THE RELATIONSHIP BETWEEN PARENTAL APPRAISALS, CHILDREN'S APPRAISALS, AND PATTERNS OF EMOTIONALITY IN CHILDREN

by

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A thesis submitted in conformity with the requirements for the degree of Master of Arts
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The Relationship Between Parental Appraisals, Children’s Appraisals, and Patterns of Emotionality in Children

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Abstract

Narratives of 44 mothers and 24 fathers were scored for appraisals utilizing a model which was based on goal theories of emotion, and on attribution theory. Maternal fearful appraisals were found to be positively correlated with children’s fearful appraisals and internalizing behaviour, while maternal and paternal anger appraisals were inversely related to children’s internalizing behaviour. An unexpected inverse relationship emerged between paternal sad and fearful appraisals and internalizing behaviour of children. The frequency of emotion words and emotion appraisals used by mothers and fathers were found to be significantly correlated with one another. Mothers utilized both emotion words and total emotional appraisals to a greater extent than fathers. Further, mothers tended to make a relatively greater number of sad and fearful appraisals in their explanations, while fathers made more angry appraisals.
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CHAPTER 1 INTRODUCTION

There is considerable evidence that parental socialization practices play a prominent role in the development of individual differences in children's emotionality and psychological well-being. Direct socialization factors, such as coaching and teaching (e.g., Gottman et al., 1996), and more indirect pathways, such as how children are affected by the marital relationship (e.g., Jenkins & Smith, 1991; Jouriles et al., 1991), have been shown to have an impact on children's differential emotional and behavioral outcomes. Many investigations have focused on cognitive factors within the child that seem to contribute to emotional and behavioral problems of childhood, such as children's depressive (Seligman et al., 1984; Haley et al., 1985), hostile (Dodge & Coie, 1987; Quiggle et al., 1992), and threat-related cognitions (Prins, 1987). Yet there has been relatively little research on the processes by which these cognitive patterns develop in childhood. Further work is needed to identify cognitive processes within the family that may contribute to the development of particular thinking styles in children that leave them more vulnerable to internalizing or externalizing affective patterns. For this study, it is hypothesized that exposure to parental models of thinking will socialize children to acquire similar patterns of thought. The present study investigates parental appraisal processes with the intent of examining the relationship between parent and child appraisal patterns, as well as the role of appraisals in relation to children's emotional and behavioral outcomes.
Cognitive Models of Emotion

Cognitive models of emotion are used as a framework for such an inquiry. Most cognitive models of emotional experience maintain that emotions are closely tied to a person's assessment of how events affect their goals and values (Stein & Levine, 1989; Oatley & Johnson-Laird, 1987; Frijda, 1986) and that changes occur in the emotional well-being of an individual whose goals are blocked, attained or threatened (Lazarus & Folkman, 1984). According to Oatley and Johnson-Laird's communicative theory, emotional monitoring mechanisms serve to evaluate events pertinent to one's goals, such that when a change in goal status occurs, this mechanism sets the brain into a readiness mode to respond to this change in goal status (Oatley, 1992).

Appraisal styles, as described by Lazarus (1991) and Abramson et al. (1978), are dispositions to appraise ongoing relationships with the environment consistently in one way or another, especially under conditions of ambiguity. Yet, how are appraisal styles related to emotional experiences? In an effort to better understand the relationship between specific appraisal patterns and emotion, it is helpful to draw on cognitive theories of goal appraisal processes (Stein and Trabasso, 1982; Stein & Levine, 1989) and attribution (Dodge & Coie, 1987; Seligman et al., 1984; Quiggle et al., 1992).

Goal Appraisal Processes and Attribution Theories

According to the theory of goal appraisal processes, emotions can be differentiated on the way that events have been appraised. In particular, appraisal patterns associated with sadness include the perception that a lost goal cannot be reinstated. Similarly, appraisal of
threat, in which harm is anticipated, are made with the expectation of failure to cope or defend against this harm. This pattern of appraisal has been found to be associated with repeated reports of fear. Cognitive appraisals that focus on blocked goals with a perceived possibility of reinstatement has been found to be associated with anger. Finally, individuals overcoming obstacles which block the desired goal state or who are able to avoid undesired goal states have been found to experience positive emotions (Stein, et al., 1990).

Both goal appraisal theory and attribution theory assert that beliefs about the agent's intentional harm is also an important dimension in attributing anger (e.g., Stein & Levine; 1989; Dodge & Coie, 1987). Appraisals regarding intent have been found to be used more often in children's explanations when they were explaining anger, rather than sadness, and when the episode included intentional harm (Levine, 1995). Further, aggressive children have been found to be biased in their attributions in the direction of presumed hostility (Dodge & Coie, 1987; Dodge et al., 1990), and this is principally observed when the social information is ambiguous, or even when it is benign.

Appraisals of agency are also considered to differentiate between emotions such as anger, sadness, and fear (Frijda, 1986; Roseman, 1991; Smith & Ellsworth, 1985). In an investigation which attempted to classify childrens' and adults' understanding of several basic emotions (Stein & Levine, 1989), one feature which distinguished anger from sadness was the higher frequency of animate agents, rather than natural events, in the causation of negative outcomes. Sadness was found to be associated with the perception of natural consequences as a causal factor, whereas anger has been linked to the perception
that an individual’s goals are being blocked by a human agent (Stein & Levine, 1989; Levine, 1995). In addition, attribution theory has found that sad individuals tend to make more internal (self-blaming) appraisals regarding negative events and external (other agent) appraisals for causal hypotheses regarding positive events (e.g., Garber, 1987; Seligman et al., 1984; Quiggle et al., 1992).

In addition to dimensions of goals, intent, and agency, the type of outcome has also been studied in relation to emotional response. Several types of outcomes have been investigated. An aversive condition is described as the presence of something one dislikes, and has been differentiated from an outcome involving loss, which is the absence of something one likes (Levine, 1995). Stein and Levine (1989) have demonstrated that anger occurs more frequently than sadness when an aversive condition, rather than a loss, occurs. Sadness has been linked to the loss of a valued person, relationship, or object (Roseman 1991). Attribution theory has also examined associations between the types of outcome appraisals made by individuals and their corresponding predominant affect. Stable and global appraisals for negative outcomes and transient and specific appraisals for positive outcomes have been linked to individuals who are depressed (Seligman et al., 1984; Garber, 1987).

Finally, it has been found that the appraisal processes of anxious individuals focus on threat-related events in the world, such as preoccupations with the threat of getting hurt (Prins, 1986). During anxiety-provoking situations, it has been suggested that negative expectations, perhaps due to memories of painful experiences in the past, may play a role in these characteristic appraisal patterns.
This literature base informs us that the experience of a particular emotion is associated with different types of appraisal patterns. While theories of goal appraisal processes are helpful in explaining how appraisal biases can arise by way of selective focus towards certain aspects of events, attribution theories focus to a greater extent on how appraisal biases can occur from habitual patterns by which an individual interprets an event. The aforementioned dimensions covered by these cognitive theories (e.g., intent, agency, outcome, goals) were used in the present study as the bases for parent and child appraisal coding schemes, to be described in more detail in a subsequent section.

Socialization of Appraisal Processes

What are the processes which contribute to the formation of children's biases in appraisal style? How are appraisal styles maintained? Very little work has been done with children in examining the very process of appraisal formation and internalization. What mechanisms may contribute to the transmission of parental appraisal style and/or emotional organizations which may predispose children to internalizing or externalizing organizations? The relationship between parental appraisal biases and their children's maladaptive cognitions and behavioral problems is unclear and represents a critical avenue for further exploration. A brief synopsis of the socialization literature regarding possible determinants of children's appraisal style and emotional problems will be provided in order to illustrate the relevance of pursuing research on parental cognitive factors.

Direct socialization processes, such as instrumental conditioning and observational learning, seem to be important contributing factors to the development of appraisal biases in children. Social referencing, as defined by Feinman (1982), is an appraisal process in
which one's own perception of other persons' interpretations of events is used to form one's own understanding of that event. This element of social learning seems to develop quite early, as parental appraisals of events have been found to influence children's reactions to events during the end of the first year and throughout the second year of life (Walden and Ogan, 1988). Further, this type of referencing increases in situations of ambiguity (Campos and Stenberg, 1981).

Previous studies have found links between parental appraisal styles and children's appraisal patterns and behaviour. In an investigation of depression and attributional style in children, Seligman et al. (1984) reported that mothers who attributed bad events to internal, stable, and global causes had children with similar self-attributional patterns for negative events. No significant link between attributional styles of fathers and their children was found. Although an association was found between the appraisal styles of mothers and their children, the processes by which the appraisal alliance occurs remains unknown. In considering the manner in which children's appraisals are established and possibly aligned with parental appraisals, the current study suggests that a primary mechanism is the way that parents talk to their children.

Although genetic influences have been implicated as a primary risk factor for many emotional and behavioral problems in childhood, there are multiple avenues of transmission to be explored. It is thought that the modelling of cognitive factors, specifically parental negative appraisal styles, may be one mechanism by which children's cognitive vulnerabilities are generated and maintained. Moreover, the psychopathology literature provides us with indirect evidence to suggest that exposure to parental appraisal
biases may be one avenue of transmission for the development of particular thinking styles which predispose children to internalizing and/or externalizing organizations.

**Intergenerational transmission of psychopathology**

Numerous studies have established that children of parents with psychological disorders, and depressive disorders in particular, are at-risk for developing psychiatric symptoms (e.g., Hammen, 1991; Beardslee et al., 1983; Turner et al., 1987). Looking more specifically at cognitive factors, Jaenicke et al. (1987) examined children at risk for depression and found that children's tendency to display negative attributional style correlated with maternal history of depression and negative perceived and actual interactions. Investigators have recently begun to examine the effects of paternal depression on child psychopathology (Forehand & Smith, 1986; Phares & Compas, 1992; Kaslow et al., 1993). Studies which have examined differences between parents of depressed and normal children (e.g., Cole & Rehm, 1986; Kaslow et al., 1988) and the relationship between paternal and maternal psychopathology and their children's depression (e.g., Puig-Antich et al., 1985) have found no strong link between paternal factors and childhood depression. Yet, the literature on paternal depression and children's functioning is comparatively in its early stages, and the limited amount of existing data is somewhat contradictory. Although maternal depression seems to be a better predictor of children's depressive symptomatology, the effect of paternal depression on children should not be ignored.

As in the depression literature, studies on adults diagnosed with anxiety disorders demonstrate an increased likelihood of anxiety disorders among their children (Turner et
al., 1987: Silverman et al., 1988). Research findings suggest that genetic factors are partly accountable for anxious characteristics, although there is little evidence that genetic transmission occurs for a specific disorder (Torgersen, 1993). Studies which attempt to tap into specific mechanisms of transmissions have been absent, even though such work would seem important due to the fact that familial contributions have been indicated for specific phobias (Fyer et al., 1990), social phobias (Reich & Yates, 1988), and separation anxiety disorders (Last et al., 1987).

Intergenerational transmission of behaviours which are typically characteristic of externalizing behaviour disorders (aggression, noncompliance, delinquency, etc.) may also be found in the literature. Longitudinal studies suggest that conduct disorder is stable across generations, and there is evidence to support the notion that environmental factors (e.g., marital discord, parenting skills, parent-child interactions) contribute to an increased risk of conduct disorder for children (Webster-Stratton & Dahl, 1995). Reviews by Loeber (1990) and Loeber and Dishion (1983) found both maternal and paternal variables, including aggressive behaviour, to be linked with later delinquency in children. In another meta-analytic review, Phares & Compas (1992) examined paternal characteristics in relation to a wide range of childhood disorders, and found a strong link between paternal antisocial and aggressive behaviour and children with clinically-referred conduct disorder. Finally, the findings of Simons et al. (1991) indicate that aggressive children tend to live with aggressive parents. The results implicated a cross-generational direct modelling effect for harsh disciplinary practices by grandparents, which were then transmitted to aggressive behaviour in the present-day parents, even after the researchers controlled for other avenues of transmission.
Moreover, in a review of the literature, Kaslow et al. (1993) attests to the reciprocal nature of the relationships between the parent and the child. For instance, a process that is particularly prominent in families with mood disorders is the development of negative cognitive biases in children of depressed parents, which, in turn, are reinforced by parental modelling of these negative cognitive styles. Although child effects must be incorporated into broader etiological issues of childhood disorders, the epidemiological and psychopathology literature does seem to provide evidence for the intergenerational transmission of cognitive styles and psychiatric symptomatology. Part of the transmission process may include parental modelling of specific patterns of appraisal to their children.

**Gender differences in the socialization of emotions**

The literature on gender differences in emotion socialization was examined in an attempt to partially untangle the appraisal processes within families. For example, it seems quite possible that parental gender differences in typical interactional styles may contribute to differential emotional outcomes in children. For young children, mothers are inclined to be more verbal, didactic, predictable, and less arousing during social exchanges with their children, whereas fathers tend to be more physical, unpredictable, and arousing in their interactions (Parke & Tinsley, 1987). It has been suggested that children may be more likely to learn about emotions within mother-child interchanges, as there is a greater amount of emotional labeling involved, whereas father may contribute to the socialization process in other ways, such as assisting children in their regulation of emotion within the context of physical play (Parke, 1994). As there is some evidence to suggest that fathers practice more instrumental types of socializing and mothers practice more expressive socializing (Saarni, 1985), it was predicted that mothers in this study would employ more
emotion terms and total emotion appraisals than fathers while explaining the events to their children.

