 2001; Gross & John, 2003). Maintenance strategies are used to prolong and enhance positive emotion (Isen, 2003; Tugade & Frederickson, 2007). These are the types of regulation strategies that are expected from children in a classroom situation. Whether they are the strategies children employ to regulate emotions that result from unfair situations will be explored in the present study.

The strategies relevant to RFT include approach or avoidance strategies for emotion regulation. Individuals with a promotion orientation are likely to use approach strategies for regulation; whereas individuals with a prevention orientation are likely to use avoidance strategies for regulation (Higgins et al., 1997). This was the pattern of responding expected when undertaking this initial study.

## **The Present Study**

Children have been able to share ideas on what makes a situation fair and unfair and vignettes have been used to elicit these perceptions (Evans et al., 2001; Thorkildsen et al., 1994), as well as emotional responses and behaviours in past studies (Evans, Yamaguchi, Raskauskas, & Harvey, 2007; Shipman et al., 2003). The aim of this study was to explore children's perceptions of emotion, and emotion regulation in unfair situations using hypothetical scenarios designed for this research project. This was an initial study aimed to find out the feasibility of the scenarios used and to find suggested emotional reactions and emotion regulation strategies to unfair situations. Perceptions of fairness were also explored to assess the feasibility of this study design. Similar to what Cropanzano and colleagues had found, the present study anticipated that judgements of fairness and emotions reported will vary in four outcomes that involved different motivations – promotion and prevention foci – used to achieve a goal. Whether

emotion regulation strategies would vary in the different outcomes was also explored. Comparatively fair scenarios have not been included in this study as unfair situations can generate more intense emotions that can be more difficult to regulate (Barclay et al., 2005). The overall findings of this study will hope to inform subsequent studies in the overall investigation into how children regulate emotion in unfair classroom situations.

## **METHOD**

This study used primarily qualitative methods supported by some quantitative analyses to explore whether perceptions of emotion can be generated from hypothetical written scenarios about unfair classroom situations. Ethical approval was received from the Massey University Human Ethics Committee (application 09/18).

### **Participants**

Fifty children in Years Four, Five and Six from a medium-sized (<500 pupils) suburban state primary school in the Manawatu were involved in this study. One participant's data was discovered to be missing after the interview resulting in a total of 49 participants. All schools in New Zealand are divided into deciles based on the socio-economic level of the surrounding communities, with 1 being the lowest income level, and 10 being the highest. The children in this study were from a primary school with a decile value of 7. Participating in this study, 40% of children were male and 60% were female. Ages ranged between eight to eleven years, and the mean age was ten years.

### **Recruitment**

The school was randomly selected from a list of schools in the Manawatu regional area. School principals were invited to participate in this study over the telephone. Schools that expressed interest in the study were mailed out information

brochures for the school and teachers (Appendix A). Returned consent forms indicated that the school volunteered to participate. The participating school had enough student participants to meet my sample criteria and no additional schools were contacted following the return of their consent forms. A meeting was arranged with teacher participants to discuss the research process. Any concerns were addressed in this meeting. Teachers gave out information packs containing a coloured information brochure and consent forms for both students and parents. Following a two week period, returned consent forms indicated voluntary participation in this study. The response rate for returned consent forms from children and their parents was 50%.

## **Materials**

Eight scenarios, labelled A to H, were used for interviews (Appendix B). The scenarios were designed to reflect one of four unfair outcome conditions: No Gain, Gain, Loss and No Loss with two stories written for each condition. All scenarios involved a procedural violation made by the teacher and at least one other student character. The scenarios also incorporated notions of extrinsic reward and no or little attempts by the main character to talk to their teacher about the unfair transgression. There were two versions of each scenario, one for goal achievement and one for non-achievement.

Table 1

*Eight Scenarios Used For Study One*

<b>Scenario</b>	<b>Condition</b>	<b>Story theme</b>
A	No Gain	Classroom Plays
B	Gain	Children were performing their plays after morning tea break and the best performance was rewarded with a prize (trip to the movies). When one group member unexpectedly falls ill, additional time was not given to the group to practice with their peers. As a result Ariana's group experiences an unfair No Gain outcome whilst Daniel's group experiences an unfair Gain outcome.
C	Loss	Swimming Pool
D	No Loss	Room 7 (Chris' classroom) had plans to visit the local swimming pool after lunch and were instructed to maintain good behaviour in order to go. A Room 8 student (from Laura's classroom) interfered with Room 7's classroom resources and the Room 7 teacher mistakenly believed a student from her class was responsible. As a result, Room 7 could not visit the swimming pool (an unfair Loss), whereas Room 8 (Laura's classroom) were able to go (No Loss).
E	Loss	Going to Friend's
F	No Loss	Two children had plans to play at their friend's farm after school. However, the teacher caught a peer whispering to them during a quiet time and punished the wrong student. The punishment was to stay behind for detention, thus Amy missed

visiting the farm (Loss), and Kurt benefited from the error and was invited to the farm (No Loss).

G	No Gain	Class Monitor
H	Gain	The teacher was assigning classroom monitors and Joshua misses out despite being on good behaviour (No Gain), whereas Nate is class monitor again despite having his turn the week previously (Gain).

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## Procedure

I conducted all interviews using a semi-structured format in a room located on school grounds. Standard interview introductions included informing children of the purpose of the research, confidentiality, and two emotion-related activities to help develop rapport.

Children were read four scenarios (one from each story) and the group of four were pre-determined, and participants were randomly assigned to a set of scenarios. The order of presentation was randomly selected by each child by placing the scenarios faced down on the table and asking the participant to select the scenario.

Each scenario was read to the participant, and children's memory of the scenario was assessed by asking them to recall details about the scenario. Any errors or omissions were corrected before the following questions were asked. It was important for children to demonstrate an understanding of the underlying theme (unfairness and goal achievement or non-achievement) of the scenario before the interview questions were asked. Following this, three key topics guided the rest of the interview.

1. Was the situation fair? Why? Who was responsible for making it unfair?
2. How do you think the character in the story was feeling? Why?

3. If you were the character in this story, what would you do to make yourself feel better? (How emotions change)

The questions were designed to: measure fairness in terms of whether the scenario was fair or not fair for the main character and their justification for their response; find out who the child thought was responsible for the unfair transgression; find out what emotional response was experienced by the main character; and find out how that emotion was regulated by the main character.

To help children express what emotion the character may be feeling, an assortment of feeling faces was available. These faces were used on three (out of 50) occasions. There was also a stress ball called the “Ideas Ball” with which participants played to help alleviate anxiety and stimulate conversation. After these key questions were covered, children were asked to rank the vignettes in order of most unfair to least unfair and provide a justification for their rankings.

At the conclusion of the interview, children were rewarded with a sticker for participation. All interviews took approximately 30 minutes and were audio and/or video recorded for written transcription and analysis. The use of each device varied according to permissions received by the child participant and their parents. The video recordings did not contribute observational data as intended. The analysis of video recordings revealed that children did not demonstrate overt behavioural reactions to the vignettes; therefore this information was not extracted for the study.

The following plan was established for occurrences when children disclosed safety concerns during the course of the interview. This was considered because of my title as a clinical psychology student and setting an environment where we were talking about emotions and injustice. It was decided if safety issues were disclosed, the interview would be suspended and children would be asked questions to assess for any

immediate safety risk. Children would also be informed about having to breach confidentiality for concerns regarding personal safety and to prevent any further harm to them. It would depend on the situation whether the interview will continue following this discussion. Then the classroom teacher would be informed after the interview. If the classroom teacher was not available or expressed an unwillingness to follow through with safety concerns, then the school principal was notified. This occurred on one occasion and the classroom teacher was aware of the child's situation. I also had a discussion about this event with my research supervisors.

Once the data collection phase was completed, initial feedback was given to the teachers and school principal following the data collection process. At the same time a brochure of preliminary findings was provided to the parents.

## **Data Analysis**

### ***Comprehension.***

Information on children's memory for scenarios and their comprehension of the scenarios was gathered to ensure the scenarios were understood by children. Memory recall items were determined with the assistance of five psychology doctoral students with practical knowledge and experience in assessment, resulting in a total of 6 raters, including myself. Interrater reliability was found to be .95. Items with more than .75 agreement were included in the list of recall items used to assess participant's free recall memory of scenarios (Appendix C). Children's responses for memory items were scored according to the number of items correctly presented in their recall. Comprehension was given when children recalled the underlying themes of the scenario, including unfairness and either goal achievement or non-achievement.

### ***Data reduction.***

The interviews were coded with Atlas Ti 5.0 software using a multi-stage clustering technique. This process involved applying codes at the general level then gradually refining codes through a series of stages. The first stage concerned applying structural codes to the transcript that were guided by the four key questions in the interview: (1) Was that fair? Justification? (2) Emotion? Justification? (3) Emotion regulation strategy? (4) Experienced? Examples of these codes are presented below.

### ***Fairness.***

The next stage involved applying codes to refine groups. Some participants had identified some fair and unfair elements the scenarios. For example:

“Kind of fair, kind of not fair, because I think it’s mainly not fair because they should just like umm they should just be able to have like another chance or, but in another way the teacher’s were probably kind of annoyed anyways because they had planned that afternoon to go see Harry Potter and then umm people that were like, the other people in the other class who were doing the plays, umm well they only had like one shot to do it.”

Therefore, “Fairness-Ambiguous” labels were given to children’s responses that took into account both fair and unfair aspects of the scenario. For the fairness question, codes were refined to ‘fair’, ‘unfair’, and ‘fair ambiguous’. Fair judgements were coded 1, fair ambiguous 2, and unfair 3. Justifications for fairness were coded as concepts related to procedural or distributive justice. To guide the coding process, distributive justice incorporated notions of allocation and equity of the outcomes. The focus was on the distribution of outcomes. Procedural justice was involved in the decision making process, considered the allocation of resources, and resolving disputes.

### ***Emotion.***

Emotion responses were originally clustered with the help of six postgraduate level students with experience in assessment. Results from this clustering technique indicated poor inter-rater agreement and there were different perspectives in how emotions could be clustered. Therefore, another clustering technique was employed.

Applying a taxonomic model of emotions was considered instead. Much research has been conducted on creating taxonomies of emotion, the most well known is perhaps Plutchik's wheel of emotions (1980). He proposed a model of emotions in which all emotions can be subcategorised under his eight primary level emotions: ecstasy, admiration, terror, amazement, grief, loathing, rage, and vigilance. According to Plutchik, emotions at opposite ends of the wheel are not experienced at the same time. This concept appears to be less understood by children, as responses such as "happy and sad" were given on more than one occasion. Whilst "happy and sad" were valid responses as it is possible to feeling happy and sad simultaneously, these responses were excluded from analysis as they did not fit the model and it was difficult to specify the emotional state represented by "happy and sad." Another limitation of this model was that only primary emotions were specified. Important emotions such as guilt as a part of the fairness paradigm were not described in his model.

A later adaption of Plutchik's wheel by Storm and Storm (1987) provides a taxonomy that includes secondary and tertiary level emotions such as guilt. According to this taxonomy there are three levels with seven superordinate categories of emotion that are further divided into 20 immediate categories (secondary), and further distinguished into 61 groups (tertiary). In this taxonomy, guilt is listed as a secondary emotion under the superordinate category Shame, Sadness, and Pain. An emotion tree

was developed to code the emotion responses and used to determine the results (Figure 2).

Forty-seven emotions in total were described by children for all scenarios. Some emotions were re-labelled for instance, “down in the dumps” to sad, “she doesn’t like the teacher” to dislike, and “frightened of the teacher” to fear. “Angry then okay” became “anger,” because this was the student’s initial reaction and okay appears to indicate that they regulated their emotion. The resulting 35 responses to describe emotions are as follows:

Angry	Annoyed	Bad	Boredom
Cross	Crying	Disappointed	Dislike
Excited	Exhausted	Fear	Frustrated
Glad	Good	Guilty	Happy
“Happy and sad”	Ignored	Jealous	Not enjoy it
Not my fault	Outraged	Pleased	Pretty bummed
Real stink	Relief	Sad	Selfish
Sick	Sorry	Surprised	Unsure
Upset	Who cares	Worried	

Some of the remaining emotions are still only descriptions of feelings rather than emotion labels for instance, ‘not enjoy it’ and ‘not my fault’. Rather than rewording them and altering the meaning of the emotion description, attempts were made to classify them according to Storm and Storm’s (1987) model of emotions. For instance, ‘who cares’ was categorised under ‘uncaring’. Figure 1 illustrates where the emotions derived from the present study lie within Storm and Storm’s taxonomy of emotion. The following emotions were omitted in the following analyses: mixed, pretty bummed, not good, selfish, stink, not my fault, and not enjoy it.

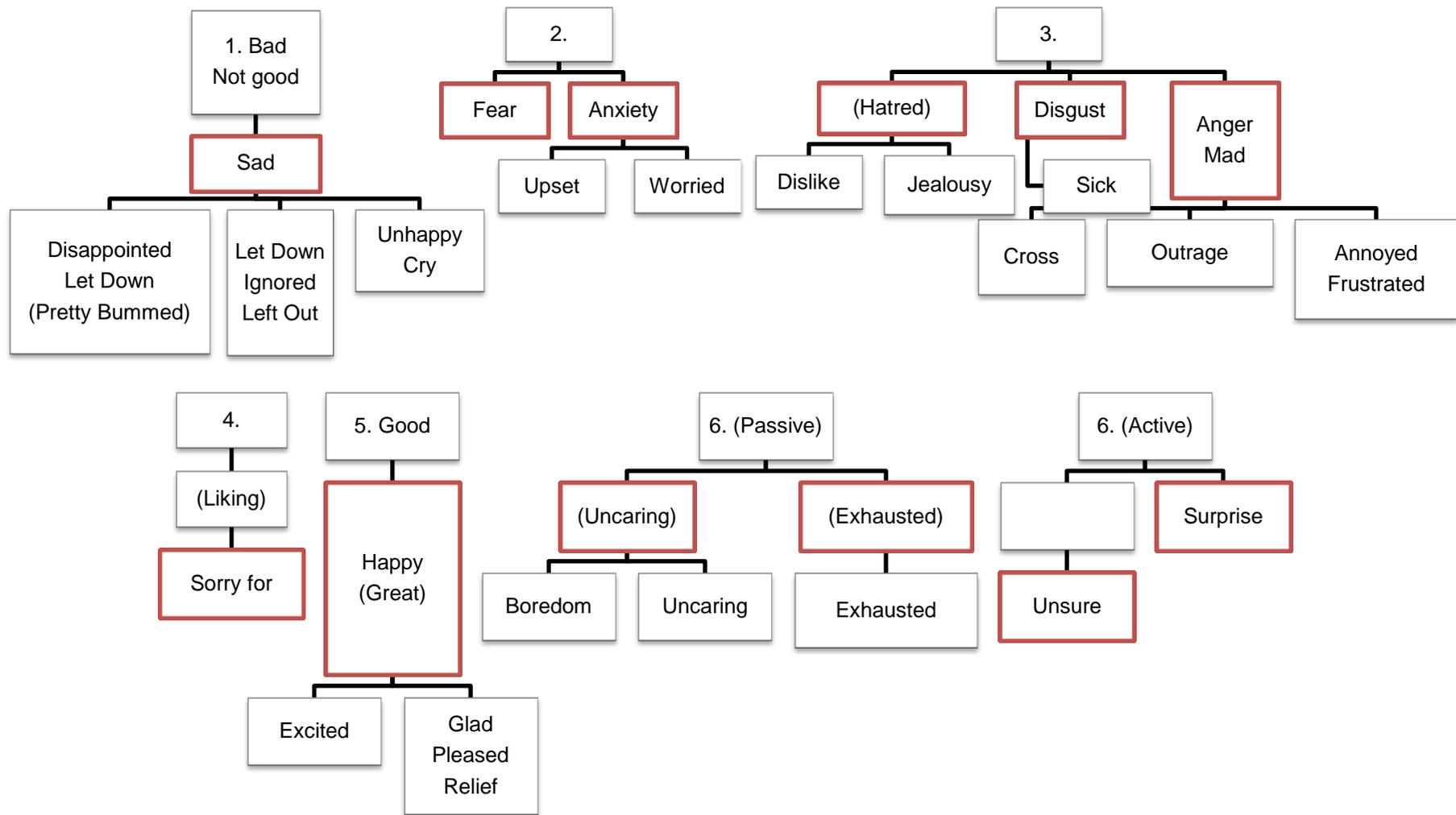


Figure 1. Emotions organised into a tree using Storm and Storm's (1987) model of emotions.

A resulting 12 emotion categories were selected based on Storm and Storm's taxonomy. A majority of the category terms selected were secondary level emotions. Four emotions did not have a secondary level term available (as in children did not provide a secondary term emotion), and in these cases the tertiary level term was used (indicated below with a #).

<b>Negative</b>		<b>Positive</b>
Sad	Disgust	Happy
Fear	Anger	Surprise
Anxiety	Uncaring <sup>#</sup>	Sorry For <sup>#</sup>
Hatred	Exhausted <sup>#</sup>	
Unsure <sup>#</sup>		

### ***Emotion regulation strategies.***

Emotion regulation strategies responses were originally coded using categories found in Gross' Process Model of Emotion Regulation. However, through the research process it was found the model was not appropriate for the responses given to the question "what would you do to feel better or change how you are feeling?" I discovered the design of the study prompted response strategies rather than antecedent strategies taking place before the event, thus, misrepresenting the temporal categories defined in Gross' model.

Therefore, responses for emotion regulation were coded into approach or avoidance strategies to ascertain an initial impression of what pattern of responses could be expected in the following study. Approach strategies were defined as efforts and behaviours that were directed towards the emotional response or unfair event (Elliot, 2006; Elliot & Pekrun, 2007). Avoidance strategies were defined as efforts and behaviours that ignored or diverted attention away from the emotional response and unfair event (e.g., "forget about it") (Elliot, 2006; Elliot & Pekrun, 2007). The reliability of coding was checked with another postgraduate student in psychology,

and the proportion of agreement was  $\rho_0 = 0.85$ , and Cohen's kappa was  $\kappa = 0.78$ , indicating good agreement.

## RESULTS

### Manipulation Checks

A closer look at the scenarios representing a No Loss condition (Scenarios D and F) revealed the stories actually represented an unexpected Gain outcome where the main character of the story (Laura or Kurt) received a reward at their peer's expense (Room 7 and Aaron). The resulting outcome – a Gain – occurs simultaneously with a prevention-focused frame because multiple characters are involved in framing the condition. Instead, the condition would better represent a 'No Loss' if the prevention-focused frame and no loss event happened to the same character. This finding was a valuable one for consideration in any future study.

#### *Comprehension.*

Understanding the scenario was a key question in the analysis of children's responses. Comprehension ratings (0 and 1) were given to children's responses during their free recall of what happened in the scenario. They received a score of one if they accurately reported the theme of the story and zero if there were errors. Approximately 82% of the eight scenarios read to children were understood overall. The theme in scenarios C, D E, G and H were understood over 90% of the time. The theme in scenarios A (Ariana's story) and F (Kurt's story) were understood less, 62% and 48% percent of the time respectively. Thus, indicating these stories could be written more clearly so children can recall the underlying theme in the scenario (to show their understanding of the story).

**Children’s recall of details of scenarios.** The average total recall of details for 47 participants across all scenarios was 54%. This indicated on average, half of the scenario was recalled in detail. The range of details recalled also greatly varied, the maximum items recalled was 90%, and minimum was 14%. After long consideration of these responses, it was decided not to explore children’s memory for scenario details further but to continue asking them what they remembered about the story to assess whether they understood the story and attended to significant details (such as the transgression and outcome).

## Fairness

Judgements of fairness were coded one for fair, two for fairness ambiguous, and three for unfair. All participants indicated that scenarios generally had some degree of unfair acts and provided justifications for all responses. No overall ‘fair’ ratings were given to any of these scenarios. Figure 2 illustrates unfair ratings were reported more often than other judgments. The odds ratio indicated scenarios were 9.56 times more likely to be rated as being unfair overall than other judgements of fairness.

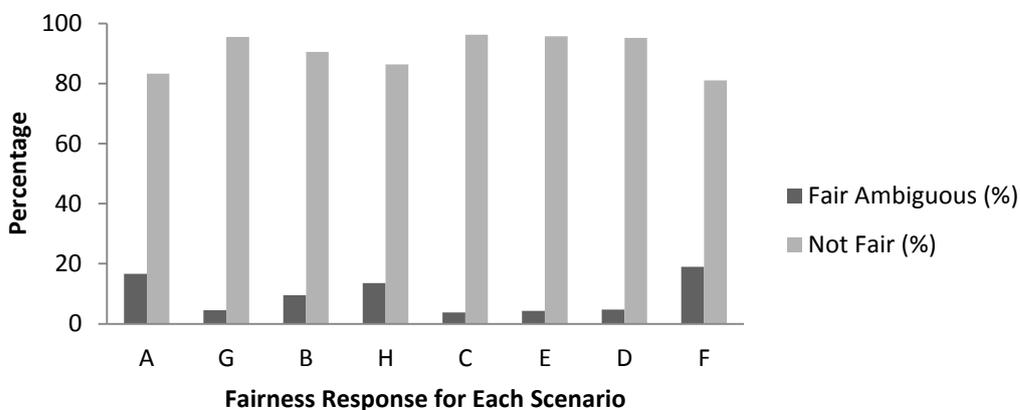


Figure 2. The proportion of unfair responses significantly outnumbered fair ambiguous responses, and no fair ratings were given in the eight scenarios.

Participants were also asked to rank the scenarios according to the degree of unfairness. The Loss condition was ranked as being the most unfair, followed by the No Loss condition, Gain and then No Gain condition. However, a non-significant Friedman’s test result,  $\chi^2(3) = 4.90, p > .05$  indicated there were no significant differences between these rankings of unfairness.

Justifications of fairness were also coded into distributive or procedural concepts and the proportion of responses were graphed (Figure 3). An example of a procedural justification included:

Scenario A (Ariana’s Story): Unfair “because they didn’t really get time to practise, and so they didn’t really know what they were going to do.”

An example of a distribution justification included:

Scenario D (Laura’s Story): Unfair “because umm by doing that umm doing that is not good at all because he just wanted to go to the swimming pool so he didn’t have to miss out and when people want to go to the pool they don’t want to miss out at all.”

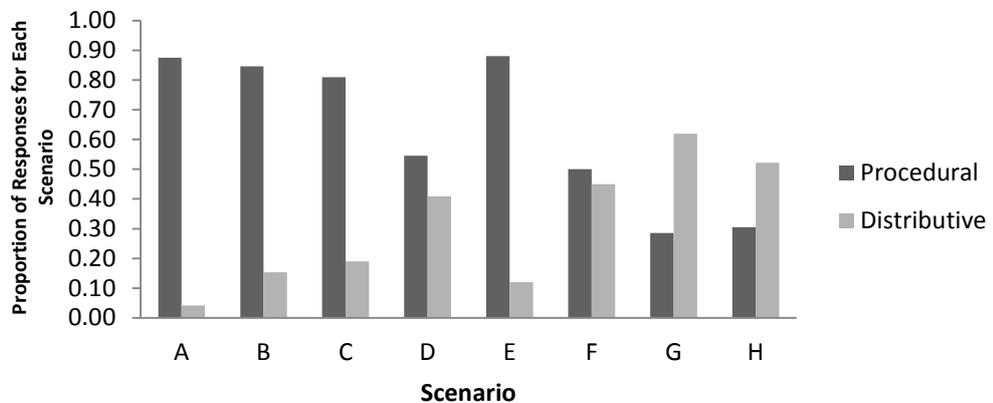


Figure 3. Graph of justifications for unfair ratings arranged by scenario.

Procedural reasons for the scenarios being unfair were proportionately larger in the classroom play, swimming pool, and friend’s farm scenarios and not the class monitor scenario (Scenarios G and H), in which distributive reasons were given to the unfair event in the story. It was also interesting to see similar proportions distributive and procedural reasons in the No Loss conditions (Scenarios D and F).

### Emotion Responses

Responses for emotion were categorised as best as they could fit into the emotion tree used for this analysis (see Figure 1 on page 59). As illustrated in Figure 4, sadness, anger and happiness were the more frequently reported emotions overall. In the No Gain and Loss outcomes, sadness and anger were reported more frequently (Figure 6), whereas happiness and sadness were reported more frequently in the Gain outcome. A mixture of happiness, sadness, anger and guilt were reported in the No Loss outcome, and this was congruent with the stories for No Loss incorporating a mixture of prevention-focused framing, Gain for the main character and Loss for the secondary character.

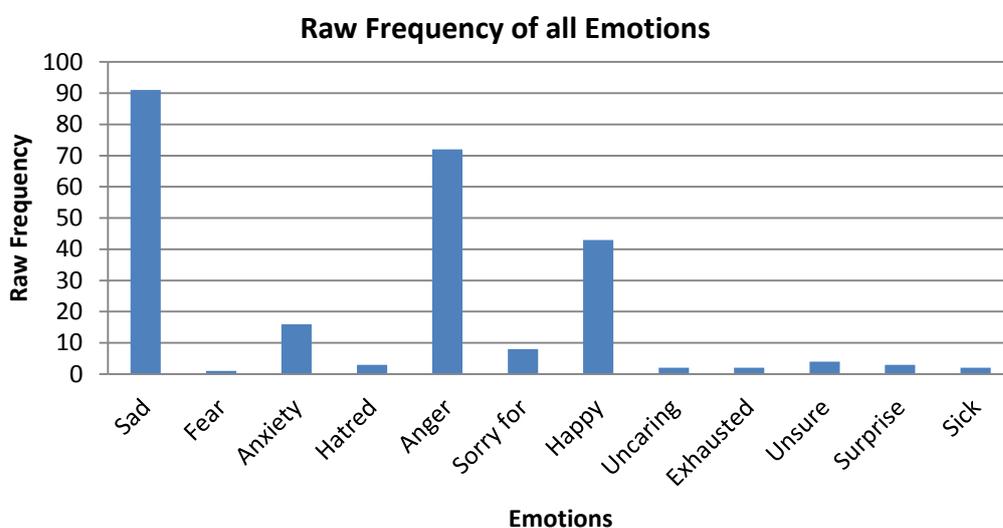


Figure 4. Raw frequencies of all emotions reported.

The frequencies of positive and negative emotions were graphed (Figure 5) for each condition using Storm and Storm's model (1987). Scenarios with non-achievement of goals (No Gain or Loss outcomes) have contrasting frequencies, where negative emotions were more frequently than positive emotions. In the Gain and No Gain outcomes, there was less distinction between the number of positive and negative emotions reported.

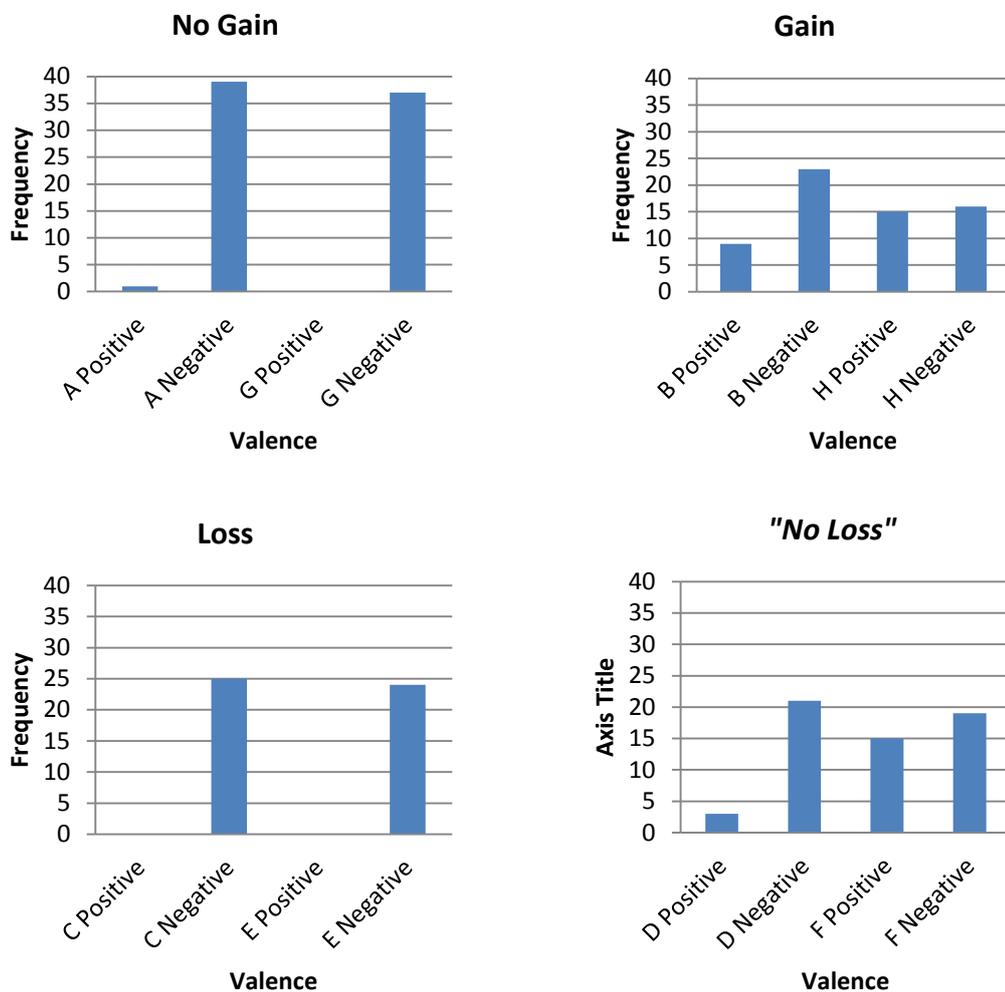


Figure 5. Positive and negative emotions graphed for each outcome.

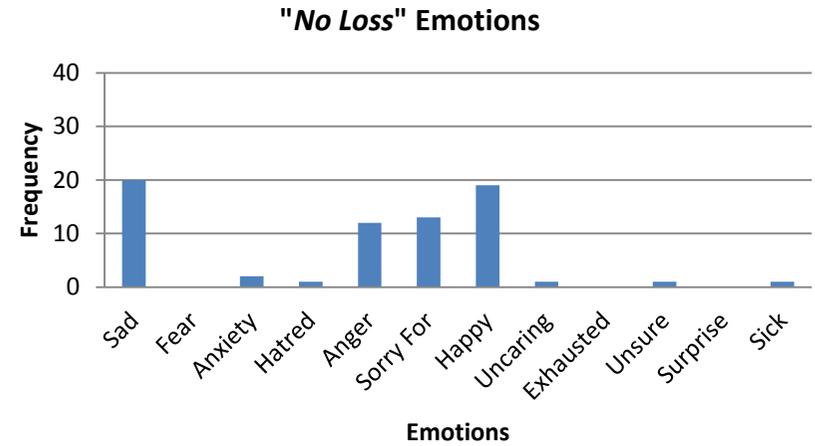
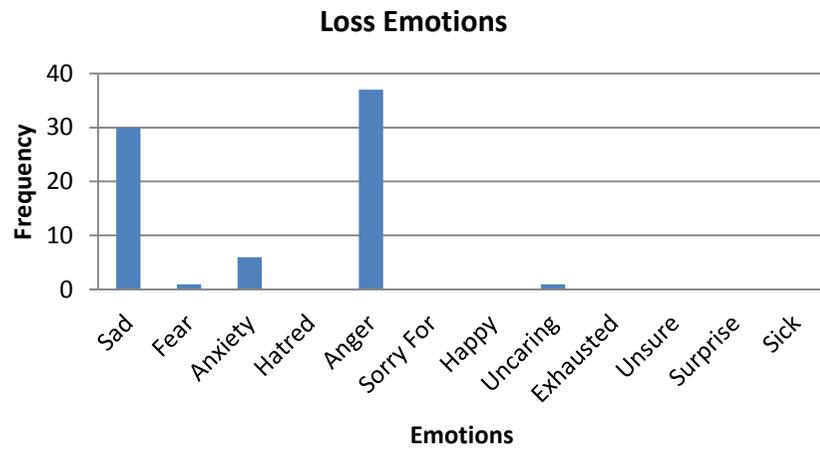
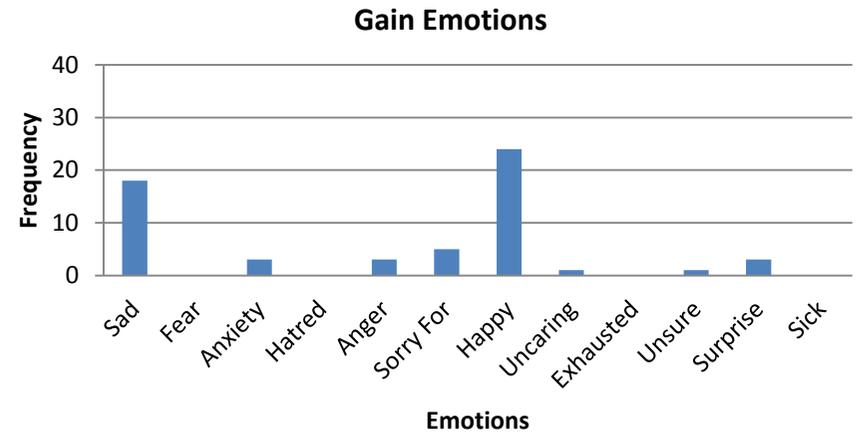
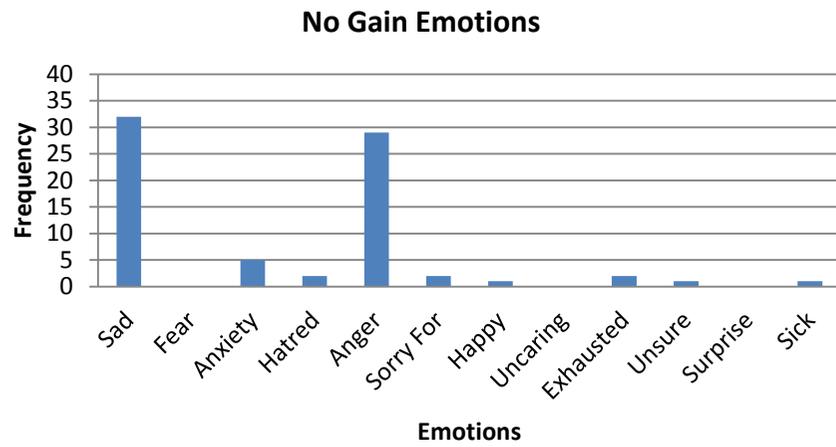


Figure 6. Emotional responses in each outcome.

