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### TITLE

THE ROLE OF EMOTION CONVERSATIONS IN FAMILIES AND CHILDREN'S DEVELOPING UNDERSTANDING OF EMOTIONS

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DATE

January 28, 1998

## **A DISSERTATION**

Submitted to the faculty of Clark University, Worcester, Massachusetts, in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of

Psychology

and accepted on the recommendation of

Dr. James P. McHale

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on Catagoria

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# The Role of Emotion Conversations in Families and Children's Developing Understanding of Emotions Regina Kuersten-Hogan

### Introduction

In recent years, research exploring children's understanding of emotions has been on the rise. Among the themes explored in such work have been the establishment of links between emotion understanding and children's cognitive (Hadwin & Perner, 1991; Wellman & Banerjee, 1991), social (Denham & Grout, 1993; Denham, McKinley, Couchoud, & Holt, 1990; Garner, Carlson Jones, & Miner, 1994), and moral development (Nunner-Winkler & Sodian, 1988). Children's development of empathy (Denham & Couchoud, 1991; Eisenberg, Fabes, Carlo, et al., 1992; Fabes, Eisenberg, Karbon, et. al, 1994) and of emotion-regulation (Dunn & Brown, 1991; Eisenberg & Fabes, 1995) has also been studied in relation to their knowledge about feelings. More recently, research has begun to look for connections between children's understanding of emotions and different patterns of interactions between mothers and children, establishing a basis for the argument that children's early social experiences in the family may come to influence their subsequent emotional understanding.

In many respects, the developmental course of children's understanding of emotions has been well mapped out. However, much less is known about the factors that foster the development of emotion understanding and about how children are socialized to develop this understanding. One of the main purposes of this dissertation study was to examine several components of family functioning hypothesized to promote the development of this skill in children of toddler and preschool age. Developing a more thorough understanding of early emotional understanding and of the individual and relationship variables that influence its development is important for several reasons. First, knowing about the feelings of others provides an important source of information that can both guide predictions about the behaviors of others and help children determine the course of their own actions. Second, emotional understanding is

of vital significance in promoting social goals such as soliciting help from others or avoiding becoming the target of others' angry feelings.

Before outlining the specific goals and hypotheses of this study, I provide a selective overview of literature relevant to understanding the importance of emotion understanding in children's socio-emotional development. First, definitions will be provided for subsequent use of the terms "emotion", "emotion understanding", and "emotion conversation" in this paper. Then, the literature on the developmental course of children's emotion understanding will be reviewed. Finally, a discussion of the major theories put forth to explain this development will be presented. I will propose that emotion conversation within families operates as an important socializing factor which fosters children's emotion understanding, and provide evidence in support of this claim from previous research in this area.

# Definition of Emotions, Emotion Understanding, and Emotion Conversation

For centuries, definitions of what constitutes an emotion have been sought, with theses formulated about how emotions might differ from motivation, drives, feelings, attitudes, and cognition. According to James (1884), emotions are the subjective experiences of physiological bodily changes. In recent years, Izard (1977) has categorized a distinct set of emotions each of which is proposed to carry with it distinctive facial muscular responses which generate the experience of emotions. This differs from Schachter and Singer's (1962) view that an undifferentiated state of physiological arousal activated by a stimulus in the environment is interpreted by the individual based on past experiences and present perceptions of the situation, and only then labeled by the individual as a distinct emotion he or she is experiencing. Zajonc (1980), however, maintains that emotional reactions occur without the influence of cognitive processes such as labeling and recall of past experiences.

The definition of emotion adopted in the present paper does not follow directly from any one of these conceptions, but rather constitutes a combination of different views. In contrast to Schachter and Singer, emotions are not seen

simply as an interpretation of undifferentiated physiological sensations, but rather are viewed as interpretations of more specific physical sensations. Emotions are also not conceived as synonymous with distinct facial expressions, although there seem to be some universally recognized and distinct facial patterns which can trigger very specific sensations. Certain emotions may be triggered without much cognitive input and primarily involve physiological and facial responses to environmental stimuli, while other emotions may be triggered entirely by internal, cognitive processes or be greatly modulated by cognitive processes which operate in combination with physiological responses. Such cognitive processes are both learned and modulated by the child's environment, both cultural and familial, a point which will be further discussed below.