The inclusion of fathers were necessary to test out hypothesized gender differences in parental appraisal styles, as well as to explore individual versus familial appraisal styles as predictors of children's psychological well-being. Based on the adult psychiatric epidemiology literature (e.g., Kessler et al., 1994) which illustrates almost a 2:1 ratio of women to men suffering from depression and anxiety disorders, as well as the likely role of gender differences in emotion socialization practices (Oatley and Jenkins, 1996), it was expected that these contingencies could conceivably be filtered down to gender differences in the types of appraisals made. In correspondence to previous research in the socialization literature (e.g., Fivush, 1989), it was thought that mothers would make more use of sad and fearful appraisals as compared to fathers.

Again based on the epidemiological research, boys are more likely to have externalizing disorders in childhood (Richardson et al., 1995) which translates into a higher prevalence of adult males versus adult females being diagnosed with disorders characterized by acting out behaviour, such as antisocial personality disorders and substance abuse disorders (Kessler et al., 1994). In reviews of gender differences in the socialization literature (e.g., Brody & Hall, 1984), demonstrated that sadness tends to be discouraged among males, while anger is encouraged. Underneath these findings undoubtedly lie numerous interwoven factors that include family demographics, the socialization of gender role differences, past and current societal norms regarding aggression, as well as the most likely determinant, biological factors. Regarding paternal appraisal processes, it was anticipated
that fathers, on average, would be more likely than mothers to make a greater number of appraisals focusing on hostile aspects in their explanations.

By separating the data pertaining to mothers and fathers, it is possible to discern which maternal and paternal factors have similar or different effects on child psychopathology (Phares and Compas, 1992). It is anticipated that the data provided in this study, while largely exploratory and descriptive in nature, is one step towards the more functional goal of delineating in a more fine-tuned manner which parental or familial appraisal patterns best predict children's biases towards internalizing and externalizing patterns of emotionality.

**Aims and Hypotheses of the Current Study**

After a review of the literature, it seems that there is ample opportunity to extend the knowledge base in the area of appraisal formation and its relationship to patterns of emotionality in children. Further, the application of various conceptual and methodological variables in this study has enabled me to advance the emotion socialization literature in several ways.

First, previous studies have typically been involved with differentiating between emotions by examining the appraisal dimensions underlying emotions (e.g., Roseman, 1991; Smith and Ellsworth, 1985, Levine, 1995; Stein & Levine, 1989). The current study takes the findings based on goal appraisal and attribution theories, and utilizes the appraisal dimensions to form a measure of individual differences. In this sense, the literature on the differentiation of emotions is operationalized and applied to family life.
Second, this study uses a story-reading method for the measurement of parental appraisals, which involves having the parents read a story to the child and subsequently explaining to the child the thoughts, feelings, and intentions of the main characters in the story. This methodology was thought to be a potentially more useful alternative than the oft-used self-report parental appraisal measures. An association that comes from a self-report measure of parental appraisal and a self-report assessment of children’s appraisals fails to explore the way that appraisal patterns came to be situated. For instance, other variables, such as genetics, could be used to explain the congruence between appraisals. Yet, if the way that parents talk to children is found to be associated with how children think, this makes a stronger case for a modelling hypothesis (although there is little doubt that genetics continues to play a prominent role).

Third, although there have been a few separate studies which have examined correlations between parent and child appraisal styles (Jaenicke et al., 1987; Seligman et al., 1984), they have been narrow in scope and only have focused on specific facets of appraisal or child outcome. For the current study, the additional step measuring children's appraisal styles is thought to be useful in attempting to clarify the role of children's appraisals in mediating parental appraisals and/or child outcomes. Current appraisal questionnaires, while useful, did not exist for children within the 3-5 year age range and often focused on one particular aspect of appraisal, such as hostile attributions (Dodge & Newman, 1981) or depressive appraisal patterns (Seligman et al., 1984). For this study, a Children's Appraisal Questionnaire was developed with content and language targeting preschool-aged children. Both the Children's Appraisal Questionnaire and the narrative analysis method of measuring parental appraisals attempted to incorporate various
theoretical viewpoints in order to establish the link between parents' and children's appraisal styles and children's behavioral outcomes.

Finally, a population of fathers will be included in the sample in order to measure appraisal styles for both parents. What could be gained by examining both mothers and fathers? Obviously, it is important to consider the child's most salient relationships in the examination of a child's cognitive/emotional growth. Different socializing agents may have different impacts on a child's expectations, understanding, or internalization of various types of appraisal styles.

Studies which have explored paternal contributions to child development have been rare. As discussed by Phares (1992), practical issues in participant recruitment, differential base rates of maternal versus paternal psychopathology, theory driven research based on sexist theories, and outdated research assumptions are among the most common reasons for the exclusion of fathers in developmental psychopathology research. Indeed, the bulk of earlier research conducted with fathers tends to focus on their formative significance with normal processes of child development, such as sex-role development (e.g., Biller, 1969; Johnson, 1963), achievement and intellectual development (e.g., Osofsky & O'Connell, 1972; Crandall et al., 1964; Hurley, 1967), and social competence (e.g., Baumrind & Black, 1967; Howells, 1969). Nonetheless, a meta-analysis of paternal psychopathology as contributors to child maladjustment by Phares and Compas (1992) suggested that, when included in the studies, paternal effects are usually found.

Regarding individual versus familial appraisal styles, there is indirect evidence to
suggest that combined parental appraisals in the same direction (e.g., both having high levels of sad appraisals) may yield greater predictive power than those appraisals of a single parent. For instance, parental concordance for diagnoses, particularly for mood or anxiety disorders, significantly increase the risk for a mood or anxiety disorder in the child (Merikangas et al., 1988; Kaslow et al., 1993). Further, although a strong link between paternal depression and child psychopathology has not been established, Mitchell et al. (1989) found that when comparing depressed and nondepressed psychiatrically disturbed children and adolescents, depressed children were significantly more likely to have two parents with a history of depression than the nondepressed group.

A competing hypothesis is that differences that exist in parental perceptions and behaviours would be a better predictor of children’s emotional or behavioral problems. The indirect pathway hypotheses (e.g., Jouriles et al., 1991) would submit that children are adversely affected by parental disagreement in their perceptions about child-rearing or, more generally, by conflictual marriages. For instance, externalizing and internalizing child outcomes have been examined within the context of parental disagreement about child rearing (Block, Block & Morrison, 1981; Reid & Crisafulli, 1988) and found that the discrepancy in child rearing practices was related to externalizing in boys and internalizing in girls.

For the present study, it is hypothesized that children's appraisal style will correlate with parental patterns of appraisal. Further, it is thought that both parental and children's appraisal biases will be associated with patterns of emotionality in the children. Specifically, parental explanatory styles which focus on fearful or sad appraisals are
hypothesized to be associated with higher levels of children’s fearful or sad appraisals and internalizing outcomes. Patterns of appraisal in which the parents emphasize angry appraisals are hypothesized to be associated with higher levels of children’s angry appraisals and externalizing outcomes.

Regarding parental gender differences in appraisal styles, it is hypothesized that mothers will be more likely to make sad and fearful appraisals when talking to their child, while fathers will be more likely to utilize angry appraisals.
CHAPTER 2  METHOD

Subjects

This study is part of an on-going longitudinal study (Jenkins, 1995) which is investigating parental socialization of emotions and the effects of maternal appraisal styles on children's emotionality. Parents of preschool and kindergarten children were recruited between February 1996 and May 1997 from 1 elementary school and 3 subsidized daycare centres in the Metropolitan Toronto area. Families from the daycares who were involved in the project each received $30 for their participation.

Ten preschool children (ages 3:8-4:8, $M = 4:1$) and 30 kindergarten children (ages 4:1-5:8, $M = 4:11$) participated in the study. Sixteen of the children were female and 24 were male. The study sample also included 44 mothers and 24 fathers. The imbalance between maternal and paternal sample sizes reflected the difficulty in the recruitment of fathers. In order to broaden our socioeconomic range, subsidized daycares were included which consisted of many high-risk families with low income. The disproportionate sample sizes was due to the preponderance of single mothers in the subsidized daycare settings. For this sub-sample of mothers ($n = 20$), 70% of the households did not have a father-figure present in the home (40% of the participating mothers in the subsidized daycares were never married, 20% were divorced, and 10% were separated). The remaining mothers were recruited from The Institute of Child Study ($n = 24$), a laboratory school in metro Toronto with mid-to high SES families. Within this sample, 8% of the fathers were not present in the home ($n = 2$).
The entire sample of participating families included a range of ethnic and socioeconomic backgrounds. Sixty-eight percent of the mothers were Caucasian (79% of fathers), 13% of mothers were of Asian descent (13% of fathers), with the remaining 19% of mothers and 8% of fathers from various backgrounds (e.g., countries in S. America, S. Africa, West Indies, etc.). The majority of the families fell into the $50-$100,000 income range ($M = 2.1$; measure described below). Mothers had a mean level of education of 15.6 years and fathers had a mean level of 17.6 years of education.

Procedure

Maternal and paternal appraisal patterns were assessed separately during two separate visits to the home. Appraisals were assessed by having parents read several brief stories to their children. Mothers and fathers were each asked to take approximately 5 minutes to discuss the story with their child in terms of the story events, and the thoughts, feelings, and motives of the main characters. In addition, parents asked the child their thoughts about what happened in the story. The conversations were audiotaped and transcribed for coding purposes. Questionnaires pertaining to demographic information and child behaviors were also completed by families during one of the home visits.

The interviewers visited children either at the school, daycare, or home to administer a measure which examined children's appraisal patterns. Children were read a short story and were given brief vignettes to measure the utilization of angry, sad, and fearful appraisals. The measures were piloted and a content analysis of the preliminary data was conducted to develop a coding scheme which captured the appraisal categories most effectively.
Measures

Demographics

Self report demographic questionnaires were completed by the mothers to obtain information regarding socioeconomic status. Primary variables of interest included years of education for parents and family income for the previous year.

Income. Approximate family income was assessed using a rating scale based on the family's total annual income for the household (1 = < $50,000; 2 = $50,000 - $100,000; 3 = $100,000 - $150,000; 4 = > $150,000).

Education. Information was obtained from mothers and fathers regarding the number of years of education completed. Specifically, parents were required to complete questions regarding the highest grade (or year) of secondary or elementary school ever attended and the number of years completed at a university or an institution other than a university (community colleges, trade schools, etc.). Education level was assessed by summing the total years of education.

Appraisal Variables

Parental Appraisal Stories

To measure parental appraisal styles, two stories were developed which depicted a negative event, along with ambiguous motives of the main characters. The ambiguous intentions of the characters allowed for multiple interpretations of the event. The theme of
the first story, "Max's Car," was a boy who had brought his new Batmobile to school despite his father's admonition that it was not a good idea. While at school, one of his friends spoke of his desire to have a Batmobile as well. Later in the day, the children tidied up and there was a lot of confusion in the classroom as the toys were put away in the cupboards. Finally, Max went to his cupboard at the end of the day and his Batmobile was not there. The other story, "Maggie's Bike," described a girl named Maggie riding her bike one Saturday. She was riding quickly because she was excited to see her friend who had been on vacation. She rode past a big tree when Sam (a boy from her class) jumped out in front of her. Just the day before, Sam and Maggie had had a fight, and Sam had stomped off angry at Maggie. He was smiling as he jumped out. Maggie jammed on her brakes and toppled off her bike. She was not badly hurt, but she was feeling pretty fed up.

Both stories were piloted on a preliminary sample of parents and children for content matter, interest level, and understanding. Questions were provided for parents at the end of each story as an outline for discussion. These were: thoughts about what might have happened to the "lost car" or possible reasons for the "fall off the bike," thoughts of the protagonists and antagonists pertaining to the lost car and the fall, general thoughts and feelings of the protagonists and antagonists throughout the stories, possible reasons for why the antagonist performed an ambiguous action, and what the parents would like their child to think about having read the stories (See Appendix A for story materials).

The analogue story-reading method was used as an alternative to the more "classic" measures of parental appraisals, such as questionnaire methods which seek appraisals via self-report. Story-reading is typically an activity that includes a meaning-making
component for the child, since parental beliefs and assumptions generally form the bases for the descriptions and explanations which are given to children as parents are reading a story. It is thought that a more naturalistic, in-vivo process of capturing appraisals, as opposed to an indirect questionnaire measure, will potentially enhance the construct validity when measuring parental appraisal styles.