## Emotion Regulation Strategies

For each scenario, children tended to provide a range of strategies rather than a single one, resulting in a total of 172 different suggested emotion regulation strategies. A list of these strategies is found in Appendix D. This initial study found less avoidance strategies reported for the Gain condition and more avoidance strategies were reported for the Loss condition. These initial results provide some expectations for the next study.

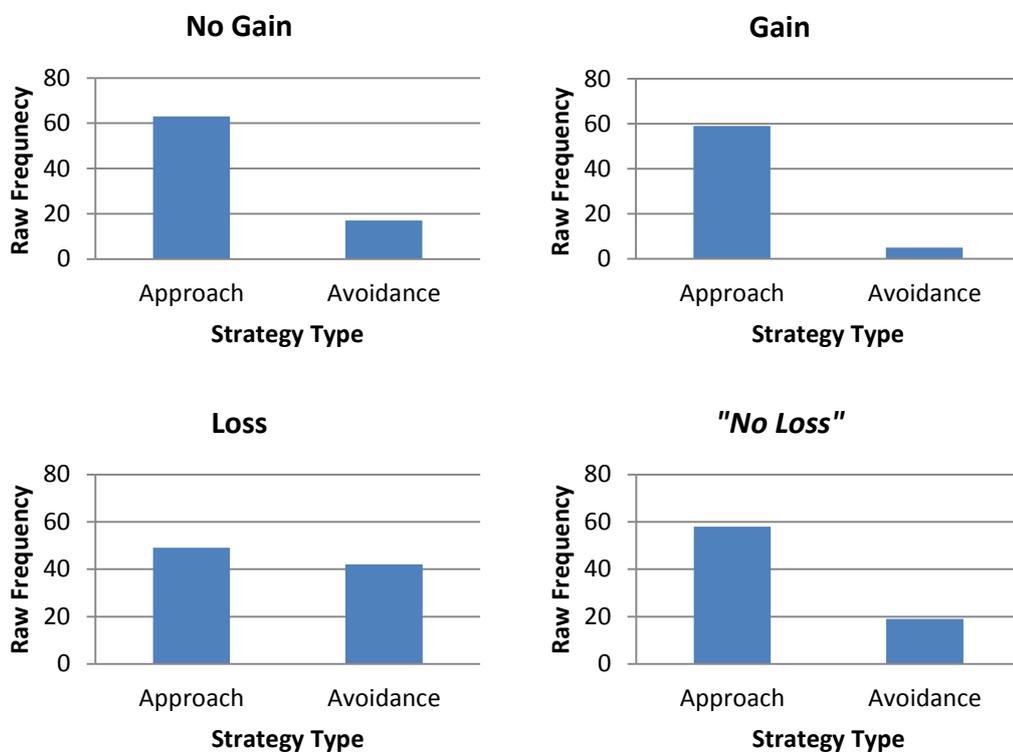


Figure 7. Graphs showing the frequency of approach and avoidance strategies reported for each condition.

## DISCUSSION

The initial study aimed to find out whether scenarios written for this research, depicting different outcomes associated with promotion or prevention motivations,

could elicit perceptions of emotion and emotion regulation. The scenarios were also analysed for their comprehension, fairness ratings, and personal experience with scenario. All scenarios involved a violation of procedural fairness, and perceptions of fairness and emotions suggested were found to vary in different goal outcomes – No Gain, Gain, Loss and No Loss. This supports findings in a study conducted with adults (Cropanzano et al., 2008). It was encouraging to find this research with adults can be an effective approach for children, and the strengths and weaknesses of this study are discussed below.

### **Comprehension of Scenarios**

Children's comprehension of the scenarios was taken into account due to the novelty of these written scenarios. The findings suggested some stories had better comprehension than others did. Scenarios A and F were less understood by children compared to the other scenarios; and Scenario H had less details about the story recalled compared to other scenarios. The level of comprehension and memory for the stories could have influenced subsequent findings for fairness, emotion and emotion regulation. Another weakness was found in scenarios D and F where the stories did not accurately reflect a No Loss condition and instead appeared to fit a No Gain condition. Therefore, further developing scenarios to better fit the modelled conditions could strengthen findings about emotional responses and emotion regulation strategies in this study.

### **Fairness**

All scenarios included unfair acts in the process of events, and findings from these interviews indicated children recognised these scenarios were unfair. However, some children identified fair elements of the story, thus reflecting the complexity of

a fairness judgement in keeping with Colquitt's theory, which incorporates multiple factors of fairness including distributions, procedures, information and interpersonal interaction (2001). When children were asked about their rationale for their fairness judgement, their responses incorporated both principles of distributive and procedural fairness.

As found in past research (Cropanzano et al., 2008), rankings of fairness appeared to differ between motivational outcomes, but this study found the Loss outcome was perceived most unfairly whereas Cropanzano and colleagues found the No Gain outcome to be most unfair in both distributive and procedural fairness. When referring to Higgins' original theory (1997), he proposed Losses and Gains to be associated with more intense experiences of emotions. This study found negative emotions more frequently reported for the Loss condition. With Higgins' RFT theory in consideration, the findings in this study suggest emotions may be influencing children's judgements of fairness as well. Past research support emotional influences on judgements of fairness as well and behaviours. For example, children reject unfair offers in the ultimatum game because of emotions felt despite being at a greater disadvantage from the rejection (Yamagishi et al., 2009). Feelings of self worth have also been shown to influence fairness judgements (Dunn et al., 2010). These preliminary findings about fairness will be further explored in the main study, but it was encouraging to find children recognised the unfair acts in the vignettes written for this research.

## **Emotion**

Storm and Storm's taxonomic model of emotions (1987) proved to be a useful way of categorising emotional responses into discrete emotion categories. This study found reported emotions could be categorised into nine negatively-

valenced emotions and three positively-valenced emotions. This imbalance of negatively- and positively-valenced emotions were expected as this investigation focuses on unfair situations rather than both fair and unfair situations. Sad emotions was the most commonly reported emotional response overall. Anger, happiness anxiety (more specifically worried emotions) and sorry (guilty) emotions were also frequently reported. These are the emotional responses children report about unfair situations that can be expected in the subsequent study.

An early analysis of emotions for each condition was explored in this study and found sadness and anger were reported more frequently in the No Gain and Loss conditions, whereas happiness and sadness were reported more frequently in the Gain condition. The mixture of happiness, sadness, anger and guilt that were reported in the No Loss condition could be attributed to the unclear RFT condition depicted in these scenarios. It was difficult to distinguish whether sadness in the No Gain condition was similar to the sadness reported in the Loss condition, and subsequent comparisons were considered for other conditions. A consideration for the following study could include measuring the intensity of emotional responses using a Likert scale. This would further add to our understanding of unfair emotional experience as measuring level of arousal will complement our current measure of hedonic tone (valence), and is recommended in emotion research (Neilsen & Kaszniak, 2007).

These early findings have shown that RFT is a useful approach to further explore different emotional responses to unfair situations, cheerfulness, happiness, or satisfaction when goals were achieved, and disappointment or discouragement when goals were not achieved (1997). Prevention-focused goals are related to feelings of quiescence, calm or and relaxation when goals were achieved, and tension and

uneasiness when goals were not achieved (Higgins et al., 1997). Disappointment was reported for the No Gain outcome (subsumed under the ‘sad’ category), and related responses included “let down” or “pretty bummed.” Tension and uneasiness are subsumed under the category ‘anxiety and fear’ (Storm & Storm, 1987), and children in this study did not report this emotion in the Loss outcome as frequently as Higgins' theory anticipated. Incidentally embarrassment and shame were not reported by children as in research with adults (e.g., Cropanzano et al., 2008).

### **Emotion Regulation**

A variety of 172 emotion regulation strategies were reported in this study. It was interesting to find approach strategies were suggested more frequently overall compared to avoidance strategies. More approach strategies were given compared to avoidance strategies in the promotion-oriented outcomes. This was expected, as promotion orientation is associated with a tendency to use approach strategies and tactics compared to avoidance strategies (Higgins et al., 1997). Finding the situations in the No Loss outcome were actually framed in a promotion orientation gives an explanation to why more approach strategies were suggested than avoidance strategies. It was surprising to find avoidance strategies did not outnumber approach strategies in the Loss outcome (a prevention orientation) as RFT theory would suggest. The greater number of approach strategies reported could be accounted for by respondents' own inclination toward a promotion or prevention orientation, rather than being influenced by the promotion or prevention orientation framed in the stories. This is something that was further explored in the subsequent vignette study. This finding also led me to revisit the literature in search of an alternative explanation, and my findings are discussed in Study Two.

## Summary and Reflections

In summary, the unfair scenarios were written for the purposes of this research as there were too few published studies from which I could draw examples. Several strengths and weakness were found for the novel scenarios and changes can be made accordingly for the next study. That was the benefit of exploring this research design with a reasonable sample size.

Children's perceptions have indicated a possible pattern of approach and avoidance strategies reported in different unfair conditions. The emotional reactions reported included anger, sadness, and happiness, and it appeared as though feelings of anxiety and guilt have some significance; however, more data were required to support these observations. Nonetheless, this initial study informed the subsequent study of emotion regulation in different unfair classroom situations using vignettes.

## CHAPTER THREE

### STUDY TWO: USING VIGNETTES TO EXPLORE EMOTION AND EMOTION REGULATION BETWEEN UNFAIR CONDITIONS

This study was a progression from the first study, with a major focus on improving the vignettes so that they would better fit Regulatory Focus Theory (RFT) principles (Higgins et al., 1997). The aim of the study was similar, and attempted to investigate children's emotional responses and emotion regulation strategies in different unfair situations where outcomes included No Gains, Gains, Losses and No Losses.

#### **Emotional Intensity**

In the previous study, children demonstrated that primary emotions such as sadness, anger and happiness result from unfair classroom situations. Findings also suggested that feelings of anxiety and guilt may be significant emotional responses to unfair experiences. However, these observations needed to be further explored with a larger participant pool, which is the aim of the present study. Furthermore, as Cropanzano and colleagues (2008) have found in their research, the intensity of these emotions can vary between different types of unfair outcomes. Happiness is found to be at their lowest levels in an unfair no gain outcome (promotion orientation), and highest in a fair gain outcome (promotion orientation). Sad emotions have not been explored in the research literature to date and differences in the level of angry emotions between conditions have not been well supported in this study with adults (Cropanzano et al., 2008). As children have reported sadness and anger in Study One for more than one outcome, I considered it important for the applicability of RFT to determine whether the

intensity of these emotions differed between different unfair outcomes, as Cropanzano and colleagues had found for happiness.

Methods for measuring emotional intensity have included offering child-appropriate response options such as visual analogue scales (Shipman et al., 2003). New Zealand research supports the use of visual prompts, particularly the use of images on Likert scales, as opposed to text-based labels (Loveridge, 2010).

Measuring emotional intensity was also relevant to determining whether regulation took place, by asking children for ratings of emotional intensity prior to regulation, and after regulation. Emotion regulation in research has often been inferred from changes in emotional intensity (Cole et al., 2004). However, there are some strategies that would have little impact on the intensity of emotions. For instance, maintenance strategies, used for prolonging positive emotion, would have little effect on levels of emotional intensity, as the strategies themselves aim to prolong the same intensity of emotion. As individuals tend to strive for positive emotional experiences and prolong positive experience (Isen, 2003), maintenance strategies would typically be used for positively-valenced emotions such as happiness. Therefore, it was expected that little changes in emotional intensity would take place for maintenance strategies rather than strategies used for negatively-valenced emotions, such as sadness and anger. By asking for ratings of emotional intensity, it would also provide some indication to the type of strategy the children suggested in this study.

## **The Present Study**

The aim of this study was to elicit emotion and emotion regulation strategies in different unfair outcomes, No Gain, Gain, Loss and No Loss, using improved written scenarios. The main changes to the design of the scenario study were as follows. Scenarios were re-written and changes were made to the others to improve the framing

conditions (particularly scenarios depicting No Gains and No Losses). The present study also introduced a five-point visual analogue scale to rate levels of emotional intensity, to rate the level of difficulty perceived in using emotion regulation strategies, and to rate the level of emotional intensity experienced after regulating emotion. Ratings of these variables - intensity and difficulty - it was hoped, would enhance our understanding of emotional experiences in unfair classroom situations.

Similar to Study One, it was anticipated children would perceive the Loss outcome as being the most unfair condition and the Gain outcome would be judged fairer than other conditions. Primary emotions such as sadness, anger and happiness were expected emotional responses for the unfair situations. Lastly, the pattern of emotion regulation strategies (approach and avoidance strategies) was further investigated. My research question asked what strategies would children suggest for regulating emotion that resulted from an unfair event? Secondly, would a pattern of strategies (approach or avoidance strategies) emerge between the different goal outcomes?

## **METHOD**

### **Design**

Children's responses were evaluated using qualitative and quantitative methods. The four goal outcomes (No Gain, Gain, Loss and No Loss) formed the conditions or independent variables of the study. Children's responses were analysed qualitatively and coded for fairness, emotion and emotional intensity (before and after regulation), and emotion regulation strategy, which formed the dependent variables of the study.

## Participants

Participants were 112 children in Years Four, Five and Six from four local state primary schools in the Manawatu, New Zealand, region. All schools in New Zealand are divided into deciles based on the socio-economic level of the surrounding communities, with 1 being the lowest income level and 10 being the highest. The decile values for these schools ranged from 1 to 7 and the average decile rating was 5. Ages ranged from 7 to 11 years with a mean age of 9.3 years and gender was evenly distributed: 54% girls and 46% boys. The number of students at each year level was approximately equal, with a slightly greater proportion in Year 6 (41%). The ethnic group membership of the participants closely matched national population figures: 61% identified with the NZ European/Pākehā ethnic origin, 14% Māori, 10% both NZ European and Māori, 5% Pacific Island, and 10% identified with another ethnicity.

## Recruitment

The overall project used a randomly ordered list of primary schools in the Manawatu region (approximately 52 schools). School principals who responded to expressions of interest were provided with information brochures for the school and teachers (Appendix F) and a meeting was arranged with the school principal to discuss details to the project (participating teachers were also invited to the meeting). The rate of participation from schools invited was 75% and non-participation was due to schools' commitments to other activities. Schools generally indicated an interest in the study findings. I was introduced to the school staff and participating classrooms before data collection commenced.

Teachers distributed information packages provided (containing a parent information brochure and consent forms for both students and parents; Appendix G). Parents were given a two-week period to return consent forms and the response rate for

returned consent forms from children and their parents was 29%. It was noted that this return rate was lower compared to Study One and several factors were considered to contribute to the decrease. These factors included the time of the year in which the study was undertaken; black and white information brochures were used rather than coloured (perhaps drawing less attention); and there was generally less interest expressed from participating teachers in this study compared to the earlier study. It was observed that more consent forms were returned when teachers expressed a great deal of interest in the study.

## Materials

1. Eight written scenarios (labelled A-H) where two stories represented each of the four RFT outcomes: No Gain (A & B); Gain (C & D); Loss (E & F); and No Gain (G & H) (Appendix E).

Table 2

*Scenarios of Unfairness.*

Scenario	Condition	Story theme
A	No Gain	Computer task
B	Gain	Children were completing a math activity on the computer and perfect scores earned students house points. An error unexpectedly generated on the computer and scores were unreliably determined. As a result Ariana's experiences an unfair No Gain whilst Daniel's experiences an unfair Gain.
C	Loss	Swimming pool
D	No Loss	The classroom had plans to visit the swimming pool after

lunchtime and needed to maintain good behaviour in order to go. A peer from Laura's classroom violated the good behaviour principle and as a result, Chris's classroom experiences an unfair Loss, whereas Laura's classroom experiences No Losses.

E	Loss	Going to a friend's
F	No Loss	Two children had plans to play on their friend's farm after school. However, the teacher caught a peer whispering to them during a quiet time and punished the wrong student. The punishment was to stay behind for detention, thus Amy missed visiting the farm (Loss), and Kurt benefited from the error and continued to go to the farm (No Loss).
G	No Gain	Class Monitor
H	Gain	The teacher was assigning classroom monitors and Joshua misses out despite being on good behaviour (No Gain), whereas Nate was class monitor again despite having his turn the week previously (Gain).

2. A digital voice recorder was used for audio recording and accessorised with a uni-directional microphone to capture the audio.
3. A visual analogue scale was used to rate the level of emotional intensity experienced before and after emotion regulation and the perceived level of difficulty in using emotion regulation strategies. For emotional intensity, one represented the lowest intensity and five represented the strongest intensity. For emotion regulation difficulty, one represented the most difficult strategy to apply and five represented the easiest strategy to apply. The scale consisted of five

concentric circles in purple shade that increased in hue intensity as they increased in size along the scale. The visual scale was aimed to help children determine intensity ratings of emotion and level of difficulty in applying emotion regulation strategies. These scales have been used in earlier research with children (for example, Shipman et al., 2003).

4. A stress ball called the “ideas ball” was offered to all participants with the intention of alleviating any anxiety about participating and responding to questions. Stress balls employ progressive muscle relaxation. As the child squeezes the ball and contracts the muscles, the blood flow increases to the hand. Releasing the squeeze further relaxes the hand. The stress ball also helps minimise fidgeting during the interview process and enhance attention.

## Procedure

*Interview.* A quiet room was arranged prior to interviews and teachers decided the order of participation. The interview format was semi-structured and began with introductions including an outline of the interview process and confidentiality. The interviewee and I followed introductions with one warm-up activity (called “Guess the Feeling”) to help build rapport, promote relaxation and fun, and access emotion-related schema. It was a quick activity and children indicated enjoyment in the game. The purpose of the digital voice recorder was explained and participants were asked what they understood about the task to ascertain whether they understood the nature of the upcoming activity.

Demographic information was collected, including age, gender, year level and ethnicity (ethnicity was explained to the majority of children), and responses were noted on a standard response sheet. All participants accepted when offered the “ideas ball” (with the intention of alleviating any anxiety and enhance attention).

The four scenarios were systematically pre-assigned so that a scenario was selected from each condition. The order of presentation was randomly selected by each child. Using this arrangement the four scenario groups included ADEH, ADFG, BCEH and BCFG.

Table 3

*The Scenarios and Matching Conditions*

<u>Condition</u>	<u>Scenario Groups</u>			
	1	2	3	4
No Gain	A	B	A	B
Gain	D	C	D	C
Loss	E	E	F	F
No Loss	H	H	G	G

To check children’s engagement in the task and story comprehension, children were asked to recall details of the scenario (meanwhile the story was placed faced down on the table). Any errors or omissions were corrected before questions about emotion followed. It was important for children to demonstrate an understanding of the underlying theme (unfair transgression) of the scenario. Whether a story was described as fair or unfair was noted on the response sheet. The following questions were asked:

1. Was the situation fair? Who was responsible for making it unfair?
2. How do you think the character in the story was feeling?
  - a. How strong was the feeling?

The five-point visual analogue scale was used to help children determine the intensity of emotion that would be experienced by the main character of the story. I explained that all circles represented the feeling the participant reported, and the emotion increased in intensity as they

moved up the scale. Children were asked to rate how strong they perceived the feeling that was reported.

3. If you were the character in this story, what would you do to make yourself feel better? I then followed with clarifying questions such as what would that look like? How?
  - a. How easy would it be to use this strategy?

The five-point visual analogue scale was used to help children determine the ease in which the strategy could be employed. One indicated great ease in employing the strategy, and this increased to five, which indicated great difficulty in employing the strategy.

4. How do you think the character in the story was feeling after using this strategy?

After these key questions were covered, children were asked to rate the scenarios in order of most unfair to least unfair and asked to provide a justification for their order. All interviews took approximately 30 minutes each.

As determined in Study One, the following plan was set in place for occurrences when children disclosed issues of personal safety during the course of the interview. At the time of disclosure the interview would be suspended and children would be asked questions to assess for any immediate safety risk. Children were also informed about having to breach confidentiality for concerns regarding personal safety and to prevent any further harm to them. It depended on the situation whether the interview would continue following this discussion. Then depending on what was appropriate or established in the school policy, either the classroom teacher or school principal would be notified immediately or after the interview. These interventions were not required in this study.

Following the completion of data collection, initial feedback was provided to teachers and the school principal. Feedback was based on initial analyses of the data specific to each school. A brochure of preliminary findings was subsequently provided to parents who had requested one on the consent form and additional copies were left at the school for any other parents who wanted a copy.

## Data Analysis

Comprehension and recall ability were not the focus of this investigation; however, it was important that the children recognised a process violation had taken place within each story. Thus confirmation of this will be reported.

Audio recordings were transcribed into written form and coded and categorised using Atlas.ti software. All other response scores were manually entered into PASW version 18.0 and 10% of the data was reviewed for accuracy. Using the emotion tree developed from Storm and Storm's theoretical model of emotions (1987), the children's emotion labels were categorised into *sad*, *angry*, *happy*, *worried*, or *guilty*, and all other terms used that fitted none of these categories were grouped as *other*. Intensity was measured by asking participants to rate on the visual analogue scale the level of emotional intensity the character could experience (where one was the weakest and five was the strongest).

Coding of emotion regulation strategies used a similar process to Study One, allowing all strategies described to be reduced initially to 37 different strategies. Another round of coding reduced the number of identifiable strategies to 23. New responses were found in the present study (compared to Study One) and included acceptance and seeking revenge (on the peer). Another, more general level of coding categorised responses into approach and avoidance strategies. As found in Study One, approach strategies were defined as efforts and behaviours that were directed towards

the emotional response or unfair event (Elliot, 2006; Elliot & Pekrun, 2007). Avoidance strategies were defined as efforts and behaviours that ignored or diverted attention away from the emotional response and unfair event (e.g., “forget about it”) (Elliot, 2006; Elliot & Pekrun, 2007). The reliability of coding was checked with three other independent coders with at least a postgraduate psychology qualification using 10% of the responses provided in this study. The overall proportion of agreement was  $\rho_0 = 0.73$ , and Fleiss’ Kappa co-efficient was  $\kappa = 0.59$  indicating moderate agreement in coding.

## RESULTS

### Manipulation Checks

#### *Comprehension.*

When participants accurately retold the theme and showed comprehension of the story their response was rated “1.” Responses that did not indicate adequate comprehension were rated “0.” Approximately 93% of the eight scenarios read to children were understood overall. Scenarios A to G were understood over 90% of the time, and Scenario H (Nate’s classroom monitor story) was understood less frequently (approximately 76% of the time).

#### *Fairness.*

The eight scenarios were rated as being unfair (expressed as  $x = 1$ ) or fair ( $x = 2$ ), and  $t$ -tests were used for each scenario to find out whether there were significant differences in these ratings.  $t$ -Test results indicated unfair ratings in all scenarios significantly differed from fair ratings (see Table 4).

Table 4

*Descriptive & t-Test Statistics For Fairness*

<b>Scenario</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
N	56	56	60	52	57	56	57	55
% Unfair	96.4	96.4	53.3	90.4	98.2	96.4	91.2	98.2
Mean	1.04	1.04	1.47	1.10	1.02	1.04	1.09	1.02
(SD)	(.19)	(.19)	(.50)	(.30)	(.13)	(.19)	(.29)	(.13)
t	-2.57*	-2.57*	5.65*	-.09	-4.70*	-2.57*	-.33*	-4.50*

\* indicates significance  $p < .05$

Children also ranked scenarios from the most unfair to least unfair. There was a significant difference found in rankings of unfairness for different outcomes according to results from the Friedman's test,  $\chi^2(3) = 110.538, p < .001$ . The Loss condition was ranked as being the most unfair (mean ranking 1.55, median 1), followed by the No Loss (mean 2.42, median 2), No Gain (mean 2.60, median 3) and Gain conditions (mean 3.43, median 4).

Responses for the individual assigned responsible for the unfair transgression was also explored. According to the median and mode statistics, the teacher was attributed responsibility for the unfair event in the promotion-focused conditions (No Gain and Gain), and in the prevention-focused conditions (Loss and No Loss) the student peer was attributed responsibility for the unfair event. The effects were significant for the No Gain  $\chi^2(3) = 106.6, p < .001$ , Gain  $\chi^2(3) = 65.3, p < .001$ , and Loss conditions  $\chi^2(1) = 47.2, p < .001$ ; not for the No Loss condition  $\chi^2(2) = 3.9, p > .05$ ; and the test assumptions were met for the chi-square analyses.

## Emotion

The percentage of sad emotion reported overall was 51%, angry emotion 12%, happy emotion 25%, guilty emotion 8%, anxious emotion 1%, and 'other' emotions was

2%. The proportion of emotions reported were graphed for each condition (see Figure 8). Sad emotions were reported more frequently in the No Gain and Loss conditions. Happiness was reported more frequently in the Gain condition, and similar frequencies of emotion responses were reported for the No Loss condition.

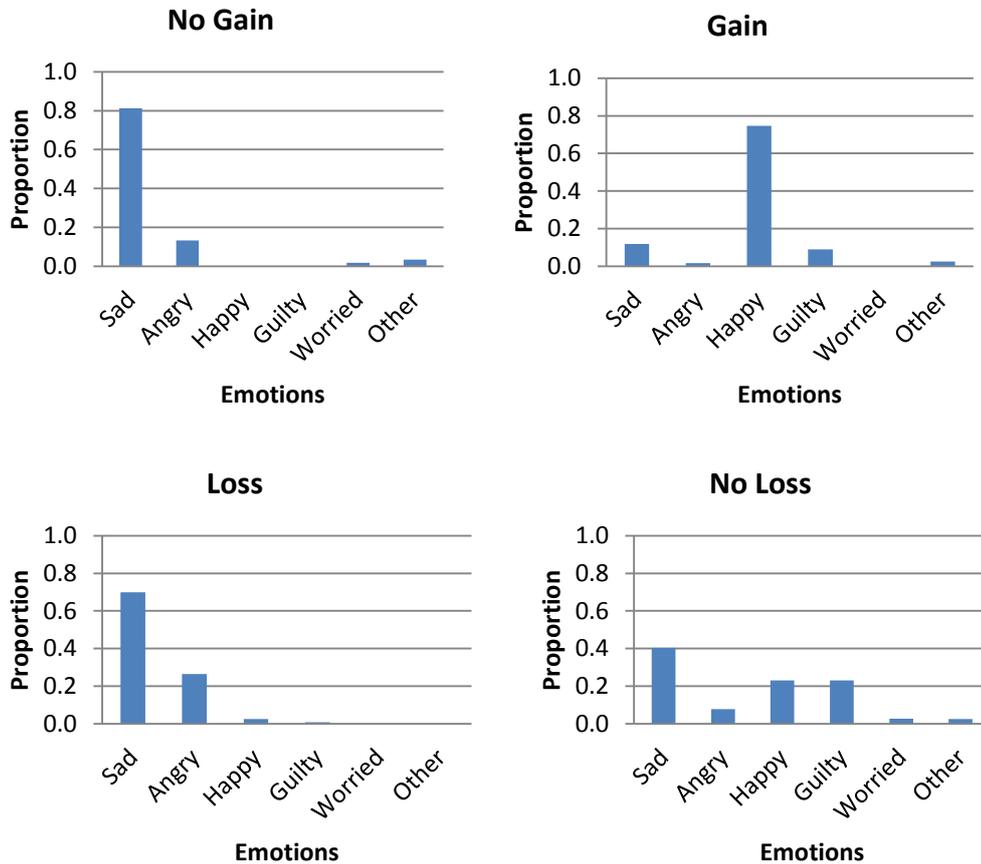


Figure 8. The proportion of emotions reported for each outcome.

Results for emotional intensity measured using the five-point scale were averaged. Happy emotions had the strongest mean intensities overall ( $M = 4.27$ ,  $SD = .78$ ); followed by angry ( $M = 3.87$ ,  $SD = .89$ ), guilty ( $M = 3.82$ ,  $SD = .73$ ), sad ( $M = 3.69$ ,  $SD = .98$ ), and anxious emotions ( $M = 3.40$ ,  $SD = 1.08$ ). These intensities are depicted in Figure 9. The graph illustrates similar intensities of emotional responses in

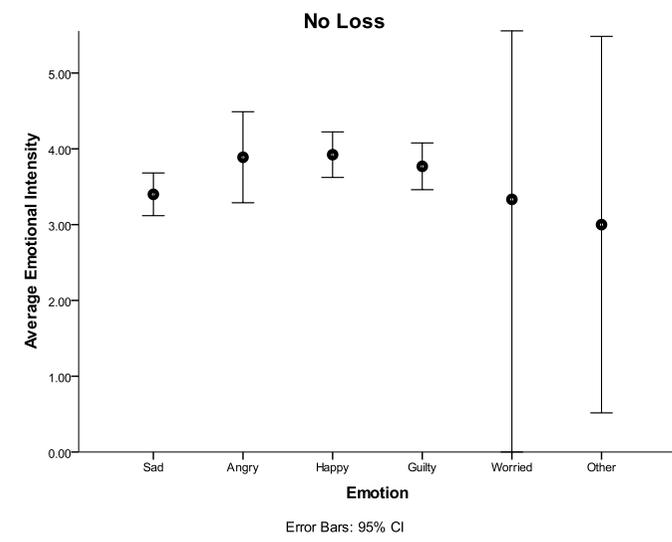
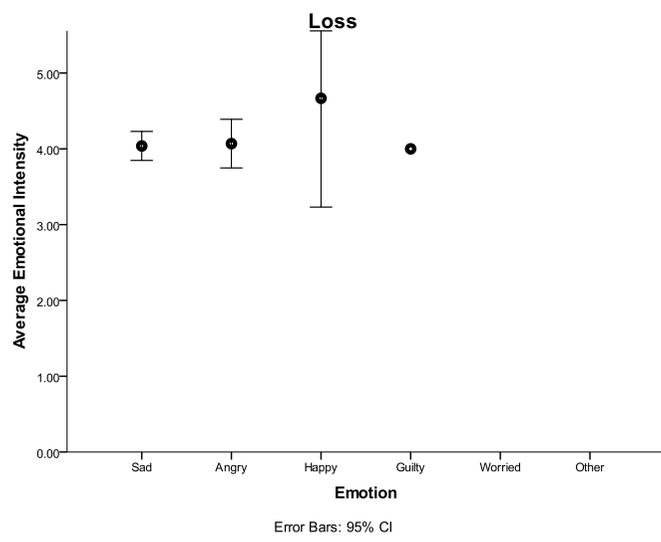
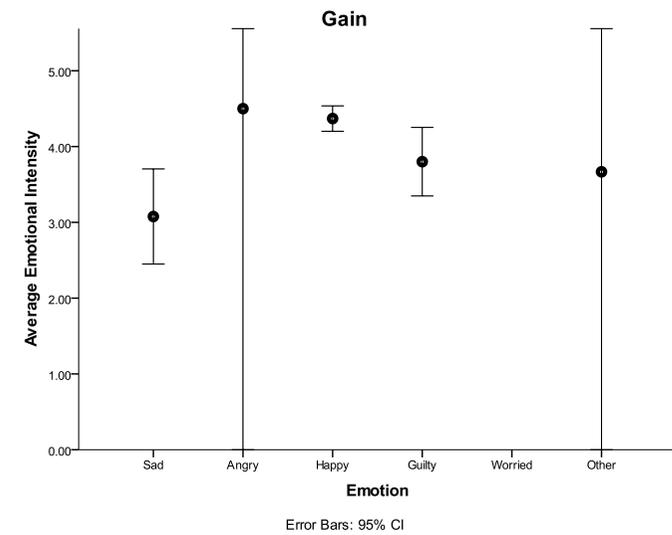
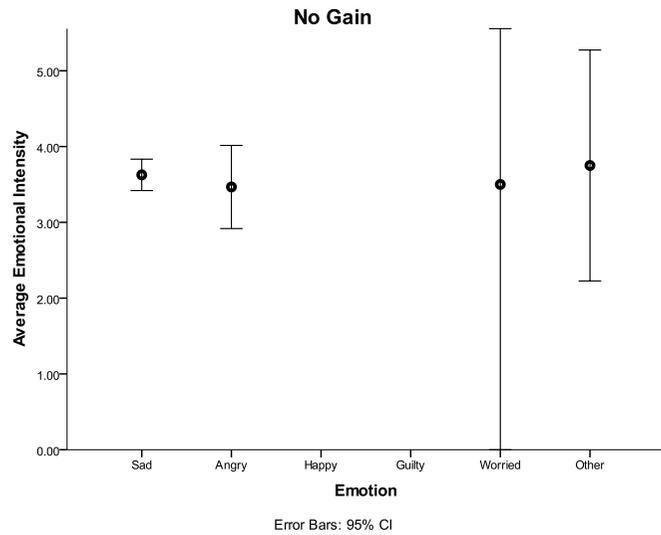


Figure 9. The average intensity rating for emotion in each condition with error bars depicting the 95% confidence Interval.

all four conditions and variable responses between conditions (groups) did not allow for accurate inferential analyses (differences between groups).