Emotion <u>understanding</u> can be defined as a set of skills that helps people to interpret the variety of emotional cues and situations with which they are faced. One of these skills involves the ability to recognize and label facial expressions of emotions. Another aspect of emotion understanding is concerned with the ability to recognize and interpret various situations that elicit emotions. A third facet of emotion understanding involves knowledge of how one can change and control emotions. Thus, emotion understanding, as it is defined in the present paper, involves cognitive processes dealing with information gathered from emotional cues received from the environment. These cognitive processes involved in emotion understanding are likely to consist of some general inferential and reasoning abilities, perspective-taking skills, and more specific conceptual processes dealing with emotional information and its integration.

Emotion understanding is linked to and yet different from emotional experience and emotional expression, both of which provide information vital to the processing and interpretation of emotions. However, emotional experience, which involves both the physiological sensations and the more or less conscious awareness of these sensations, need not involve the kind of cognitive processes required for understanding how another person feels in a particular situation. For instance, cognitive processes might have only a limited

involvement in the emotional experience of pain resulting from a broken leg. In the same vein, emotional expression might also occur without much cognitive input. For example, the fear of heights is likely to be expressed without much prior cognitive processing. In fact, therapy addressing emotional difficulties is often aimed at activating cognitive processes to deal with exaggerated or irrational emotional responses that occur almost automatically in response to certain stimuli.

Despite the fact that cognitive processes are proposed to be involved in emotion understanding, it is conceivable that a less advanced form of emotion understanding exists which does not rely on complex conceptualizations of emotions. For example, a less advanced form of emotion understanding may merely involve the ability to recognize different facial expressions of emotions and emotion laden situations. Furthermore, a complex, conceptual understanding of emotion does not necessarily imply that a person with this form of understanding is able to verbally explain their conceptual understanding.

In summary, emotion understanding is defined in this paper as both related to emotional experience, but different in certain respects. Emotion understanding requires some cognitive involvement that allows processing and interpreting of emotional cues in the environment, either internal (i.e., one's own emotional experience or thoughts) or external (i.e., situations, one's own behavior, or responses and cues of others belying their underlying emotions).

As stated above, emotion <u>conversations</u> are proposed as an important socializing factor in children's developing understanding of emotions. Emotion conversation is defined in the present study as any verbal communication about emotions occurring between two or more members of the family. The motivation for conversing about emotions is either to share information about feelings or to directly coach emotion knowledge. Emotion conversations can focus on past emotional states, on emotions occurring at the time of conversation, or on emotions that might never have actually occurred. According to the definition adopted in the present and most previous studies, emotion conversations always involve references using <u>emotion words</u>. Based

on work by Dunn and her colleagues (see for example, Dunn, Bretherton, & Munn, 1987), emotion words as defined in this study can be words that refer to fundamental emotions, selected physiological states, or emotional behavior. Questions about feelings are also relevant. Emotion words can be used in discourse that either describes emotion situations or expressions, or asks about or explains causes or consequences of emotions.

I have provided this section on definitions to illustrate the theory and logic behind the research to be pursued in this study. Next, I provide an overview of how children's understanding of emotions changes with age, so that this study of toddler and preschool-aged children's understanding of emotions can be placed in its relevant developmental context. This review will also present information that will be relevant to understanding a number of the measures that will be employed in this dissertation study.

### Developmental Course of Children's Emotion Understanding

The development of children's understanding of emotions has received increased research interest in recent years. In this section, I review the literature on the developmental course of children's emotion understanding. This section sets the stage for a subsequent review and discussion of the literature regarding forms of socialization that may foster emotion knowledge and understanding. I have divided the review of studies on children's emotion understanding into 10 sections, each of which addresses a different aspect of emotion understanding. The first part reviews what is known about children's abilities to recognize and label facial expressions of emotions and to associate emotion laden situations with appropriate emotions. Then, I review studies describing developments in understanding more complex aspects of emotions, such as the ability to recognize emotions in situations that present conflicting emotional cues, the ability to understand internal factors as mediators in emotional experiences, and the appreciation of individual differences in emotional experiences. The discussion then moves to special issues in emotion understanding focusing on children's comprehension of more complex emotions such as pride or guilt, on

the knowledge of mixed, multiple, ambivalent, and hidden emotions, and on their understanding of how emotions change over time and how they might be regulated by a person. A final section explores the issue of continuity of children's emotion understanding over time, which is pertinent to the questions I will be asking in this longitudinal study of children's emotion understanding from ages 2 1/2 to 3 1/2 years.