**Transcription**

From verbatim transcriptions of parental appraisals, the score for number of speaker turns was determined. Speaker turns were defined as maternal/paternal utterances that were bound by a child's response or by the parent moving onto the next question when the child did not speak. Typically, parents and their children interacted verbally in a reciprocal fashion. In several instances however, the child did not speak and when this occurred, the passage was divided into speaker turns by the parent moving onto the next question in their sequence. For instance, "What are the possible reasons for Maggie's fall?" and "Why did Sam jump out at Maggie?" each deserved a separate speaker turn. For an example of a transcript which has been divided into speaker turns, please refer to Appendix B.

**Discourse analysis**

Each speaker turn was coded for the presence (1) or absence (0) of each appraisal category. Each appraisal category (e.g., hostile intent, other-blame, reinstatement possible, presence of aversive phenomenon, self-blame, natural consequence, reinstatement not possible, loss, global, stable, fear) could only be coded once per speaker turn. As well, the various appraisals were not considered mutually exclusive. Therefore, each speaker turn
could potentially be coded for 11 possible appraisal categories. Parental explanations to a child that did not provide their own appraisal within the question (e.g., mere reiteration of a child's statement) were excluded from the coding process. Scores for each of the 11 appraisal variables were obtained by dividing the total number of each appraisal variable by the total number of speaker turns.

On the basis of the literature as reviewed in the Introduction, anger has been found to be associated with the following appraisal categories: hostile intent, other-blame, reinstatement possible, and presence of aversive phenomenon. Sadness has been linked to appraisal categories which include: self-blame, natural consequence, reinstatement not possible, loss, global, and stable. Finally, fear has been associated with appraisals of threat.

Coding Scheme

The following coding scheme for appraisals was based on the literature on basic emotions and appraisal (Oatley & Johnson-Laird, 1987; Stein & Levine, 1989; Lazarus, 1991; Smith & Ellsworth, 1985; Roseman, 1991; Seligman et al., 1984, etc.) and content analysis of preliminary data.

APPRAISALS

Anger:

a) Hostile intent:
Definition: The intent was defined as hostile if an action was taken by the antagonist with a malevolent or aggressive purpose in mind.

Examples: Hostile appraisals included "the car was stolen," "he jumped out to scare her," "Peter took the car for good," "he had a mean look on his face as he jumped out."

b) Other-blame:

Definition: Other blame was coded if the implication of the statement was that the protagonist's distress was caused by another person. For example, somebody else was responsible for the occurrence of the loss of the car or the fall off the bike.

Examples: Other-blame appraisals included "he scared her and she fell," "one of the children put it away in the wrong place," "she tumbled off her bike because she would have hit Sam," "Peter borrowed the car."

c) Goal reinstatement possible

Definition: Goal reinstatement possible referred to instances in which there was a possibility that the protagonist's goal, even though blocked, will be met eventually.

Examples: Goal reinstatement possible codes included "the child only borrowed it for a little while," "she may still be able to ride to her friend's house," "maybe Peter will give the car back," "the other kids will help him find it."

d) Presence of aversive phenomenon

Definition: Presence of aversive phenomenon was defined as the presence of or reference to a disliked stimulus.

Examples: Presence of aversive phenomenon included "Maggie fell off her bike," "Max was upset because he and Peter argued," "she was sad because her bike was damaged," "Sam and Maggie had a fight."
Sad:

a) Self-blame

Definition: Self-blame was coded if the implication of the statement was that the protagonist was at fault for the occurrence of the loss of the car, the fall off the bike, or another negative event.

Examples: Coding of self blame included "she wasn't paying attention while riding," "he shouldn't have taken the car to school," "she has to ride more slowly," "he should have put it right in his cubby to save it from getting lost."

b) Natural consequence

Definition: Natural consequence was defined as instances in which a non-human agent was responsible for the protagonist's distress.

Examples: Natural consequence codes included "the car got lost in all the confusion," "she fell because of the bush," "the car vanished," "That darn bike!"

c) Goal reinstatement not possible

Definition: Goal reinstatement not possible was coded for appraisals which assessed that there was not a possibility of the protagonist's goal being met.

Examples: Goal reinstatement not possible was identified by expressions such as, "it's gone for good," "now I'll never make it to my friend's house," "no more car," "he couldn't find it."

d) Loss

Definition: Loss was categorized as the absence of a liked stimulus.
Examples: Loss appraisals included "someone took my car, "where has my car gone?" "I wish I could see Amy," "my car is lost."

e) Global

Definition: Global was defined as a negative event or feeling which is generalized to include other individuals, objects, places, or situations.

Examples: Global codes included "you may lose your other toys that way," "people will steal things," "it can be dangerous when people jump out at them," "anyone could have taken it," "Peter felt jealous of many children."

f) Stable

Definition: Stable referred to a negative feeling or event which lasted beyond the moment or occurred frequently.

Examples: Stable codes included "so the next time it happens...," "he still couldn't find it the next day," "dad will probably say 'no' next time he asks," "her mom will be angry for quite a while," "no more car."

Fear:

a) Threat

Definition: Threat-related appraisals were defined as thoughts or statements regarding potential negative consequences (physical or psychological harm) for future events, or warnings about present or future events.

Examples: Threat codes included "you should always wear your helmet in case you get in an accident," "be careful so you don't hurt yourself or others," "you need to watch your toys carefully or else you might lose them," "his dad said he shouldn't bring it because it might get lost."
Total appraisals:

The variable ‘total appraisals’ is an aggregate of all appraisals made per parent during both story explanations. For example, the sum of an individual mother’s angry, sad, and fearful appraisals is used for the maternal total appraisal score. In the analysis, this variable was used to examine individual differences between parents and familial styles of appraisal.

Two independent raters coded transcripts for 45% of the maternal appraisals (n = 20) and 29% of the paternal appraisals (n = 7) for assessment of inter-rater agreement. Reliability was calculated in two ways. Cohen’s kappa measured the intercoder reliability for the presence or absence of each appraisal per speaker turn for both maternal and paternal transcripts (see Table 1). Pearson product moment correlations were calculated on summed scores to examine interrater agreement on summed measures for each appraisal type (see Table 2). For a more comprehensive description of the coding scheme, see Appendix C.

<table>
<thead>
<tr>
<th>Appraisal</th>
<th>Mother’s Appraisals</th>
<th>Father’s Appraisals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostile intent</td>
<td>.90</td>
<td>.90</td>
</tr>
<tr>
<td>Self-blame</td>
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<td>.80</td>
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<tr>
<td>Other-blame</td>
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<td>.93</td>
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<tr>
<td>Global</td>
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<td>.73</td>
</tr>
<tr>
<td>Stable</td>
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<tr>
<td>Goal reinstatement possible</td>
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</tr>
<tr>
<td>Goal reinstatement not possible</td>
<td>.82</td>
<td>.95</td>
</tr>
<tr>
<td>Threat</td>
<td>.87</td>
<td>.89</td>
</tr>
<tr>
<td>Loss</td>
<td>.90</td>
<td>.96</td>
</tr>
<tr>
<td>Aversive Phenomenon</td>
<td>.92</td>
<td>.88</td>
</tr>
<tr>
<td>Natural Consequence</td>
<td>.92</td>
<td>1.00</td>
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</table>
Table 2. Pearson Product Moment Correlations for Maternal and Paternal Appraisal Reliabilities

<table>
<thead>
<tr>
<th>Appraisal Type</th>
<th>Mother’s Appraisals</th>
<th>Father’s Appraisals</th>
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</thead>
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<td>Hostile intent</td>
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<td>.90</td>
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<tr>
<td>Self-blame</td>
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<td>Other-blame</td>
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<td>Global</td>
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<tr>
<td>Threat</td>
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<td>Loss</td>
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<td>Aversive Phenomenon</td>
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<td>.89</td>
</tr>
<tr>
<td>Natural Consequence</td>
<td>.80</td>
<td>1.00</td>
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</tbody>
</table>

Informed by the literature, composite variables were formed for anger and sadness appraisals for both mother and father by examining the internal consistency of the composite variables and dropping variables that were operating in the opposite direction to the scale, thereby lowering the internal consistency. Cronbach’s alpha demonstrated the internal consistency of both the anger composite variable (hostile intent, other-blame, goal reinstatement possible, aversive phenomenon) and the sadness composite variable (self-blame, global, stable, loss, goal reinstatement not possible) for mothers (alphas = .67 and .72, respectively). Natural consequence was dropped from the sadness composite. Cronbach’s alpha for fathers’ anger composite variable (hostile intent, other-blame, goal reinstatement possible, aversive phenomenon) was .73 and the alpha for fathers’ sadness composite variable (self-blame, global, stable, loss, goal reinstatement possible, natural consequence) was .60. No variables were dropped for fathers’ anger or sadness composites. Fear appraisals were based on one score, appraisal item (threat), making a
composite score unnecessary.

In addition to the anger and sadness composite appraisals, broader composites were formed for an 'internalizing' score by combining sad and fearful appraisals for both mothers and fathers (alphas = .72 and .71, respectively).

It was evident from an examination of the distribution for each of the appraisal variables, that 5 out of 8 variables had outliers. These outliers were rescaled, in order that they were closer to the rest of the distribution. See Table 3 for details.

**Total emotion words:**

Besides speaker turns and appraisals, the story passages also yielded a count of words that dealt with emotions. These emotion words or "feeling states" were operationally defined as typical emotion words (e.g., sad, angry, jealous, scared), words such as "feel" or "felt," and emotion verbs (e.g., laughing, crying, frowning). Words dealing with "thinking, thoughts, or descriptions of physical situations ("she was hurt from the fall") were not included in the emotion word count.

Pearson product moment correlations were calculated on summed scores to examine interrater agreement for emotion words. Forty-three percent of the individual maternal stories ($n = 38$) and 19% of the individual paternal stories ($n = 9$) yielded $r = .99$ and .98, respectively.
<table>
<thead>
<tr>
<th>Appraisal Type</th>
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<th>Original value of outlier</th>
<th>Transformed value of outlier</th>
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<td>1.30</td>
<td>.88</td>
</tr>
<tr>
<td>Mother angry</td>
<td>.05 - 1.06</td>
<td>1.06</td>
<td>.69</td>
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<tr>
<td>Father sad</td>
<td>.15 - .84</td>
<td>.62, .63</td>
<td>.56</td>
</tr>
<tr>
<td>Father angry</td>
<td>.17 - .87</td>
<td>.87</td>
<td>.81</td>
</tr>
<tr>
<td>Mother fearful</td>
<td>.00 - .33</td>
<td>.27</td>
<td>.17</td>
</tr>
</tbody>
</table>

**Children's Appraisal Measure**

Unfortunately, common measures that assess children's appraisal style, such as the Children's Attributional Style Questionnaire (CASQ) (Seligman et al., 1984) are either too focused on one particular dimension of appraisal (e.g., depressive attributional style) or are not intended for young children. Therefore, a series of brief vignettes were developed for this study which follow the format of the CASQ, but with vocabulary and content that are appropriate for a younger population of children. In addition, the measure encompassed a broader range of questions which target hostile (angry), depressive (sad), and threat-related (fear) appraisal styles. See Appendix D for Children's Appraisal Questionnaire.

Part I of the children's appraisal instrument contained 9 items, consisting of hypothetical negative events involving the child. The child was shown gender neutral pictures while brief vignettes were described. S/he was given a choice between two
potential causes of an event (based on the dimensions described below) and was asked to
pick the explanation which better describes the cause of the negative event. Two practice
vignettes were presented to each child to ensure adequate task understanding.

The four dimensions measured fell under the following categories: a) hostile/neutral
intent, b) internal/external blame, c) global/specific explanations, d) stable/transient
explanations. Three questions dealt with the hostile/neutral dimension, while two
questions pertained to each of the other 3 dimensions. Each question earned a child's
rating ranging from 0 to 2 (0 = I don't think that at all, 1 = I think that a little bit, 2 = That's
really what I think). Responses within each dimension were not mutually exclusive. For
each dimension, the questions were presented to the children in random order. Definitions
and examples for each appraisal dimension are described below.

Anger:

a) Hostile intent:

1. The action was taken by the antagonist with a malevolent or aggressive
   purpose in mind.

2. Example of hostile/neutral appraisal question:

   "Pretend that you are a new kid at school. You would like to make
   friends with the other kids in your class. You walk up to some of the
   other kids and say 'Hi,' but they don't say anything back."

   a- They wanted to ignore you (HOSTILE).
   b- They didn't hear you (NEUTRAL).

Sadness:

a) Internal blame:
1. The protagonist was at fault for the occurrence of the negative event.