## Emotion Regulation Strategies

Coding reduced responses into the following 23 emotion regulation strategies:

Examples of strategies for each category are given and explained here:

***Acceptance.*** An example of acceptance included “Think of it as something that happens in life. Take it as it is. Move on. It only happened once and probably will never happen again.”

***Apologise.*** This category consisted of any statement such as: “apologise” or “say sorry.”

***Avoid bad experience.*** Several responses indicated the child suggested avoiding bad experience. Example of responses included “he would feel less happy if someone teased (him) for being a geek or know-it-all,” or “people tell him off about it,” or “stay away from Debra” or “he stays happy unless someone rubs the points off the whiteboard.”

***Cognitive distraction.*** Responses that indicated “thinking about something else” were coded as cognitive distraction. Examples included “think of happy times,” and “think about something she likes, and her work, and how well she’s doing, what she will do when she gets home and happy things.” Other examples included “think of something else” and “think about something else, like what to do at lunchtime.”

***Cognitive reframing/validation.*** These strategies involved attending to the unfair event and associated emotions, but involved reframing thoughts in order to alter feelings. Examples included “think that it’s not important,” or “think aw it doesn’t really matter and next time I might get 100%.” Another example included, “think it’s not the end of the world. Ah well. And think try better and hope he gets it next week.”

Thoughts that involved validating the unfair event were included here as well as these cognitive strategies involved attending to the unfair event. An example of validation included, “say in head that they’ve done well.”

***Distraction with current activity.*** This involved undertaking other activities that were not the primary task in the story. Examples included, “do something else,” and “play with friends in class.” The activities included enjoyable activities as well, such as, “play a game”, “play with a friend in playtime,” “read, they might enjoy the story,” and “Get something to play with. Draw and colour in. During work time or free time.”

***Distraction with later activity.*** These responses involved other activities that take place outside of school, for instance, “running after school. Ask for quiet time (at home),” or “reading after school (alone).” Other activities were related to compensating for the unfair event, for instance, “ask parents to go swimming in the weekend and invite friends.”

***Focus on current activity.*** Any response that indicated the main character would return to the current activity was noted as a separate category as it was difficult to discern whether the strategy was used to distract the person from the unfair event, or focus on the unfair event. Examples included, “carry on with his work,” and “think about his writing and try to enjoy it.”

***Focus on/maintain emotion.*** This involved direct efforts to prolong the emotion and examples included, “tell parents to keep happy,” and “stay very happy by keep remembering.”

***Give peer support.*** Examples included “do something for Danny. Buy a present or make a card,” or “Ring Michelle and stay behind with Danny to try and make Danny feel better.”

***Give/Seek share of reward.*** This included responses that involve seeking or sharing the reward. This was different to seeking another opportunity as responses were associated with the current reward involved. For example “Talk to his teacher to let someone else be class monitor.”

***Nothing.*** Doing nothing was coded separately, and usually reported for a Gain outcome. Responses were either “nothing,” or “don’t do anything.”

***Peer apologises.*** This category was clear, and was reported on one occasion, “Debra said sorry for what she did.” This was not a strategy used by the individual but was a response that showed reliance on external factors for self-regulation.

***Relax.*** This included responses that stated, “calm down” or “take deep breaths.”

***Seek another opportunity.*** Seeking another opportunity applied to responses where the main character would attempt to achieve the goal again. Example responses included, “try again,” “do it again next time,” and “arrange another time to visit Michelle.”

***Seek support: Parent, peer, teacher, or other.*** Seeking support statements were listed as independent categories. Some responses included all three main sources of support, for example, “talking to people (friends and parents). Tell the teacher it wasn't fair.”

***Seek revenge.*** There was one example of this and the response was significant enough to warrant its own category, “make Debra get into trouble (payback).”

***Suppression.*** Examples of suppression included cognitive suppression such as, “forget about it,” “not think about it” or “ignore it and stop thinking about it so much.” Masking expression was also included, for example, “sit hiding his smile.” These strategies were considered more permanent than distraction and warranted its own category.

***Teacher apologises.*** This was reported when a goal was not achieved (i.e., No Gain and Loss outcome) and involved relying on external factors to regulate emotion rather than the child's actions.

***Withdraw from current activity.*** Sitting alone was often reported, “go have a quiet time alone,” “sit by yourself alone,” and “go somewhere alone (e.g. toilets) and count to 20 or count backwards.” These strategies were reported when a goal was not achieved (i.e., No Gain and Loss outcome).

### **Comparing Approach and Avoidance Strategies**

When strategies were further categorised into approach or avoidance strategies, children suggested a disproportionately greater number of approach strategies compared to avoidance strategies. Approach strategies were defined as efforts and behaviours that were directed towards the emotional response or unfair event, and avoidance strategies were defined as efforts and behaviours that ignored or diverted attention away from the emotional response and unfair event (Elliot, 2006; Elliot & Pekrun, 2007). Some children suggested both types of strategies in their responses and these were coded independently (as approach and avoidance, rather than assigning a new category “both”). Firstly, proportion of approach and avoidance strategies was investigated for each motivation – promotion (No Gain and Gain) and prevention (Loss and No Loss) (Figure 10). Then the proportion of approach and avoidance strategies was investigated for goal achievement – achievement (Gain and No Loss) and non-goal achievement (No Gain and Loss) (Figure 11). As depicted on the figure, the pattern of approach and avoidance strategies suggested by children appear similar, where more approach strategies were suggested compared to avoidance strategies in all conditions (promotion or prevention foci, or whether a goal was achieved or not achieved).

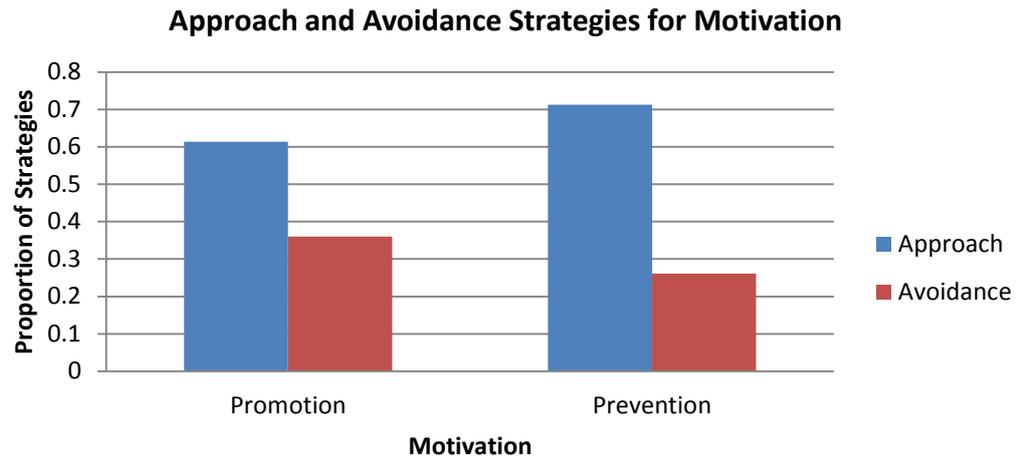


Figure 10. The proportion of approach and avoidance strategies suggested for motivation conditions.

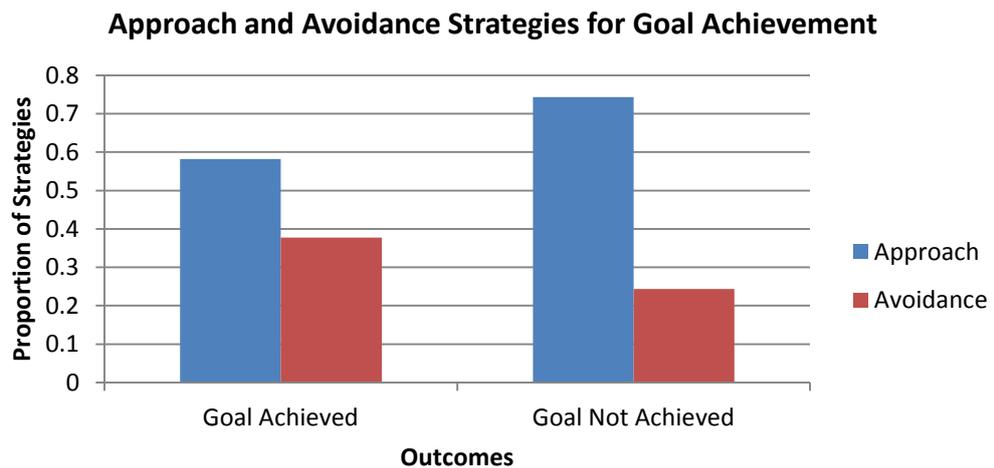


Figure 11. The proportion of approach and avoidance strategies suggested for goal outcomes.

Approach and avoidance strategies were also investigated for each outcome (No Gain, Gain, Loss and No Loss) (Figure 12). Again, children suggested more approach strategies than avoidance strategies for regulating emotions in unfair situations and this pattern of responding was similar in all four outcomes. The No Loss outcome appears to include a greater distinction between the approach and avoidance strategies suggested.

Non-parametric tests also indicated no significant differences in strategy use (approach or avoidance) between the four outcomes (No Gain, Gain, Loss and No Loss).

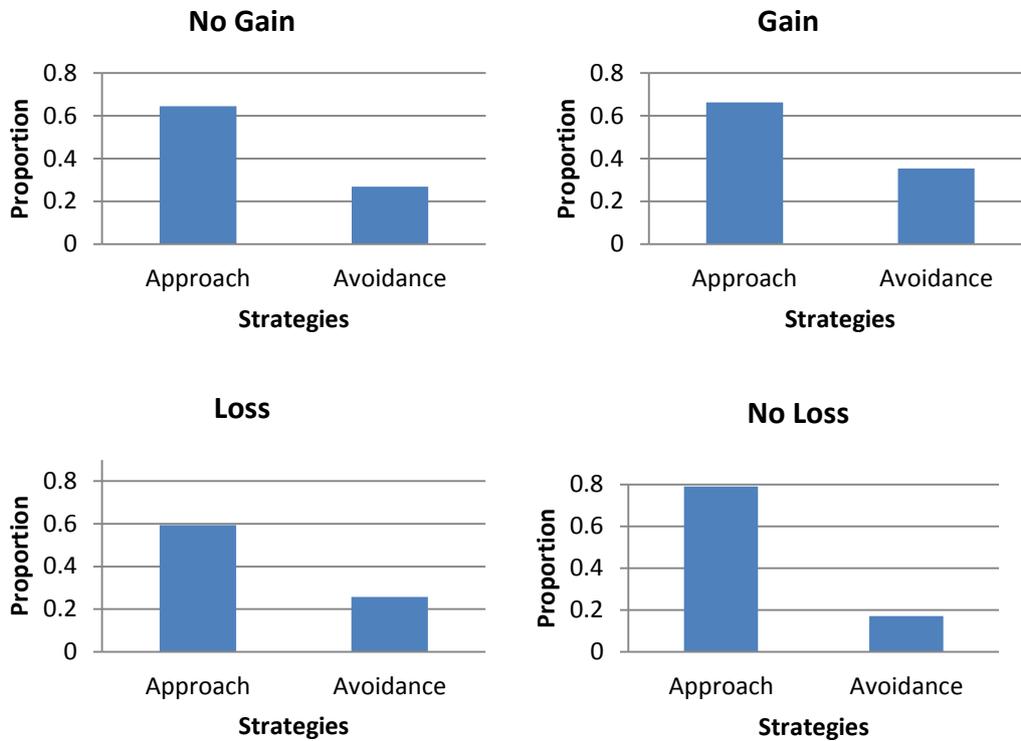


Figure 12. Proportion of approach and avoidance strategies in the four outcomes.

Responses for emotion regulation strategies were explored further by graphing the 23 categories for the four outcomes. Strategies reported less than 10% of the time were excluded from the graphs, and those included were apologise, avoid bad experience, focus on/maintain emotion, seek another opportunity, give/seek share of reward, and seek teacher support. The following histograms (see Figure 13) illustrate the greater frequency of approach strategies reported such as seeking another opportunity (to obtain a reward), focusing or maintaining emotion (i.e., prolonging happiness), and seeking teacher support. Seeking teacher support was more frequently reported in outcomes (Loss and No Loss) that had prevention-focused orientations in the stories (i.e., stories about the pool and farm). Seeking another opportunity was a

strategy more frequently reported in the No Gain and Loss outcomes, where goals were not achieved. Apologising, focusing on or maintaining emotion (i.e., happiness), and sharing the reward were reported for outcomes where the goal was unfairly achieved (Gain and No Loss). Apologising was more prevalent in the No Loss condition, whereas focusing on or maintaining emotion was more prevalent in the Gain condition. Within seeking parent or peer support, this was more likely when Loss was experienced.

### Changes in Emotion Intensity

The next analysis explored whether children perceived emotion regulation strategies as being effective in changing emotional intensities. This was assessed by asking children for ratings of emotional intensity before and after emotion regulation. Paired-sample *t*-tests indicated significant differences in emotional intensity for all scenarios, and in all cases the emotional intensity reduced after regulation. One-sample *t*-tests were used to find out whether the changes in intensity between Time 1 and Time 2 were significantly different from the average change (see Table 5). Scenarios C and D (the Gain outcomes) had significantly less change in intensity, and scenarios E and F (the Loss outcomes) had significantly greater changes in intensity following emotion regulation.

Table 5

*One-Sample t-Test Statistics for Emotion Intensity Change*

<b>Scenario</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>Overall</b>
N	56	56	58	52	56	56	57	55	
Mean Difference	2.07	1.96	1.09	1.29	2.34	2.29	1.64	1.87	1.82
SD	.95	1.06	1.39	1.46	1.07	.01	1.30	1.31	.71
t	1.98	1.02	-4.01*	-2.62*	3.64*	3.84*	-.99	.30	

\*indicates significance at  $p < .05$ .

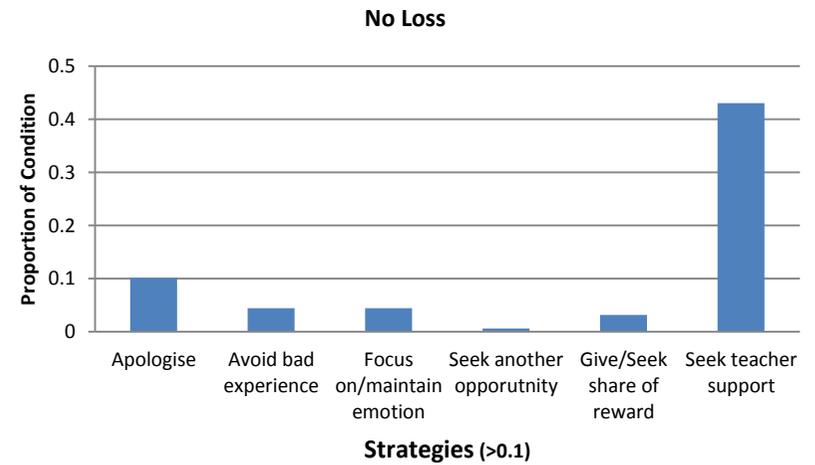
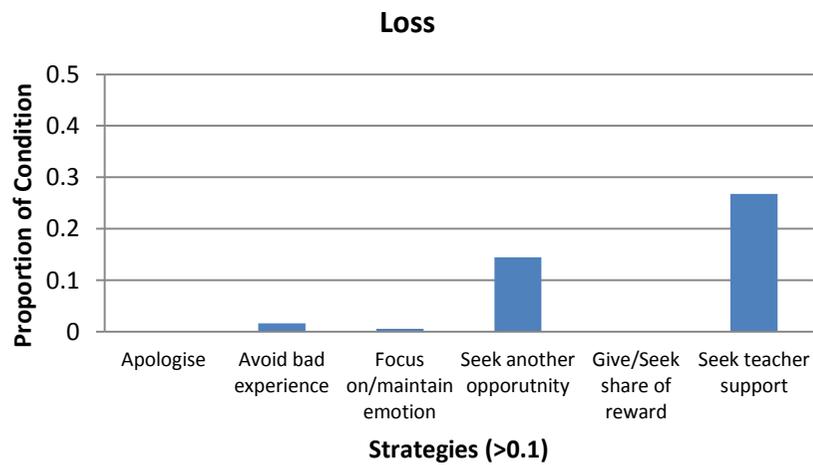
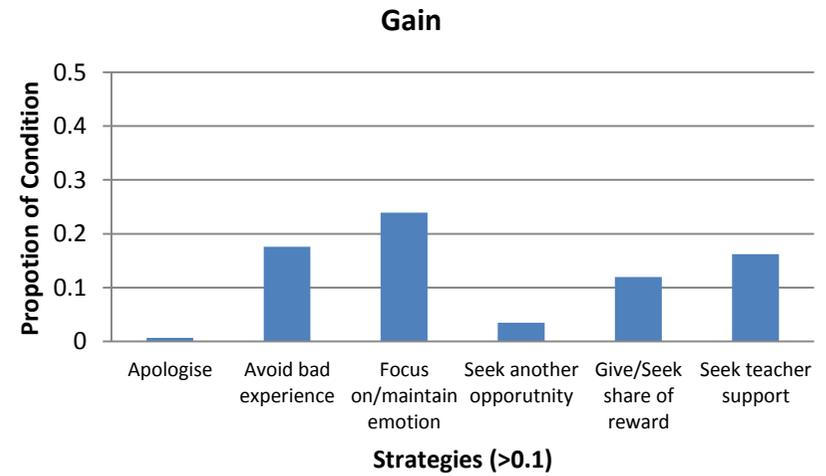


Figure 13. The frequency of emotion regulation strategies suggested more than 10% of the time in each condition.

## **DISCUSSION**

The vignettes were about different unfair situations (goal outcomes) and two types of motivational principles proposed in RFT. The aim of the study was to gather children's emotional responses elicited in these vignettes, as well as, to ascertain suggested strategies for regulating these emotions. The inclusion of a computer-activity based scenario appeared to help children comprehend the situation better, and changes to the No Loss scenarios were more aligned with RFT principles.

It is generally understood that unfair events elicit more negative emotion than positive ones (Shipman et al., 2003); however this thesis has so far demonstrated happy emotions are possible when a goal was achieved, despite the process being unfair. Sad emotions were the most prevalent emotions reported, accounting for almost half of responses. Happy emotions accounted for approximately a quarter of responses. For the No Gain outcome sad emotions were more frequently reported than other emotions, happy emotions were more frequently reported for Gain outcome, sadness and anger in the Loss outcome, and a mixture of sadness, happiness and guilt were reported in the No Loss outcome. Similar to findings by Cropanzano and colleagues (2008), anger was not the most common emotion elicited in an unfair Loss as originally expected.

### **Emotion Regulation Strategies**

More approach strategies were suggested by children compared to avoidance strategies overall, and the pattern was similar in each of the four outcomes (No Gain, Gain, Loss and No Loss). The findings for approach and avoidance strategies did not support the theory that proposes more avoidance strategies are employed in a prevention-focused goal orientation and more approach strategies are used in a promotion-focused goal orientation. A possible explanation for this finding was

children's responses for regulatory strategies could reflect cultural and environmental influences of strategies for coping taught to them by parents, teachers and other caregivers. Adults tend to provide optimistic and approach strategies for regulating emotion (Gross, 2002; Koole, 2009). These types of strategies are also observed in children's television programmes. This was my original hypothesis.

However, as described in my literature review, RFT proposes when individuals in a prevention orientation encounter a loss, the individuals are likely to engage in risky strategies to return to the status quo (Scholer et al., 2010). Therefore, in a prevention orientation, participants were likely to report approach strategies for regulating emotions in a Loss outcome, as it could help the character in the story return to a neutral emotional state. Only this theory does not explain the greater distinction between approach and avoidance strategies suggested in the No Loss outcome. According to RFT, individuals in a prevention orientation are likely to employ avoidance strategies to regulate emotion; however, specific contexts can influence this relationship and both avoidance and approach strategies could be used in a prevention orientation (Scholer & Higgins, 2008). The unfair process involved in these vignette situations could have provided a context whereby approach strategies were preferred for emotion regulation, particularly as children were asked about regulation of the unfair emotion, rather than strategies to promote goal attainment.

Both approach strategies and avoidance strategies were suggested for regulation and the presence of avoidance strategies in the Gain outcome was considered. The use of avoidance strategies in the achievement of goals, such as a Gain outcome, resonates with ideas found in the hedonic contingency model (Wegener & Petty, 1994), where people can be very protective of their positive emotional states (Isen, 2003), thus adopting avoidance strategies. When in a positive subjective state, some individuals

seek out activities to maintain that state, and the strategies suggested for maintaining positive emotions included “avoiding bad experience.” This supports the idea goal orientation is independent of whether individuals use approach or avoidance strategies to manage emotions.

When strategies were explored individually, some strategies were recommended more frequently in particular outcomes. Seeking support from the classroom teacher was the most frequently suggested strategy to help manage emotion in unfair events overall. Validation of the unfair event and seeking resolution appeared to be of importance. This was considered an approach strategy as the character would be required to use efforts and behaviours that were directed towards the emotional response or unfair event. Children have been observed in classrooms to seek emotional support from their classroom teacher in earlier research (Yan et al., 2011). This study found seeking support from the classroom teacher appeared to be more frequently suggested in scenarios depicting a No Loss outcome, a prevention-focused orientation, than other outcomes (No Loss 43% of the time, Loss 27%, No Gain, 23%, and Gain 16%). These scenarios included maintaining good classroom behaviour in order to keep their reward (going to the swimming pool or visiting a friend’s house). The unfair aspect of the situation was that the character kept a reward that was undeserved. This suggests that when children unfairly keep their undeserved reward and are aware of doing so, they are likely to seek teacher support. Seeking teacher support accounted for 43% of the strategies suggested in the No Loss outcome, so other regulation strategies are also possible. According to RFT, the emotions related to a No Loss experience are on the quiescence to agitation continuum of emotional responses associated with a prevention orientation (Higgins et al., 1997). It is perhaps the anxiety-related emotion that undergoes regulation with a seeking teacher support strategy. However, this is

speculative as anxiety was not a commonly reported emotional response for unfair No Loss outcomes. Other literature has also proposed people seek a resolution or make reparations to unfair events to help alleviate associated feelings of guilt (Eisenberg, 2000; Ghorbani, Liao, Çayköylü, & Chand, 2012; Tangney, 1991).

Seeking another opportunity was the most frequently suggested strategy (approximately 32% of the time) for managing emotions in unfair situations where the character failed to achieve goals in a promotion orientation (No Gain). This was followed by seeking teacher support (approximately 23% of the time). Tactics suggested as part of the seeking another opportunity strategy included, “try again” or “ask to do activity again,” and they were considered to be approach tactics as they involved efforts and behaviours that were directed towards the emotional response or unfair event. Using approach strategies in a promotion orientation is congruent with the principles of RFT (Higgins et al., 1997). According to the theory, achieving gains involves the use of risk-taking biases, and rather than being sensitive to failures, individuals are likely to continue using risky biases to achieve their goal (such as trying to achieve the task again). This has been found in students undertaking an academic task in a promotion orientation, where students tended to persist on tasks significantly longer than students who adopted a prevention orientation (Bjørnebekk, Gjesme, & Ulriksen, 2011; Sideridis & Kaplan, 2011).

A range of strategies was suggested in the Gain outcome, and avoiding bad experience and focusing on or maintaining emotion (i.e., happiness) appeared to be the more frequently suggested strategies. Although the two strategies share a similar goal, they were coded independently as one represented an approach strategy (focus on or maintain emotion), whereas the other represented an avoidance strategy (avoid bad experience). This was possible as RFT posits goal orientation (at the systemic level) is

independent of strategy use (avoidance or approach) (Scholer & Higgins, 2008). Specific tactics included, “remembering (or thinking about) the event to stay happy,” or focusing their attention on other enjoyable things to prolong happiness. Tactics for avoiding bad experience included “avoid doing anything wrong.” These strategies were perhaps the most congruent with the notion people strive for positive emotional experiences opposed to negative ones. Studies have evidentially supported people being protective of their positive emotional states (Isen, 2003), and when in a positive affective state, individuals seek activities to maintain it. According to a derivative of Regulatory Focus Theory called Regulatory *Fit* Theory, when individuals use strategies that are congruent with their goal orientation (i.e., personal bias towards a promotion or prevention orientation, and in this case it would be approach strategies in a promotion orientation), the resulting emotion (happiness) can be even more intense, and the person feels ‘right’ about the strategy they have employed (Brodscholl et al., 2007; Idson et al., 2004).

Strategies such as apologising (suggested 10% of the time in the No Loss scenarios), and giving a share of the reward (suggested 12% of the time in the Gain scenarios) are usually strategies used to regulate guilt-related emotions. Despite happiness being reported more frequently in these conditions, guilt was reported in the Gain outcome 9% of the time (out of emotions reported in the Gain outcome) and in the No Loss outcome 23% of the time. Responses such as “happy and sad” suggested that some children in this study had yet to develop the emotion knowledge to describe their feelings. Secondary emotions such as guilt, shame and embarrassment are considered social emotions (Barrett & Nelson-Goens, 1997) or “self-conscious emotions” (Lewis, Alessandri, & Sullivan, 1992) that require cognitive capacities in which the child was reflective of their self-behaviour. The ability to be self-reflective is possible from as

early as 18 to 24 months of age (Lewis et al., 1992); however children around eight years of age continue to offer a larger proportion of responses like happy or sad when making emotional inferences (Thompson, 1987). Guilt can be elicited in children of this age when situations required effort and resulted in a negative outcome (Thompson, 1987).

### ***Changes in emotional intensity***

Asking for the intensity of emotion before and after regulation indicated the function of the regulation strategy (up-regulation or down-regulation). All emotion regulation strategies were perceived to be effective in reducing emotional intensity; particularly the Loss outcome which showed greater changes in emotional intensity between Time 1 and Time 2. As less change between Time 1 and Time 2 was reported in the Gain condition, this indicated children used strategies in order to maintain or prolong commonly reported positive happy emotions (e.g., focus on or maintain the emotion) as anticipated.

### **Fairness**

Children considered all scenarios to be unfair. The Loss condition was ranked as being the most unfair, followed by No Loss, No Gain, and Gain. By contrast, Cropanzano and colleagues (2008) found the No Gain condition was considered the most unfair outcome; and not ranked third. Of note, the prevention-focus conditions were ranked before the promotion-focus conditions, and this finding was incongruent with Regulatory Focus Theory. It instead supports the loss aversion principle where losses are experienced more intensely than gains of similar objective magnitude (Lieberman, Idson, & Higgins, 2005). This means that for children concerned with maintaining the status quo (i.e., the way things ideally ought to be) they will demonstrate protective behaviour and will find it more unfair when they encounter a

loss of the status quo. However, when taking the average level of emotional intensity across emotions into consideration, the Gain and Loss conditions had the highest intensities, which was congruent with the principles of Regulatory Focus Theory.

The individual responsible for the unfair event differed in each of the motivation types. In the promotion-focused orientations, the teacher was more often than not assigned responsibility for the unfairness. In the prevention orientations, the peer involved in the scenario was attributed responsibility despite the teacher having control over the process of events. In families, Yamaguchi (2009) had similarly found that siblings (or peers) are blamed for unfair transgressions more often than parents. Furthermore, children were forgiving of their mother's transgressions despite the mother's behaviour being unfair (Yamaguchi, 2009). Research evidence has found young children hold ideals that are conducive to adult caregivers having a protective role. Other theorists in the attachment literature have referred to these ideals as "working models" (Bretherton & Munholland, 2008). The same could be applied to teachers as caregivers where teachers are perceived by children as making efforts to foster a fair and just classroom environment. The literature suggests children hold ideals about their caregivers and these ideals relate to children's regulatory behaviours (Sroufe, 1997, 2005; Toth, Cicchetti, & Kim, 2002). A need for trust in their caregiver is important for children's ability to resolve emotional conflict (Denham, 1998; Gottman, 1997). However, further research would be required to determine whether these associations took place in this study.

### **Strengths and Limitations of the Study**

Exploring children's responses qualitatively had some benefits in that I was able to ascertain rich descriptions of how children regulate emotion in different circumstances. A limitation of this design was it did not allow for strong comparisons

which can be offered by adopting a quantitative procedure. While it was found children generally understood the scenarios, there were still a few who missed the procedural violation in their recall of the story. This refers me to the literature that questions children's cognitive abilities in recalling complex behaviours such as emotion regulation because of their developmental age (Zeman et al., 2007). Having the ability to understand how another individual is feeling forms the basis of understanding how another person could regulate their emotion, and this was a limitation of using interview methods with children as these notions were asked of children in Studies One and Two. As the approach thus far was limited by children's ability to perceive emotions and emotion regulation strategies in other individuals, another methodology was proposed in the next study for exploring emotion regulation strategies in unfair classroom situations.

Anecdotal reports from participants indicated that they enjoyed reading the stories and found the stories easy to understand. When considering other variables involved in this research, the eight scenarios used to gather perceptions of emotion and emotion regulation were generally well understood by participants. These factors contributed to the advantages of using vignettes, as this method also allowed children to disclose emotion and emotion regulation strategies without the risk of harm caused by experiencing distressing emotion.

Using varied scenarios was another limitation of this study as it appeared as though emotion regulation strategies could have been related to the different stories used (i.e., computer, class monitor, swimming pool and friends farm visit) rather than direct RFT principles. Having a single scenario framed in four different outcome conditions would have been a more useful way of exploring emotional reactions and subsequent regulation strategies. Perhaps future studies could take this point into consideration when undertaking this research.

## **CHAPTER FOUR**

### **BRIEF SUMMARY OF STUDIES ONE AND TWO: FURTHER CONSIDERATIONS**

The two studies aimed to ascertain children's range of emotions and emotion regulation strategies in different unfair situations, written using principles of Regulatory Focus Theory (RFT). RFT proposes our individual goal orientation (either promotion-focused and prevention-focused) and its outcomes (No Gains, Gains, Losses and No Losses) resulting from goal achievement or non-achievement, are associated with different emotional responses. Individuals in a promotion orientation tend to experience cheerful emotions when they achieve gains, and discouraged emotions when they fail to achieve gains (Higgins et al., 1997). Individuals in a prevention orientation experience quiescent emotions when they successfully prevent losses and agitated emotions when they fail to prevent losses (Higgins et al., 1997). These terms were considered to be inappropriate for the group of participants involved in this study, as responses given included more simple emotion terms such as sad, mad, annoyed, happy and good.

The vignette study was a useful method for eliciting these emotional responses to different unfair situations framed using RFT principles. However, the vignette study did not indicate clear patterns of emotion regulation responding, i.e., approach and avoidance strategies, to different unfair situations as anticipated. More approach strategies were reported than avoidance strategies in each outcome. Nonetheless, some emotion regulation strategies were suggested more than others in each of the different goal outcomes.

As the scenarios were explicitly designed for this research, it was important to consider whether they appropriately captured the principles of RFT in each story. As

found in Study One, two scenarios reflected a prevention-focused orientation with an unexpected Gain rather than a No Loss outcome. Initially it was thought the confusion also affected the mixed responses given for emotion in Study One; however, mixed emotions (happy, sad and guilty) were similarly reported in Study Two. The majority of children recognised a violation of fairness, which was another important factor to consider in these studies. Children found experiencing loss when trying to prevent loss from happening was most unfair in both studies (despite unfairness being included in all scenarios). The inclusion of a computer-activity based scenario helped children comprehend the situation better, and this scenario was linked to the design of the following study (Study Three).