### 1. Recognition and labeling of facial expressions of emotions

There is clear evidence that infants under one year of age not only produce recognizable, discrete facial expressions of happiness, anger, and distress, but also react to others' displays of emotions in organized ways (Caron, Caron, & Myers,1982; Cummings, Zahn-Waxler, & Radke-Yarrow, 1981; Walker-Andrews,1986). By the second year of life, children have acquired the verbal means of expressing how they and others feel and can talk about past and future emotions and about antecedents and consequences of emotional states (Bretherton, Fritz, Zahn-Waxler, & Ridgeway, 1986; Ridgeway, Waters, & Kuszaj II, 1985; Wellman, Harris, Banerjee, & Sinclair, 1995).

Beyond establishing when children use particular words to refer to particular emotions, it is important to determine the contexts in which children use these words and the meanings they attach to them. In this regard, several studies have focused on children's abilities to recognize emotional facial expressions in relation to their production and comprehension of emotion language.

Facial expressions of emotions are a valuable source of information about how another person might be feeling, and several studies have sought to establish young children's competencies in accurately reading such expressions. It is important to recognize, however, that in naturalistic settings facial expressions are but one source of information about others' emotional states used by the observer. It is also important to note that distinct facial expressions have been identified for only a limited number of emotions such as joy, sadness, and anger. Many emotions, such as pride, are not associated with distinct facial expressions. As will become clear from this review, emotions associated with

distinct facial expressions are not only understood earlier but are also recognized more easily by both children and adults than are emotions not associated with distinct facial expressions.

Of the studies that have focused primarily on recognition of facially posed emotions, most present already verbal children with photographs or line drawings of different facial expressions and ask them to identify the emotion portrayed. There is considerable evidence that toddlers and preschoolers recognize certain facial expressions of emotions more readily than others and that children's abilities to recognize and label facial expressions of emotions improves with age (Gross & Ballif, 1991). For example, preschool children are able to recognize facial expressions of happiness and sadness more easily than expressions of surprise, fear, anger, and disgust (Camras & Allison, 1985). In fact, preschoolers' abilities to recognize facial expressions for happiness seem to exceed their abilities to recognize any negative emotions such as sadness, fear, or anger (Denham & Couchoud, 1990; Fabes, Eisenberg, Nyman, & Michealieu, 1991). However, recognition of facial expressions may also be in part determined by the stimuli presented to children. While most studies presented children with pictures or photographs of facial expressions, Profyt and Whissell (1991) asked 4-to 6-year-olds to label their own and other children's facial expressions captured on videotapes and found that it was easiest for children to recognize videotaped expressions of happiness and of disgust.

Of the negative emotions, preschoolers are more accurate at recognizing and labeling sad emotions than they are with respect to angry or fearful expressions (Denham and Couchoud, 1990). It also appears that children have a much easier time recognizing than labeling facial expressions of emotions (Denham & Couchoud, 1990) and that they do a better job labeling emotions after having been given an emotion recognition task than when emotion labeling tasks are presented to them first (Harrigan, 1984).

However, there is evidence that not even <u>adults</u> can reliably infer certain emotional states based on facial expressions alone. Wagner, MacDonald, and Manstead (1986) designed a study to determine whether facial expressions alone constitute sufficient information regarding another person's feeling states.

Surprisingly, the investigators found that only happy, angry, and disgusted facial expressions were recognized significantly more by <u>adult subjects</u> than could be expected by chance, and that male subjects were better able to recognize expressions of anger than were female subjects. Furthermore, even the adults participating in this emotion recognition study seemed to have difficulties in recognizing facial expressions of surprise. These findings place the findings on children's difficulties with recognizing certain facial expressions of emotions into perspective in that facial expressions alone do not always provide enough information to infer another person's feeling states.

Gross and Ballif (1991) point out that children's inaccurate judgments of facial expressions of emotions seem to follow consistent patterns. Children tend to confuse facial expressions of emotions in which the position of facial features are similar to one another leading to confusions between angry and sad expressions or between neutral and sad expressions.

In summary, children's abilities to recognize and label facial expressions of emotions improves rapidly over the preschool and early elementary school years. It is important to note, however, as do Harris and Saarni (1989), that children's knowledge about emotions quickly moves beyond recognizing emotions that can be linked to distinctive facial expressions. In relatively short order, children come to recognize more complex emotions such as pride, guilt, and relief and develop an understanding of changing, multiple, and hidden emotions. Thus, it is not only that children develop the ability to recognize a broader range of emotions, but also that their conceptual and abstract understanding of emotions moves beyond mere recognition of facial and situational cues. These abilities will be discussed shortly.