2. Example of internal/external appraisal question:

   "Pretend you are at school one day and you're lining up with your class to go to recess. Just as you are getting in line, another kid says 'I want this spot!' and cuts in front of you."

   a- The kid is pushy (EXTERNAL BLAME).
   b- I must have been moving too slowly (INTERNAL BLAME).

b) Stable:

1. A negative feeling or event which lasted beyond the moment or occurred frequently.

2. Example of stable/transient appraisal question:

   "Pretend that you are playing at home. While you were playing, you accidentally knocked a lamp off the table and it broke. Your mother was angry and sent you to your room."

   a- I probably won't get in trouble again tomorrow (TRANSIENT).
   b- I'll probably get into trouble again and again (STABLE).

c) Global:

1. A negative event or feeling which is generalized to include other individuals, objects, places, or situations.

2. Example of global/specific appraisal question:

   "Pretend that you and your brother/sister get into a fight with your words. Even though you've stopped arguing, your brother/sister is still mad at you."

   a- Everyone in your family is mad at you (GLOBAL).
   b- Your brother is probably the only one mad at you (SPECIFIC).
The child is asked to rate each answer from 0-2. Scores for each of the dimensions (hostile, internal, global, stable) were summed to obtain frequency counts for each dimension.

Another method of calculating the appraisal scores would be to subtract the contrasting score within each dimension to obtain a proportional score for each type of appraisal. For example, subtracting neutral intent from hostile intent would produce a proportional score for the dimension of intent. This method of calculation was attempted and was found not to yield differences in the substantive results.

**Fear:**

Part II of the children's appraisal assessment which intended to measure threat-related appraisal patterns included a story read to the child by one of the interviewers. The story described a scenario in which a similarly aged child is faced with a stimulus (her/his first overnight visit to a friend's house) with potentially exciting, neutral, and/or threatening features within the story. The story was read by the interviewer. Versions of the same story were adapted for each gender; the only difference being the names and physical appearance of the children in the story. After the story had been read, the interviewer asked the child what the main character may have been "scared or worried about" when s/he went to spend the night at a friend's house. Each child was prompted 3 times as to the frightening aspects of the story with the question, "Was there anything else that s/he was scared of or worried about?" Again, scores were summed for frequency counts of events perceived to be threatening to the child.
Intercoder reliability for the children’s appraisal measure was assessed for 23% (n = 9) of the sample. As with the parental appraisal measure, reliability was measured in several ways. Inter-rater reliability for the presence (1) or absence (0) of a particular appraisal category per question was assessed using Cohen’s kappa. Kappa’s for each child’s appraisal score were $K = 1.00$. To calculate the extent of agreement between raters on the summed score for each appraisal question, the Pearson product moment correlation was utilized. For the summed appraisal questions, all were $r = 1.00$.

As a number of questions had been asked for anger and sadness, composite measures for anger and sadness were established by assessing the internal consistency with Cronbach’s alpha. Initial analysis of the composite reliabilities for the children’s appraisal measure yielded lower than acceptable assessments of internal consistency. It was noted that the younger children, specifically, 3-year old participants, had experienced some difficulty while completing the measure, which may have resulted in an artificially lowered level of internal consistency. Cronbach’s alpha was re-attempted after dropping the four 3-year old participants from the analysis of child appraisals, resulting in satisfactory composite reliabilities.

The sadness composite variable included the following questions: questions 1 and 2 from self-blame, question 2 from global, and question 2 from stable (alpha = .68). Question 1 from both global and stable were dropped, as they did not load on the composite scale. The anger composite variable was comprised of hostile questions 1 and 3 (alpha = .63). Hostile question 2 was dropped from the composite, due to an unsatisfactory loading. Only the 4- and 5-year old participants (S=36) were utilized for the remainder of
the analysis that deals with the children’s appraisal measure.

*Children’s Emotionality Outcome Variables*

Assessments of children’s current emotional and behavioral dispositions via questionnaire format were utilized as outcome measures. An effort was made to obtain data from several informants in order to assess inter-rater reliability and to tap into both home and school environments of the child.

*Children’s Behaviour Questionnaire (CBQ)*

The CBQ questionnaire is a parent-report instrument that was designed to elicit information regarding the child's pattern of emotionality by uncovering the child's likely reactions across a number of situations within the past six months. The frequency with which the child shows specific affects, such as anger, sadness, and fear, are described. The questionnaire has demonstrated high internal consistency and reliability estimates and is deemed appropriate for assessing patterns of emotionality in children aged 3-8 years. For a more detailed description of the development and standardization of the CBQ, see Rothbart et al. (1994).

Mothers were asked to rate their child's reaction to an event on a Likert scale ranging from 1 (extremely untrue that child would react this way) to 7 (extremely true that child would react this way). If mothers have not seen their child in the described situation, they indicate that the statement is not applicable. Following the CBQ manual, questions for each dimension (anger, shy, happy, fear, and sad) were summed and means were obtained.
For the purposes of this study, a composite score for internalizing was achieved by assessing the relationship between the "shy," "fear," and "sadness" scales to ensure significant positive correlations. The scale pertaining to shyness was ultimately dropped from the internalizing composite score due to the lack of consistent congruency with the other internalizing variables. The externalizing score was represented by the mean scores of the "anger" variable.

The "difference CBQ-high internalizing score" score was calculated by transforming all scores (both internalizing and externalizing) into z-scores and subtracting the internalizing score from the externalizing score. High positive scores indicate a child's propensity towards an internalizing organization, while high negative scores indicate a bias towards externalizing. This "difference CBQ-high internalizing score," instead of an absolute score, was utilized, as the primary goal of this study was to establish predictors of the balance between internalizing and externalizing emotions, as these emotional biases may set the stage for subsequent emotional disorders.

*Preschool Behavior Questionnaire (PBQ)*

The PBQ is a teacher-report questionnaire designed to assess children's emotional and behavioral functioning within the school setting. The screening instrument is aimed at detecting developing behavior problems in children aged 3 to 6. Three dimensions, Hostile/Aggressive, Anxious/Fearful, and Hyperactive/Distractible, have demonstrated criterion validity, as well as high inter-rater and test-retest reliabilities. For further information regarding questionnaire development and/or validation, see Behar &

Teachers were given a series of descriptions of behaviors often shown by preschoolers and asked to respond by placing an "X" under one of the following headings that is most appropriate: "Certainly Applies" (the child frequently displays the behavior described), "Applies Sometimes" (the child shows the behavior to a lesser degree or less often), or "Doesn't Apply" (the child does not show the behavior).

The scores were summed for 3 scales (aggression, anxiety, and hyperactivity/distractibility) and transformed into z-scores. A composite externalizing score was formed by combining the highly-correlated aggression and hyperactivity/distractibility variables. The internalizing score for each individual was comprised of the score on the anxiety scale. In the same fashion as the CBQ, a "difference" score was obtained (difference PBQ-high internalizing score) by subtracting the internalizing score (anxiety) from the externalizing score (aggression and hyperactivity). Again, high positive scores attest to higher levels of children's internalizing, while high negative scores indicate an elevation in the externalizing domain.

**Missing Data**

Two mothers failed to turn in the demographic information forms. The 2 missing income variables were substituted with the mean of income. The two CBQ's that were not returned by mothers were treated as 'systems missing' values within the database, which dictated that they were in no way incorporated in the final analysis. One child was unable
to complete the section of the questionnaire that dealt with fear appraisals.

In analyses that follow, there are lower numbers than expected for the total sample sizes when cross-informant comparisons are carried out. For instance, the number of mother-child pairs available for analysis was 32. Although 36 children and their mothers were interviewed and outcome measures were collected, 4 of the mothers did not complete the story-reading task with the child due to either technical or temporal difficulties.
Chapter 3  Results

Results are presented in four parts. First, the relationship between parental appraisals and children's appraisals is examined. Next, the relationship between parent/child appraisals and children's emotional and behavioral outcomes is explored. Then, models that determine the best predictors of child behavioral outcomes are examined. Finally, differences in maternal versus paternal appraisal styles are considered.

Mediating variables for parent to child appraisals

The relationship between demographic variables, such as socioeconomic background or education of the parents, and appraisals was examined to establish covariates for analysis. One-tailed correlations were used throughout the analysis. Income was found to be correlated with maternal anger appraisals, \( r(44) = .32, p < .05 \), and child anger appraisals, \( r(36) = .47, p < .01 \). A comparable relationship was not found when measuring paternal appraisals with level of income. The level of parental education was also nonsignificant when linked with both maternal and paternal appraisals.

Preliminary inspection of the data demonstrated that children's sex and age effects were few and inconsistent, and these variables were not controlled for in subsequent analyses. Clearer patterns might arise in a larger sample.
Mother to child appraisals

Table 4 presents means, standard deviations, and ranges of parental demographic information, parent and child appraisals, and child outcome variables. It was predicted that levels of maternal and children’s anger appraisals would be related, as well as maternal and children’s fear appraisals and maternal and children’s sadness appraisals. Pearson product moment correlation was utilized to examine the relationship between mother and child appraisals. Mother and child fear appraisals were associated with one another after controlling for income, \( r_{(28)} = .42, p < .05 \). None of the other predicted mother-child correlations were found to be significant after controlling for income (See Table 5). The results suggest that children and their mothers are likely to have similar biases regarding fear appraisals when assessing a given situation, with the possibility that children are perceiving and internalizing maternal assumptions regarding the threatening aspects of a situation.

Father to child appraisals

Although similar associations were hypothesized for fathers and their children, the results (see Table 5) indicate no significant relationship between paternal and child emotional appraisals, nor are relationships in the hypothesized direction in 2 out of 3 analyses.

Relationship between parent child appraisal patterns and child behavioral outcomes

Relationship between mother appraisals and child outcome measures

The next step involved examining the role of parental appraisals in children’s affective
Table 4. Means, Standard Deviations, and Ranges for Demographic Variables, Parent/Child Appraisals, and Child Outcome Variables

<table>
<thead>
<tr>
<th>Index</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
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<tbody>
<tr>
<td><strong>Demographics</strong></td>
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<td><strong>Child CBQ Outcomes</strong></td>
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<td>Diff CBQ-hi internalizing*</td>
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<td><strong>Child PBQ Outcomes</strong></td>
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<td>-2.27 - 1.99</td>
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* The CBQ and PBQ dimensions were changed to z-scores and the externalizing scores were subtracted from the internalizing.

Table 5. Partial correlations between maternal, paternal, and child appraisals

<table>
<thead>
<tr>
<th></th>
<th>Child Anger</th>
<th>Child Sadness</th>
<th>Child Fear</th>
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<td>Internalizing (Sad + Fear)</td>
<td>-.01</td>
<td>-.08</td>
<td>.18</td>
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<td><strong>Father Appraisals</strong></td>
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<tr>
<td>Anger</td>
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<tr>
<td>Internalizing (Sad + Fear)</td>
<td>-.31</td>
<td>-.21</td>
<td>-.16</td>
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* p < 0.05.
development. It was anticipated that children's biases towards internalizing or externalizing would relate to the exposure of particular patterns of parental appraisal. More specifically, mothers who incorporated relatively higher levels of sad and fearful appraisals into their explanations were predicted to link to a child's imbalance towards high internalizing (difference PBQ/CBQ-high internalizing), and those mothers with comparatively heightened levels of hostile or angry appraisals were presumed to be inversely related to the children's "difference PBQ/CBQ-high internalizing" variable.

Upon examining the maternal appraisal data after controlling for income, it was found that mothers' fearful appraisals were significantly associated with "difference PBQ-high internalizing" (which is an imbalance towards internalizing behaviour based on teacher report), \( p(41) = .32, p < .05 \). Further, as predicted, maternal anger appraisals were inversely related to the "difference PBQ-high internalizing" score, \( p(41) = -.34, p < .05 \). Thus, as mothers' fear appraisals increase, children showed a pattern of behaviour in which internalizing behaviour which was much more evident than externalizing behaviour. As mothers' anger appraisals increased, children showed a pattern of behaviour in which externalizing behaviour was much more evident than internalizing behaviour. Table 6 displays the matrix of partial correlations for maternal appraisals (as well as paternal and child appraisals) and child outcomes as measured by the PBQ. Finally, contrary to expectations, partial correlations did not yield any meaningful associations upon comparing maternal appraisals to the maternal-report CBQ child outcome measure.

Relationship between father appraisals and child outcome measures

Partial correlations controlling for income revealed several significant relationships
between paternal appraisals and children's emotional and behavioral outcomes, as well as several trends towards significance. See Table 6 for the results. Contrary to the hypothesis that a positive relationship would exist between fathers' sad and fearful appraisals and children's internalizing, an inverse relationship was demonstrated. Fathers' sad and fearful appraisals negatively correlated with the "difference CBQ-high internalizing" score, $pr(17) = -.70, p < .001$ and $pr(17) = -.53, p < .05$, respectively. When fathers made more sad and fearful appraisals, children's emotionality favoured externalizing more than internalizing.

Further, it was hypothesized that fathers who interpreted events in an angry way would have children who were more likely to exhibit externalizing patterns of behaviour. An inverse relationship was approaching significance between paternal angry appraisals and children's score on the "difference CBQ-high internalizing," $pr(17) = -.39, p = .05$, while a positive relationship was found to approach significance between paternal angry appraisals and the "difference PBQ-high internalizing" score, $pr(21) = .29, p = .09$. In the first

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<tr>
<th>Table 6. Partial correlations between maternal, paternal, and child appraisals and child outcome measures</th>
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<td><strong>PBQ</strong></td>
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* $p < 0.05$; ** $p < 0.01$
relationship, fathers who made more angry appraisals had children who showed more of a bias towards externalizing. In the second relationship, as fathers' angry appraisals increased, children showed more of a bias towards internalizing. The direction of some of the aforementioned relationships are contrary to the hypotheses and the interpretation of these patterns will be explored in the Discussion section.