This vignette approach offered some insight into how children would regulate emotions elicited in unfair situations, but the question remains as to whether children would actually demonstrate the emotion regulation strategies they suggest. The vignette approach used was also limited by the requirement that children were required to make inferences about the emotions and emotion regulation strategies in other children. Using a multi-method approach is recommended in the investigation of emotion (Cole et al., 1994; Zeman et al., 2007) and emotion regulation (Calkins & Hill, 2007); therefore another methodology was proposed. In the literature, experimental paradigms used to explore perceptions of fairness and emotional responses have included behavioural tasks (Hessler & Katz, 2007; Santelli et al., 2009). These behavioural tasks offer an alternative approach to the study of emotion regulation in unfair situations.

## **CHAPTER FIVE**

### **STUDY THREE: CHILDREN'S EMOTIONAL RESPONSES AND EMOTION REGULATION STRATEGIES IN AN UNFAIR EXPERIMENT**

A research method with good validity in eliciting judgements of fairness and subsequent emotional responses using RFT has involved an ambiguous computer task. The authentic experience of fairness-related emotion and immediate familiarity with their experience of fairness, emotion, and emotion regulation is an advantage to using a behavioural task, particularly in research with children (LoBue, 2009; Zeman et al., 2007).

In this case the task instructions establish the motivation condition. The task instructions are framed according to promotion-focused and prevention-focused goal orientations and whether the goals were met or not form the expected outcome conditions: No Gain, Gain, Loss and No Loss. For manipulating the outcomes of the task, the participant completed an activity requiring effort, which was scored, and a threshold score was required in order to receive or keep a prize (Santelli et al., 2009; van den Bos, Maas, Waldring, & Semin, 2003). Computer tasks have been useful for controlling outcome variables in studies that have applied RFT. Unknown to the participant, the scores were predetermined and incorporated into the computer activity.

For manipulating fairness, earlier studies have used confederates. This involved informing participants their computer was connected to another computer located in another room, where a confederate, either another participant (Santelli et

al., 2009) or researcher (e.g., van den Bos et al., 2003), was situated. Similar to the infamous Milgram study, the participant and the confederate formed a ‘team,’ when in reality there were no other participants involved. An example of judging fairness using this design included the participant evaluating whether their team member had made a fair or unfair ‘contribution’ to the team result. This method has been used to explore perceptions of fairness, emotions experienced (Cropanzano et al., 2008; van den Bos et al., 2003), and experiences of forgiveness (Santelli et al., 2009). This research design has yet to be used with children, and a search of the literature found emotion regulation strategies have yet to be explored with adults using this paradigm.

My earlier investigation of emotion and emotion regulation using vignettes informed the strategies that were to be expected in this study. The scenarios about the computer activity that were written for the promotion orientation (i.e., No Gain and Gain outcomes) also provided some information on the emotion and emotion regulation strategies to be expected in this study. It was unfortunate scenarios involving a computer activity were not written for the prevention-focused orientation, and the present study provided the opportunity to explore this. Nevertheless, children suggested seeking another opportunity, seeking teacher support, avoiding bad experience and focusing on or maintaining happy emotion as useful strategies for managing emotion in Ariana’s and Daniel’s stories about the computer activity. More approach strategies were suggested compared to avoidance strategies (i.e., avoid bad experience), and a similar pattern of responding was anticipated in the present study.

## **Ethical and Methodological Considerations**

The ethical implications are discussed here as the deceptive component of this research approach was notable. While authors have cautioned against the use of deception with very young children (Henderson & Fox, 2007), many behavioural experiments of fairness concepts with children continue to involve the use of deception with older children (Lucas, Wagner, & Chow, 2008). With a vulnerable population being of interest in the present study, it was important to minimise possible harm as well as include great benefits for participating. It was for this reason that the following considerations were made in the methodological design.

As unfair situations tend to induce negative emotional responses, the intensity of known emotional responses were considered by consulting findings from the vignette studies. For instance, in Study Two sadness was the most frequently reported emotional response in the computer story with a No Gain outcome. The average level of intensity for sad emotion was rated at 3.7 out of five (with 1 being the lowest and five being the highest). A smaller proportion of angry reactions were reported in Study Two, and the average intensity level was 3.4 out of five. Other factors are also known to mediate negative emotional reactions to unfair events. For instance, anger was more intense in the ultimatum game when unfair offers were made by a human opponent rather than by a computer (Dunn et al., 2010), which implies a computer activity would induce negative emotional reactions at lower intensities than tasks that involve peer interaction.

An ideal situation was explored, one that generated minimal intensities of negative feelings in reaction to a fairness violation and a level of emotional arousal that was significant enough for a child to notice their emotion regulation. The

scenario which generated lower intensities of negative emotion had involved a computer task:

*Scenario:* Ariana is 10-years-old and in Mr. Smith's class. Her math group is working on a math activity on the classroom computer. If she gets all answers correct, then she will be rewarded with house points at the end of the task. While Ariana was working, an error message comes up on the computer screen that reads, "Computer Error: Your answers were not scored properly." (...) Ariana found that her score was not 100%, and Mr. Smith did not reward her with house points at the end of the task.

Children gave reasons why this scenario was given a lower rating and related it to the computer having responsibility for the scenario being unfair despite the teacher's involvement in the unfair transgression. As such, children reported that the main character (in this case Ariana) would have found it easier to regulate their sad emotion despite a violation of fairness and the outcome resulting in no gain. The use of this computer-based task was ideal as earlier studies have supported a similar design in exploring RFT, fairness and emotional reactions with adult participants (Dunn et al., 2010; Santelli et al., 2009; van den Bos et al., 2003).

Intentionally subjecting children to an unfair experience raised some ethical concerns. It could be said that the degree of the fairness violation proposed in the computer activity was relatable to everyday experiences with computer tasks where people generally experience unexpected crashes and negative emotions such as frustration. My earlier vignette studies found children often sought help from the teacher to repair the unfair event, and this was a significant approach to managing negative emotion. Thus, this strategy was incorporated into the research design,

particularly as debriefing and rewards are a significant part of the research process for children (Fargas-Malet, McSherry, Larkin, & Robinson, 2010). Additional strategies for repairing an unfair event found in the literature included offering children the opportunity to express or discuss issues related to the unfair event (Geddes, 2003). Validating the unfair event occurred and normalising children's subsequent emotional reactions was another effective strategy. This was more important for older children (i.e., in fifth grade or 11 years of age) who tend to experience guilty emotions in unfair events compared to their younger peers (i.e., in second grade) (Ferguson, Stegge, & Damhuis, 1991). Therefore, when intentionally creating an unfair transgression, an opportunity to discuss and resolve the unfair event as well as validation of emotions are important strategies in the reparation process and to be considered in unfair research tasks.

Another consideration was for children to have good opportunity to share their emotional responses as past research has found children generally withhold information about emotion in research studies (Docherty & Sandelowski, 1999). Providing children with the opportunity to respond anonymously about how they feel could improve their reporting of emotion and emotion regulation.

### **Research Question**

The combination of the aforementioned ideas lead to the present investigation, to find out whether a simulated unfair situation can elicit perceptions of emotion and emotion regulation in primary school children. My investigation asked two questions: what emotions are experienced by children? What emotion regulation strategies do children employ to manage their emotion?

## **METHOD – PILOT**

Ethical approval was received from the Massey University Human Ethics Committee (10/32). The committee did not raise concerns regarding my ethical considerations.

The aim of the pilot study was to assess the feasibility of the research method proposed, particularly as the computer activity was specifically designed for this research and had not been tested in a classroom environment.

A classroom of 12 senior children (8-12 years old) from a small rural primary school in the Manawatu (<100 pupils) volunteered to participate in the trial of the computer task. Consent was sought from the school and parents. On the day of the activity, participants were introduced to the nature of the task and confidentiality of results and group discussion was explained. Computers were located around the classroom and each participant was provided with a compact disc that was loaded with the computer task on it.

Issues that arose included (1) poor screen resolution on the small HP mini notebook computers so that some questions were cut off on the screen; (2) some computers did not have a compact disc drive and in these cases the task was loaded onto the computer with a USB drive; (3) some computers did not have the latest flash player plug-in so the activity on the website did not load onto the screen; and (4) a group of 12 children was too large for the task and group discussion to run smoothly. The feedback from the pilot activity generally supported that participants found the task enjoyable. The experiment took one hour to complete, and the data collected were not used in the present study.

## **METHOD – MAIN STUDY**

### **Participants**

Fifty-two children in Years Four, Five and Six (Grades 3-5 in the USA) from three local state primary schools in the Manawatu area gave written informed consent to participate in the study. All schools in New Zealand are divided into deciles based on the socio-economic level of the surrounding communities, with one being the lowest income level, and 10 being the highest. The decile values for these schools ranged between seven to 10, with an average decile rating of 9. It was noted the schools involved had higher socio-economic levels than my previous studies.

Participating in this study, 54% were male, 46% were female. The mean year level was 5; 25% were in Year Four, 31% in Year Five, and 44% in Year Six. Age ranged between eight to 11 years, and the mean age was 9.8 years. In this study, 54% were NZ European/Pākehā, 12% Māori, 17% both NZ European and Māori, 8% Pacific Island, and 9% identified with another ethnicity.

### **Recruitment**

A new list consisting of 10 randomly selected schools was constructed for soliciting participation in this study. Schools that participated in the earlier studies were excluded from the recruitment list. These included schools who previously expressed that they would not like to participate in this research. Schools were also excluded from the list if English was not the primary language in the school (as the computer activity was in English).

Initial contact with school principals was made over the telephone. A meeting with school principals was arranged to discuss the nature of the research project and in some cases, participating teachers. Any concerns were addressed in this meeting.

Schools who expressed interest in the study were provided with information brochures for the school and teachers (Appendix I). Of the schools invited to participate, 57% accepted the offer. Feedback for non-participation was related to school commitments to end-of-year activities.

Teachers gave out information packs containing an information brochure and consent forms for both students and parents (Appendix J). The parent letter was sealed inside an envelope, and the child letter was attached on the outside. There was a minimum one-week period for children and their parents to return the consent forms to the school. Signed consent forms indicated voluntary participation in this study. The response rate for returned consent forms from children and their parents ranged from 22% to 48% with an average of 33% returned consent forms. After receiving their consent forms, four children did not participate in the study. Three of these children had learning or physical impairments that would affect their performance on the task, and there was the possibility of causing more emotional harm to these children than was necessary. One child was absent for an extended period of time during the data collection process. Unfortunately, two sets of data were also lost due to technical difficulties. The resulting sample size (N) was 52.

## **Materials**

A computer program was developed in the School of Psychology department. The program was designed to incorporate a math task found on the BBC Schools website and bring upon an error message at a predetermined temporal point. The activity involved simple addition, and dragging two pieces to form a sum of 20 (see Appendix K for further explanation).

The program was loaded onto a compact disc and USB drive. After the task, children answered questions surrounding emotions experienced, emotion regulation

strategies, and fairness on the computer program. A printed version of the questions was also made available (Appendix H). The stationery prizes awarded at the end of the task (during the debrief) consisted of university branded pens and stickers.

## **Procedure**

The experiment began with introductions. To verify whether the validity of the task had been compromised, I asked participants what they knew about the upcoming task. No participants said that they were aware of the computer glitch in the activity. However, two participants were aware that the stationery prize was a pen. Then the nature of the task and confidentiality were explained to participants.

When in groups, participants were asked to establish group discussion guidelines. The guidelines included, (1) not disclosing the group-discussion to non-participants (I highlighted that it was possible to say something very general about the topics discussed but not provide details and not to identify individual members of the group); (2) when sharing a personal event with the group, be sure to omit identifying information such as names; (3) be sensitive to other individual experiences, as some members may be upset or offended by another's comments; and (4) we would focus the discussion on examples of emotion and emotion regulation related to unfair events in school rather than outside of school. These guidelines are supported by Greene and Hogan's book on *Researching Children's Experiences* (2005). Participants were provided with the opportunity to have their questions answered and were asked how they were feeling before beginning the task, and whether they had experience in playing computer games. An administration guide was compiled to outline the procedure involved (Appendix K).

Those who consented to continuing with the experiment were allocated a computer to work on. All children continued with the task. The task was conducted

on the computer, instructions were given at the beginning, and further instructions were given as participants progressed through the task.

At the beginning, participants were instructed that they needed to have two raffle tickets to receive a small stationery prize. The goal orientations were framed using different task instructions. Participants assigned a prevention orientation were given two tickets at the beginning of the activity and told they needed to score over 90% to keep both tickets. Successfully scoring over 90% resulted in a No Loss outcome, and scoring less than 90% resulted in a Loss outcome. Participants assigned a promotion orientation were given only one ticket at the beginning of the activity and told they needed to score over 90% to gain one more ticket. Scoring over 90% resulted in a Gain outcome, and scoring less than 90% resulted in a No Gain outcome. No participant reported having difficulty with the task. Some participants required more instruction than others, but were able to spend the majority of the time completing the task on their own. The No Gain condition had 13 participants, 14 were in the Gain, 13 were in the Loss, and 12 were in the No Loss.

Table 6

*Summary of Outcomes*

<b>Goal Orientation</b>	<b>Score</b>	<b>Goal Outcome</b>	<b>Tickets</b>
Promotion	Score < 90%	No Gain	No tickets gained
Promotion	Score > 90%	Gain	Gained 1 ticket
Prevention	Score < 90%	Loss	Keep 2 tickets
Prevention	Score > 90%	No Loss	Lose 1 ticket

After the task instructions were given, children entered demographic information including their gender, year level, ethnicity and age. Children

participated in the math activity and five minutes into the task an error message appeared on screen reading: “Error: Failed to read and score responses accurately.” This message was part of the program. Participants had the opportunity to click on the ‘okay’ button and their score appeared afterward. Due to the error message appearing prior to scores, it was anticipated that all participants would believe their scores were unfairly generated.

As the participants completed the task, I noted their behaviour. Reactions to the error message were recorded in the notes. Some participants had alerted me and sought guidance for what to do next. In these cases I asked the participant to read the message, and asked them what the message indicated. When further bids were made, for example, “What do I do now?” I replied, “We will have to see what score the computer gives us and use that score for now.”

Then participants completed a questionnaire about emotions, fairness, and emotion regulation strategies on the computer. Questions were also available in printed form in the case where computer screen pixels were not adequate enough to contain the emotion-related questions at the end of the task. The written questionnaires were used in five cases (Appendix H).

After completing the questionnaire, some children continued playing the math game. When everyone had completed the questionnaire, we held a discussion that focused on talking about participant’s perceptions of the game in terms of fairness, emotions, and “How did I help myself feel better?” We also explored other examples of classroom situations where we are required to “help ourselves feel better.” It was also decided as a group, that all participants would receive a small stationery prize to resolve the unfair computer glitch that took place, and I introduced this as a resolution.

*Debrief.* When debriefing participants, I acknowledged the situation was unfair and offered participants another chance to complete the maths task to see if they could get a better score. I also asked participants how they were feeling at the end of the task.

The following plan was set in place for occurrences when children disclosed issues of personal safety during the course of the interview. At the time of disclosure, the interview will be suspended and children will be asked questions to assess for any immediate safety risk. Children will also be informed about having to breach confidentiality for concerns regarding personal safety and to prevent any further harm to them. It will depend on the situation whether the interview will continue following this discussion. Then depending on what was appropriate or established in the school, either the classroom teacher or school principal will be notified immediately or after the interview. This was not required in this study.

Once the data collection phase was completed, initial feedback was given to the teachers and school principal following the data collection process. A brochure of preliminary findings was provided to the parents. Parents had the option of having the findings delivered to a postal address, or to the school.

## **Data Analysis**

The majority of the data were in text file format and they were copied into the PASW software version 18.0 for analysis and Microsoft Excel for generating graphs. The written responses were manually entered into the program.

### ***Data reduction/coding***

Emotion and emotion regulation strategies were open-ended responses, and thus coded for quantitative analysis. Emotion answers were coded “1” for sad, “2” for angry, “3” for happy, “4” for guilty, and “5” for other. The emotion tree from

Study One (see Chapter 2) was used to categorise emotions. When more than one emotion was given, e.g., “Sad and angry,” then the first emotion was coded. “Other” emotions were subsequently excluded from the emotion analysis as a review of answers indicated that they were not actual emotions (e.g., ‘hungry,’ or ‘dumb’).

Responses for emotion regulation strategies differed to my previous studies, as children’s self report required them to write the strategy rather than talk about it. Emotion regulation strategies were coded into first level regulation strategies and second-level approach or appraisal strategies. Approach strategies were defined as efforts and behaviours that were directed towards the emotional response or unfair event (Elliot, 2006; Elliot & Pekrun, 2007). Avoidance strategies were defined as efforts and behaviours that ignored or diverted attention away from the emotional response and unfair event (e.g., “forget about it”) (Elliot, 2006; Elliot & Pekrun, 2007). There were also codes for “both” and “neither.” As I employed a similar system, strategies had similar names to strategy categories in the vignettes studies. The reliability of coding was checked with two other independent coders with at least a postgraduate psychology qualification. The proportion of overall agreement was  $\rho_0 = 0.73$ , and Fleiss’ Kappa was  $\kappa = 0.60$  indicating moderate agreement in coding, indicating moderate agreement.

## **RESULTS**

### **Manipulation Checks**

#### ***Fairness***

Children were asked to rated on a five-point scale how unfair they thought their score was. Five represented most unfair, three represented moderately unfair, and one represented slightly unfair. The highest mean rating of unfairness was for scores

in the No Gain outcome ( $M = 2.54$ ,  $SD = 1.45$ ), followed by Loss ( $M = 2.15$ ,  $SD = 1.07$ ), No Loss ( $M = 1.42$ ,  $SD = .79$ ), and Gain ( $M = 1.43$ ,  $SD = 0.76$ ). A one-way ANOVA found significant differences in unfair ratings between outcome conditions, and the Brown-Forsythe test is reported here as the Levene statistic indicated that the variances were not equal,  $F(3, 36.7) = 3.61$ ,  $p = .02$ ,  $\omega = .36$ . An alpha level of .05 or less was used for all statistical tests in this study. Post-hoc Tukey tests revealed that the No Gain condition was judged significantly more unfair than the Gain and No Loss conditions. No significant differences were found between the No Gain and Loss means of the conditions.

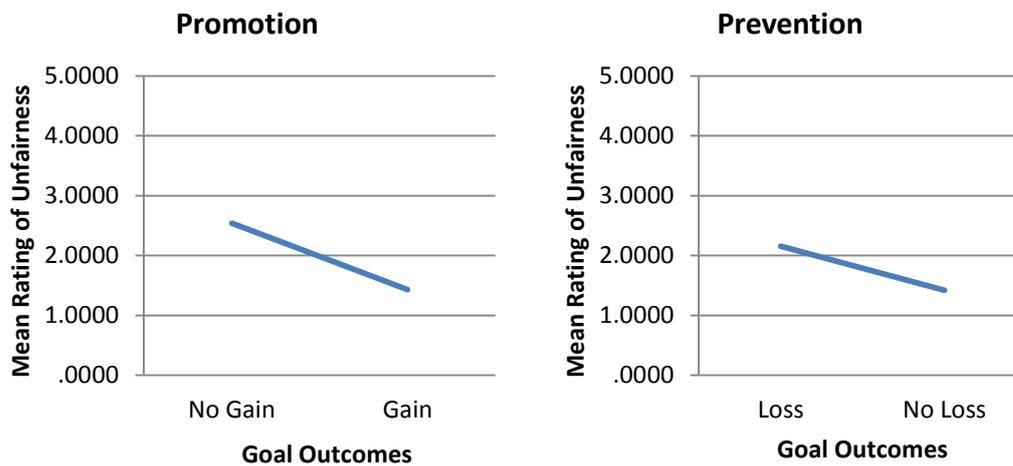


Figure 14. Comparison of mean ratings from 1 to 5 on unfairness.

As depicted in Figure 14, scores associated with non-goal achievement appeared to be more unfair than scores associated with goal achievement. Ratings were statistically compared between participants who did not achieve their goals (received one ticket; No Gain and Loss outcomes) with those who achieved their goals (received two tickets; Gain and No Loss outcomes). As depicted in Figure 15, participants perceived receiving one ticket to be more unfair ( $M = 2.24$ ,  $SE = .26$ ) than receiving two tickets ( $M = 1.56$ ,  $SE = .16$ ), and an independent  $t$ -test found

significant differences,  $t(50) = 2.27, p < .05, r = .31$ . These scores were normally distributed (as determined with the Komogorov-Smirnov test) for both groups, with one ticket  $D(25) = .23, p = .001$ , and two tickets  $D(27) = .38, p < .001$ . The Levene's statistic indicated equal variances.

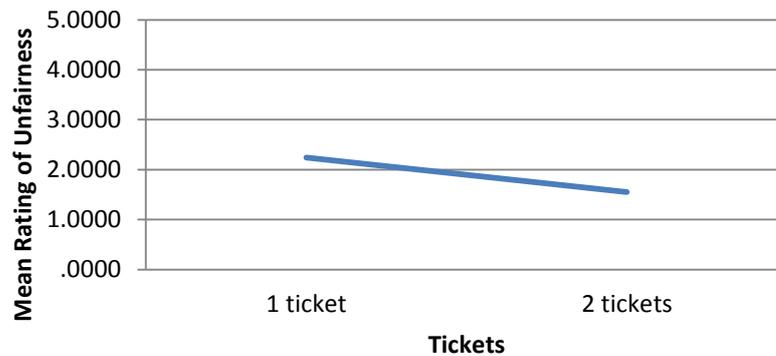


Figure 15. Comparison of mean ratings of unfairness for tickets received.

## Emotion

### *Open-ended emotion responses.*

Responses for the open-ended question to assess for emotional reaction were coded into sad, angry, happy, guilty, and other. Happy emotions were reported more frequently (65.4% of the total emotions reported), followed by sad emotions (13.5%), angry emotions (7.7%), and guilty emotion (1.9%). Other emotions (11.5%) included responses that were difficult to code, for example, “dumb.” The frequencies of open-ended emotion responses reported for each outcome are depicted in the graph below (Figure 16). Happiness was reported more frequently than other emotions in each of the four outcomes. Moreover, happy emotion was reported more frequently in outcomes where goals were achieved (Gain and No Loss; 40.4% of the time) compared to outcomes where goals were not achieved (No Gain and Loss; 25.0% of the time).

When emotions were categorised into valence, the percentage of positive and negative emotions reported were positive 72.7%, negative 27.3% in the No Gain outcome, Gain (0%, negative 100% positive), Loss (88.9% positive, 11.1% negative), and No Loss (91.7% positive, 8.3% negative). The nature of the open-ended question did not allow for statistical comparisons between the groups (goal outcomes).

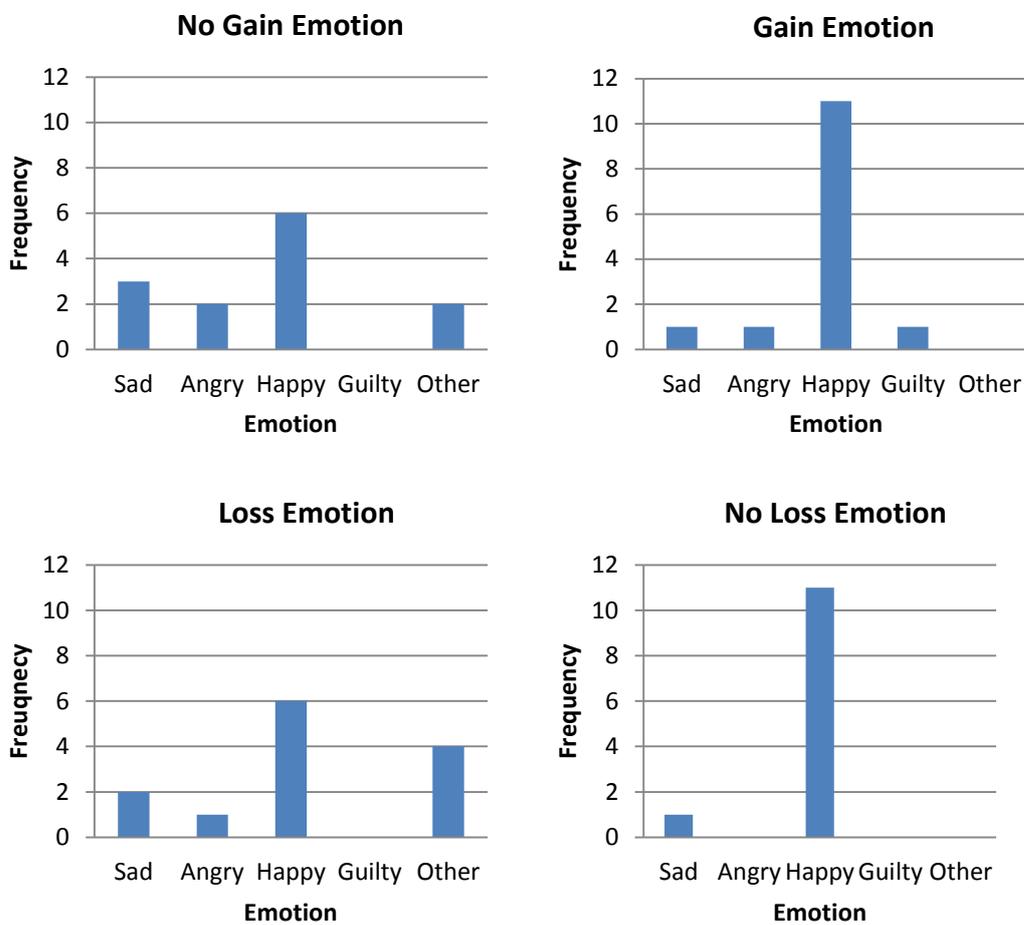


Figure 16. The frequency of emotions given in open-ended question for each outcome.

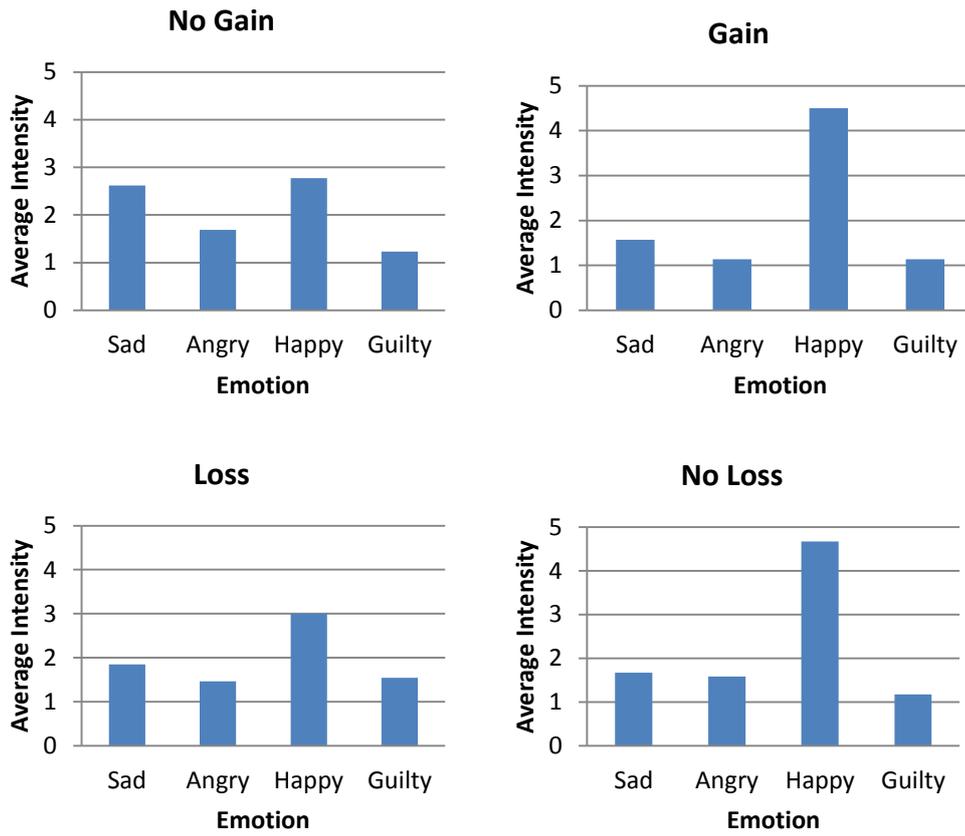


Figure 17. The average intensity of emotion for each of the four outcomes.

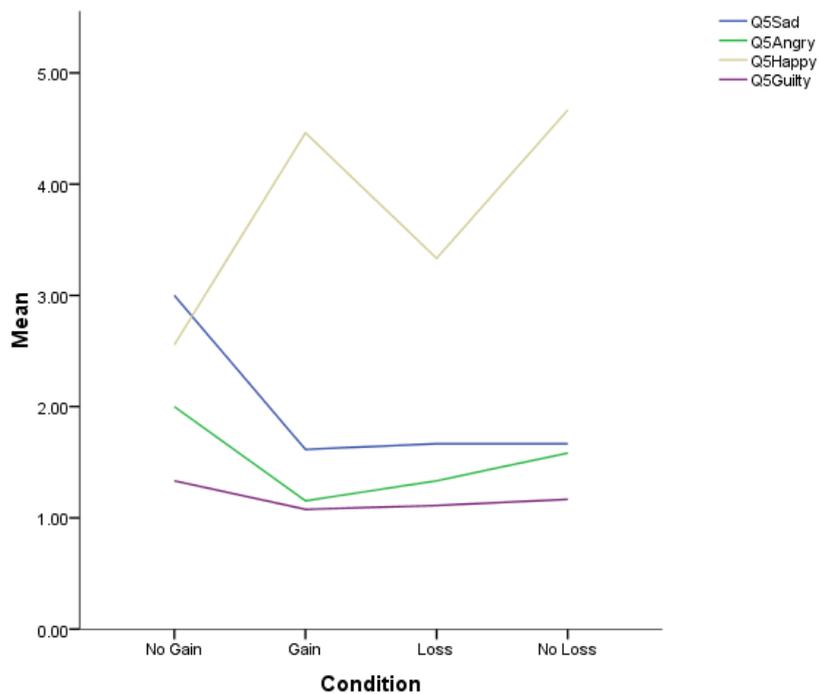


Figure 18. Mean emotion intensity plotted against condition.

### ***Closed-ended emotion ratings.***

Children were asked to rate the intensity with which they experienced the emotion (sadness, anger, happiness and guilt) between one and five (with one representing weak intensity and five representing strong intensity). The emotional intensities reported are depicted in Figure 17.

The assumption of homogeneity of variance for the one-way ANOVA was violated for angry and happy emotions; therefore the Brown and Forsythe *F*-ratio was used to interpret these statistics. There was a significant effect of condition on intensity ratings for only happy emotion,  $F(3,21) = 7.41, p = .001$ , where happy emotion was greatest in the No Loss condition ( $M = 4.67, SD = .49$ ), followed by the Gain ( $M = 4.50, SD = .52$ ), Loss ( $M = 3.33, SD = 1.58$ ), and No Gain condition ( $M = 2.73, SD = 1.49$ ). There was no significant effect of condition on intensity ratings for sad emotion,  $F(3,42) = 2.45, p = .08$ ; angry emotion,  $F(3, 25) = 1.29, p > .05$ ; and guilty emotion,  $F(3, 42) = .26, p > .05$  (see Figures 17 and 18).

### **Emotion Regulation Strategies**

Figure 19 illustrates the frequency of 13 categories of emotion regulation strategies reported for each outcome. Maintaining happy emotion by either thinking about what happened (i.e. receiving a good score) or thinking of other positive things was the most frequently reported strategy for managing emotion in all outcomes. Maintaining emotion in the Gain and No Loss outcomes were reported more frequently than other strategies. In the No Gain outcome, suppression was more frequently reported and in the Loss outcome, cognitive reframing was more frequently reported.