**Relationship between child appraisals and the child outcome measures**

Next, the more direct relationship of children’s appraisals to their emotional and behavioral outcomes was examined. As with the parental appraisals, it was hypothesized that elevated levels of sad and fearful appraisals would link to higher levels of internalizing as measured by the “difference CBQ-high internalizing” and the “difference PBQ-high internalizing”, while children with a larger proportion of angry appraisals would be negatively correlated with the same variables. Partial correlations controlling for income were carried out and the results are summarized in Table 6. Of interest, children’s fearful appraisals were found to be approaching significance when linked to children’s internalizing behaviour on the CBQ, \( p(36) = .20, p = .14 \), but none of the other hypothesized relationships even approached significance.

**Parental Predictions of Child Outcomes**

Several of the aforementioned maternal and paternal appraisal variables were found to be associated with the child outcome variables “difference CBQ-high internalizing” and “difference PBQ-high internalizing.” In order to determine whether these parental variables were unique predictors of the child outcome variables, they were entered into stepwise regressions. For the first regression, the dependent variables consisted of the
"difference PBQ-high internalizing" score and the independent variables included mothers’ angry, fearful, and sad appraisals. For the second regression, the dependent variable was the “difference CBQ-high internalizing” score and the independent variables consisted of paternal angry, fearful, and sad appraisals. For both regressions, income was entered first as a covariate. See Table 7 for the results.

In the first regression, mothers’ low angry appraisals and high fearful appraisals each contributed significantly to the internalizing prediction after controlling for income. In the second regression, only father low sad appraisals made a significant contribution to the prediction model after controlling for income.

| Table 7. Contribution of Parental Appraisal Biases in the Prediction of Child Behavioral Outcomes |
|---------------------------------------------------------------|--------|--------|
| Diff CBQ-hi internalizing:                                    | R      | R²  |
| Step 1: Income                                               | .33    | .09   |
| Step 2: Mother Angry Appraisals                              | .46    | .08   |
| Step 3: Mother Fear Appraisals                               | .62    | .18   |
| Diff PBQ-hi internalizing:                                    |        |       |
| Step 1: Income                                               | .00    | .00   |
| Step 2: Father Sad Appraisals                                | .70    | .43   |

* p < .05  
** p < .01  
*** p < .001

*Individual differences versus familial appraisal styles*

*Similarities between mothers’ and fathers’ appraisal talk*

In the next set of analyses, we were interested in the relationship between maternal and
paternal appraisal style. To rule out the possibility of mediating variables, several
demographic variables were again examined to establish covariates for analysis. Income
was determined to be the only covariate, as it was significantly correlated with the amount
of maternal total emotion words, \( r(44) = .32, p < .05 \), and maternal total emotion appraisals
expressed, \( r(44) = .32, p < .05 \). Thus, middle class mothers seemed to be talking more
about emotions in general to their children than lower SES mothers.

For the next set of analyses, partial correlations were run with income as the covariate.
It was predicted that gender differences would arise with regards to the use of emotion
words between parents. Interestingly, upon examining emotion word usage within
families, the relationship between maternal and paternal use of emotion words within
families were found to be highly correlated, \( pr(19) = .44, p < .05 \).

The relationship between maternal and paternal total emotion appraisals was also
examined. It was found that maternal and paternal ‘total emotion appraisals’ were
positively correlated, \( pr(19) = .50, p < .01 \), after controlling for income.

Finally, it was found that individual mothers who tended to explain events utilizing a
high level of sad appraisals also used a relatively higher number of hostile attributions as
well. The finding that internalizing (sad) and externalizing (angry) appraisals were
positively correlated for individual mothers, \( pr(41) = .25, p = .05 \), was encountered for
individual fathers as well, \( pr(21) = .38, p < .05 \).
Differences between mothers' and fathers' appraisal talk

To analyze the extent to which parents differed in the frequency and type of appraisals made, paired sample t-tests were computed for the parents' proportional appraisal scores. First, as mentioned above, it was hypothesized that mothers would use emotion words to a greater extent than fathers. Indeed, it was apparent that mothers generally used more 'total emotion words' in their explanations than fathers, $t(21) = -3.22, p < .05$ ($M = .63$ and $.44$, respectively).

Similarly, with regards to total emotion appraisals, it was anticipated that mothers would exceed fathers in their rate of use when interpreting stories to their children. As expected, mothers use of total emotion appraisals ($M = 1.41$) was found be greater than that of fathers ($M = 1.08$), $t(21) = 2.94, p < .01$.

Further, it was hypothesized that mothers would make a greater number of sad and fearful appraisals as compared to fathers when interpreting events in the story to their children. As expected, it was found that mothers made more sad appraisals than fathers, $t(21) = -2.16, p < .05$ ($M = .45$ and $.35$, respectively). Surprisingly, no significant relationship was found for differences between maternal and paternal fearful appraisals, although mothers were inclined to make a higher number of fear-related appraisals than fathers, $t(21) = -1.40, p = .09$ ($M = .07$ and $.05$, respectively). Yet, when sad and fearful appraisals were combined as a composite variable, a significant difference did emerge between mothers and fathers, $t(21) = -2.19, p < .05$ ($M = .52$ and $.40$, respectively). When examining angry appraisals, a significant difference did emerge, with fathers yielding more
angry appraisals than mothers, $t(21) = 1.86, p < .05$ ($M = .47$ and $.38$, respectively).
CHAPTER 3 DISCUSSION

Under a more global framework of identifying risk factors in the development of child psychopathology, this is the first study that utilized a narrative analysis of parental appraisals in an attempt to identify links between the ways that parents talk to children about emotions and the patterns of emotionality that children show. Application of the narrative method has been effective in the adult literature pertaining to cognitive theories of emotion (e.g., Stein et al., 1997), yet previous studies within the realm of the socialization literature have not tapped into the potential of this particular methodology.

This study attempted to expand the knowledge base of the socialization literature in two additional ways. First, the little-known contribution of fathers (compared to mothers) to the processes of affective organization in children, as well as to child psychopathology research in general, dictated the addition of fathers to this sample population. Second, current appraisal questionnaires, while useful, did not exist for children within the 3-5 year age range and often focused on one particular aspect of appraisal, such as hostile attributions (Dodge & Newman, 1981) or depressive attribution patterns (Seligman et al., 1984). For this study, a Children’s Appraisal Questionnaire was developed with content and language targeting preschool-aged children. Both the Children’s Appraisal Questionnaire and the narrative analysis method of measuring parental appraisals attempted to incorporate various theoretical viewpoints in order to begin to outline the relationship between parents’ and children’s appraisal styles and children’s behavioral outcomes.
Integration of cognitive theories of emotion

By integrating the existing theories of attribution and goal appraisal processes, this study explored the modeling of appraisals as one of the potential pathways by which children’s appraisal patterns may become established. Specifically, the study focused on answering the following questions: Are children’s biases towards internalizing patterns of emotionality developed and/or maintained from exposure to parental appraisals predominantly characterized by “internalizing” patterns? Similarly, are children’s biases towards externalizing related to parental appraisals dominated by “externalizing” patterns?

Before discussing how the results of the study speak to these questions, one must first consider a matter of central importance, that is, whether the appraisal categories captured the essence of what we were attempting to measure. In other words, how effective was the operationalization of the “internalizing” and “externalizing” appraisal domains?

While attempting to combine various categories in order to form internalizing and externalizing composite variables, it is notable that the conceptualization of appraisal processes from different theoretical viewpoints held together quite nicely, even after undergoing many permutations through the coding process. Even though the appraisal categories were formed by combining aspects of two separate conceptual bases (goal appraisal processes and attribution theories), the analysis of internal reliability demonstrated significant intercorrelations.

Because each of the theorists view appraisal processes under a different lens, they each possess unique contributions to the creation of composite variables by focusing on a particular aspect of an appraisal. For instance, while the theory of goal appraisal processes
emphasizes goal-related aspects of an appraisal (e.g., Stein & Trabasso, 1982; Stein & Levine, 1989), other theories include appraisals of agency as central concepts (e.g., Roseman, 1991; Smith & Ellsworth, 1985) or focus on the intention of the agents involved (e.g., Dodge & Coie, 1987). Rather than treating goal appraisal and attribution theories of emotion as mutually exclusive, they are perhaps better thought of as overlapping and additive in nature, yielding potentially more meaningful constructs when cooperatively employed.

This study represents a first step in the application of cognitive theories of emotion to socialization processes within family life. Prior research has focused on the differentiation of emotions by examining the underlying appraisal dimensions (e.g., Roseman, 1991; Smith and Ellsworth, 1985, Levine, 1995; Stein & Levine, 1989). The current study has attempted to extend the findings of cognitive theories of emotion by extrapolating the appraisal dimensions which have been linked to emotional experience, combining them in a meaningful way, and utilizing the resulting appraisal variables to form a measure of individual differences regarding how parents talk to their children about emotional experiences. Further, a discourse methodology was employed, rather than using the more standard measures of parental appraisal styles, such as self-report questionnaires. Both the operationalization of cognitive appraisal dimensions and the narrative method represented an attempt to use an innovative and meaningful approach to studying parental appraisal styles, with the ultimate goal of better understanding parental contributions to the socialization of emotions in their children.

This study supports the hypothesis that children of mothers with an appraisal pattern
characterized by a high level of fear appraisals would display a bias toward fear-related appraisals as well. Maternal fear appraisals emerged as a relatively strong predictor across domains of children’s appraisals and behaviour, specifically, children’s fearful appraisals and internalizing behaviour. The significant inverse relationship found between maternal anger appraisals and children’s internalizing behaviour also conformed closely to prediction, in that mothers with a high level of angry appraisals had children with orientations towards externalizing. Contrary to the hypothesis, paternal sad and fearful appraisals demonstrated an inverse relationship with children’s internalizing behaviour. Also, paternal angry appraisals were found to be inversely correlated with one child outcome measure (difference CBQ-high internalizing) and approaching significance for a positive correlation with the other child outcome measure (difference PBQ-high internalizing). Therefore, paternal anger appraisals were related to children’s outcomes with both internalizing and externalizing biases. In the discussion that follows, explanations for both confirmatory evidence and alternative hypotheses will be explored.

Parent and child appraisals

This study provided additional evidence for viewing parental appraisal biases as one component of the emotion process that may account for some variance in the development or maintenance of children’s affective organization skewed in one direction (internalizing) or the other (externalizing). The high correspondence that emerged between mother fear appraisals, child fear appraisals and child internalizing behaviour and the inverse correlations found between maternal/paternal anger appraisals and child internalizing behaviour in this study are not surprising when viewed under the framework of the risk literature.
Studies of parental psychiatric disturbance have repeatedly demonstrated the high concordance rate between anxiety-disordered parents and anxiety symptoms in children (e.g., Rosenbaum, Biederman, & Gersten, 1988; Turner et al., 1987), and the correspondence of parental antisocial disorders to children’s externalizing disorders (e.g., Kessler et al., 1994). Yet, many children who live with parents with these and other psychiatric disturbances do not go on to develop psychiatric symptoms themselves. That is why the study of individual differences in patterns of emotionality is one important method of helping to untangle why certain emotions, such as anger, sadness, or fear, may be triggered more easily for some children than for others. To extend this idea further, it is essential to consider how short term emotions relate to the longer-term aggregate notion of psychopathology (Oatley & Jenkins, 1996).

The results of this study suggest that maternal appraisals of fear seem to be linked with children’s fear appraisals. As opposed to the depression literature regarding the potential transmission of “depressogenic” appraisals to children (Jaenicke et al., 1987; Seligman et al., 1984), little or no work has focused on the transmission of fear appraisals from parent to child. Yet, this finding may be more clear when the children’s age and developmental level is taken into account.

As mentioned previously, social referencing begins as early as infancy (Walden & Ogan, 1988) and children were found to develop some understanding of the meaning of fearful expressions as early as the first year of life (Sorce et al., 1985). When young children are faced with stressful or aversive events, they often look to their parents’ appraisals and emotions to find out how to appraise and react to these events. As children
grow older, they become more effective at learning to monitor and interpret their
caregiver's affect and behaviour so that they may regulate and modify their own behaviour. 
Whereas older children who are faced with a potentially threatening stimulus are more
likely to gather more information and rely on a shared interpretation between child and 
parent, younger children are more likely to reference the parent and respond accordingly 
(Walden & Ogan, 1988).

*Parent Appraisals and Children's Internalizing Outcomes*

With regards to the association between maternal fear appraisals and children’s
internalizing outcomes, one could surmise that these children are taking cues from their
mothers’ narratives, as well as referencing their mothers’ behavioral response patterns in
everyday situations. On one hand, appraisals of threat and an associated behavioral
response to potentially threatening stimuli can be viewed as largely adaptive (Rozin & 
Fallon, 1987), as children who do not respond to in an appropriate fashion to signals of
danger would face serious consequences. The referencing of fearful appraisals and 
emotions is generalized beyond the immediate caregiver to other adults. For instance, in
the Walden (1993) study, children aged 2 ½ to 5 who were told by a slight acquaintance
that a stimulus was frightening, exhibited total behavioral inhibition, whereas children over
age 5 who were given the same introduction to the stimulus forged ahead and interacted
with the stimulus anyway, albeit in a cautious manner. Thus, when pre-school age
children receive threat-related messages, there may be a greater correspondence between
the social referencing, the expressed behaviour, and the internal emotional state than with
school-age children. At extreme levels, consistent messages of threat may play a role in
the development of a child's internalizing, or anxious, orientation.
From a qualitative standpoint, mothers in the study most often referred to concrete threats when making fearful appraisals (e.g., “you must wear your helmet when riding your bike or you’ll hurt yourself”), while children often referred to diffuse, imaginary threats, such as ghosts, monsters, and the dark. Children were given a variety of specific and concrete potential threats on which to focus within the appraisal measure, yet they often strayed into more imaginary realms (which is largely consistent with the literature on childhood fears for this developmental level).

As well, mothers’ appraisals of fear, as opposed to angry or sad appraisals, seemed to have a more raw, repetitive, and direct quality about them. For instance, whereas the angry and sad appraisals were often cloaked within a third person narrative (e.g., the protagonist’s thoughts and feelings in the story), fear appraisals seemed to be utilized more in a didactic fashion when speaking directly to their own child and when reiterating the moral of the story. Social desirability factors may be one reason why mothers might have had less trepidation about making more direct statements centering around threat. Since there is probably less stigma attached to fearful appraisals (e.g., warning children about a potentially threatening event) than with anger appraisals (e.g., assuming hostile intentions of the other person), mothers might feel less need to embed fear statements or censor themselves with an observer present.

*Parental appraisals and child externalizing outcomes*

The findings that linked parental anger appraisals to children’s externalizing behaviour runs parallel to the bulk of research which suggests that aggressive children tend to live in homes with aggressive parents (Dodge et al., 1990; Patterson, 1982; Simons et al., 1991).
The results also concur with more specific research on the cognitive processes of mothers of aggressive boys that have been shown to share the propensity to infer hostility in ambiguous situations (Bickett et al., 1996). Further work that focused on the interpretations of mothers who were watching videotapes of unfamiliar children has demonstrated that mothers of aggressive children displayed a hostile attribution bias, and that their tendency to “assume the worst” could not be viewed as simply a by-product of a negative history with the child (Dix & Lochman, 1990).

Much previous research has attempted to provide increasingly accurate descriptions of the cognitive characteristics of aggressive children within different stages of the appraisal process. For instance, it has been established that aggressive children display hostile appraisal biases (e.g., Dodge & Coie, 1987; Quiggle et al., 1992), attend to fewer cues while attempting to interpret the meaning of another’s behaviour (Dodge & Newman, 1981), generate more non-verbal, direct action solutions than nonaggressive children (Asarnow & Callan, 1985), and make more positive evaluations of aggressive solutions than their nonaggressive peers (e.g., Boldizar, Perry, & Perry, 1989). In contrast, there has been less work examining how particular thinking styles develop that leave children more vulnerable to externalizing problems.

For instance, in this study, parents were rated high on angry appraisals if they were utilizing elevated levels of appraisals that stressed hostile attributions of intent, blamed others for negative events, and focused on the possibility of goal reinstatement and the presence of an aversive phenomenon. The intensity, duration, type, and amount of hostile appraisals utilized by parents when they are talking to their child may very well have a
bearing on the child’s emotional organization. As an adjunct to previous research that focuses on socialization factors contributing to children’s aggressive behaviour, (e.g., Dodge et al., 1990), the current findings attempt to provide more fine-tuned evidence about which cognitive processes play a role in the development of aggression.

Although an inverse relationship was expected between the angry appraisals of father and the internalizing behaviour of the child, a positive correlation approaching significance also emerged between paternal angry appraisals and children’s internalizing behaviour on the PBQ measure. First, it must be reiterated that these findings must be interpreted with extreme caution, due to the size of the sample. Yet, this limitation of the study should not inhibit the exploration of alternative hypotheses.

Since it appears that the relationship between high levels of angry appraisals and children’s outcomes are not limited to behavioral outcomes of aggression, it could be that higher levels of angry emotions contribute to child affective outcomes skewed to either end of the emotional continuum. Excessive levels of paternal anger appraisals (which are most probably embedded within a larger cluster of hostile cognitions and behaviors), while serving to socialize some children to react in a more aggressive fashion, it may serve to inhibit other children emotionally and/or behaviorally. Indeed, Dodge et al., (1990) found that, besides externalizing difficulties, children of hostile, abusive parents were also at risk for the development of internalizing problems, such as withdrawal and isolation.

Bidirectional effects from child to parent (e.g., Bell, 1968; Lytton, 1990) necessarily play a role in the socialization of children’s emotions, and, in this case, possibly in the
development of an internalizing cognitive and behavioral style. Hopkins et al., (1987) found that family members with depressed affect served to suppress aggression from other family members. Children in this study with high externalizing fathers may acquire an internalizing organization as an adaptive mechanism to suppress parental aggression, negativity, and/or hostility. Further, gender effects of the parent and/or child, as well as the child’s temperament, may have played somewhat of a mediating role in this study. Due to the sample size in this study, boys and girls were grouped together for purposes of analysis. If boys and girls were able to be teased apart and analyzed separately, it may be determined that girls lean towards an internalizing organization and boys towards an externalizing schema (Achenbach et al., 1991).

Attempts to interpret the finding that fathers’ sad and fearful appraisals negatively correlated with children’s internalizing behavior seem to point to a more complex socialization process than a modeling hypothesis could explain. Lytton (1990) and Eisenberg and Fabes (1994) demonstrated that children differing in characteristics may shape the socialization methods of parents. In this study, child-to-parent effects may be viewed in terms of parental responsiveness to children’s emotions. For example, fathers who perceive that their children have a tendency to be isolated, withdrawn, or sad, may attempt to draw the focus away from sad or fearful interpretations of everyday events during social exchanges with the children.

In this study, further qualitative evidence regarding parental responsiveness to children’s appraisals was apparent in the parental narratives. For instance, during preliminary analysis, a tendency was noted for mothers of more aggressive children to
stress the prosocial aspects of a situation and/or non-hostile alternative interpretations in response to the children's "aggressive" or "hostile" explanations. When listening to these parents relating the stories to their children, a distinct picture emerges of parental attempts to coax the child out of her/his aggressive frame of mind.

Of course, parental responsiveness is a discrete aspect of the parent-child relationship that is necessarily influenced by the overall emotional tone of the relationship (Oatley & Jenkins, 1996). Yet, the findings from this study that certain types of appraisals linked to particular behaviour patterns in children is an intriguing first step in attempting to understand how these patterns of response are influenced by emotional expression in the family. The results suggest that a 'modeling' framework for understanding emotional development, while possibly explaining some variance in children's emotional and behavioral outcomes, needs to be supplemented by other models of emotion socialization when dealing with the complexities of familial (and extra-familial processes). Using longitudinal data, it may be possible to tease apart the direction of some of these associations.

In Parke's commentary on the progress of understanding children's emotions (1994), a tripartite perspective of emotion socialization is offered which stresses dyadic interaction, direct teaching, and regulation of opportunities for learning about emotions. It seems that these socialization strategies are best viewed as overlapping and complementary in their effect on children's emotional development, and parental appraisals would seem to play a role in all three mechanisms of socialization.
Individual differences versus familial appraisal styles

The results demonstrated anticipated differences between parents in terms of their relative use of appraisals and the types of appraisals made. For instance, mothers generally made a greater number of references to emotions and utilized emotional appraisals to a greater extent than fathers. This confirms prior evidence that females tend to experience more positive and negative emotions (Rehm, 1978; Tangney, 1990) and are generally more emotionally expressive than males (e.g., Manstead, 1991; Hall, 1984). Further, mothers in this study used appraisals relating to sadness more often than fathers, while fathers more frequently verbalized angry appraisals. Reviews of the literature (e.g., Brody & Hall, 1993) indicate that females are both stereotyped to be and in fact are more intensely expressive of both positive and some negative emotions, and exhibit greater expression of sadness and fear, while males demonstrate a greater expression of anger. Indeed, in the socialization literature, findings to date have demonstrated that sadness is encouraged among females and discouraged among males; conversely, anger seems to be discouraged among girls (Fivush, 1989; Fuchs & Thelen, 1988). Interpretation of the current findings regarding gender differences should be viewed in light of a strong argument by Brody & Hall (1993), that the stereotypes in and of themselves may be self-fulfilling prophecies that lead to actual behavior, and are passed on to children via socialization practices.

Significant zero-order correlations were entered into exploratory regression models in an attempt to examine which parental appraisal patterns would be unique predictors of children’s patterns of emotionality. With regards to the “difference CBQ-high internalizing” outcome, the results demonstrated that paternal sad appraisals were the only type of father appraisal that contributed significantly to the prediction of the internalizing
outcome score after controlling for income.

The results also yielded that both high levels of maternal fear appraisals and low levels of maternal angry appraisals provided independent contributions in the prediction of children's internalizing emotional organizations as measured by the “difference PBQ-high internalizing” score. A modeling hypothesis would suggest that mothers are “teaching” fear appraisals, while at the same time veering children away from hostile or angry interpretations of events by rarely teaching angry explanations and/or actively steering children away from them. They are offering explanations to children about how the world operates, getting children to pay attention to certain aspects of their environment and to ignore other aspects. One could surmise that relatively high levels of angry appraisals may override or mask fearful messages. At the very least, it seems reasonable that high levels of anger would direct children’s attention away from solely threatening aspects of a situation. Additional research in this area may do well to investigate the impact of important mediating variables, such as age and gender of the child, as well as to examine familial contributions to absolute levels of child dysfunction in order to further test hypotheses around familial appraisal patterns.

Limitations of the study

Several caveats must be emphasized in relation to the overall findings, as they provide recommendations for future research. As mentioned previously, the modest samples size obtained for fathers limit predictive power with regards to paternal effects. Due to the centrality of paternal contributions to the socialization process, every effort was made to obtain a large and representative subsample of fathers for the study. Yet, the
predominance of single mothers in the subsidized daycares resulted in decreased paternal participation. Since the majority of fathers who participated were from the laboratory school, they are represented within a relatively higher socioeconomic bracket. In their extensive review of the literature on paternal factors and child psychopathology, Phares and Compas (1992) strongly suggest an agenda to learn more about the mechanisms through which paternal factors exert their influence, as well as variables that moderate paternal effects. In order to enrich the knowledge base, socialization research must make it a priority to better clarify the role of fathers in child psychopathology.

It must also be noted that issues of comorbidity were not highlighted in this study. Rather than focusing on absolute levels of psychopathology, there was more interest in obtaining a difference score between internalizing and externalizing in order to gauge children's emotional biases towards one or the other. Therefore, children who scored at high levels in both the internalizing and externalizing domains would not stand out as being biased towards either end of the emotion spectrum. Yet, for a population of children whose affective organization contains high loadings on both angry and sad dimensions, there may be qualitative differences in their cognitive processes or in the mechanisms by which specific appraisal patterns develop. Studies are needed that will examine cognitive patterns in the context of absolute levels of dysfunction which provide an adequate treatment of populations of children with comorbid aggression and depression/anxiety.

Attempts were made to have the story-reading method adhere as closely as possible to a naturalistic parent-child interaction. Yet, the presence of an observer during the story-reading process led to the possibility of observer bias effects. The logic behind the
researcher's presence was that someone needed to be present in order to tape the narrative for later transcription and, more importantly, to guide mothers who did not understand the task. Further, some parents who had reading difficulties or spoke English as a second language required the researcher to provide an increased level of facilitation. Because of the stigma attached to displaying negative emotions to their children, the potential existed for a lower threshold of negative parental perceptions vocalized. Yet even erring towards the conservative with regards to the types of parental appraisals verbalized, it is notable that associations were still evident between parent appraisals, child appraisals, and patterns of emotionality.

Finally, caution must be brought to bear in the interpretation of which parental cognitive patterns contribute to and maintain a child’s particular appraisal style, as the effect of the child’s behaviour on the parents in eliciting certain appraisals cannot be ruled out (Jaenicke et al., 1987). Multidirectional influences of affect, cognitions, and behaviours illustrate the importance of taking into account the extent to which children’s appraisal styles and behaviour may contribute to the maladaptive circumstances in which they may find themselves. Further, the present analyses were entirely cross-sectional. Therefore, the data does not lend itself to causal language or interpretations.

In order to test the hypothesized contributions of specific family variables and to untangle the direction of effects, longitudinal and experimental studies need to investigate in a detailed manner the causal influences between parental cognitive processes and children’s emotional problems. Although most researchers concur that family variables are key to the emotional development of children, increased attention should be also devoted
to the development of causal models which include a more comprehensive picture of the interplay between the cognitive vulnerabilities of the child, pertinent family factors, and broader contextual factors.