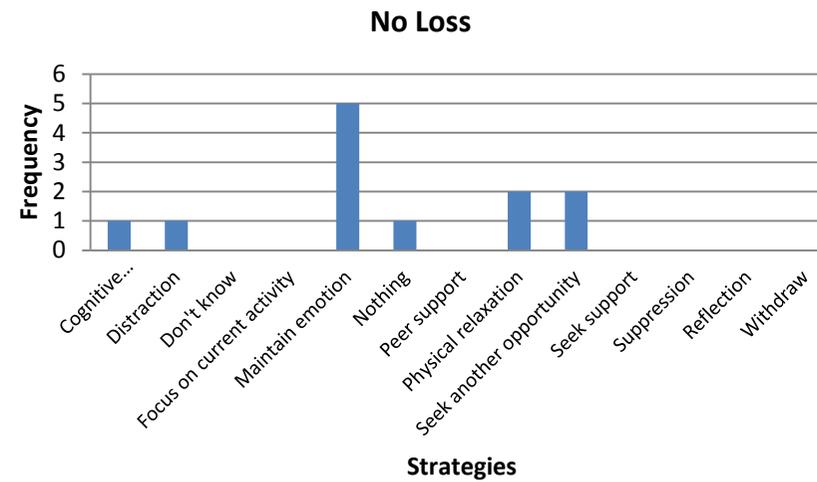
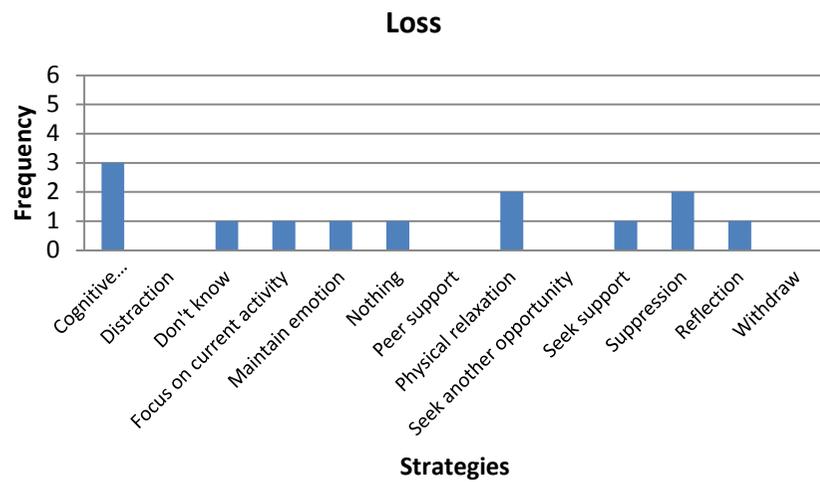
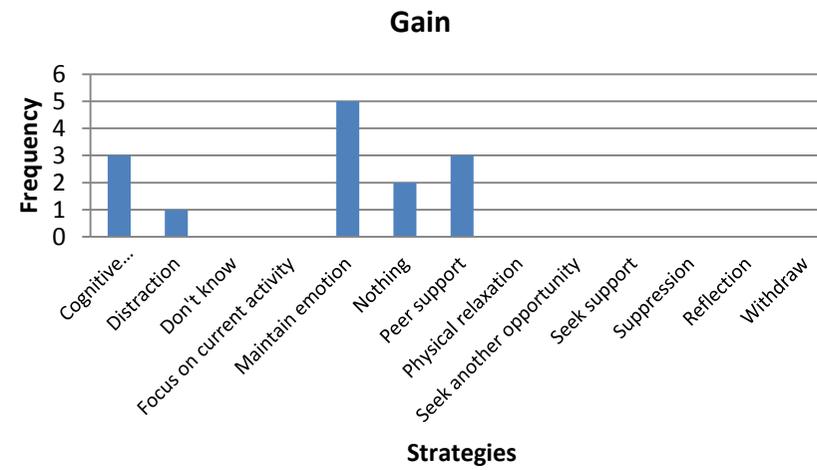
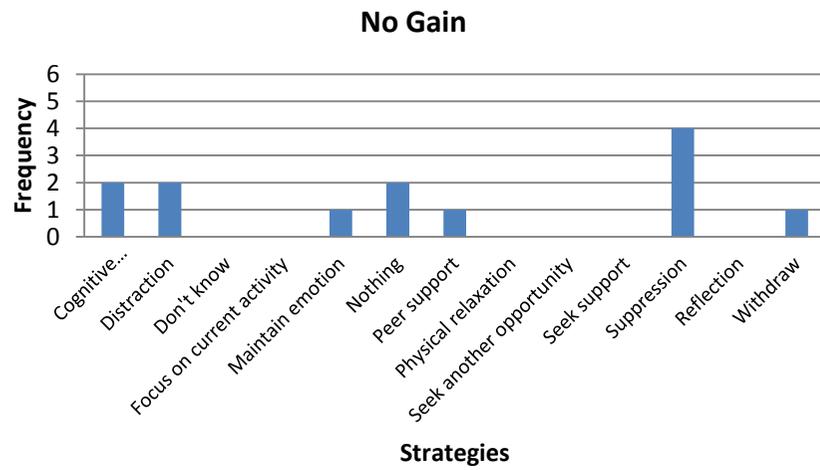


Figure 19. Emotion regulation strategies elicited in each of the four outcomes.

Strategies were also categorised into approach and avoidance strategies and these are illustrated below (Figure 20). Some strategies such as cognitive reframing were classified as either an approach or avoidance strategy depending on the tactic used. For example, “think that I can do better next time,” was coded as an approach strategy as the cognitions attended to the outcome, whereas, “I thought I’m used to it,” was considered an invalidating strategy (a rejection of emotional experience) that indicated avoidance of the unfair event and emotions.

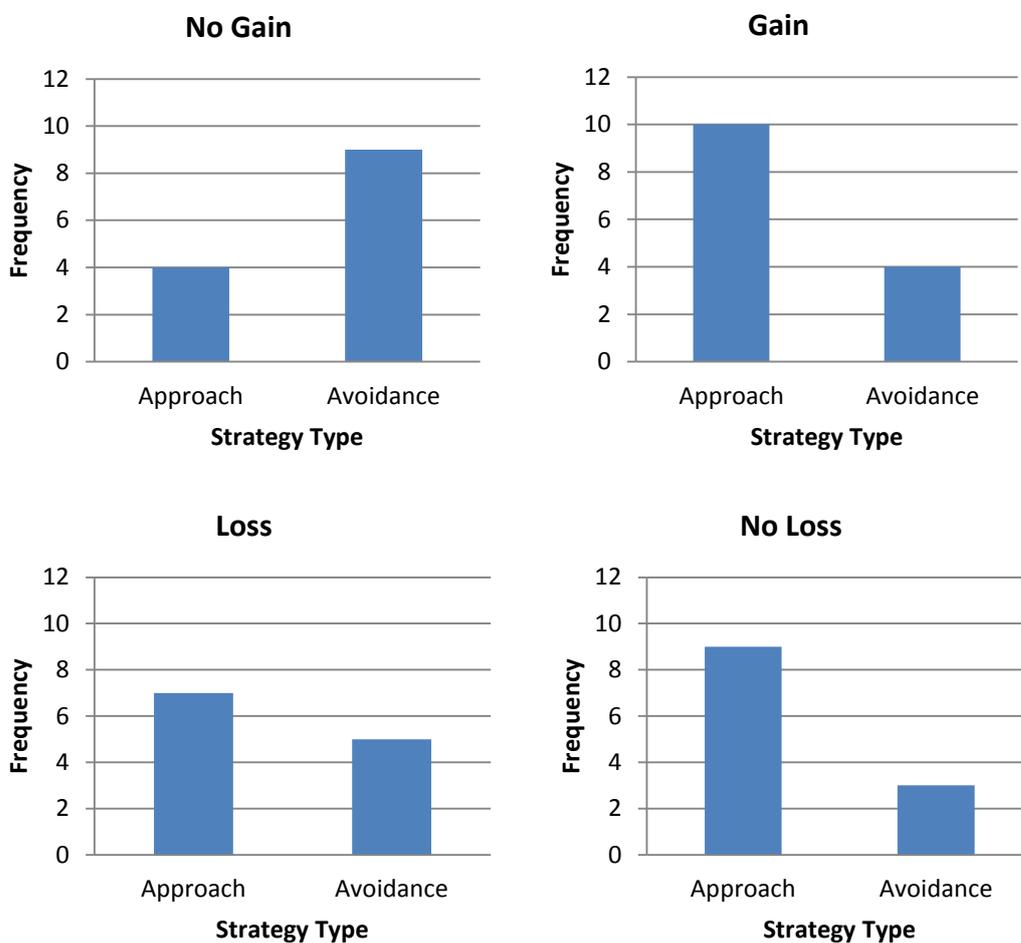


Figure 20. Approach and avoidance strategies for each condition.

More avoidance strategies than approach strategies were reported in the No Gain outcome. More approach than avoidance strategies were reported in the Gain,

No Loss and Loss outcomes. Statistical comparisons of approach and avoidance strategies between the outcomes were not conducted as chi-analyses could not be calculated because cells were not equally distributed.

Types of avoidance strategies reported in the No Gain condition included suppression, distraction, nothing and there was one example of withdrawal. Examples of suppression strategies included, “if I feel sad about something I try to shake it off and if I can't I try harder than I normally feel,” and “I forgot about it.” Distraction involved tactics such as “think about something different,” and “counted to 10.” The response for a child using withdrawal was “hide.”

Types of approach strategies in the Gain condition included cognitive strategies for maintaining the positive emotion and seeking peer support. Examples for maintaining emotion included, “thinking about my score,” and “thought because I got the second raffle ticket.” Talking to or looking at peers were classified as seeking peer support.

In the Loss outcome, the types of strategies were more varied and included cognitive reframing techniques such as “think I can do better next time.” These were classified as approach strategies, whereas “thought that I'm used to it” was classified as an avoidance strategy. Other approach strategies reported in the Loss outcome included maintain happy emotion (for one participant), focus on the current activity “continue playing the math game,” relaxation “just took a deep breath and shook it off.” Examples of avoidance strategies included suppression “cleared it off my mind,” and doing nothing.

Approach strategies reported in the No Loss outcome included one cognitive validation technique “say (to myself) I can do it.” Maintaining emotion was more

common, e.g., “keep thinking positively.” Relaxation “take a deep breath” and seeking another opportunity “keep on going” were also reported.

How easy it was to use the strategy was measured using a five-point scale, where one represented a very easy strategy to use and five represented a very difficult strategy to use. How easy it was to use the strategy was compared between the approach and avoidance types. The Levene’s statistic was not significant at  $\alpha = .05$  ( $F = .001, p = .97$ ), which indicated the assumption of homogeneity of variance was not been violated and an ANOVA calculation was usable. A one-way ANOVA found no significant differences ( $F(1,49) = .37, p = .54$ ) between ease of approach strategies ( $M = 2.50, SD = 1.22$ ) versus avoidance strategies ( $M = 1.23, SD = 1.27$ ) overall.

The mean ratings for ease in which an approach or avoidance strategy was used were graphed for each orientation and outcomes (see Figure 21). These were responses to the open-ended question about ease of strategy use. As shown on this graph, approach strategies appeared to be more difficult to use, except in the No Loss condition.

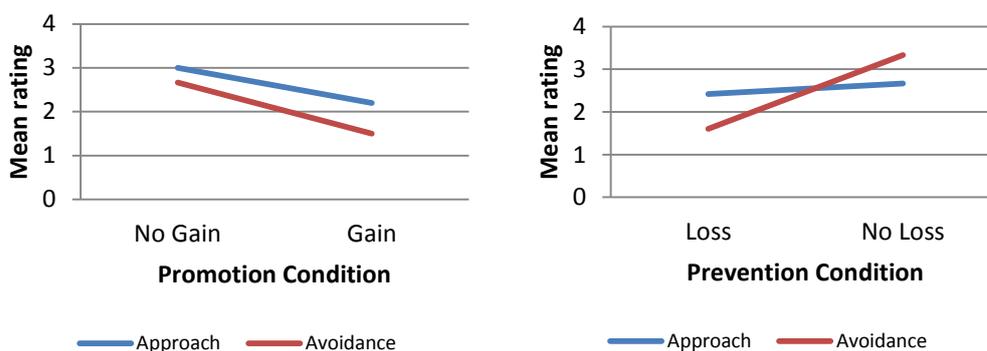


Figure 21. The mean ratings of approach and avoidance strategies for each orientation.

A different pattern was found for the closed-ended question responses to emotion regulation strategies. The closed-ended questions were categorised into eight approach strategies and four avoidance strategies. Figure 22 illustrates the mean rating in how easy it was to use the approach and avoidance strategies (on a five-point scale, where one represented easy to use and five represented difficult to use). The differences in ratings are within one-point of one another and this indicates similar levels of ease of strategy use.

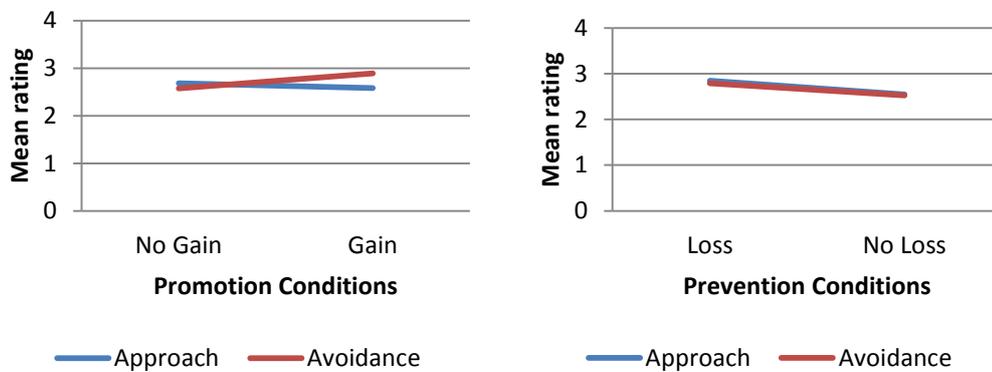


Figure 22. The mean ratings of approach and avoidance strategies collated from the closed-ended questions.

## DISCUSSION

The design of this study incorporated techniques and ideas from earlier research that involved adult participants to ascertain children's emotion and emotion regulation strategies in response to unfair situations. The computer task was a good medium for manipulating procedural fairness (creating unfairness), and eliciting current emotion. Using principles of Regulatory Focus Theory (RFT), this investigation anticipated that children would experience more negative emotions when their goals were not achieved through unfair processes, and more positive

emotions when goals were achieved (through unfair processes). Strategies used for emotion regulation were also ascertained in this study and the following discusses the research findings.

All of the children involved experienced unfairness when the computer glitch occurred, and the experience aimed to increase their awareness for emotions in an unfair situation, as well as improve the accuracy of emotion reported by children. In comparison, not all children would have observed the unfair situation described in the vignettes given in Study Two, and using vignettes relied on children's cognitive ability to recall emotions. This was the benefit of using a computer activity to create an unfair situation as it elicited emotional responses from children more easily.

Sad emotional responses were not reported as frequently as anticipated from findings in Studies One and Two. In this study, happiness was reported more frequently than other emotions (such as sadness, anger, and guilt), and ratings of these other emotions were at lower intensity levels. Ideas proposed in a recent study on the effectiveness of validation could explain the emotional responses reported in this study. Shenk and Fruzzetti found experimenter validation reduced stress-related arousal in participants who were completing difficult math problems; whereas invalidation maintained high levels of arousal as participants completed the problems (2011). Although the computer glitch and message generated unfairness, as the experimenter, my validating and supportive behaviour during the experiment could have positively influenced children's responses to the unfair situation and impacted on their regulatory processes without their awareness (as it was not reported as a strategy used in this study). Research has shown children around eight years of age take into account whether the transgressor had just or fair intentions or motivations, and justify an unfair event as being fair because the transgressor portrayed a good

sense of morality (Krcmar & Cooke, 2001). This could also mean children did not perceive the scores obtained in the computer activity to be significant violation of fairness. There is literature to support the idea happiness can be felt in unfair situations when the participants perceived small violations in the fairness of the procedure (Krehbiel & Cropanzano, 2000; Weiss et al., 1999). When procedures are conducted fairly, people generally adapt better to unwanted outcomes (van den Bos et al., 2001). Future research could consider the impact of experimenter behaviour when trying to elicit unfairness.

The size of the reward involved was another possible factor contributing to more happiness reported than sadness or anger (for outcomes where the goal was not achieved). The prize was a mystery to most participants; however, some children were aware they would receive a pen prior to participation as they witnessed their peers returning to the classroom with one. Whilst extrinsic rewards are perceived to have a greater effect on perceptions of fairness than praise (Thorikildsen et al., 1994), children's perceptions of fairness can be influenced by the magnitude of the reward and punishment in the scenarios (Evans et al., 2001). A more substantial reward may have elicited negative emotional responses to the computer glitch more frequently in situations where children's task goals were not achieved (i.e., No Gain or Loss).

When considering these aforementioned variables, it is understandable why fewer angry emotions were reported, and Cropanzano and colleagues (2008) also could not generate sufficient levels of angry reactions to unfair situations. The issue may be the inability to elicit angry emotions intense enough for comparison. However, eliciting angry emotions in research is an ethical issue as intentionally generating intense negative emotion in an individual where it could cause more emotional harm than good, particularly in those children who reported maladaptive

regulation strategies (such as “seek revenge” in Study Two), poses a problem. Children’s knowledge of social rules for emotional expression could also account for why anger was less frequently reported (Shipman et al., 2003). However, anger resulting from unfairness has been reported in past research studies, for example, anger was proposed to be the primary emotion responsible for the rejection of unfair offers in the ultimatum game (Yamagishi et al., 2009). Anger is a widely accepted reaction to unfairness in the literature, so it is possible to elicit anger for an investigation of emotion regulation. Consideration for these variables discussed would be important for future research.

Only one child reported feeling guilty after gaining a ticket through an unfair process (Gain outcome). One possible explanation was that the computer activity and prize did not generate significant feelings of guilt. Another explanation was children of this age group reporting feelings of guilt depend on their emotion knowledge and ability to express self-conscious emotions such as guilt. Denham proposed children in the middle childhood age described guilt as, “feeling bad about (their) performance,” (1998, p. 39). However, feeling *bad* is classified in the sad category of the emotion tree used for this research (Storm & Storm, 1987). The child who reported feeling guilty as a result of a Gain outcome was older in age. Whilst some children have the cognitive ability to express they are feeling guilty, this does not mean to say other children do not experience these feelings of guilt as well.

The level of happiness as well as judgements of unfairness differed between the outcomes, and as levels of happiness increased, children’s judgements of unfairness intuitively decreased. Levels of happiness were lowest in situations where individuals failed to gain tickets and this situation was judged as being the most unfair (No Gain). This was followed by situations where individuals failed to keep

their tickets (Loss); happiness levels were slightly higher and judgements of unfairness were similar to a No Gain outcome. Situations where individuals successfully gained a ticket (and reward) in an unfair process (Gain) followed in terms higher happiness levels, and lower judgements of unfairness; and finally, situations where individuals successfully kept their tickets (No Loss) was judged the least unfair and had the highest levels of happiness.

The significance of the No Gain outcome being more unfair than other outcomes contradicts principles proposed in RFT where Losses are experienced more negatively. The result also contrasts findings from the vignette study, which found the Loss outcome was considered to be the most unfair situation compared to other outcomes. It can be suggested from this finding that children are reward dominant and consider it more unfair to miss out on a deserved reward (No Gain) compared to receiving a undeserved punishment (Loss), as supported in findings in other studies (Evans et al., 2001). Cropanzano and colleagues' (2008) study similarly found the No Gain was perceived to be the most unfair outcome. Attending to the receipt of rewards could account for why a No Gain outcome was perceived to be more unfair than other unfair outcomes. However, this study involved a small sample and further research would be required to support this idea. It is possible, with a larger sample size that the Loss outcome could be perceived to be more unfair than other outcomes, as found in the main vignette study (Study Two).

### **Emotion Regulation Strategies**

Approach and avoidance strategies reported by children differed in frequency for each of the four goal outcomes. More approach strategies compared to avoidance strategies were reported by children for outcomes where goals were achieved (i.e., Gain and No Loss). Examples of approach strategies included seeking support from

a peer (“looked at my mate,” and “talk to the others”), maintaining emotion (“think about it,” “I told myself I got 97,” and “keep thinking positively”). Seeking support is a well established as an effective strategy for managing emotions; however, this strategy was reported less often in this study compared to the vignette studies. Gross and Thompson (2007) have stated that emotion regulation strategies are context dependent, and many situational variables found in this study may have affected these findings. For instance, children were working independently on the computer activity rather than groups; thus giving limited opportunity for the use of seeking social support strategies. Furthermore, seeking help with regulation from the teacher was not available as the classroom teacher was not involved in the study, and my relationship with the participating children was not as well developed. Therefore, children were more likely to seek support from their peers as they had closer bonds with them. The absence of having a teacher available may have accounted for less social support strategies reported in this study.

Maintaining emotion in the Gain and No Loss outcomes was reported more frequently than other strategies and was considered an approach strategy for regulating emotion. Additional examples of maintaining emotion included, “think about happy things,” and “thinking about my score.” Deliberate attention to a pleasant experience is considered a cognitive savouring technique (Bryant et al., 2005). Using savouring techniques is associated with benefits such as improved self-esteem (Wood, Heimpel, & Michela, 2003) because individuals are attending to positive attributes of the event. Moreover, maintaining positive emotions is a strategy beneficial for the short and long term; by cultivating positive emotional experiences the individual is able to develop resilience to stress (Tugade & Frederickson, 2007). This is a strategy reported in earlier research and theoretically

can be used in three ways that draw attention to feelings: (1) in anticipation of upcoming positive events; (2) when appreciating present positive events; and (3) when reminiscing about past positive events (Bryant et al., 2005).

When a goal was not achieved, more avoidance strategies were reported for the No Gain outcome and slightly more approach strategies than avoidance strategies were reported in the Loss outcome. Suppression was an example of an avoidance strategy used in the No Gain outcome, and this type of emotional disengagement is proposed to be an effective short-term strategy for children dealing with mildly negative emotions (Rice, Levine, & Pizarro, 2007). However, suppression used over a long period of time, or used as a regular strategy for coping with negative emotion can be counterproductive and harmful to long-term social functioning (Henry, Rendell, Green, McDonald, & O'Donnell, 2008). A principle found in Acceptance and Commitment Therapy is that suppression of unwanted feelings and thoughts can often lead to the person experiencing more intense emotion or an increase in unwanted thoughts after a period of time (Blackledge & Hayes, 2001; Clark, Ball, & Pape, 1991), thus prolonging as well as intensifying emotional experience.

Other avoidance strategies reported in the No Gain outcome included distraction, doing nothing and there was one example of withdrawal. Similar to suppression, these strategies are thought of as being effective in the short term, but when used as a strategy in the long term, they are also harmful to social functioning and outcomes in later life related to well-being.

In the Loss outcome, more varied strategies were reported and in this outcome, cognitive reframing was considered either an approach strategy or avoidance strategy depending on the tactic employed by the child. Compared to suppression strategies, reappraisal was proposed to be a more effective strategy for

managing negative emotions in the long-term (Gross, 2001; Gross & Muñoz, 1995; Gross & Thompson, 2007), and more effective for reducing the physiological experience of emotion (Gross, 1998a).

### **Study Limitations and Future Research Considerations**

Since analysing this data it was decided “thinking about happy things” and “thinking about my score” have two functions in emotion regulation – the strategy could either increase or prolong the emotional experience. This idea has been proposed in the literature (Tugade & Frederickson, 2007), and by not asking children for their emotional intensity after regulation, the function of the regulation strategy was not able to be determined in this study. This was a limitation of this study and something to consider in future research. Similar considerations applied to ‘doing nothing’ and ‘suppression’ strategies, which could be a single category since ‘doing nothing’ is also considered to be an avoidant strategy for coping with emotion (Eisenberg et al., 1993). ‘Doing nothing’ is also considered an emotion regulation strategy that involves suppression of facial, vocal and bodily expression recognised by a dissociation between the expression and physiological symptoms (Gross & Thompson, 2007; Rice et al., 2007). As this study did not ask what emotion or what intensity emotions were felt after regulation, responses for ‘nothing’ could not be assumed to be suppression (and thus avoidant) strategies. An alternative interpretation of doing nothing could include poor insight into the child’s own emotion regulation strategy. These limitations could be considered in future research.

Another consideration was for the scale terms used for ease of strategy, where it would be have been more accurate to have consistent labels on the scale, i.e., labelled the higher value five as more of something, such as very easy to use, and one would be less of something, such as not very easy to use. Alternatively, if

the question referred to difficulty, then five would mean high difficulty. Creating a balance of closed-ended questions for approach and avoidance strategies would also be a consideration for the future, as a disproportionately greater number of approach strategies were used compared to avoidance strategies.

As mentioned in the earlier studies, ascertaining the goal orientations children personally hold (promotion or prevention) would have helped establish whether it affected the emotion regulation strategies reported, or whether responses reflected the goal orientation manipulated in the task instructions. RFT proposes an individual “feels right” when using strategies that are congruent with their goal orientation (i.e., approach strategy in a promotion orientation). This is a consideration for future research.

Research with a larger sample size would have also been preferred. The interpretation of emotion regulation strategies reported were based on frequencies, and it would be good to have the opportunity to do statistical comparisons to support these findings. Nonetheless, the results reported in this study provided a good indication of what emotion regulation strategies can be expected in similar unfair situations to this experiment.

## **Summary and Conclusions**

Using a behavioural experiment provided the opportunity to explore the ecological validity of this research paradigm with children. This study also provided some support for the reporting of emotions, and emotion regulation strategies can differ between unfair outcomes despite all situations being unfair. Thus, an individual’s goal orientation can have an impact on judgments of fairness and regulating subsequent emotional responses to unfair events.

As children have demonstrated here, people do not always approach positive emotions and avoid negative emotional experience. Children who have encountered an unfair Loss used approach strategies to regain their sense of status quo, and similar approaches were used in positive goal outcomes (Gain and No Loss). As supported by the literature, approach strategies such as positively reframing the situation, attending to positive attributes of the event and seeking peer support are effective strategies for managing emotion in the short and long term. However, there are unfair situations where more avoidance strategies than approach strategies were used to regulate emotions experienced when goals were not achieved in a promotion orientation (No Gain). As the literature states, avoidance strategies such as suppression, withdrawal, and distraction may be effective in the short term, but can have harmful consequences on social functioning and well-being in the longer term. This has wider implications for children's emotion regulation and subsequent emotional functioning and long term coping skills in a classroom environment, and these implications are discussed in the final chapter of the thesis.

## **CHAPTER SIX**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **FOR FUTURE RESEARCH**

##### **General Background to this Research**

As life itself tends to bring upon experiences of injustice or unfairness, whether the event is a significant event or minor everyday experience, how children manage these experiences was something I felt could be explored further. The clinical literature on maladaptive emotion regulation abilities or emotion dysregulation strongly supports the importance for children to develop healthy adaptive strategies in their formative years. The aim of this project was to provide some theoretical knowledge to support these clinical outcomes, and ideally further develop our understanding of children's emotion regulation ability.

This project incorporated motivational principles from industrial and organisational psychology research, where goal orientation is assumed to influence emotional outcomes and decision-making processes in adults (Cropanzano et al., 2008). Regulatory focus theory (RFT; Higgins et al., 1997) provided a theoretical paradigm to explore children's emotion regulation in the context of unfair situations. Since writing this research I discovered my ideas had indeed been published in the literature (Tyson, Linnenbrink-Garcia, & Hill, 2009), where the authors refer to achievement goal orientations including mastery, performance-approach and performance-avoidance orientations. Goal orientation was found to be related to academic achievement, and Tyson and colleagues proposed emotion regulation of debilitating emotions (that could arise from unfair classroom situations) moderated this relationship (Tyson et al., 2009). The present research did not look at the

academic outcomes of goal orientation using RFT, but did explore the emotion and emotion regulation concepts in goal orientation. It was encouraging to find others shared similar ideas about a relationship between goal orientation, emotional responding and emotion regulation, and the present research was able to apply these ideas in research. Using several hypothetical scenarios and a behavioural task framed in the four outcomes using RFT principles (promotion- and prevention-focused goals versus whether the goal was obtained or not obtained), children in their middle childhood (between ages eight and twelve years) answered questions about emotional responses, how they would manage their emotion, and whether they believed the scenario or task was fair.

Despite certain limitations in the research project, the methods used worked well with the children involved. Overall, children shared that they enjoyed the experience and some children reported they felt as though they had something to take away (in terms of gaining strategies to manage emotions and affirmation for strategies they already used). The teachers and parents involved reported they valued the opportunity for their children to discuss issues of unfairness or injustice, as well as learning more about emotion regulation or emotion management themselves.

### **Overall Research Findings and Implications**

This research indicated that children's strategies could differ between different unfair outcomes, particularly when methods had ecological validity (for example, an unfair behavioural task). It further supported emotion regulation strategies being context dependent (e.g., vignette scenarios versus behavioural task). The programme of research has also provided support for the notion that emotional responses to unfair situations can differ according to our goal orientation, and this

could explain why different emotion regulation strategies were preferred, but statistical comparisons were not made to further support this.

The greater implications of these findings may involve revising how we educate children on ways to regulate emotion when things are unfair. As found in this investigation, emotion regulation strategies are context dependent, and in the classroom context there are social influences (e.g., peers), as well as expectations established in this environment which inhibit children from expressing emotion freely. With consideration for approach and avoidance strategies, it was understood emotional arousal remains high for a longer period of time when children use avoidance strategies such as suppression. Anecdotal observations from my clinical experience has taught me that some children are referred to professionals for help with disruptive behaviours at home, when in the classroom the child demonstrates no behavioural problems (and the converse has also been observed). Those children who are inhibited by the classroom surroundings and use avoidance strategies for managing emotions, their behaviour at home could be problematic, in an environment where they are more able to express themselves. These may be the children who appear well-regulated to the observer as they are quiet and withdrawn during emotional events occurring in the classroom. This makes it difficult to determine which child requires emotional coaching input from the teacher. It is for this reason that coaching all children to use approach strategies for emotion regulation in a classroom environment should be encouraged in the teaching curriculum. These were recommendations made in a recent New Zealand study of the classroom emotional environment (Evans & Harvey, 2012; Harvey & Evans, 2003).

Caregiver support is well-established as an effective strategy for coping with negative events (Calkins & Hill, 2007) such as unfairness, and teachers are recognised as having this caregiver role (Evans & Harvey, 2012). Children frequently reported seeking support from their classroom teacher as a strategy to help manage emotion in the vignette studies, and it was a preferred strategy for regulating emotions that resulted from unfairness in the context of maintaining status quo, or preventing loss from happening (i.e., a prevention orientation). In seeking teacher support, children tended to make efforts to restore perceived injustice, and this idea has been proposed in classroom justice research (Chory-Assad, 2002). There are schools who implement principles of restorative justice for discipline, where attention is placed on relationships and the restoration of the individual harmed rather than assigning blame or attending to punishment of the offender (Buckley & Maxwell, 2007; Hopkins, 2002; Meyer & Evans, 2012). The reason why restorative justice principles are more effective than traditional methods of discipline in schools, is that the caregivers model principles of safety, fairness, and respect, i.e., the same principles they want their children to possess (Hopkins, 2002). This process would involve acknowledging the event was unfair (provide validation for the child's thoughts and feelings), and discussing possible solutions with the child (offering the child a voice in the decision-making process). By children seeking support from teachers for a resolution to an unfair event, teachers have the opportunity to role model fair and just values to their students.

When caregiver support was unavailable, seeking support from a peer was a preferred strategy for emotion regulation in the behavioural task. Support included an array of particular tactics and simply venting emotional experiences with a peer is an effective emotion regulation strategy (Nils & Rimé, 2012). Its effectiveness

would depend on the listeners' response modes, and venting is generally preferred by girls rather than boys (Zeman & Shipman, 1997). Whether children have the opportunity to seek support from peers in a classroom setting would depend on numerous factors, including opportunity, peer availability and the individuals' ability to communicate. Nonetheless, peer support is encouraged in New Zealand schools, and there are benefits of having social support for mental health (Lakey & Orehek, 2011). This research additionally found support was important for the regulation of emotions.

In addition to seeking support, children spontaneously reported some sophisticated strategies for regulating emotions that resulted from unfairness. For example, in the vignette study acceptance was reported as a useful strategy, "think of it as something that happens in life. Take it as it is. Move on. It only happened once and probably will never happen again." This is a type of response expected from an adult rather than a child between eight and twelve years old, which demonstrates children have the capacity to understand their emotional responses and respond in an effective manner, and that these abilities can be learnt. Teaching children skills to regulate emotion has substantial impacts on later life outcomes, and these ideas are well-supported in the literature. The Dunedin Multidisciplinary Health and Development Study (a longitudinal study conducted in New Zealand) found emotion regulation (which they refer to as self-control) predicted physical health, substance dependence, personal finances, and criminal offending outcomes (Moffitt et al., 2011). Moreover, these effects were extricated from their intelligence and social class. There is also an extensive amount of literature supporting the benefits of adaptive emotion regulatory skills for improved mental health outcomes (e.g., Berking & Wupperman, 2012; Kovacs et al., 2008).