Longitudinal research is needed to examine the extent to which the hypothesized parental appraisal biases are more appropriately viewed as an antecedent, concomitant, or an outgrowth of children’s patterns of emotionality. It is already well known that childhood aggression tends to be quite stable over time, and prospective studies will also allow us to explore the continuity of children’s appraisal patterns as well. Longitudinal data will help to clarify whether children with biased appraisal patterns, or other deviant cognitive processes, are more likely than other children to develop emotional disorders over time. Finally, Quiggle et al. (1992) notes the value of research which examines the developmental course of cognitive variables in facilitating early identification of at-risk children before their cognitive patterns become rigidified.

In summary, the parent-child relationship is a powerful context for understanding the ways in which emotions are socialized (Parke, 1994). This study utilized the narrative method in an attempt to add to the knowledge base regarding the origins of cognitive appraisal patterns in children and to better understand the link between parental appraisal styles and children’s patterns of emotionality.
References


APPENDIX A

Parental Appraisal Measure

Instructions To Parents:

This booklet contains two short stories which we would like you to read to your child. At the end of each story, we would like you to take approximately 5 minutes to explain the story to your child, including the motivation that led up to what happened. There are ideas at the end of each story which you might like to include in your explanation of the story to your child. Perhaps in doing this, you could draw on similar things that have happened in your child’s life. Please note that we don’t necessarily expect your child to participate in this discussion. After you have finished your explanation, though, we would like you to ask your child about what happened.
Parental Appraisal Measure (cont.)

Story 1:

Page 1

Max and Peter were playing cars together. Max had brought his newest Batmobile to school. His uncle had given it to him for his birthday. Max’s dad had said that it was best not to take it to school because he might lose it, but Max had wanted to take it anyway. He wanted all his friends to see his best car. Max’s friend Peter just loved Batman, and he particularly loved Max’s new Batmobile. “Oh I do wish I could have one of those,” he said to Max. “Maybe I could get one for my birthday, but that’s such a long time away.”

Page 2

Later, Ms. Harvey, Max and Peter’s teacher, told the children to put away their toys because it was lunchtime. At lunchtime, there was always a lot of confusion in the class. There was lots of tidying up to do before the children could eat. All the toys got put away in cubbies and cupboards, and the biggest boxes which were filled with toys and games were carried into the closet near the gym.

Page 3

At the end of the day, Max went to his cubby to get his Batmobile. It was not there. He looked all around and he told his teacher so that she could search, but they could not find it anywhere. Max wondered what could have happened to it.

Page 4

Things to explain to your child:

Your thoughts about what might have happened to the car.

Your thoughts about what Max’s friend Peter was thinking to himself when it came time to put away the toys.

Your thoughts about what Max might have been thinking to himself when he was standing at his cubby and couldn’t find his car.

Your thoughts about the feelings Max and Peter might have had throughout the story.

What you would like your child to think about, having read this story.
Parental Appraisal Measure (cont.)

Story 2:

Page 1
Maggie was riding her bike one Saturday. She was riding very quickly because she was excited to see her friend Amy. Amy had been on vacation and Maggie had missed her.

Page 2
She was just riding past the big tree when Sam, one of the boys from her class, jumped out in front of her. Just the day before, Maggie and Sam had had a fight, and Sam had stomped off pretty mad at Maggie. He was smiling as he jumped out.

Page 3
Maggie jammed on her brakes. She veered away so that she missed Sam, but she hit a bush and toppled off her bike. She was not badly hurt, but she had scraped her knees and was feeling pretty fed up.

Page 4
Things to explain to your child:
Your thoughts about the possible reasons which led Maggie to tumble off her bike.
Your thoughts about what Maggie might have been thinking to herself after she’d fallen off her bike.
Your thoughts about the feelings Sam and Maggie might have had throughout the story.
Your thoughts about why Sam jumped out in front of Maggie, and what he was thinking to himself.
What you would like your child to think about, having read this story.
APPENDIX B

Example of Parental Appraisal
Measure Transcript

Story #1

M = Mother
TC = Target Child

(1) M: That's the end of the story. What happened to Max's toy, TC?

TC: The teacher, she put his car away. She put the cars on the shelf. And you know what happened? His car, it went away with the shelf.

(2) M: His car went away with the shelf? But the shelf was still there.

TC: Let's read it again, mommy. Read it again.

(3) M: Read it again? (reads story)

TC: 'Cause the shelf, it moved in the class. And now he don't know where it is.

(4) M: Yah?

Carol: Could you tell her what you think happened to the car?

(5) M: Max's friend Peter took the car because he was so much in love with the batmobile. And he knew that his birthday was so far away. And he could not wait so he stole the batmobile. Right here. That was the batmobile that he brought to school. And his friend stole it, took it home. Do you think he was sad? He was very sad.

TC: He.. how come...

(6) M: If you had a batmobile and took it to school with you and then when you're ready to come home and couldn't find it, would you be sad?

TC: Yah.

(7) M: Yah. Well Max was very sad when he could not find his batmobile. But maybe he thought that Peter didn't take it because they were friends.

TC: And they...

(8) M: But friends sometimes do that because they want to have the same things that their friends have.
TC: Who's that?

(9) M: That's Max. Max's friend. And these are all the toys that they play with. And then they have to clean up.

TC: And..and then they play. 'Cause they have to tidy up when her come for lunch.

(10) M: Mmhmm.

TC: And then the teacher came into the room and she said, and she said, "Guys! Come for lunch when you tidy up your toys"

Carol: What happened here?

TC: Okay. He was trying to find his Batman toy and he couldn't find it because...

(11) M: It was gone.

TC: 'Cause it was gone and his friend taked it away and now he's sad. The End.

Carol: All right. Does mom have anything that she wants TC to think about after she's read the story?

TC: Mommy. I read it all by myself.

(12) M: You did? That's good. So when you go to daycare, you have to clean up and put your stuff away too.

TC: I tidy up.

(13) M: But you know what TC? When you go to daycare and your friend has something that you really like...you can't take it. You have to ask them if you can have it. If they say no, then you can't have it. Right?

TC: Yah.

(14) M: Okay? Because he is very sad now. If you take something from your friend that they like a lot, then they're going to be very sad.

Story #2

(1) M: Why do you think Maggie fell off her bike?

TC: The bush.
(2) M: The bush? She was riding. Do you see Sam? She had had a fight with him.

TC: No she didn't.

(3) M: You see how she is here? She was happy to go to see her friend. Then she saw Sam hiding behind the tree and she was scared.

TC: Didn't she put on the brakes?

(4) M: Mmhm. What do you think happened here?

TC: She had a scrape.

(5) M: And what was she thinking when she had the scrape?

TC: Um, she was sad?

(6) M: Yah. She was very sad.

TC: How come she's got flat eyes?

(7) M: That's just the painting. Why was she sad?

TC: Because. Because (unintelligible)

(8) M: If anything, she was sad because she was going to see a friend who she had not seen in a long time and this boy who she had a fight with came...(Baby crying, tends to her). She was sad because she was intending to go, but she got into an accident and she can't go. What do you think could happen when Majjie was so...

TC: Maggie.

(9) M: (laughs) He keeps on correcting me. And, what do you think happened when Maggie saw Sam coming out from the tree?

TC: She turned home and she thought that he was a stranger.

(10) M: Yah. She was scared. You know that they had had a fight. The reason she was scared was because of the fight.

TC: Yes.

(11) M: Do you think that they were now friends or still apart?

TC: They're still apart.

(12) M: I think they have already made up. So he was just standing there and all of a sudden Maggie was coming by. So he just wanted to be friends with Maggie, but
Maggie was still frightened. Thinking they were still...because of the fight...he was still trying to threaten her. So she missed control. But that was not his intention. He could have started the fight all over again, but he didn't. I don't know.

TC: Mmmm..

(13) M: You don't think so? So what do you think about after you have heard the story? Maggie is going to see a friend and Sam just came out. So what do you think about the story? If you were riding a bike and...if you were Maggie, what would you think?

TC: She's a girl!

(14) M: Okay. You could still be Sam. So if (friend) was riding her bike and you just came out, what do you think?

TC: I scared (friend).

(15) M: You scared (friend)? So that's why you think that he was scaring Maggie. He was just trying to be friendly to her. Which is not good anyway. If you think so, then it's no good. It's not good to scare a friend. You know? If you guys had a fight and somebody forget about it and continue to be friends, it's not good to hang beside a tree and scare her if she's riding a bike or scare her if you've had a fight previously. You have to be friendly to her. Say "hi Maggie, how are you?" or "Hi (friend), how are you?"

TC: Mm.

(16) M: Don't make her feel frightened when she sees you. Try to be very friendly. Okay? Or if somebody has a fight...if you have a fight with someone and that person is trying to scare you, tell your teacher, you know? So if you're in Maggie's position, you tell your teacher. You tell them that somebody's frightening you because you had had a fight.

Carol: Maybe TC could tell us what happened?

(17) M: Okay, TC.

TC: Maggie was riding her bike so fast because she wanted to, 'cause she had a friend that she missed. And when she was at her house, she was rushing. And Sam just came out and...what was her name again?

(18) M: Maggie.

TC: Maggie put on her brakes and she was scared. Then she went into the bush. Then she had a scrape. And she was very sad.

Carol: So why did she fall off her bike?

TC: Because she was so scared.
Carol: And why did Sam jump out?

TC: Because he wanted to scare her.
Coding Sheet - Parental Appraisal Measure

Subject #__________ Date:__________

Check one: Mother___ Father___

Story 1 (Max and Peter)

Number of speaker turns (mother or father) ________

Total number of speaker words (mother or father)__________

Total number of emotion words (mother or father)__________

Codes: Circle appropriate codes for each speaker turn.

Speaker turn #_______: Other-blame Self-blame Hostile Aversive Loss NatCon
                       Rein-possible Rein-not possible Global Stable Threat

Speaker turn #_______: Other-blame Self-blame Hostile Aversive Loss NatCon
                       Rein-possible Rein-not possible Global Stable Threat

Speaker turn #_______: Other-blame Self-blame Hostile Aversive Loss NatCon
                       Rein-possible Rein-not possible Global Stable Threat

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                       Rein-possible Rein-not possible Global Stable Threat

Speaker turn #_______: Other-blame Self-blame Hostile Aversive Loss NatCon
                       Rein-possible Rein-not possible Global Stable Threat
APPENDIX C

Coding Scheme
Parental Appraisal Measure

Procedure:

1) Count the number of speaker turns (mother or father)
2) Count the total number of words (mother or father)
3) Count total number of emotion words (mother or father)
4) Choose the appropriate codes (11 of them) for each parental speaker turn.

   a) It's important to remember that we're taking contextual issues into account rather than just coding for the frequency of a particular word (e.g., stole). So, if the mother states, "I don't think Peter stole it" - other-blame and hostile is not coded, because mother is denying this happened.

   b) Begin coding after the last sentence of the story being read, even if parent is just repeating the first question (e.g., Story finished, then parent asks, "Why did Maggie fall off her bike?" = code for aversive)

   c) Do not code for those instances when the parent asks the child a question, unless they are providing their own appraisal within the question. If the parent is merely reiterating what the child said, then do not code.

      Ex: "What happened then?" (do not code)
      "And then what will Sam do?" (do not code)
      "Where else could it be?" (do not code)

   Child: Someone stole it.
   Mother: Why do you think someone stole it? (don't code)

   d) Do code if mother reiterates and embellishes on child's appraisal.

      Ex: Child: Maybe someone stole it.
      Mother: That could have happened. Maybe Peter took it because he was the one that really wanted it.

   e) Do code if spontaneous questions from mother:

      Ex: "What if someone took it?" (yes, code)
      "Do you think he lost it?" (yes, code)
f) Do code if child makes an appraisal and mother agrees and brings it up as her own appraisal again at a later time.

Ex: Child: It got lost.
Mother: Yah, it might have got lost. (yes, code)
Child: Peter might have taken it.
Mother: Yes, it is possible that Peter took it. (yes, code)
{Later in story}
Mother: So, you know what I think? I think that Peter wanted that toy so badly that he took it home. (yes, code)

For each speaker turn, there may often be more than one code per category (e.g., other-blame, self-blame, aversive, loss = all in one speaker turn). Codes are not mutually exclusive, but all codes can only be coded once per speaker turn.

h) If parent speaks continuously without interruption from the child, it is up to us to break into speaker turns (this will rarely happen). If this is the case, the coder can divide up the passage into the various questions they are answering.

For instance, if parent is answering in one passage:

What are the possible reasons for Maggie’s fall?
Why did Sam jump out from behind the tree?

Each of these questions deserves a speaker turn.

Operational Definitions of Codes:

(1) AGENCY

Self-blame = self responsibility for the occurrence of the loss or fall
Other-blame = someone else responsible for the occurrence of loss or fall
Natural consequence = no direct reference to a human agent as responsible for the loss or fall
Notes:

This code pertains to appraisals toward the protagonists (Max and Maggie). If Max is responsible for losing his car or Maggie is responsible for falling off her bike; code as self-blame. If someone in the story other than the protagonist is responsible; code as other-blame.