The regulation of happy emotion was also included in this research and regulation served to prolong and enhance children's positive emotional experience (Tugade & Frederickson, 2007). Children reported approach strategies were preferred for maintaining positive emotion (e.g., thinking about the event and thinking of additional positive events); however, avoidance strategies were also suggested for maintaining their positive emotional state. According to RFT, this is possible as strategies are independent of one's systemic goal orientation, and both approach and avoidance strategies can serve a similar goal, in this case, prolonging positive emotional experience. Children regulating happy emotion also showed that children can experience positive emotions in unfair events if their goals were achieved. Another study found when children received an undeserved reward, 89% reported they would feel positive (Evans et al., 2001). Usually guilt and embarrassment are considered socially appropriate feelings for receiving undeserved rewards or avoiding punishment for wrongful behaviour (Evans et al., 2001). An implication of this finding relates to the resolution process discussed earlier. In the event of failure to achieve goals through an unfair process (whether the outcome was a loss or no gain), if the event was judged to be a small violation, teachers could resolve the situation by altering the outcome, by restoring the status quo or make reparations. This is because small violations of unfairness are associated with more neutral affective responses by children (Royzman et al., 2009), and can be resolved more easily by the transgressor. This type of response relates to restoring distributive fairness.

### **Research Strengths and Weaknesses**

Including all children's responses for emotion regulation and analysing these responses quantitatively as well as qualitatively was a strength of this research

project. Rarely have studies of children's emotion regulation reported children's own accounts of the actual strategies they are aware of and use for managing their emotions (Zeman et al., 2007). This may be based on former assumptions or beliefs that children lack the verbal skills or conceptual abilities to share emotion-laden information, and instead parents, caregivers, and other adults were typically their children's informants (Docherty & Sandelowski, 1999; Greenspan & Greenspan, 2003). Having discussions with children about emotions was considered to be another strength of this research project. Despite the well-known limitations of asking children in this age range about emotions, all children were able to respond to questions about emotional experiences using their own terms and knowledge. Using vignettes was a good method for exploring sensitive topics in a less personal and threatening way, and providing an opportunity to respond to questions about emotion on the computer made the process less confrontational for children.

The application of RFT was also useful in developing a systematic investigation of different unfair situations and emotional responses to unfairness. Using knowledge gained from previous research helped the design of these studies and predict the emotional responses expected from children. If given the opportunity to undertake this project again, I would have liked to have measured children's chronic regulatory focus, their personal orientation to goal achievement as it may have influenced their responses for approach and avoidance strategies. Although goal orientation was framed in the vignettes and task instructions in the behavioural experiment, it would have been reassuring to know whether children's responses to different unfair situations were affected by the manipulated orientation, or their personal orientation. This is a suggested consideration for future research.

Another recognised limitation of this research project was that the coding of emotion and emotion regulation strategies were largely influenced and guided by my knowledge and reading into emotion regulation, although there were attempts to minimise this subjectivity by including results from additional coders for comparison and having well-defined concepts of approach and avoidance. However, an array of similar terms found in the literature could be better descriptors of children's strategies for emotion regulation. For instance, reappraisal has also been expressed as reinterpretation (Carver, Scheier, & Weintraub, 1989), and distancing has been used to describe suppression or "forget about it" (Compas, Worsham, & Ey, 1992; Kochenderfer-Ladd & Skinner, 2002). If given the opportunity to undertake this research again, I would have put more consideration into defining the categories used for emotion regulation strategies, and I have since found literature that would help with this process (see Skinner, Edge, Altman, & Sherwood, 2003).

### **Suggestions for Future Research**

This thesis has provided a basis for further study on this topic. An array of strategies for managing emotions in unfair situations was reported in this research. The broader implications of this for subsequent research could include exploring whether the education of emotion regulation in the classroom is possible, particularly as the subsequent outcomes of good emotion regulation ability for children is so profound. Understanding the principles of RFT can help others increase their awareness of different unfair situations, and understand the emotional reactions to different outcomes to goals. RFT has also been applied to other areas of psychological research including marital or romantic relationships (e.g., Bohns et al., in press), parenting (Manian, Papadakis, Strauman, & Essex, 2006), achievement, organisational relationships (e.g., Brockner & Higgins, 2001), identity (Johnson,

Chang, & Rosen, 2010), forgiveness (Santelli et al., 2009), parenting influences on the quality of life for survivors of childhood cancer (Eiser et al., 2004), and the development of psychopathology (Klenk et al., 2011).

Additionally, past research has identified gender differences in emotional expressive behaviour, where young girls tend to show more shame than boys after failing a task (Lewis et al., 1992). Girls are also more likely to mask emotions such as disappointment compared to boys (Davis, 1995; Saarni, 1984). As well as gender, cultural differences on the use of emotion regulation strategies such as suppression and reappraisal have also been found in the literature (Matsumoto, Yoo, & Nakagawa, 2008), and could be an additional avenue for research.

## **Final Conclusions**

The presentation of this research project has been a journey worth undertaking, for its scholarship, advocacy for children's experiences, and my personal growth as a researcher. Highlighted numerous times in this thesis is the importance of emotion regulation skills for our children's wellbeing, which would involve normalising emotional experience in our everyday experiences. Individuals acquire a repertoire of adaptive and maladaptive methods of coping through experience, and like many other life skills, acquiring emotion regulation strategies is possible through education. My research showed children of the middle childhood age demonstrated spontaneous ability to use some sophisticated strategies for managing emotion in different unfair situations. Unfair situations provide a good opportunity for adults to teach children these emotional skills, particularly in the types of unfair situations involving maintaining the status quo, where children sought support from their teachers for this guidance. Doing so would enhance

children's ability to attenuate emotions, in a beneficial way that will maximise their daily functioning and promote psychological wellbeing.

E hara I te mea. No naianei te aroha. Ko nga tipuna tuku iho tuku iho.

Love is not only a thing of today. It has been passed down from our ancestors.



## REFERENCES

- Arsenio, W. F., & Gold, J. (2006). The effects of social injustice and inequality on children's moral judgements and behavior: Towards a theoretical model. *Cognitive Development, 21*, 388-400.
- Arsenio, W. F., & Kramer, R. (1992). Victimizers and their victims: Children's conceptions of the mixed emotional consequences of moral transgressions. *Child Development, 63*, 915-927.
- Barclay, L., Skarlicki, D. P., & Douglas, P. S. (2005). Exploring the role of emotions in injustice perceptions and retaliation. *Journal of Applied Psychology, 90*, 629-643.
- Barrett, K. C., & Nelson-Goens, C. (1997). Emotion communication and the development of the social emotions. *New Directions for Child Development, Fall 97*, 69-88.
- Berking, M., & Wupperman, P. (2012). Emotion regulation and mental health: recent findings, current challenges, and future directions. *Current Opinion in Psychiatry, 25*, 128-134.
- Bicchieri, C., & Xiao, E. (2009). Do the right thing: But only if others do so. *Journal of Behavioral Decision Making, 22*, 191-208.
- Bjørnebekk, G., Gjesme, T., & Ulriksen, R. (2011). Achievement motives and emotional processes in children during problem-solving: Two experimental studies of their relation to performance in different achievement goal conditions. *Motivation & Emotion, 35*, 351-367.
- Blackledge, J. T., & Hayes, S. C. (2001). Emotion regulation in acceptance and commitment therapy. *Journal of Clinical Psychology, 57*, 243-255.

- Boekaerts, M. (2007). Understanding students' affective processes in the classroom. In P. A. Schutz & R. Pekrun (Eds.), *Emotion in education* (pp. 37-56). Burlington, MA: Elsevier Academic Press.
- Bohns, V. K., & Flynn, F. J. (2010). "Why didn't you just ask?" Underestimating the discomfort of help-seeking. *Journal of Experimental Social Psychology, 46*, 402-409.
- Bohns, V. K., Lucas G. M., Molden D. C., Finkel E. J., Coolsen, M. K., Kumashiro M., et al. (2012). When opposites fit: Increased relationship well-being from partner complementarity in regulatory focus. *Social Cognition*. Retrieved from [http://faculty.wcas.northwestern.edu/elifinkel/documents/InPress\\_Bohnsetal\\_SocialCognition.pdf](http://faculty.wcas.northwestern.edu/elifinkel/documents/InPress_Bohnsetal_SocialCognition.pdf)
- Bretherton, I., & Munholland, K. A. (2008). Internal working models in attachment relationships: Elaborating a central construct in attachment theory. In J. Cassidy, P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications (2nd ed.)* (pp. 102-127). New York, NY: Guilford.
- Brockner, J., & Higgins, E. T. (2001). Regulatory focus theory: Implications for the study of emotions at work. *Organizational Behavior and Human Decision Processes, 86*, 35-66.
- Brodsholl, J. C., Kober, H., & Higgins, E. T. (2007). Strategies of self-regulation in goal attainment versus goal maintenance. *European Journal of Social Psychology, 37*, 628-648.
- Bronson, M. B. (2000). *Self-regulation in early childhood: Nature and nurture*. New York, NY: Guilford.

- Browne, D. T., & Jenkins, J. M. (2012). Health across early childhood and socioeconomic status: Examining the moderating effects of differential parenting. *Social Science & Medicine*, *74*, 1622-1629.
- Bryant, F., Smart, C., & King, S. (2005). Using the past to enhance the present: Boosting happiness through positive reminiscence. *Journal of Happiness Studies*, *6*, 227-260.
- Buckley, S., & Maxwell, G. (2007). *Respectful schools restorative practices in education: A summary report*. Wellington: Office of the Children's Commissioner and The Institute of Policy Studies, School of Government, Victoria University.
- Bullock, M., & Russell, J. A. (1984). Preschool children's interpretation of facial expressions of emotion. *International Journal of Behavioral Development*, *7*, 193-214.
- Calkins, S. D., & Hill, A. (2007). Caregiver influences on emerging emotion regulation: Biological and environmental transactions in early development. In J. J. Gross (Ed.), *Handbook of emotion regulation*. New York, NY: Guilford.
- Campos, J., Frankel, C. B., & Camras, L. (2004). On the nature of emotion regulation. *Child Development*, *75*, 377-394.
- Campos, J., Mumme, D. L., Kermoian, R., & Campos, R. G. (1994). A functionalist perspective on the nature of emotion. *Monographs of the Society for Research in Child Development*, *59*, 284-303.
- Carter, C. A., Bottoms, B. L., & Levine, M. (1996). Linguistic and socioemotional influences on the accuracy of children's reports. *Law and Human Behavior*, *20*, 335-358.

- Carver, C. S. (2006). Approach, avoidance, and the self-regulation of affect and action. *Motivation & Emotion, 30*, 105-110.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*, 267-283.
- Causey, D. L., & Dubow, E. F. (1992). Development of a self-report coping measure for elementary school children. *Journal of Clinical Child Psychology, 21*, 47-59.
- Cecchini, J. A., Montero, J., Alonso, A., Izquierdo, M., & Contreras, O. (2007). Effects of personal and social responsibility on fair play in sports and self-control in school-aged youths. *European Journal of Sport Science, 7*, 203-211.
- Chaplin, T. M., Cole, P. M., & Zahn-Waxler, C. (2005). Parental socialization of emotion expression: Gender differences and relations to child adjustment. *Emotion, 5*, 80-88.
- Chory-Assad, R. M. (2002). Classroom justice: Perceptions of fairness as a predictor of student motivation, learning, and aggression. *Communication Quarterly, 50*, 58-77.
- Chory-Assad, R. M., & Paulsel, M. L. (2004). Classroom justice: Student aggression and resistance as reactions to perceived unfairness. *Communication Education, 53*, 253-273.
- Chory, R. M. (2007). Enhancing student perceptions of fairness: The relationship between instructor credibility and classroom justice. *Communication Education, 56*, 89-105.

- Chu, P. S., Saucier, D. A., & Hafner, E. (2010). Meta-analysis of the relationships between social support and well-being in children and adolescents. *Journal of Social and Clinical Psychology, 29*, 624-645.
- Clark, D. M., Ball, S., & Pape, D. (1991). An experimental investigation of thought suppression. *Behaviour Research and Therapy, 29*, 253-257.
- Cole, P. M. (1986). Children's spontaneous control of facial expression. *Child Development, 57*, 1309-1321.
- Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: Methodological challenges and directions for child development research. *Child Development, 75*, 317-333.
- Cole, P. M., Michel, M. K., & O'Donnell Teti, L. (1994). The development of emotion regulation and dysregulation: A clinical perspective. *Monographs of the Society for Research in Child Development, 59*, 73-100.
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*, 386-400.
- Compas, B. E., Worsham, N. L., & Ey, S. (1992). Conceptual and developmental issues in children's coping with stress. In A. M. LaGreca, L. J. Siegal, J. L. Wallander, & C. E. Walker (Eds.), *Stress and coping in child health* (pp. 7-24): New York, NY: Guilford.
- Contreras, J. M., Kerns, K. A., Weimer, B. L., Gentzler, A. L., & Tomich, P. L. (2000). Emotion regulation as a mediator of associations between mother-child attachment and peer relationships in middle childhood. *Journal of Family Psychology, 14*, 111-124.
- Corr, P. J. (2004). Reinforcement sensitivity theory and personality. *Neuroscience and Biobehavioral Reviews, 28*, 317-332.

- Cropanzano, R., Paddock, L., Rupp, D., Bagger, J., & Baldwin, A. (2008). How regulatory focus impacts the process-by-outcome interaction for perceived fairness and emotions. *Organizational Behavior and Human Decision Processes, 105*, 36-51.
- Dale, P. S. (1996). Language and emotion: A developmental perspective. In J. H. Beitchman (Ed.), *Language, learning and behavior disorders: Developmental, biological, and clinical perspectives* (pp. 5-22). Cambridge: Cambridge University Press.
- Davis, T. L. (1995). Gender differences in masking negative emotions: Ability or motivation? *Developmental Psychology, 31*, 660-667.
- Denham, S. A. (1998). *Emotional development in young children*. New York, NY: Guilford.
- Diener, M. L., & Mangelsdorf, S. C. (1999). Behavioral strategies for emotion regulation in toddlers: Associations with maternal involvement and emotion expressions. *Infant Behavior & Development, 22*, 569-583.
- Docherty, S., & Sandelowski, M. (1999). Focus on qualitative methods: Interviewing children. *Research in Nursing & Health, 22*, 177-185.
- Dockett, S. (2009). *Engaging young children in research*. Paper presented at the Involving children and young people in research: A compendium of papers and reflections from a Think Tank co-hosted by the Australian Research Alliance for Children and Youth and the New South Wales Commission for Children and Young People on 11 November 2008. Retrieved from [http://www.aracy.org.au/cmsdocuments/rep\\_involving\\_children\\_and\\_young\\_people\\_in\\_research\\_2009.pdf](http://www.aracy.org.au/cmsdocuments/rep_involving_children_and_young_people_in_research_2009.pdf)

- Dunn, B. D., Makarova, D., Evans, D., & Clark, L. (2010). "I'm worth more than that": Increased rejection of unfair financial offers. *PLoS ONE*, *5*, e15095. doi:10.1371/journal.pone.0015095
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology*, *51*, 665-697.
- Eisenberg, N., Fabes, R. A., Bernzweig, J., Karbon, M., Poulin, R., & Hanish, L. (1993). The relations of emotionality and regulation to preschoolers' social skills and sociometric status. *Child Development*, *64*, 1418-1438.
- Eisenberg, N., Fabes, R. A., & Murphy, B. C. (1996). Parents' reactions to children's negative emotions: Relations to children's social competence and comforting behavior. *Child Development*, *67*, 2227-2247.
- Eisenberg, N., Fabes, R. A., Murphy, B., Maszk, P., Smith, M., & Karbon, M. (1995). The role of emotionality and regulation in children's social functioning: A longitudinal study. *Child Development*, *66*, 1360-1384.
- Eisenberg, N., & Spinrad, T. L. (2004). Emotion-related regulation: Sharpening the definition. *Child Development*, *75*, 334-339.
- Eiser, C., Eiser, J. R., & Greco, V. (2004). Surviving childhood cancer: Quality of life and parental regulatory focus. *Personality and Social Psychology Bulletin*, *30*, 123-133.
- Elliot, A. J. (2006). The hierarchical model of approach-avoidance motivation. *Motivation and Emotion*, *30*, 111-116.
- Elliot, A. J., & Pekrun, R. (2007). Emotion in the hierarchical model of approach-avoidance achievement motivation. In P. A. Schutz & R. Pekrun (Eds.), *Emotion in education* (pp. 57-73). Burlington, MA: Elsevier Academic Press.
- Erikson, E. H. (1980). *Identity and the life cycle*. New York, NY: W.W. Norton.

- Evans, I. M. (2005). Applied behavior analysis. In M. Hersen, A. M. Gross, & R. S. Drabman (Eds.), *Encyclopedia of behavior modification and cognitive behavior therapy. Vol. 2: Child clinical applications* (pp. 666-674). Thousand Oaks, CA: Sage.
- Evans, I. M., Galyer, K. T., & Smith, K. J. H. (2001). Children's perceptions of unfair reward and punishment. *The Journal of Genetic Psychology, 162*, 212-227.
- Evans, I. M., & Harvey, S. T. (2012). *Warming the emotional climate of the primary school classroom*. Auckland, NZ: Dunmore Publishing.
- 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.
- Evans, I. M., Salisbury, C., Palombaro, M., & Goldberg, J. S. (1994). Children's perception of fairness in classroom and interpersonal situations involving peers with severe disabilities. *Journal of the Association for Persons with Severe Handicaps, 19*, 326-332.
- Evans, I. M., Yamaguchi, T., Raskauskas, J., & Harvey, S. T. (2007). *Fairness, forgiveness and families*. Final report to the Families Commission, Wellington, NZ..
- Fargas-Malet, M., McSherry, D., Larkin, E., & Robinson, C. (2010). Research with children: Methodological issues and innovative techniques. *Journal of Early Childhood Research, 8*, 175-192.
- Ferguson, T. J., Stegge, H., & Damhuis, I. (1991). Children's understanding of guilt and shame. *Child Development, 62*, 827-839.

- Fitzsimmons, E. E., & Bardone-Cone, A. M. (2010). Differences in coping across stages of recovery from an eating disorder. *International Journal of Eating Disorders, 43*, 689-693.
- Frederickson, N. L., & Simmonds, E. A. (2008). Special needs, relationship type and distributive justice norms in early and later years of middle childhood. *Social Development, 17*, 1056-1072.
- Geddes, D. (2003). *Fairness in the classroom: Lessons learned from organizational justice research*. Paper presented at the 16th Annual IACM Conference, Melbourne, Australia. Retrieved from <http://ssrn.com/abstract=400880>
- Ghorbani, M., Liao, Y., Çayköylü, S., & Chand, M. (2012). Guilt, shame, and reparative behavior: The effect of psychological proximity. *Journal of Business Ethics, 1-13*. doi: 10.1007/s10551-012-1350-2
- Gorard, S. (2011). The potential determinants of young peoples' sense of justice: An international study. *British Journal of Sociology of Education, 32*, 35-52.
- Gottman, J. M. (1997). *The heart of parenting: How to raise an emotionally intelligent child*. New York, NY: Simon & Schuster.
- Gratz, K. L. (2007). Targeting emotion dysregulation in the treatment of self-injury. *Journal of Clinical Psychology: In Session, 63*, 1091-1103.
- Gray, J. A. (1982). *The neuropsychology of anxiety: An enquiry into the functions of the septo-hippocampal system*. New York, NY: Oxford University Press.
- Greco, L. A., & Hayes, S. C. (Eds.). (2008). *Acceptance & mindfulness treatments for children & adolescents: A practitioner's guide*. Oakland, CA: New Harbinger.
- Greenberg, J., & Cropanzano, R. (Eds.). (2001). *Advances in organizational justice*. Palo Alto, CA: Stanford University Press.

- Greene, S., & Hogan, D. (2005). *Researching children's experience: Approaches and methods*. London, UK: Sage.
- Greenspan, S. I., & Greenspan, N. T. (2003). *The clinical interview of the child*. Arlington, VA: American Psychiatric Publishing.
- Greig, A. D., Taylor, J., & MacKay, T. (2007). *Doing research with children*. London, UK: Sage.
- Gross, A. L., & Ballif, B. (1991). Children's understanding of emotion from facial expressions and situations: A review. *Developmental Review, 11*, 368-398.
- Gross, D., & Harris, P. L. (1988). False beliefs about emotion: Children's understanding of misleading emotional displays. *International Journal of Behavioral Development, 11*, 475-488.
- Gross, J. J. (1998a). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology, 74*, 224-237.
- Gross, J. J. (1998b). The emerging field of emotion regulation: An integrative review. *Review of General Psychology, 2*, 271-299.
- Gross, J. J. (2001). Emotion regulation in adulthood: Timing is everything. *Current Directions in Psychological Science, 10*, 214-219.
- Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology, 39*, 281-291.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology, 85*, 348-362.
- Gross, J. J., & Muñoz, R. F. (1995). Emotion regulation and mental health. *Clinical Psychology: Science and Practice, 2*, 151-164.

- Gross, J. J., & Thompson, R. A. (2007). Emotion regulation: Conceptual foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation*. New York, NY: Guilford.
- Hackenbracht, J., & Tamir, M. (2010). Preferences for sadness when eliciting help: Instrumental motives in sadness regulation. *Motivation and Emotion, 34*, 306-315.
- Harvey, S. T., & Evans, I. M. (2003). Understanding the emotional environment of the classroom. In D. Fraser & R. Openshaw (Eds.), *Informing our practice* (pp. 182-195). Palmerston North, NZ: Kanuka Grove Press.
- Henderson, H. A., & Fox, N. A. (2007). Considerations in studying emotion in infants and children. In J. A. Coan & J. B. Allen (Eds.), *Handbook of emotion elicitation and assessment* (pp. 349-360). New York, NY: Oxford University Press.
- Henry, J. D., Rendell, P. G., Green, M. J., McDonald, S., & O'Donnell, M. (2008). Emotion regulation in schizophrenia: Affective, social, and clinical correlates of suppression and reappraisal. *Journal of Abnormal Psychology, 117*, 473-478.
- Hessler, D. M., & Katz, L. F. (2007). Children's emotion regulation: Self-report and physiological response to peer provocation. *Developmental Psychology, 43*, 27-38.
- Higgins, E. T. (2002). How self-regulation creates distinct values: The case of promotion and prevention decision making. *Journal of Consumer Psychology, 12*, 177-191.
- Higgins, E. T. (2006). Value for hedonic experience and engagement. *Psychological Review, 113*, 439-460.

- Higgins, E. T., Friedman, R. S., Harlow, R. E., Idson, L. C., Ayduk, O. N., & Taylor, A. (2001). Achievement orientations from subjective histories of success: Promotion pride versus prevention pride. *European Journal of Social Psychology, 31*, 3-23.
- Higgins, E. T., Roney, C. J. R., Crowe, E., & Hymes, C. (1994). Ideal versus ought predilections for approach and avoidance distinct self-regulatory systems. *Journal of Personality and Social Psychology, 66*, 276-286.
- Higgins, E. T., Shah, J., & Friedman, R. (1997). Emotional responses to goal attainment: Strength of regulatory focus as moderator. *Journal of Personality and Social Psychology, 71*, 515-525.
- Hopkins, B. (2002). Restorative justice in schools. *Support for Learning, 17*, 144-149.
- Horan, S. M., Chory, R. M., & Goodboy, A. K. (2010). Understanding students' classroom justice experiences and responses. *Communication Education, 59*, 453-474.
- Hubbard, J. A. (2001). Emotion expression processes in children's peer interaction: The role of peer rejection, aggression, and gender. *Child Development, 72*, 1426-1438.
- Idson, L. C., Liberman, N., & Higgins, E. T. (2004). Imagining how you'd feel: The role of motivational experiences from regulatory fit. *Personality and Social Psychology Bulletin, 30*, 926-937.
- Isen, A. M. (2003). Positive affect as a source of human strength. In L. G. Aspinwall & U. M. Staudinger (Eds.), *A psychology of human strengths: Fundamental questions and future directions for a positive psychology* (Vol. 179-195). Washington, DC: American Psychological Association.

- Izard, C., Stark, K., Trentacosta, C., & Schultz, D. (2008). Beyond emotion regulation: Emotion utilization and adaptive functioning. *Child Development Perspectives, 2*, 156-163.
- Jackson, Y., & Warren, J. S. (2000). Appraisal, social support, and life events: Predicting outcome behavior in school-age children. *Child Development, 71*, 1441-1457.
- John, O. P., & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality, 72*, 1301-1333.
- Johnson, R. E., Chang, C., & Rosen, C. C. (2010). "Who I am depends on how fairly I'm treated": Effects of justice on self-identity and regulatory focus. *Journal of Applied Social Psychology, 40*, 3020-3058.
- Keenan, K. (2000). Emotion dysregulation as a risk factor for child psychopathology. *Clinical Psychology: Science and Practice, 7*, 418-434.
- Keller, J. (2008). On the development of regulatory focus: The role of parenting styles. *European Journal of Social Psychology, 38*, 354-364.
- Keller, M., Orlando, L., Tina, M., & Henrik, S. (2003). The multifaceted phenomenon of 'happy victimizers': A cross-cultural comparison of moral emotions. *British Journal of Developmental Psychology, 21*, 1-18.
- Klenk, M. M., Strauman, T. J., & Higgins, E. T. (2011). Regulatory focus and anxiety: A self-regulatory model of GAD-depression comorbidity. *Personality and Individual Differences, 50*, 935-943.
- Kochenderfer-Ladd, B., & Skinner, K. (2002). Children's coping strategies: Moderators of the effects of peer victimization? *Developmental Psychology, 38*, 267-278.

- Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition & Emotion, 23*, 4-41.
- Kovacs, M., Joormann, J., & Gotlib, I. H. (2008). Emotion (dys)regulation and links to depressive disorders. *Child Development Perspectives, 2*, 149-155.
- Kovacs, M., Sherrill, J., George, C. J., Pollock, M., Tumuluru, R. V., & Ho, V. (2006). Contextual emotion-regulation therapy for childhood depression: Description and pilot testing of a new intervention. *Journal of the American Academy of Child and Adolescent Psychiatry, 45*, 892-903.
- Kraag, G., Van Breukelen, G. J. P., Kok, G., & Hosman, C. (2009). 'Learn Young, Learn Fair', a stress management program for fifth and sixth graders: Longitudinal results from an experimental study. *Journal of Child Psychology and Psychiatry, 50*, 1185-1195.
- Kraag, G., Zeegers, M. P., Kok, G., Hosman, C., & Abu-Saad, H. H. (2006). School programs targeting stress management in children and adolescents: A meta-analysis. *Journal of School Psychology, 44*, 449-472.
- Krcmar, M., & Cooke, M. C. (2001). Children's moral reasoning and their perceptions of television violence. *Journal of Communication, 51*, 300-316.
- Krehbiel, P. J., & Cropanzano, R. (2000). Procedural justice, outcome favorability and emotion. *Social Justice Research, 13*, 339-360.
- Lakey, B., & Orehek, E. (2011). Relational regulation theory: A new approach to explain the link between perceived social support and mental health. *Psychological Review, 118*, 482-495.
- Langston, C. A. (1994). Capitalizing on and coping with daily-life events: Expressive responses to positive events. *Journal of Personality and Social Psychology, 67*, 1112-1125.

- Lazarus, R. S. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine, 55*, 234-247.
- Leung, C. M., & Lam, S. F. (2003). The effects of regulatory focus on teachers' classroom management strategies and emotional consequences. *Contemporary Educational Psychology, 28*, 114-125.
- Leung, L. (2007). Stressful life events, motives for internet use, and social support among digital kids. *CyberPsychology & Behavior, 10*, 204-214.
- Lewis, M., Alessandri, S. M., & Sullivan, M. W. (1992). Differences in shame and pride as a function of children's gender and task difficulty. *Child Development, 63*, 630-638.
- Lewis, M., Lamm, C., Segalowitz, S. J., Stieben, J., & Zelazo, P. D. (2006). Neurophysiological correlates of emotion regulation in children and adolescents. *Journal of Cognitive Neuroscience, 18*, 430-443.
- Liberman, N., Idson, L. C., & Higgins, E. T. (2005). Predicting the intensity of losses vs. non-gains and non-losses vs. gains in judging fairness and value: A test of the loss aversion explanation. *Journal of Experimental Social Psychology, 41*, 527-534.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York, NY: Plenum Press.
- LoBue, V., Nishida, T., Chiong, C., DeLoache, J. S., & Haidt, J. (2009). When getting something good is bad: Even three-year-olds react to inequality. *Social Development, 20*, 154-170.
- Loveridge, J. (2010). *Involving children and young people in research in educational settings*. Wellington, NZ: Victoria University of Wellington, Jessie Hetherington Centre for Educational Research.

- Lucas, M. M., Wagner, L., & Chow, C. (2008). Fair game: The intuitive economics of resource exchange in four-year olds. *Journal of Social, Evolutionary, and Cultural Psychology, 2*, 74-88.
- Maag, J. W. (2001). Rewarded by punishment: Reflections on the disuse of positive reinforcement in schools. *Exceptional Children, 67*, 173.
- Malti, T., Gasser, L., & Buchmann, M. (2009). Aggressive and prosocial children's emotion attributions and moral reasoning. *Aggressive Behavior, 35*, 90-102.
- Malti, T., & Keller, M. (2009). The relation of elementary-school children's externalizing behaviour to emotion attributions, evaluation of consequences, and moral reasoning. *European Journal of Developmental Psychology, 6*, 592-614.
- Manian, N., Papadakis, A., Strauman, T. J., & Essex, M. J. (2006). The development of children's ideal and ought self-guides: Parenting, temperament, and individual differences in guide strength. *Journal of Personality, 74*, 1619-1646.
- Matsumoto, D., Yoo, S. H., & Nakagawa, S. (2008). Culture, emotion regulation, and adjustment. *Journal of Personality and Social Psychology, 94*, 925-937.
- Meyer, L. H., & Evans, I. M. (2012). *The teacher's guide to restorative classroom discipline*. Thousand Oaks, CA: Corwin Press.
- Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., et al. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences, 108*, 2693-2698.
- Murphy, K. (2009). Procedural justice and affect intensity: Understanding reactions to regulatory authorities. *Social Justice Research, 22*, 1-30.

- Neilsen, L., & Kaszniak, A. W. (2007). Conceptual, theoretical, and methodological issues in inferring subjective emotion experience: Recommendations for researchers. In J. A. Coan & J. B. Allen (Eds.), *Handbook of emotion elicitation* (pp. 361-378). New York, NY: Oxford University Press.
- Nelson, S. A. (1980). Factors influencing young children's use of motives and outcomes as moral criteria. *Child Development, 51*, 823-829.
- Nils, F., & Rimé, B. (2012). Beyond the myth of venting: Social sharing modes determine the benefits of emotional disclosure. *European Journal of Social Psychology* (Online April 2012). doi: 10.1002/ejsp.1880
- Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science, 3*, 400-424.
- Ochsner, K. N., & Gross, J. J. (2008). Cognitive emotion regulation: Insights from social cognitive and affective neuroscience. *Current Directions in Psychological Science, 17*, 153-158.
- Okin, S. M., & Reich, R. (1999). Families and schools as compensating agents in moral development for a multicultural society. *Journal of Moral Education, 28*, 283-297.
- Op t'Eynde, P., De Corte, E., & Verschaffel, L. (2007). Students' emotions: A key component of self-regulated learning? In P. A. Schutz & R. Pekrun (Eds.), *Emotion in education*. Burlington, MA: Elsevier Academic Press.
- Panfile, T. M., & Laible, D. J. (2012). Attachment security and child's empathy: The mediating role of emotion regulation. *Merrill-Palmer Quarterly, 52*, 1-21.
- Pekrun, R., & Stephens, E. J. (2009). Goals, emotions, and emotion regulation: Perspectives of the control-value theory. *Human Development, 52*, 357-365.

- Pizzagalli, D. A., Jahn, A. L., & O'Shea, J. P. (2005). Toward an objective characterization of an anhedonic phenotype: A signal-detection approach. *Biological Psychiatry, 57*, 319-327.
- Quoidbach, J., Berry, E. V., Hansenne, M., & Mikolajczak, M. (2010). Positive emotion regulation and well-being: Comparing the impact of eight savoring and dampening strategies. *Personality and Individual Differences, 49*, 368-373.
- Raftery, J. N., & Bizer, G. Y. (2009). Negative feedback and performance: The moderating effect of emotion regulation. *Personality and Individual Differences, 47*, 481-486.
- Rice, J. A., Levine, L. J., & Pizarro, D. A. (2007). "Just stop thinking about it": Effect of emotional disengagement on children's memory for educational material. *Emotion, 7*, 812-823.
- Richards, J. M., & Gross, J. J. (2000). Emotion regulation and memory: The cognitive costs of keeping one's cool. *Journal of Personality and Social Psychology, 19*, 410-424.
- Rimé, B. (2007). Interpersonal emotion regulation. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 466-485). New York, NY: Guilford.
- Royzman, E. B., Leeman, R. F., & Baron, J. (2009). Unsentimental ethics: Towards a content-specific account of the moral-conventional distinction. *Cognition, 112*, 159-174.
- Rubin, K. H., Coplan, R. J., Fox, N. A., & Calkins, S. (1995). Emotionality, emotion regulation and preschooler's social adaptation. *Development and Psychopathology, 7*, 49-62.

- Rubin, R. M., & Hubbard, J. A. (2003). Children's verbalizations and cheating behavior during game playing: The role of sociometric status, aggression, and gender. *Journal of Abnormal Child Psychology, 31*, 65-78.
- Rydell, A., Berlin, L., & Bohlin, G. (2003). Emotionality, emotion regulation, and adaptation among 5- to 8-year-old children. *Emotion, 3*, 30-47.
- Saarni, C. (1984). An observational study of children's attempts to monitor their expressive behavior. *Child Development, 55*, 1504-1513.
- Saarni, C. (1999). *The development of emotional competence*. New York, NY: Guilford.
- Saarni, C., & Harris, P. (Eds.). (1989). *Children's understanding of emotion*. Cambridge: Cambridge University Press.
- Santelli, A. G., Struthers, C. W., & Eaton, J. (2009). Fit to forgive: Exploring the interaction between regulatory focus, repentance, and forgiveness. *Journal of Personality and Social Psychology, 96*, 381-394.
- Scholer, A. A., & Higgins, E. T. (2008). Distinguishing levels of approach and avoidance: An analysis using regulatory focus theory. *Handbook of approach and avoidance motivation* (pp. 489-503). New York, NY: Psychology Press.
- Scholer, A. A., & Higgins, E. T. (2010). Regulatory focus in a demanding world. In R. H. Hoyle (Ed.), *Handbook of personality and self-regulation*. West Sussex, UK: Blackwell Publishing.
- Scholer, A. A., Stroessner, S. J., & Higgins, E. T. (2008). Responding to negativity: How a risky tactic can serve a vigilant strategy. *Journal of Experimental Social Psychology, 44*, 767-774.

- Scholer, A. A., Zou, X., Fujita, K., Stroessner, S. J., & Higgins, E. T. (2010). When risk seeking becomes a motivational necessity. *Journal of Personality and Social Psychology, 99*, 215-231.
- Schutz, P. A., & Pekrun, R. (2007). *Emotion in education*. Burlington, MA: Elsevier Academic Press.
- Segerstrom, S. (2011). The structure and consequences of repetitive thought. *Psychological Science Agenda*, (March 2011). Retrieved from <http://www.apa.org/science/about/psa/2011/03/repetitive-thought.aspx>
- Shaw, R. T. (2009). Reducing attention-maintained behavior through the use of positive punishment, differential reinforcement of low rates, and response marking. *Behavioral Interventions, 24*, 249-263.
- Shenk, C. E., & Fruzzetti, A. E. (2011). The impact of validating and invalidating responses on emotional reactivity. *Journal of Social and Clinical Psychology, 30*, 163-183.
- Shipman, K. L., Zeman, J., Nesin, A. E., & Fitzgerald, M. (2003). Children's strategies for displaying anger and sadness: What works with whom? *Merrill-Palmer Quarterly, 49*, 100-122.
- Sideridis, G. D., & Kaplan, A. (2011). Achievement goals and persistence across tasks: The roles of failure and success. *The Journal of Experimental Education, 79*, 429-451.
- Silk, J., Shaw, D., Forbes, E., Lane, T., & Kovacs, M. (2006). Maternal depression and child internalizing: The moderating role of child emotion regulation. *Journal of Clinical Child and Adolescent Psychology, 35*, 116-126.

- Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, *129*, 216-269.
- Sommers-Flanagan, J., & Sommers-Flanagan, R. (2003). *Clinical interviewing*. Hoboken, NJ: Wiley.
- Southam-Gerow, M. A., & Kendall, P. C. (2002). Emotion regulation and understanding: Implications for child psychopathology and therapy. *Clinical Psychology Review*, *22*, 189-222.
- Sroufe, L. A. (1997). *Emotional development: The organization of emotional life in the early years*. Cambridge, UK: University of Cambridge.
- Sroufe, L. A. (2005). Attachment and development: A prospective, longitudinal study from birth to adulthood. *Attachment & Human Development*, *7*, 349-367.
- Storm, C., & Storm, T. (1987). A taxonomic study of the vocabulary of emotions. *Journal of Personality and Social Psychology*, *53*, 805-816.
- Suveg, C., Southam-Gerow, M. A., Goodman, K. L., & Kendall, P. C. (2007). The role of emotion theory and research in child therapy development. *Clinical Psychology: Science and Practice*, *14*, 358-371.
- Tangney, J. P. (1991). Moral affect: The good, the bad, and the ugly. *Journal of Personality and Social Psychology*, *61*, 598-607.
- Taylor Tavares, J. V., Clark, L., Furey, M. L., Williams, G. B., Sahakian, B. J., & Drevets, W. C. (2008). Neural basis of abnormal response to negative feedback in unmedicated mood disorders. *Neuroimage*, *42*, 1118-1126.

- Thompson, M., & Gauntlett-Gilbert, J. (2008). Mindfulness with children and adolescents: Effective clinical application. *Clinical Child Psychology and Psychiatry, 13*, 395-407.
- Thompson, R. A. (1987). Development of children's inferences of the emotions of others. *Developmental Psychology, 23*, 124-131.
- Thorkildsen, T. A. (1993). Those who can, tutor: High-ability students' conceptions of fair ways to organize learning. *Journal of Educational Psychology, 85*, 182-190.
- Thorkildsen, T. A., Nolen, S. B., & Fournier, J. (1994). What is fair? Children's critiques of practices that influence motivation. *Journal of Educational Psychology, 86*, 475-486.
- Thorkildsen, T. A., & White-McNulty, L. (2002). Developing conceptions of fair contest procedures and the understanding of skill and luck. *Journal of Educational Psychology, 94*, 316-326.
- Toth, S. L., Cicchetti, D., & Kim, J. (2002). Relations among children's perceptions of maternal behavior, attributional styles, and behavioral symptomatology in maltreated children. *Journal of Abnormal Child Psychology, 30*, 487-501.
- Tugade, M. M., & Frederickson, B. L. (2007). Regulation of positive emotions: Emotion regulation strategies that promote resilience. *Journal of Happiness Studies, 8*, 311-333.
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. Zanna (Ed.), *Advances in experimental social psychology* (pp. 115-191). New York, NY: Academic Press.
- Tyson, D. F., Linnenbrink-Garcia, L., & Hill, N. E. (2009). Regulating debilitating emotions in the context of performance: Achievement goal orientations,

- achievement-elicited emotions, and socialization contexts. *Human Development, 52*, 329-356.
- van den Bos, K., Lind, E. A., & Wilke, H. A. M. (2001). The psychology of procedural and distributive justice viewed from the perspective of fairness heuristic theory. In R. Cropanzano (Ed.), *Justice in the workplace: From theory to practice* (Vol. 2, pp. 49-66). Mahway, NJ: Lawrence Erlbaum.
- van den Bos, K., Maas, M., Waldring, I., & Semin, G. R. (2003). Toward understanding the psychology of reactions to perceived fairness: The role of affect intensity. *Social Justice Research, 16*, 151-168.
- Watling, D., & Bourne, V. J. (2007). Linking children's neuropsychological processing of emotion with their knowledge of emotion expression regulation. *Laterality: Asymmetries of Body, Brain and Cognition, 12*, 381-396.
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin, 98*, 219-235.
- Webster-Stratton, C. (1999). *How to promote children's social and emotional competence*. London: Sage.
- Wegener, D. T., & Petty, R. E. (1994). Mood management across affective states: The hedonic contingency hypothesis. *Journal of Personality and Social Psychology, 66*, 1034-1048.
- Weiss, H. M., Suckow, K., & Cropanzano, R. (1999). Effects of justice conditions on discrete emotions. *Journal of Applied Psychology, 84*, 786-794.
- Wood, J. V., Heimpel, S. A., & Michela, J. L. (2003). Savoring versus dampening: Self-esteem differences in regulating positive affect. *Journal of Personality and Social Psychology, 85*, 566-580.

- Yamagishi, T., Horita, Y., Takagishi, H., Shinada, M., Tanida, S., & Cook, K. S. (2009). The private rejection of unfair offers and emotional commitment. *PNAS*, *106*, 11520-11523.
- Yamaguchi, T. (2009). *Fairness, forgiveness and grudge-holding: Experimental studies with primary school children in New Zealand*. Doctoral thesis, Massey University, Palmerston North, NZ.
- Yamaguchi, T., Barry, A., & Evans, I. M. (n.d.). *Fairness matters: Children's perceptions of and emotion responses to unfair punishment*. Unpublished manuscript, School of Psychology, Massey University, Palmerston North, NZ.
- Yan, E., Evans, I. M., & Harvey, S. T. (2011). Observing emotional interactions between teachers and students in elementary school classrooms. *Journal of Research in Childhood Education*, *25*, 82-97.
- Zeman, J., Klimes-Dougan, B., Cassano, M., & Adrian, M. (2007). Measurement issues in emotion research with children and adolescents. *Clinical Psychology: Science and Practice*, *14*, 377-401.
- Zeman, J., & Shipman, K. (1997). Social-contextual influences on expectancies for managing anger and sadness: The transition from middle childhood to adolescence. *Developmental Psychology*, *33*, 917-924.
- Zitek, E. M., Jordan, A. H., Benoit Monin, J., & Leach, F. R. (2010). Victim entitlement to behave selfishly. *Journal of Personality and Social Psychology*, *98*, 245-255.

## APPENDICES

# Appendix A: School and Teacher Information Sheets - Study One



MASSEY UNIVERSITY  
COLLEGE OF HUMANITIES  
AND SOCIAL SCIENCES  
TE KURA HINENGARO TANGATA



## Is that fair?

### SCHOOL CONSENT FORM

I \_\_\_\_\_, acting on behalf of the management at \_\_\_\_\_, approve of the undertaking of this research project. I have read the Information Sheet and have had the details of the study explained to me. I am fully aware that a researcher from Massey University will be interviewing students from selected classrooms during school hours. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

Yes I would like to receive a summary of the findings at the end of the project

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

*This consent form will be held for a period of five (5) years*



MASSEY UNIVERSITY  
COLLEGE OF HUMANITIES  
AND SOCIAL SCIENCES  
TE KURA HINENGARO TANGATA



## Is that fair?

### SCHOOL INFORMATION BROCHURE

This research project wants to find out what emotion regulation strategies children would use when faced with an unfair classroom situation.



My name is Liz Yan and I am the primary investigator of this project. I am studying for a qualification in Clinical Psychology at Massey University. I am particularly interested in children's emotional development in particular, how children emotionally recover from stressful situations or how children regulate their emotions.

These situations are hypothetical and presented in vignette form. Children will be individually read a series of stories about classroom situations where the teacher was unfair and will be asked questions about the character in the story. First we want to find out if the children interpreted the emotion correctly, and what they would do to make themselves feel better if they were the character in the story.

**How can your school help?**

These interviews will take place this year in 2009. We are inviting children in Years 4-6 to participate from schools in the Manawatu and surrounding districts.

I would greatly appreciate any assistance from your school. Please return the attached consent form if your school is interested.

Te Kōwhiri  
ki Pāwhiri

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Private Bag 11222, Palmerston North 4442 T +64 6 356 9099 x 2033 F +64 6 350 5763 e elizabeth.m.yan@gmail.com

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## Is that fair? | SCHOOL INFORMATION BROCHURE

### Background

I am primarily supervised by Prof. Ian Evans, you may already be familiar with his work such as the Blue Skies project – Fairness, Forgiveness, and Families conducted by Tomoko Yamaguchi.

This research project will also include aspects of fairness with a particular focus on unfair situations. An unfair situation is where I will set the scene for investigating how children manage to recover emotionally.

My previous research has been involved in classroom emotional environments with *Te Āniwanīwa*. This project is managed by Dr. Shane Harvey and Prof. Ian Evans. Shane Harvey is also supervising my current research project.

### What would happen?



We will provide you with information packs (an information letter and consent form) for students to take home to their parents/caregivers. Those students with full consent are invited to participate.

Interviews are then pre-scheduled with the teacher. Interviews will take only 30 minutes, and will be conducted during school hours. The interviews will also be filmed with a camera set up in the corner of the room. This is how the information will be recorded. We would like help with arranging a quiet room where interviews could take place.



The stories that are read to students are hypothetical. They are not based on real events, but they do include aspects of classroom life that commonly occur. After the stories are read to your student, they have the opportunity to answer questions about the character in the story. If your student finds a question too difficult, or simply does not want to answer the question, they are free to do so.



## Is that fair? | SCHOOL INFORMATION BROCHURE

### What happens to the information?

All the information gathered from interviews will inform us about the strategies children use to regulate their emotions in unfair situations. This is how we will help formulate the design of an intervention for children that requires the regulation of emotions.

A summary of results at the end of the research project can be made available to participants who indicate this preference on the consent form. Otherwise you can contact me via email if you wish for a copy.

### Questions?

Please contact me (by email or telephone) if you have any queries about this research project. Additionally, my supervisors contact details are listed below.

Liz Yan  
T (06) 356 9099 x 2033  
e elizabeth.m.yan@gmail.com

Prof. Ian Evans  
T (06) 356 9099 x 62125  
e i.m.evans@massey.ac.nz

Dr. Shane Harvey  
T (06) 356 9099 x 7171  
e s.t.harvey@massey.ac.nz

### Massey University Human Ethics statements:

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- withdraw from the study at any stage before interviews begin;
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 09/18. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email humanethicssouth@massey.ac.nz.

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## Is that fair?

TEACHER CONSENT FORM

I \_\_\_\_\_ from  
\_\_\_\_\_ school,

approve of the undertaking of this research project in my classroom. I have read the Information Sheet and have had the details of the study explained to me. I am fully aware that a researcher from Massey University will be interviewing my students. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

Yes I would like to receive a summary of the findings at the end of the project

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

*This consent form will be held for a period of five (5) years*

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TE KURA HIRANGA TANGATA



## Is that fair?

TEACHER INFORMATION BROCHURE

Students from your classroom have been invited to participate in this research project - Is that fair? This research project wants to find out what emotion regulation strategies children would use when faced with an unfair classroom situation.



My name is Liz Yan and I am the primary investigator of this project. I am studying for a qualification in Clinical Psychology at Massey University. I am particularly interested in children's emotional development in particular, how children emotionally recover from stressful situations or how children regulate their emotions.

These situations are hypothetical and presented in vignette form. Children will be individually read a series of stories about classroom situations and will be asked questions about the character in the story. First we want to find out if the children interpreted the emotion correctly, and what they would do to make themselves feel better if they were the character in the story.

Interviews about hypothetical unfair situations will take place in 2009. We are looking for a total of 100 children in Years 4-6 to participate from schools in the Manawatu and surrounding districts.

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Is that fair? | TEACHER INFORMATION BROCHURE

### Background

I am primarily supervised by Prof. Ian Evans, you may already be familiar with his work such as the Blue Skies project – Fairness, Forgiveness, and Families conducted by Tomoko Yamaguchi. This research project will also include aspects of fairness with a particular focus on unfair situations. An unfair situation is where I will set the scene for investigating how children manage to recover emotionally.

My previous research has been involved in classroom emotional environments with *Te Āniwaniwa*. This project is managed by Dr. Shane Harvey and Prof. Ian Evans. Shane is also supervising my current research project.

### What would happen?



We will provide you with **information packs** (an information letter and consent form) for students to take home to their parents/caregivers. We will allow two weeks for parents to read the information, sign and return the consent form. Both parents and children have a consent form each. Those students with full consent are invited to participate.



Once all the consent forms have been collected, we would arrange a day (or two) for interviews to take place. Interviews will take about 30 minutes, are individual, and will be in a quiet room located in the school. The interviews will also be filmed with a video camera set up in the corner. This is how the information will be recorded. We would like your help with arranging a room for interviews to take place.



The stories that are read to your students are hypothetical. They are not based on a real event, but they do include aspects of classroom life that commonly occur. After the stories are read to your student, they have the opportunity to answer questions about the character in the story. If your student finds a question too difficult, or simply does not want to answer the question, they are free to do so.

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Is that fair? | TEACHER INFORMATION BROCHURE

### What happens to the information?

All the information gathered from interviews will inform us about the strategies children use to regulate their emotions in unfair situations. This is how it will help formulate the design of an intervention for children that requires the regulation of emotions.

A summary of results at the end of the research project can be made available to participants who indicate this preference on the consent form. Otherwise you can contact me via email if you wish for a copy.

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## Appendix B: Vignettes for Study One

### A – No Gain

Ariana is 8 years old and practising a play with her reading group, the Crusaders. Her friend Olivia is in the same reading group, the Crusaders. They are going to perform their play in front of their class after morning tea. The group that performs the play the best will be allowed to go watch Harry Potter at the movies with Room 2. During morning tea break, Olivia said she had a sore tummy and did not feel well. So Olivia went to the sick bay. At the end of morning tea Olivia was still in the sick bay. Oh no! The Crusaders were supposed to act out their plays after morning tea. Ariana tried to look for her teacher Mr. Smith so she could tell him what happened. After the bell rang everyone went back to class. Ariana told Mr. Smith that Olivia was in the sick bay and couldn't act in the play. Mr. Smith said, "That is too bad. But the Crusaders will still have to act out the play now like we had planned." The Crusaders acted out their play but made many mistakes because they did not have the extra time to practice without Olivia. The Crusaders were not the group with the best performance and did not get to see Harry Potter. The Hurricanes were rewarded with the best performance and were allowed to see Harry Potter with Room 2.

### B - Gain

Daniel is 8 years old and is in a reading group called the Hurricanes. The Hurricanes were practising their play and going to perform in front of their class after morning tea. The group that has the best play performance will be allowed to go watch Harry Potter at the movies with Room 2. After morning tea Daniel found out that his friend Olivia was in the sick bay. Olivia was in the Crusaders reading group. Daniel saw

the Crusaders group ask the teacher Mr. Smith if they could have some more practice because Olivia was not there. Mr. Smith said “No. The Crusaders will still have to act out the play now like we had planned”. Daniel saw that the Crusaders group made a lot of mistakes because Olivia was not there and did not have extra practice. Daniel and the Hurricanes performed their play with no mistakes. They were rewarded with the best performance and were allowed to see Harry Potter with Room 2.

#### C - Loss

Chris is 12 years old and his class Room 7 are going to the swimming pool after lunch. Their teacher Mrs Madison said it is their reward for being on good behaviour all morning. During lunchtime Ross from Room 8 was visiting Room 7. Ross rubbed all the house points off the whiteboard but no one saw him do it. The bell rang and when Mrs Madison entered the classroom she saw that someone had rubbed off all the house points. Mrs Madison angrily asked the class, “Who rubbed off all the house points?” No one answered because no one knew who did it. Mrs Madison asks again “Who rubbed off all the house points?” Still no one answers. Mrs Madison takes away their reward, “We won’t be going to the swimming pool this afternoon because someone in this classroom cannot be trusted.” All that good behaviour was ruined because someone from another classroom rubbed off the house points. Instead of going to the pools, the class finish working on their story writing for the rest of the afternoon.

#### D – No Loss

Laura is 12 years old and her class Room 8 were surprised with a reward when they returned from lunch. They are all going to the swimming pool to play on the hydrosides. The reason why they were rewarded with this trip was because Room 7 next door had misbehaved, and their teacher took their trip away. Laura knew that this boy Ross in her class had been next door in Room 7 during lunchtime. When the boy came back to his own classroom, he was showing off about how he had rubbed off all the house points on Room 7's whiteboard. Laura soon found out that Room 7 was punished for this and had their swimming trip taken away from them. She tried to tell her teacher this, but her teacher didn't listen. Later that afternoon, everyone in Room 8 got to play on the hydrosides at the swimming pool.

#### E - Loss

Amy is 10 years old and she sits next to her friend Michelle in class. Amy is very excited because Michelle lives on a farm and this will be the first time she will catch a school bus home. It is maths time, and their maths group should be working quietly on their maths questions. Amy and Michelle were whispering about what they should do after school at Michelle's house. Ms. Kelly caught them and said "Amy and Michelle, if I catch you talking again you will stay behind after school." Amy and Michelle quickly faced their desks and got back to work. Amy was quietly working on her questions when Michelle leaned over to her and whispered, "What did you get for question five?" Ms. Kelly heard the whisper and yelled out, "Amy I warned you once before! Now you can stay behind after the bell rings." Michelle tried to tell Ms. Kelly that it wasn't Amy's fault. But Ms. Kelly wouldn't listen to

her. Because Amy had to stay behind after school, she missed catching the bus to Michelle's house. Michelle invited Danielle to play at her house instead.

#### F – No Loss

Kurt is 10 years old and he sits next to his friends Michael and Aaron in class. Aaron is excited about going to Michael's home on the farm after school. It will be the first time Aaron catches the school bus. It is maths time, and their maths group should be working quietly on their maths questions. Aaron and Michael were whispering about what they should do after school at Michael's house. Ms. Kelly caught them and said "Aaron and Michael, if I catch you talking again you will stay behind after school." Aaron and Michael quickly faced their desks and got back to work. Michael leaned over Aaron's desk and whispered to Aaron, "What did you get for question five?" Ms. Kelly heard the whisper and yelled out, "Aaron I can hear you talking! You are off task, now you can stay behind after the bell rings." Michael tried to tell Ms. Kelly that it wasn't Aaron's fault. But Ms. Kelly wouldn't listen to him. Aaron had to stay behind after school. Michael did not have to stay behind and invited Kurt to his farm to play. Kurt asked his Mum who said "Yes!" Kurt and Michael caught the bus to Michael's house.

#### G – No Gain

Joshua is 9 years old. He is hoping that Mr. Thomas will pick him to be class monitor this week. It is Monday morning. Mr. Thomas will choose one boy and one girl to be class monitor. The kid in the class that was on their best behaviour the week before usually gets picked to be the class monitor. Joshua was on his best behaviour last week. Last week Nate was class monitor. Nate gets to be class

monitor a lot because Mr. Thomas likes him the most. The class are quietly sitting on the mat and Joshua makes sure that he is sitting up straight and has his arms and legs folded. Mr. Thomas finishes calling the roll, and is about to name this week's class monitor. Mr. Thomas says to the class, "Everyone was so well behaved last week, and this week the class monitors are Amber and Nate." "Nate again!" Joshua thought to himself.

#### H - Gain

Nate is 9 years old. He is in Mr. Thomas's class. It is Monday morning. Mr. Thomas will choose one boy and one girl to be class monitor. Nate was class monitor last week. Nate likes to be class monitor, and he has found that he has been class monitor the most. The kid in the class that was on their best behaviour the week before usually gets picked to be the class monitor. Nate saw that Joshua was really good last week. Mr. Thomas finishes calling the roll, and is about to name this week's class monitor. Mr. Thomas says to the class, "Everyone was so well behaved last week, and this week the class monitors are Amber and Nate." "Me again!" Nate thought to himself.

## Appendix C: List of Recall Items – Study One

### Scenario A

Ariana

Ariana 8 years old

Ariana asked Mr Smith for extra practice

Ariana's friend Olivia

was sick and went to the sick bay

in reading group, the Crusaders

Mr Smith denied extra practice

The Crusaders made many mistakes

The Crusaders were not the group with the best performance

the group that has the best play performance will be allowed to go watch Harry Potter with Room 2 A

The Hurricanes were rewarded with the best performance

### Scenario B

Crusaders made a lot of mistakes

Daniel

Daniel 8 years old

Daniel and the Hurricanes performed their play with no mistakes

Daniel and the Hurricanes were rewarded with the best performance

Daniel's friend Olivia

was in the sick bay

in reading group, the Hurricanes

Mr Smith denied Crusaders extra practice

Olivia in the Crusaders reading group

the group that has the best play performance will be allowed to go watch Harry Potter with Room 2 B

### Scenario C

All that good behaviour was ruined

Chris

Chris 12 years old

Chris's class are going swimming

Mrs Madison takes away their reward

No one knows who did it

reward for good behaviour

Room 7

Room 8 (another class)

Ross C

Someone from another class rubbed all the house points off the whiteboard

The class finished working on their story writing for the rest of the afternoon

#### Scenario D

in her class

Laura

Laura 12 years old

Laura's class are going swimming

Room 7 misbehaved and teacher took their swimming trip away

Room 8

Room 8 got to play on the hydrosleds at the swimming pool

Ross D

rubbed off all the house points on Room 7's whiteboard

She tried to tell her teacher but her teacher didn't listen

#### Scenario E

Amy

Amy 10 years old

Amy and Michelle were whispering when they should be working quietly

Amy is excited about catching the school bus to Michelle's farm

Amy missed catching the bus to Michelle's house/farm

caught them and warned them E

Michelle invited Danielle to play

Michelle tried to tell Ms Kelly it wasn't Amy's fault

Michelle whispered to Amy

Ms Kelly E

Ms Kelly wouldn't listen to Michelle

Ms Kelly yells at Amy and Amy has to stay behind after school

#### Scenario F

Aaron and Michael were whispering when they should be working quietly

Aaron is excited about catching the school bus to Michael's farm.

Aaron missed catching the bus to Michael's house/farm

caught them and warned them F

Kurt

Kurt 10 years old

Michael invited Kurt to his farm

Michael tried to tell Ms Kelly it wasn't Aaron's fault

Michael whispered to Aaron

Ms Kelly F

Ms Kelly wouldn't listen F

Ms Kelly yells at Aaron and Aaron has to stay behind after school

#### Scenario G

"Nate again!"

Amber and Nate are selected to be class monitors G

Joshua

Joshua 9 years old

Joshua hoping to be class monitor

Joshua was on his best behaviour last week

kid who is best behaviour the week before gets to be class monitor G

Mr Thomas likes Nate the most

Nate is class monitor a lot

Scenario H

"Me again!"

Amber and Nate are selected to be class monitors H

kid who is best behaviour the week before gets to be class monitor H

Nate

Nate 9 years old

Nate has been class monitor the most

Nate likes to be class monitor

Nate saw that Joshua was really good last week

Nate was class monitor last week

## Appendix D:List of Emotion Regulation Strategies Reported in

### Study One

Condition		Frequency
No Gain		
A1	A After school activity with Olivia	1
A2	A An activity that involves cheering up Olivia	2
A3	A Apologise	1
A4	A Ask the Hurricanes about what the movie was like	1
A5	A Ask the teacher if we can perform the play again	5
A6	A Concentrate on my work	2
A7	A Do something after school	1
A8	A Do something fun in class (depending on schedule)	1
A9	A Get somebody to help them	1
A10	A Join Olivia in the sick bay	1
A11	A Look forward to the next opportunity	5
A12	A Make a suggestion to Mr Smith to play a game	1
A13	A Play a game	1
A14	A Sit down and listen to the teacher (be on good behaviour)	2
A15	A Talk to friends about other things	1
A16	A Talk to Olivia about how you feel	3
A17	A Talk to the teacher about ensuring fairness next time	3
A18	A Talk to the teacher about the unfair event	2
A19	A Talk to your parents	1
A20	A Think about positive things	2
A21	A Think at least you gave it a go	1
A22	A Think that it is not a big deal	2
A23	A Think that Olivia is okay	1
A24	A Think that there's always next time	2
A25	A Try not to think about it	7
A26	A Visit Olivia to find out how she is	3
A27	A Watch a different movie after school	1
A28	A Watch the movie after school	5
G1	G Ask teacher for a task to do (to keep mind off it)	1

G2	G Continue with work	2
G3	G Do not know	1
G4	G Do something to make you laugh (hit your funny bone)	1
G5	G Look forward to the next opportunity (hope)	3
G6	G Offer to help the class monitors	1
G7	G Play with friends	1
G8	G Talk to an adult like parents	2
G9	G Talk to friends about other things	1
G10	G Talk to the teacher about choosing someone else next time	5
G11	G Talk to the teacher about the situation being unfair	4
G12	G Think of positive things (how many days till your birthday etc)	3
G13	G Think that if I behave this week I might have another opportunity	2
G14	G Try to be on my best behaviour for next week	9

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### **Gain**

B1	B Apologise to Olivia	1
B2	B Apologise to the other group	1
B3	B Ask the teacher if the Crusaders group could perform again for the class	3
B4	B Do not know	1
B5	B Do something that makes you feel good	1
B6	B Enjoy the movie	3
B7	B Give Crusaders the movies trip	1
B8	B Help the Crusaders group performance (Change the situation)	1
B9	B Invite Olivia to HP another time	1
B10	B Rent out the movie for Olivia to watch	1
B11	B Reschedule the movies	1
B12	B Share with the Crusaders group what the movie was about	1
B13	B Take Olivia to the movies with him	1
B14	B Talk to Crusaders group	1
B15	B Talk to friends	1
B16	B Talk to Olivia about how you feel	1
B17	B Talk to Olivia to find out if she is okay	2
B18	B Talk to the teacher about everybody doing	1

	plays again	
B19	B Talk to the teacher about letting the Crusaders go with them because they had less people	2
B20	B Talk to the teacher about the unfair event	2
B21	B Tell himself he did the best he could	1
B22	B Tell himself that he's going to the movie and Olivia won't miss out because there are other times	1
B23	B Think about enjoying the movie	2
B24	B Think about something else	3
B25	B Try not to think about it / Forget about it	1
B26	B Try to make Olivia feel better (do something good)	1
B27	B Visit Olivia in the sick bay	1
B28	B Wait and see if it happen again, and help them ask the teacher for extra practice next time	1
H1	H Apologise to Joshua	1
H2	H Be naughty	1
H3	H Do not know	3
H4	H Enjoy being class monitor	2
H5	H Practice his good behaviour after school	1
H6	H Swap with Joshua (himself)	1
H7	H Talk to Mr Thomas about choosing someone else next time	10
H8	H Talk to the teacher about choosing someone else (in the present)	9
H9	H Think about the positive things in the situation	1
H10	H Think that other people have had two turns in a row as well	1

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### Loss

C1	C After school do enjoyable activities	1
C2	C After school go to friend's house	1
C3	C Concentrate on your work	1
C4	C Do not know	4
C5	C Do something that makes him happy	0
C6	C Follow teacher's instructions	2
C7	C Go to the pools after school	1
C8	C Play with friends in break time	6
C9	C Talk to his friends	1

C10	C Talk to his Mum	3
C11	C Talk to Ross	2
C12	C Talk to the person who is responsible	1
C13	C Talk to the teacher	1
C14	C Think about it and try to relax	2
C15	C Think about something else	1
C16	C Think about something else positive	3
C17	C Think of the positive i.e., that you're finishing of your work	1
C18	C Think that he has been swimming before	1
C19	C Think that the incident never occurred	1
C20	C Think that there will be another opportunity	3
C21	C Try not to think about it	9
C22	C Try to earn another reward with good behaviour	5
C23	C Try to find out who did it	3
C24	C Try to physically relax (lie down)	1
C25	C Wait until after school to talk to the teacher about how it was unfair	2
C26	C Write about his feelings in story writing	1
C27	C Write about something fun and humourous in story writing	1
C28	C Write about what he could have done at the swimming pools	1
E1	E At home did enjoyable activities	1
E2	E Change the situation by not talking or looking at Michelle	1
E3	E Concentrate on your work	2
E4	E Do not follow the teacher's instructions (ineffective)	1
E5	E Do not know	1
E6	E Forget about it	2
E7	E Give Michelle one more chance, but if she does it again, you don't want to be her friend	1
E8	E Hang out with another friend	2
E9	E Her Mum might talk to the teacher	2
E10	E If teacher doesn't listen again, talk to the principal	1
E11	E Ignore what's happening	1
E12	E Invite a different friend over to play after school	1
E13	E Invite Michelle to her house (enjoy herself and forget about it)	1

E14	E Look for a new friend	2
E15	E Make Michelle invite her again	2
E16	E Michelle and Amy could apologise to each other	1
E17	E Michelle could apologise	1
E18	E Play a game	1
E19	E Talk to friends e.g., Danielle	2
E20	E Talk to her Mum about what happened	3
E21	E Talk to Michelle	4
E22	E Talk to the teacher again	7
E23	E Think about the positive things	2
E24	E Think about what I was meant to be doing	1
E25	E Think that I could go another day	2
E26	E Think that was a mistake	1
E27	E Think that you could do it tomorrow	1
E28	E Try to keep away from Michelle	2
E29	E Use something in her desk to play with e.g., drawing	1

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### No Loss

D1	D Ask parents to talk to the teacher	1
D2	D Do something you enjoy after school e.g., watch TV, play Playstation	1
D3	D Enjoy yourself at the swimming pools and hydrosrides	7
D4	D Get reassurance from parents	1
D5	D Laura apologises to Room 7	1
D6	D Make sure everyone knows that Ross did it and let Room 7 go to the pools next time	1
D7	D Not swim	2
D8	D Not think about it	1
D9	D Prevent Ross from ruining another trip in the future	1
D10	D Share their next treat with Room 7	1
D11	D Sit down and read a book or something (relax)	1
D12	D Talk to friends	2
D13	D Talk to Ross afterwards	1
D14	D Talk to the Room 7 teacher	8
D15	D Talk to the teacher now	2
D16	D Talk to your parents about what happened	2
D17	D Talk to your teacher again at an appropriate time (after school)	7

D18	D Think of positive things	2
D19	D Yell at Ross	1
F1	F Apologise to Aaron	5
F2	F Change the situation - not go to Michael's house	4
F3	F Concentrate on his work	1
F4	F Enjoy himself at Michael's house	2
F5	F Gave friends some space and played with other friends	1
F6	F Help Aaron feel better	3
F7	F Ignore what is happening around him (by concentrating on work)	1
F8	F Invite Aaron around the next day	5
F9	F Sit somewhere quiet and do something	1
F10	F Talk to Aaron	2
F11	F Talk to Michael's mum about giving Michael time out	1
F12	F Talk to Michael's mum about what happened and how he feels	3
F13	F Talk to Michael about inviting Aaron over to his house again	4
F14	F Talk to Michael about waiting for Aaron	4
F15	F Talk to the teacher again	2
F16	F Think that it wasn't him so he's happy	1

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## Appendix E: Vignettes from Study Two

### A. No Gain

Ariana is 10 years old and in Mr. Smith's class. Her maths group are working on a maths activity on the classroom computer. If she gets all answers correct then she will be rewarded with house points at the end of the task. While Ariana was working, an error message comes up on the computer screen that reads, "Computer Error: Your answers were not scored properly." Ariana put her hand up for Mr. Smith's attention. When Mr. Smith arrives at the group, he says, "It is nearly morning tea time everybody, please finish off the question you are working on now, and the computer will score our answers." Ariana showed Mr. Smith the error message on the computer screen. Mr. Smith said, "That's too bad Ariana, for now we will have to use the score the computer has given us." When everyone received their scores from their computer, Ariana found that her score was not 100%, and Mr. Smith did not reward her with house points at the end of the task.