Natural consequence refers to blame of an inanimate object, such as the bike or the batmobile. Look for key words: "It just got lost." Intent will not be coded with natural consequence.

If mother substitutes own child for either protagonist or antagonist, code accordingly. E.g.: substitution of child for Sam. "TC jumped out at friend in class and made her fall". Code as "other blame"

Examples:

**Both Self-blame and Other-blame:** "Max shouldn’t have left the batmobile there and it looks like somebody took it"

**Self-blame**

"If Max wouldn’t have taken it to school, the batmobile wouldn’t be lost now."

"Maggie wasn’t paying attention and fell."

"She fell, see? You have to ride slowly."

"She was riding too quickly."

"Don’t bring your car to school because you might lose it"

"She wasn’t concentrating on the road"

"He should have put it right into his cubby to save it from getting lost"

**Other-blame**

"One of the kids must have borrowed the batmobile."

"Sam scared Maggie and she fell."
"She had to stop or else she would hit Sam"

"It got misplaced into the wrong cubby"

Not: "She was upset that Sam scared her like that" (don't code because no mention that Sam caused her fall, only scared her)

Natural Consequence

"Maggie said, "Oh that darn bike"

"The batmobile got lost"

"it disappeared"

"Don't bring your batmobile to school, because it might get lost"

"In all the confusion, it got lost with other toys"

Not: "It got put away with other toys" or "it got misplaced" (because putting and placing implies human agent)

(2) INTENT

Hostile Intent = An action was taken with a malevolent or aggressive purpose in mind.

Notes: This code pertains to the antagonists only (Peter and Sam). Or if any other individual may have done something with it.

For the word "surprise", must take context into account. E.g., if paired in same sentence, such as "He scared her, surprised her" (code hostile).

If two separate thoughts, "He scared her, or maybe he just wanted to surprise her" (code as both hostile and neutral)
Examples:

Hostile: he stole it, he got back at her, jumped out to scare her, he took it, he had a mean look on his face as he jumped out

"She was upset at Sam for jumping out to scare her like that"

"He deliberately jumped out"

"Peter set the toy aside to take it"

"Sam was happy that she fell off her bike"

(3) OUTCOME

Presence of Aversive Phenomenon = presence of disliked stimuli (or reference to a disliked stimuli)

Loss = absence of liked stimuli (or reference to absence of liked stimuli)

Notes: Code for protagonist (or something protagonist involved in, such as a fight). Stimuli must refer to something in their surroundings, not within them. For example: do not code ‘Aversive’ for emotions.

Examples:

Aversive: she fell, they had a fight, she hurt herself

"Max was sad” (do not code)

"Maggie was sad because other kids had a fight (do not code)

"Maggie was sad since her bike was damaged” (yes, code)

"Max was upset because he and Peter had an argument” (yes, code)

Loss:

“Someone took the batmobile”

“It’s lost”

“Where has my car gone”
(4) GOALS

**Goal Reinstatement Possible** = There is a possibility that the protagonist's goal will be met (finding car/back on bike)

**Goal Reinstatement Not Possible** = There is no possibility that the protagonist's goal will be met.

Notes: Must be pretty explicit, not inferred.

Examples:

**Goal Reinstatement Possible:**

"Maggie may still be able to ride to Amy's"

"Peter only borrowed it for a little while"

"Well, maybe he'll give the car back"

"Peter brought it back the next day"

"The other kids will help him find it"

(Key words = finding it)

Do code for: "Do you think he'll find it?"

"Did he get any help looking for it?"

"I wonder if he got everyone in the class to help him find it?"

**Goal Reinstatement Not possible:**

"It's (the car) gone for good"

"Now I'll never make it to Amy's"

"No more car"

Not: "My batmobile is gone"
(5) NEGATIVE PERCEPTIONS

Global = A negative event/feeling is generalized to include other children/people, other objects, or other situations or places.

Stable = A negative event/feeling will last for a lengthy period, or will occur frequently.

Notes: Code for protagonist or antagonists; only for negative events/feelings.

Do not include sentences which pertain to Peter's birthday being so far away.

Global Examples:

Other people:

“Anyone could have taken it”
“A lot of children could have taken it”
“Peter felt jealous of many children”
“It can be very dangerous when people jump out at them”
“People steal things”
“Be careful so you don't hurt other people”

Do not code for: "People don't steal things" (positive conotation)

Other objects:

“Max was sad, because when children take toys they should ask first”

“You have to be careful or you may lose your toys that way”

“You’ve lost many things, haven’t you?”

Not: “You lost your doll one time, didn’t you?”
Other places/situations:

"This could happen anywhere you take your toys"

"People have to be careful when they’re riding bikes in the park or on the street because you never know what could jump in their way"

Stable Examples:

"So the next time it happens..."

"Max still wasn’t able to find it the next day"

"She is badly hurt and can’t ride to Maggie’s"

"Dad will probably say no next time he asks"

"He won’t be able to bring the toy again"

"Her mom will be angry at me for a while"

"Sam was still mad, even though they had a fight yesterday"

"She’ll probably fall again unless she’s more careful"

"No more car"

"She was scared as to what he would do to her because they had a fight the day before"

Not: "He just took it to play with it for a while"

"It's gone" (see below)

"He just couldn't find it" (too much inference, unless mentions that had to go home without it or couldn't find it the next day)

(6) Threat

Threat = Thoughts or statements regarding potential negative consequences (physical or psychological harm) for future events, or warnings about present or future.
Notes: Code for protagonist or antagonist. Don't pay too much attention to "emotion" words.

Examples:

"You need to pay attention while riding your bike so that you don't have an accident"

"You should always wear a helmet, in case it was a serious accident"

"You need to watch your toys carefully, or else you may lose them"

"Be gentle. Be careful so you won't hurt yourself or others"

"Holding a grudge like Sam did sometimes ends up in other people getting really hurt"

"His dad said you shouldn't bring it because it might get lost"

Not: "What's Max gonna say to his dad?"
Parental Appraisal Coding Scheme (cont.)

Emotion Words/Feeling States

Yes, code for:

Typical emotion words

sad, angry, mad, jealous, scared, frustrated, upset,
(past or present tense) fed up (code as one emotion word),
confused, scare, fright, surprise, surprised, liked, loved, hated,
don’t like (one emotion word), excited, confusion

Feel or felt: feel bad, felt upset, feel happy (all=2 emotion words)

Emotion verbs: crying, laughing, frowning, smiling, whining
he scared her, he surprised her

Separated words: feeling a bit guilty (code for “feeling” and “guilty”)
hurt someone’s feelings (code for “feelings”)

Do not code for:

Thinking and thoughts:

(unless an emotion word is present within the thought)
“Max thinks Peter doesn’t like him” (code for “like” only)

Physical situations:

“He felt bad” (physically) “She was hurt from the fall”

Words such as:

want, wish, fun, careful, aware, conscious, like (as in similar)
(but code for “felt” if in front of these words)
APPENDIX D

Children’s Appraisal Questionnaire

Materials:

Fourteen gender-neutral pictures of children at home and school.

Response cards with pictures of cartoon character heads. The first card has a cartoon bubble over the head filled up to indicate “I really think that.” The second card has the cartoon bubble filled a little to indicate “I think that a little.” The third card has an empty bubble to indicate “I don’t think that at all.” Separate cards are made for boys and girls, with the only difference being the picture of the child.

Three boxes with cartoon characters on the front which correspond to the three types of response cards.

A brief story, adapted for boys and girls.

Procedure:

Part 1

The response cards are shown and described to the children, until it is clear that they understand the task. In addition, two practice vignettes are administered in order to demonstrate the task demands. The series of brief vignettes are administered verbally, each with a corresponding gender-neutral picture. Children will then be asked to pretend they are the child in the picture for each vignette. Following each of these vignettes, children will indicate the extent to which they believe the two following questions are applicable to the picture. For each of the 24 questions, children will respond by placing a response card in the corresponding box. Questions within each section will be asked in random order.

Part 2

Children are read a brief story by the interviewer. Following the story, they will be asked two questions regarding their thoughts on the story. If the child indicates that s/he doesn’t know or gives only one example, s/he will be prompted, “Is there anything else that is making Pat worried/tense/nervous about the sleepover?”
Children's Appraisal Questionnaire

Date ___________________________ ID ___________________________

I am going to ask you to do some pretending. First, I'll ask you to pretend that you are somewhere, like on a playground, or at home or school. Then I will ask you some questions. Let me show you how we'll do it. {Lead her/him through example pictures until the child demonstrates understanding of the task.}

Example 1: {Show the picture and explain the different face cards to the child}. “See this picture? Pretend that you are at school and you just finished drawing a very beautiful picture, the most beautiful picture you've ever drawn. Now, how much do you think other kids helped you to draw it?” {Show cards} “Do you think that a lot, a little bit, or not at all?” {Demonstrate if child does not understand} “See, I think that just a little bit, so I put the card in this box. Now, how much do you think you drew that beautiful picture because you are really good at drawing? Do you think that a lot, a little bit, or not at all?” {Demonstrate again if necessary}

Example 2: “See this picture? Pretend that you are at home, and you’re looking for one of your favorite toys. You can’t find it anywhere. How much do you think someone else has hidden it somewhere? How much do you think that it may have just been put in the wrong place?” {Help child if necessary}

Please use the following scale to rate the scenarios:

0 = I don’t think that at all
1 = I think that a little bit
2 = I think that a lot

Hostile/Neutral

1. Pretend that you see some kids playing on the playground. You would really like to play with them, so you go over and ask one of them, a kid named Alan/Leah, if you can play. Alan/Leah says no.

   a) S/he didn’t want you to play with them (HOS) __________

   b) There were already too many kids playing the game (NEUT) __________
2. Pretend that you are playing on the playground and you’re wearing brand new sneakers. You really like your new sneakers and this is the first day you have worn them. Suddenly, you are bumped from behind by a kid named John/Lisa. You stumble into a mud puddle and your new sneakers get muddy.

a) S/he thought it would be funny to get you muddy (HOS)  

b) S/he had tripped and didn’t mean to bump you (NEUT)  

3. Pretend that you are a new kid at school. You would like to make friends with the other kids in your class. So, you walk up to some of the other kids and say “Hi,” but they don’t say anything back.

a) They wanted to ignore you (HOS)  

b) They didn’t hear you (NEUT)  

**Internality/Externality**

1. Pretend that you are at school one day and one of your good friends tells you that s/he doesn’t like you.

a) My friend was in a bad mood that day (EXT)  

b) I might have done something to make my friend feel sad (INT)  

2. Pretend that you just played a game with some friends at recess and you won the game.

a) The other kids weren’t playing very well (EXT)  

b) I played really well today (INT)  

3. Pretend that you’re at school one day, and you are lining up with your class to go to recess. Just as you are getting in line, a kid named Robert/Susan says “I want this spot!” and cuts in front of you.

a) Robert/Susan is pushy (EXT)  

b) I must have been moving too slowly (INT)
**Stable/Transient**

1. Pretend that you just moved to a new neighborhood and you would really like to make new friends. When your mom goes to visit a neighbor, she brings you along and you see some kids playing. You ask if you can play with them and they say no.

   a) They’ll probably let me play with them next time I ask (TRANS)  
   b) They’ll probably say “no” from now on (STABLE)  

2. Pretend that you are playing with a friend who was dropped off at your house. You shared all your toys with your friend. Your mother says that she is very proud of you because you did such a good job sharing your toys.

   a) She won’t be proud anymore tomorrow (TRANS)  
   b) She’ll be proud of you for at least a few days (STABLE)  

3. Pretend that you are playing at home. While you were playing, you accidentally knocked a lamp off the table and it broke. Your mother was angry and sent you to your room.

   a) I probably won’t get in trouble again tomorrow (TRANS)  
   b) I’ll probably get into trouble again and again (STABLE)  

**Global/Specific**

1. Pretend that you’re in school one day, and you find out that a girl/boy named Anna/Daniel doesn’t like you.

   a) Anna/Daniel is probably one of the only kids that doesn’t like you (SPEC)  
   b) A lot of kids in the class probably feel the same way (GLOBAL)  

2. Pretend that you were in school today and you were proud of yourself because you were able to put together a really hard puzzle.

   a) You probably won’t do as well during drawing and storytime (SPEC)  
   b) You’ll probably do just as well during drawing and storytime (GLOBAL)
3. Pretend that you and your brother/sister get into a fight. Even though you’ve stopped arguing, your brother/sister is still mad at you.

a) Your brother is probably the only one mad at you (SPEC) 

b) Everyone in the family is mad at you (GLOBAL)
Threat/Neutral

[Interviewer] Read the brief story to the children, then ask the following questions: (Use only 3 prompts for each. E.g., "What else might Pat be worried about?")

What are some things that Pat can look forward to when s/he stays over at Chris’s house?

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What are some things that Pat will be worried about when s/he stays over at Chris’s house?

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