### B. No Gain

Jesse is 8 years old and in Mr. Smith's class. It is Monday morning and Mr. Smith will choose one boy and one girl to be class monitor. You get to be the class monitor when you are on your best behaviour. Jesse was on his best behaviour last week. Amber and Nate were the class monitors last week. The class are quietly sitting on the mat and Jesse makes sure that he is sitting up straight and listening to Mr. Smith carefully. Mr. Smith finishes calling the roll, and says, "Everyone was so well behaved last week, and this week the class monitors are Amber and Nate again."

### C. Gain

Daniel is 10 years old and in Mr. Thomas's class. His maths group are working on a maths activity on the classroom computer. The person who has the most answers correct will be rewarded house points at the end of the task. While Daniel was working, an error message comes up on the computer screen that reads, "Computer Error: Your answers were not scored properly." Daniel put his hand up for Mr. Thomas's attention. When Mr. Thomas arrives at the group, he says, "It is nearly morning tea time everybody, please finish off the question you are working on now and the computer will score our answers." Daniel showed Mr. Thomas the error message on the computer screen. Mr. Thomas said, "That's too bad Daniel, for now we will have to use the score the computer has given us." When everyone received their scores from their computer, Daniel found that his score was 100%, and Mr. Thomas rewarded him with house points at the end of the task.

### D. Gain

Amber is 8 years old and in Mr. Thomas's class. It is Monday morning and Mr. Thomas will choose one boy and one girl to be class monitor. You get to be the class monitor when you are on your best behaviour. Amber saw that Joshua was on his best behaviour last week. Nate and Amber were the class monitors last week. The class are quietly sitting on the mat and Mr. Thomas finishes calling the roll, and says, "Everyone was so well behaved last week, and this week the class monitors are Amber and Nate again."

### E. Loss

Chris is 12 years old and in Mrs. Merry's class. For being on good behaviour, Mrs. Merry said that they can go to the swimming pool after lunch. There was one condition, they needed to keep being on good behaviour until after lunchtime. During lunchtime Ross from another classroom came into Chris's class while no one was looking. Ross rubbed all the house points off the whiteboard. No one saw him do it. The bell rang and when Mrs. Merry entered the classroom she saw that someone had rubbed off all the house points. Mrs. Merry angrily asked the class, "Who rubbed off all the house points?" No one answered because no one knew who did it. Mrs. Merry asks again "Who rubbed off all the house points?" Still no one answers. Mrs. Merry takes away their reward, "We won't be going to the swimming pool this afternoon because someone in this classroom cannot be trusted." Instead of going to the swimming pool, the class finish working on their story writing for the rest of the afternoon.

#### F. Loss

Amy is 9 years old and in Mrs. Merry's class. Amy is excited about going to her friend Michelle's farm after school. It is maths time and their group should be working quietly on their maths questions. Everyone in the class is talking. Mrs. Merry warns the class, "If I catch you talking, you will stay behind after school." Amy was quietly working on her questions when Debra leaned over to her and whispered, "What did you get for question 5?" Mrs. Merry. heard the whisper and yelled out, "Amy I warned you once before! Now you can stay behind after the bell rings." Amy tried to tell Mrs. Merry that it wasn't her whispering. Mrs. Merry was busy and didn't listen to her. Amy had to stay behind after school, and she missed out on playing on Michelle's farm.

#### G. No Loss

Laura is 12 years old and in Ms. Eden's class. For being on good behaviour, Ms. Eden said that they can go to the swimming pool after lunch. There was one condition, they needed to keep being on good behaviour until after lunchtime. During lunchtime, Ross from Laura's classroom went into another class and rubbed all the house points off the whiteboard. No one saw him do it. Laura heard Ross tell his friends about his stunt. She soon found out that the other classroom was punished for this. The bell rang and when Ms. Eden entered the classroom, she says, "Well done to you all for great behaviour today!" Laura tried to tell her what she heard Ross do. But Ms. Eden was busy and didn't listen to her. Later that afternoon, Laura and everyone in her classroom went to the swimming pool.

#### H. No Loss

Kurt is 9 years old and he is in Ms. Eden's class. He is excited about going to his friend Michael's farm after school. It is maths time and their group should be working quietly on their maths questions. Everyone in the class is talking. Ms. Eden warns the class, "If I catch you talking, you will stay behind after school." After some time, Kurt was stuck on a question and he whispered to Danny, "What did you get for question five?" Ms. Eden heard the whisper and yelled out, "Danny I warned you once before! Now you can stay behind after the bell rings." Kurt tried to tell Ms. Eden that it wasn't Danny whispering. Ms. Eden was busy and didn't listen to him. Danny had to stay behind after school. Kurt went to play on Michael's farm.

# Appendix F: School and Teacher Information Sheets - Study Two



## Is that fair?

SCHOOL INFORMATION BROCHURE

I \_\_\_\_\_, acting on behalf of the management at \_\_\_\_\_, approve of the undertaking of this research project. I have read the Information Sheet and have had the details of the study explained to me. I am fully aware that a researcher from Massey University will be interviewing students from selected classrooms during school hours. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

Yes I would like to receive a summary of the findings at the end of the project

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

This consent form will be held for a period of five (5) years



## Is that fair?

SCHOOL INFORMATION BROCHURE

This research project wants to find out what emotion regulation strategies children would use when faced with an unfair classroom situation.



My name is Liz Yan, and I am the primary investigator of this project. This is my 7th year of study for a Doctoral qualification in Clinical Psychology at Massey University.

I am interested in children's emotional development. In particular, how children emotionally recover from stressful situations, or how children regulate their emotions.

This research project will involve individual interviews where children will read a series of stories about fair and unfair classroom situations. Then they will be asked a set of questions about the character in the story, how the character may feel, and how the character would make themselves feel better.

### How can your school help?

I am looking for at least 100 children in Years 4, 5 & 6 in the Manawatu area to participate in these individual interviews. I have already conducted some interviews in other schools and looking for more participants to help me with my research.

I would greatly appreciate any assistance from your school. Please return the attached consent form if your school is interested.



## Is that fair? SCHOOL INFORMATION BROCHURE

### Background

I am primarily supervised by Prof. Ian Evans who has recently supervised the Blue Skies research project funded by the Families Commission – Fairness, Forgiveness, and Families. The present research project will also explore fairness but in the classroom environment.

My earlier research experience was involved in a project called *Te Anwanawa – Warming the Classroom Emotion Environment*. This research project is managed by Dr. Shane Harvey and Prof. Ian Evans. Dr. Shane Harvey is also supervising the present research project.

### What would happen?

**1** Your teachers will be provided with information packs (information and consent forms) for students to take home to their parents/ caregivers. Please encourage students to return consent forms within a week or two. Those students with full consent are invited to participate.

**2** The next step involves scheduling appropriate days for interviews to take place. Interviews will take about 30 minutes, are individual, and ideally in a quiet room located in the school. I will escort children to and from the classroom. I would like your help in arranging a room for interviews to take place.

In the interview, the stories that are read to your students are hypothetical. They do include aspects of classroom life that commonly occur, but the themes have come from research and are not based on real events.

After the stories are read to the student, they have the opportunity to answer questions about the character in the story and generate some ideas about how the character could cope emotionally in their situation. If the student finds a question too difficult, or simply does not want to answer the question, they are free to do so.



## Is that fair? SCHOOL INFORMATION BROCHURE

### What happens to the information?

All the information gathered from interviews will be collated together and will help inform us about children's emotion regulation strategies. The results of this study will be published in my doctoral dissertation, and a summary of the results will be made available to you at your request. You can indicate this preference on the consent form or alternatively contact me via email if you wish for a copy.

Let me know if you would like me to meet with you and your staff to provide feedback on the results of this study.

### Questions?

Please contact me (by email or telephone) if you have any queries about this research project. My supervisors' contact details are also listed below.

Liz Yan  
T (06) 356 9099 x 7860  
e elizabeth.yan.1@uni.massey.ac.nz

Prof. Ian Evans  
T (06) 356 9099 x 62125  
e i.m.evans@massey.ac.nz

Dr. Shane Harvey  
T (06) 356 9099 x 7171  
e s.harvey@massey.ac.nz

### Massey University Human Ethics statements:

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- withdraw from the study at any stage before interviews begin;
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 09/18. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email [humanethicssouthb@massey.ac.nz](mailto:humanethicssouthb@massey.ac.nz).



## Is that fair?

TEACHER INFORMATION BROCHURE

I \_\_\_\_\_, approve of the undertaking of this research project in my classroom. I have read the Information Sheet and have had the details of the study explained to me. I am fully aware that a researcher from Massey University will be interviewing my students. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

Yes I would like to receive a summary of the findings at the end of the research project. Please send a summary to:

The School, or

This address: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

*This consent form will be held for a period of five (5) years*

Te Kūnenga  
ki Pāhuruora

Liz Yan, Massey University School of Psychology – Te Kura Hirangaro Tangata  
Private Bag 11222, Palmerston North 4442 T +64 6 356 9099 x 7860 e elizabeth.yan.1@uni.massey.ac.nz



## Is that fair?

TEACHER INFORMATION BROCHURE

Students from your classroom have been invited to participate in this research project - Is that fair? This research project wants to find out what emotion regulation strategies children would use when faced with an unfair classroom situation.



My name is Liz Yan, and I am the primary investigator of this project. This is my 7th year of study for a Doctoral qualification in Clinical Psychology at Massey University.

I am interested in children's emotional development. In particular, how children emotionally recover from stressful situations, or how children regulate their emotions.

Thanks for taking the time to read this information brochure. This research project will involve individual interviews where children will be read a series of stories about fair and unfair classroom situations. Then they will be asked a set of questions about the character in the story, how the character may feel, and how the character would make themselves feel better.

I am looking for at least 100 children in Years 4, 5 & 6 in the Manawatu area to participate in these individual interviews. I have already conducted some interviews in other schools and looking for more participants to help me with my research.

Te Kūnenga  
ki Pāhuruora

Liz Yan, Massey University School of Psychology – Te Kura Hirangaro Tangata  
Private Bag 11222, Palmerston North 4442 T +64 6 356 9099 x 7860 e elizabeth.yan.1@uni.massey.ac.nz



Is that fair? | TEACHER INFORMATION BROCHURE

### Background

I am primarily supervised by Prof. Ian Evans who has recently supervised the Blue Skies research project funded by the Families Commission – Fairness, Forgiveness, and Families. The present research project will also explore fairness but in the classroom environment.

My earlier research experience was involved in a project called *Te Aniwanuiwa - Warming the Classroom Emotion Environment*. This research project is managed by Dr. Shane Harvey and Prof. Ian Evans. Dr. Shane Harvey is also supervising the present research project.

### What would happen?

**1** You will be provided with information packs (information and consent forms) for students to take home to their parents/ caregivers. Please encourage students to return consent forms within a week or two. Those students with full consent are invited to participate.

**2** The next step involves arranging a day (or two) that suits you for interviews to take place. Interviews will take about 30 minutes, are individual, and ideally in a quiet room located in the school. I will escort children to and from the classroom.

In the interview, the stories that are read to your students are hypothetical. They do include aspects of classroom life that commonly occur, but the themes have come from research and are not based on real events.

After the stories are read to the student, they have the opportunity to answer questions about the character in the story and generate some ideas about how the character could cope emotionally in their situation. If the student finds a question too difficult, or simply does not want to answer the question, they are free to do so.

Te Kūnenga  
ki Pāhuruora

Liz Yan, Massey University School of Psychology – Te Kura Hirangaro Tangata  
Private Bag 11222, Palmerston North 4442 T +64 6 356 9099 x 7860 e elizabeth.yan.1@uni.massey.ac.nz



Is that fair? | TEACHER INFORMATION BROCHURE

### What happens to the information?

All the information gathered from interviews will be collated together and will help inform us about children's emotion regulation strategies. The results of this study will be published in my doctoral dissertation, and a summary of the results will be made available to you at your request. You can indicate this preference on the consent form or alternatively contact me via email if you wish for a copy.

### Questions?

Please contact me (by email or telephone) if you have any queries about this research project. My supervisors' contact details are also listed below.

Liz Yan  
T (06) 356 9099 x 7860  
e elizabeth.yan.1@uni.massey.ac.nz

Prof. Ian Evans  
T (06) 356 9099 x 62125  
e i.m.evans@massey.ac.nz

Dr. Shane Harvey  
T (06) 356 9099 x 7171  
e s.t.harvey@massey.ac.nz

### Massey University Human Ethics statements:

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- withdraw from the study at any stage before interviews begin;
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 09/18. If you have any concerns about the conduct of this research, please contact Dr. Karl Papp, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email humanethicssouth@massey.ac.nz.

Te Kūnenga  
ki Pāhuruora

Liz Yan, Massey University School of Psychology – Te Kura Hirangaro Tangata  
Private Bag 11222, Palmerston North 4442 T +64 6 356 9099 x 7860 e elizabeth.yan.1@uni.massey.ac.nz

# Appendix G: Parent and Child Information Sheets - Study Two



## Managing Feelings at School Project PARENT CONSENT FORM

My child \_\_\_\_\_ has my consent to participate in this research project **Is that fair?** I have read the Information Sheet and am fully aware that a researcher from Massey University will be interviewing my child.

Yes I would like to receive a summary of the findings at the end of the research project. Please send a summary to:

The School, or

This address: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_

*This consent form will be held for a period of five (5) years.*

Te Kūnenga  
ki Pūrehuroa

Liz Yan, Massey University School of Psychology – Te Kura Hinengaro Tangata  
Private Bag 11222, Palmerston North 4442 T +64 6 356 9099 x 7860 e elizabeth.yan.1@uni.massey.ac.nz



## Is that fair?



## Managing Feelings at School Project PARENT INFORMATION BROCHURE

Thanks for taking the time to read this information brochure. Your child is invited to participate in this research project - **Is that fair?** This research project wants to find out how children in New Zealand manage their feelings when faced with unfair situations at school.



My name is Liz Yan, and I am the primary researcher of this project. This is my 7th year of study for a Doctoral qualification in Clinical Psychology at Massey University. In my study, I am interested in children's emotional development. In particular, how children recover from emotionally stressful situations.

This research project will involve one-to-one interviews where children will be read a set of stories about fair and unfair classroom situations. Then they will be asked a set of questions about the character in the story, how the character may feel, and how the character would make themselves feel better. The focus of the questions are about the child in the story.

Te Kūnenga  
ki Pūrehuroa

Liz Yan, Massey University School of Psychology – Te Kura Hinengaro Tangata  
Private Bag 11222, Palmerston North 4442 T +64 6 356 9099 x 7860 e elizabeth.yan.1@uni.massey.ac.nz



## Is that fair? | PARENT INFORMATION BROCHURE

### What would happen?

Interviews will take place on a day that has been pre-scheduled with the teacher to minimise disruption to children's learning. Interviews will take only 30 minutes and will be conducted during school hours. We will read through some stories about fair and unfair transactions.

The stories that are read to your child are hypothetical. They do include aspects of classroom life that commonly occur, but the themes have come from research and are not based on real events.

After the stories are read to your child, they have the opportunity to answer questions about the character in the story and generate some ideas about how the character could cope emotionally in their situation. If your child finds a question too difficult, or simply does not want to answer the question, they are free to do so.

Our discussion will be recorded with a digital voice recorder that will be used later for written transcription. This is how information will be gathered. Names and other identifying information will not be recorded in the written transcription. All information obtained during the interview will be kept confidential.

### What do I need to do?

We encourage you to read the enclosed information letter with your child so they fully understand the nature of this research project.

Please contact me if you have any queries.

If you agree to your child participating in this project please sign and return the consent form in the envelope to school as soon as possible.



Te Kūnenga  
ki Pūrehuroa

Liz Yan, Massey University School of Psychology – Te Kura Hinengaro Tangata  
Private Bag 11222, Palmerston North 4442 T +64 6 356 9099 x 7860 e elizabeth.yan.1@uni.massey.ac.nz



## Is that fair? | PARENT INFORMATION BROCHURE

### What happens to the information?

All the information gathered from interviews will be collated together and will help inform us about children's emotion regulation strategies. The results of this study will be published in my doctoral dissertation, and a summary of the results will be made available to you at your request. You can indicate this preference on the consent form or alternatively contact me via email if you wish for a copy.

### Questions?

Please contact me (by email or telephone) if you have any queries about this research project. My supervisors' contact details are also listed below.

Liz Yan  
T (06) 356 9099 x 7860  
e elizabeth.yan.1@uni.massey.ac.nz

Prof. Ian Evans  
T (06) 356 9099 x 62125  
e i.m.evans@massey.ac.nz

Dr. Shane Harvey  
T (06) 356 9099 x 7171  
e s.l.harvey@massey.ac.nz

### Massey University Human Ethics statements:

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- withdraw from the study at any stage before interviews begin;
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B. Application 09/18. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email humanethicssouth@massey.ac.nz.

Te Kūnenga  
ki Pūrehuroa

Liz Yan, Massey University School of Psychology – Te Kura Hinengaro Tangata  
Private Bag 11222, Palmerston North 4442 T +64 6 356 9099 x 7860 e elizabeth.yan.1@uni.massey.ac.nz



## Is that fair?

### CHILD LETTER

My name is Liz Yan, and as part of my university studies I want to find out what kids can do to make themselves feel better when something is unfair at school.

I will read you some stories about kids in school and they come across some things that are fair and unfair. Then I will ask you questions about the child in the story to get your ideas.



Our conversation will be recorded with a voice recorder. This is because I'm not very quick at taking notes. Our conversation will also be *confidential*. It means that no one at your school will ever get to hear this recording. I will also not be writing down your name so people will not know what answers you gave me. This helps people say the things they really want to say.



If you are OK with me asking you questions and using your answers as part of my research, please talk to your parents. Then read and sign the consent form and return it to school in the envelope.

Thank you for reading this.

Kia ora

Liz ☺

## Appendix H: Written Questionnaire for Study Three



### QUESTIONS ABOUT MY FEELINGS



Circle or fill in the answer that best fits you...

<p><b>Q0.</b> How many raffle tickets will you receive?</p>	<p>1 or 2</p>
<p><b>Q1.</b> Think about how you felt when you were given your score, what EMOTION were you feeling?</p> <hr/>	
<p><b>Q2.</b> ALL of these circles show how strong your feeling was. If all circles represent your feeling, how strong would you rate it when you saw your score?</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  1 Very Weak         </div> <div style="text-align: center;">  2         </div> <div style="text-align: center;">  3         </div> <div style="text-align: center;">  4         </div> <div style="text-align: center;">  5 Very Strong         </div> </div> <p style="text-align: center;">Moderately Strong</p>	<p>Circle one 1 2 3 4 5</p>
<p><b>Q3.</b> Think about how your feelings changed since finding out about your score. What did you do to make yourself feel better?</p> <hr/> <p style="text-align: center;">This is called your STRATEGY.</p>	
<p><b>Q4.</b> Think about how easy it was to use your STRATEGY. Use these circles to rate how easy it was for you to use your strategy.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  1         </div> <div style="text-align: center;">  2         </div> <div style="text-align: center;">  3         </div> <div style="text-align: center;">  4         </div> <div style="text-align: center;">  5 Very hard to do         </div> </div> <p style="text-align: center;">Very easy to do      Moderately easy</p>	<p>Circle one 1 2 3 4 5</p>

# Appendix I: School and Teacher Information Sheets - Study Three

**Questions?**

Please do not hesitate to contact me if you have any questions about this research project. Email is the most preferred option.

**Research Team**

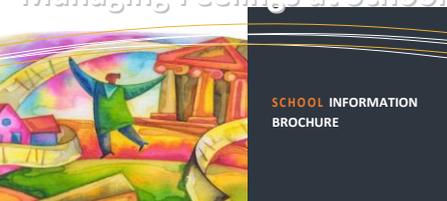
I am supervised by Professor Ian Evans, Dr. Shane Harvey, and Dr. Kirsty Ross from the School of Psychology. Professor Ian Evans has recently supervised the Blue Skies research project funded by the *Families Commission – Fairness, Forgiveness, and Families*.

Dr. Shane Harvey is the Director of the Massey University Psychology Clinic. He recently co-managed the *Te Āniwaniwa - Warming the Classroom Emotion Environment* project with Prof. Ian Evans. My Honours research was undertaken as part of this project.

Dr. Kirsty Ross is a Senior Clinical Psychologist at the Massey Psychology Clinic and has research interests in all aspects of child and family work. Her current research interests are in mental health in children with long-term health conditions.



**Is That Fair?**  
*Managing Feelings at School*



SCHOOL INFORMATION BROCHURE

**Contact Details**

**Primary Researcher**  
Liz Yan BSc(Hons)  
School of Psychology  
Massey University  
Palmerston North  
T 06 356 9099 extn 7860  
E elizabeth.yan.1@uni.massey.ac.nz

**Supervisors**  
Prof. Ian Evans  
Professor (Wellington)  
T 06 356 9099 extn 62125  
E i.m.evans@massey.ac.nz

Dr. Shane Harvey  
Turitea Psychology Clinic Director  
T 06 356 9099 extn 7171  
E s.t.harvey@massey.ac.nz

Dr. Kirsty Ross  
Senior Clinical Psychologist  
T 06 356 9099 extn 2879  
E k.j.ross@massey.ac.nz

**About Me**

My name is Liz Yan, and I am a trainee Clinical Psychologist specialising in work with children. This is my 7th year of study for a Doctoral qualification in Clinical Psychology at Massey University. I am interested in children's emotional development. In particular, how children manage their emotions in stressful situations.

**How can your school help?**

I am looking for at least 80 children in Years 4, 5 & 6 in the Manawatu area to help me with this project



Is that fair?  
2009-2011



Is that fair?  
2009-2011

Te Kunenga ki Pūrehuroa



MASSEY UNIVERSITY  
COLLEGE OF HUMANITIES  
AND SOCIAL SCIENCES  
TE KURA PEREMBA TANGATA

**Questions?**

Please do not hesitate to contact me if you have any questions about this research project. Email is the most preferred option.

**How do children manage their emotions in unfair classroom situations?**  
*- My research question*

**About the study**

As mentioned earlier, individual students are invited to participate in a simple math activity that will be performed on a computer. Students will be out of the classroom for up to 45 minutes.

The math activity is designed to be simple to complete, and will suit various ability levels. However, the activity outcome will vary in terms of providing either a sense of achievement or no achievement, which may or may not be perceived as fair by the children. This will happen when the computer activity experiences a 'glitch' that will lead to some unreliable scores appearing at the end of the task. It is anticipated that as a consequence emotions will be experienced during the completion of the task and children will be asked how they managed their emotions during the whole activity.

For the activity to take place, and real emotion to be generated, it is important that children do not know about the 'glitch' before the activity. At the end of the session, children will be debriefed on the math activity and we will discuss effective ways of managing emotions in the classroom. They will be informed of the 'glitch' by the end of the day, after the activity has taken place. They will also receive a small stationery prize for participation. The experience will hope to provide children with a better understanding of how they can manage feelings in the future.



**Emotion regulation skills are key for healthy emotional development**

**What would happen?**

You will be provided with information packs (with permission slips) for students to take home to their parents/ caregivers. I would like your help with encouraging students to return consent forms within the next week.

The activity will take place in a quiet room, in the school. Let me know what dates you would like for this activity to take place. I am more than willing to work around your schedule. I will also provide you with a list of students who have full permission to take part in this project.

**What happens to the information?**

All responses will be collated together and will help inform us on how children manage emotions in a school context. The results of this study will be published in my doctoral dissertation, and a summary of the results will be made available to you at your request. You can indicate this preference on the consent form or alternatively contact me via email if you wish for a copy.

**Massey University Human Ethics statements:**

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- withdraw from the study at any stage before interviews begin;
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 10/32. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5789 x 6929, email humanethicssouthb@massey.ac.nz.

**How can your school help?**

I am looking for at least 80 children in Years 4, 5 & 6 in the Manawatu area to help me with this project

## Appendix J: Parents and Child Information Sheets – Study Three

### Research Team

I am supervised by Professor Ian Evans, Dr. Shane Harvey, and Dr. Kirsty Ross from the School of Psychology. Professor Ian Evans has recently supervised the Blue Skies research project funded by the Families Commission – *Fairness, Forgiveness, and Families*.

Dr. Shane Harvey is the Director of the Massey University Psychology Clinic. He recently co-managed the *Te Āniwaniwa - Warming the Classroom Emotion Environment* project with Prof. Ian Evans. My Honours research was undertaken as part of this project.

Dr. Kirsty Ross is a Senior Clinical Psychologist at the Massey Psychology Clinic and has research interests in all aspects of child and family work. Her current research interests are in mental health in children with long-term health conditions.



### Is That Fair? Managing Feelings at School

**PARENT INFORMATION BROCHURE**

**INVITATION TO PARTICIPATE**

Thanks for taking the time to read this information brochure. Your child is invited to participate in this research project **Managing Feelings at School**. This research project wants to find out what how children manage feelings in a computer-based math activity.

For this research project, your child is invited to participate in a learning activity that will be performed on a computer. Then they will be asked questions about feelings and managing feelings at the end of the task.

The experience will hope to provide children with a better understanding of how they can manage feelings in the future.

**How can you help?**

I am looking for at least 80 children in Years 4, 5 & 6 in the Manawatu area to help me with this project.

### Questions?

Please do not hesitate to contact me if you have any questions about this research project. Email is the most preferred option.

### About Me

My name is Liz Yan, and I am a trainee Clinical Psychologist specialising in work with children. This is my 7th year of study for a Doctoral qualification in Clinical Psychology at Massey University. I am interested in children's emotional development. In particular, how children manage their emotions in stressful situations.

### Contact Details

**Primary Researcher**  
Liz Yan BSc(Hons)  
School of Psychology  
Massey University  
Palmerston North  
T 06 356 9099 extn 7860  
E elizabeth.yan.1@uni.massey.ac.nz

**Supervisors**  
Prof. Ian Evans  
Professor (Wellington)  
T 06 356 9099 extn 62125  
E i.m.evans@massey.ac.nz

Dr. Shane Harvey  
Turitea Psychology Clinic Director  
T 06 356 9099 extn 7171  
E s.t.harvey@massey.ac.nz

Dr. Kirsty Ross  
Senior Clinical Psychologist  
T 06 356 9099 extn 2879  
E k.j.ross@massey.ac.nz



Is that fair?  
2009-2011



Te Kōwhiri  
ki Pārehuroa



MASSEY UNIVERSITY  
COLLEGE OF HUMANITIES  
AND SOCIAL SCIENCES  
PALLISER AVENUE  
PALMERSTON NORTH

### How do children manage their emotions in unfair classroom situations?

- My research question

**What would happen?**

The research will take place on a day that has been pre-scheduled with the teacher to minimise disruption to children's learning. Your child will be asked to complete a simple math activity on the computer that will take up to 45 minutes.

The activity has been tailored to suit different ability levels and provide either a sense of achievement or no achievement, which may or may not be perceived as fair by the children.

There will be a surprise computer 'glitch' that will take place at some time during the activity. This will lead to some unrelated outcomes involving a pass or fail depending on what condition your child will be assigned into; which will influence how children rate the scores. During the activity, different emotions will be experienced during the task. Your child will be asked some questions about emotion and how they managed emotions during the task.

In order for a life-like situation to be created it is important that your child does not know about the 'glitch' because this will interfere with the outcome of our research.



**Emotion regulation skills are key for healthy emotional development**

At the end of the session, children will be debriefed on the math activity and we will discuss about effective ways of managing emotions in the classroom. They will also receive a small stationery prize for participation.

Every child will experience ultimate success and achievement, so all will leave the task feeling positive and having earned a reward. If you have any questions about the procedure, I would very much like to talk to you before you sign the permission slip.

If you are happy with these conditions, we would love for your child to participate. The experience will hope to provide children with a better understanding of how they can manage feelings in the future.

### What do I need to do?

We encourage you to read the enclosed information letter with your child so they fully understand the nature of this research project. If you agree to your child participating in this project please sign and return both consent forms in the envelope, to school as soon as possible.

### What happens to the information?

All responses will be collated together and will help inform us on how children manage emotions in a school context.

All responses will be anonymous and confidential.

The results of this study will be published in my doctoral dissertation, and a summary of the results will be made available to you at your request. You can indicate this preference on the consent form or alternatively contact me via email if you wish for a copy.

### Massey University Human Ethics statements:

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- withdraw from the study at any stage before interviews begin;
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 10/32. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email humanethicssouthb@massey.ac.nz.



# Is That Fair? Managing Feelings at School



CHILD LETTER &  
PERMISSION SLIP



About  
Me

My name is Liz Yan, and I am a trainee Clinical Psychologist specialising in work with children. I study at Massey University. My work involves finding out how children can help themselves feel better.

## INVITATION TO PARTICIPATE

Hi, my name is Liz Yan, and as part of my university studies I want to find out what kids do to make themselves feel better.

You are invited to participate in my research study. This is a study that wants to find out how children manage their feelings when they are doing school work. We will be doing some easy maths activities on a computer. Then I will ask you some questions about your feelings.

Te Kōwhiri  
ki Pārehurua



Is that fair?  
2009-2011

Te Kōwhiri  
ki Pārehurua



Our conversation will be recorded with a voice recorder. This is because I'm not very quick at taking notes.

Our conversation will also be *confidential*. It means that no one will find out from me how well you did in the research study. I will not be writing down your name so people will not know what answers you gave me. This helps people say the things they really want to say.

The whole activity will take up to 45 minutes, and you will receive a stationary prize for participation.

Would like to take part, please talk to your parents. Then read and sign the consent form and return it to school in the envelope as soon as possible.

Thank you for reading this letter.

Kia ora

Liz ☺



## Managing Feelings at School Project

CHILD PERMISSION SLIP

It is okay for me to take part in Liz's research. My name is \_\_\_\_\_

from Room \_\_\_\_\_.

I understand that:

I will be doing easy maths activities on the computer

Liz will ask me questions about feelings

I can ask Liz questions at any time

Liz will not tell my friends, parents or teacher what I say

It is okay for the voice recorder to record what we say

If I change my mind about taking part, I can ask to leave at any time

Today's Date: \_\_\_\_\_

(Tear off and return to school with parent's permission slip)



## Appendix K: Administration Guide for Study Three



### ADMINISTRATION

Pilot the program on the computer first before running the task.

- There are two things to consider, 1) the webpage runs smoothly. If there are any errors in loading the webpage, then check the internet connection, and whether the latest adobe flash player plugin is installed in the computer. 2) Check that all the survey questions appear on the computer screen. If there are any problems with loading the survey questions, then consider the computer screen pixel resolution under display settings in the control panel.

### Ingredients

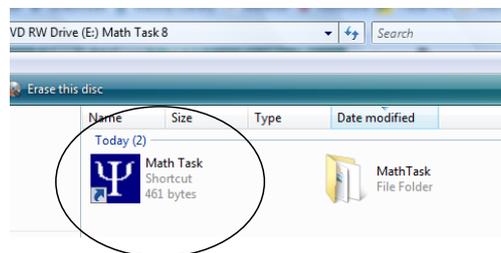
- USB stick with the computer program on it.



- 2x for each participant.
- Printed Observation Notes template.
- Printed version of the questionnaire.
- A prize – ideally a stationery prize.

### Setup

Click on the “Math Task” link (not the folder).



Enter the participant number and click save. The file will save in the “Math Task” folder as a notepad text file.