#### 2. Knowledge of situations that evoke emotions

In addition to facial expressions, children also receive important information about the feelings of others from situational cues. Particularly when emotions are not associated with distinct facial expression, the situation in which emotions occur is often the only information children have available to infer others' emotions. A common paradigm used to test knowledge about

situational aspects of emotions is to ask the respondent to describe a situation that could evoke a particular emotion. The reverse methodology (presenting a particular situation and asking how another person might feel in this situation) is also used. Interestingly, Reichenbach and Masters (1983) found that the accuracy in 4- to 8-year olds' judgments of others' emotions is not enhanced when convergent expressive and situational cues are provided rather than situational cues alone. However, having both sources of information available does lead to more accurate judgments than when only expressive cues are available. According to the authors, this finding indicates the potency of information children gather from contexts in which emotions arise. The next several pages review studies in which children are either presented with or asked to describe a situation appropriate for a particular emotion. A related body of research, in which children are presented with incongruent information including situational factors, will be discussed in the next section.

An early study by Camras (1980) in which 5- to 7 1/2 year-olds listened to stories describing situations in which a character was either feeling angry, sad, or disgusted revealed that children were accurate at relating the appropriate situations and emotions. A decade later, Denham and Couchoud (1990) studied similar competencies in 2-, 3-, and 4-year-olds. Different situations were enacted by puppets and children were asked how the story character would feel. Since their subjects were rather young children, Denham and Couchoud allowed children to indicate their judgments via nonverbal responses (attaching a felt face displaying the most appropriate facial expression to the puppet). The researchers used other tactics to maximize children's performance as well. The puppeteer's own facial expression and tone of voice, and the puppet's body posture were adapted to contour to the particular emotion portrayed in the story. It was found that children's abilities to interpret emotional situations did not increase with age between 2 and 4 years, although there were significant increases in their ability to recognize and label facial expressions of emotions. Children had the easiest time linking happy and sad situations with the appropriate emotions, while angry or fearful situations were more difficult for them to understand.

Denham and Couchoud also found some interesting patterns of errors children made in their judgments. They rarely confused happy with any of the negative emotion producing situations, but they frequently confused emotions displayed in sadness and anger eliciting situations, possibly because in many situations both sad and angry emotions may be appropriate. Similar errors in judgments of emotion situations were made by older children. For example, Reichenbach and Masters (1983) found that 4-year-olds and third graders had the easiest time recognizing situations for happy emotions and found it more difficult to judge situations that would elicit sad, angry, and neutral emotions. Using a forced-choice format, Ribordy, Camras, Stefani, and Spaccarelli (1988) again found that happy situations were easiest to determine for 5 and 6-year-old children, while surprise situations were often incorrectly associated with fear. Other common errors involved situations depicting fear, which were often confused with sadness and disgust, and situations depicting sadness, which were often confused with anger. These incorrect answers provide some insights into the kinds of emotional situations perceived as similar by young children. Paralleling the errors they make when judging facial expressions of emotions, it seems most difficult for them to differentiate between situations that evoke different negative emotions and between situations that evoke more complex emotions, such as surprise.

In another study, Denham and Couchoud (1990b) presented 3- to 5-year-olds with 12 situations enacted by puppets and asked them to judge how the story character would feel. An important feature of this work involved a pretesting inquiry of children's mothers in which they were asked to tell the examiner how their child would feel in a particular situation. The situations selected for this task were defined as equivocal, meaning that a sample of adult subjects asked to rate how a child might feel in the situations endorsed two emotions that would be appropriate for each respective situation. Thus, the situations enacted for children had the potential to evoke happy or sad, happy or angry, happy or afraid, angry or sad, sad or afraid, and angry or afraid emotions, according to the adult raters. After children's mothers identified how their child would feel in each of the 12 situations, the puppets portrayed a reaction different

from the one the child would feel. Denham and Couchoud found that 5-year-olds were most accurate at making personalized appraisals of the puppet's emotions in equivocal situations. All age groups found it easier to make these appraisals and to use personal emotional information when the stories involved contrasts between positive and negative emotions (i.e. happy versus sad) rather than two different types of negative emotions (i.e. sad versus angry). Children also performed better on happy versus sad contrasts than they did on happy versus angry ones and had the hardest time with items that involved the emotion of fear.

In another study involving somewhat older children from two different cultural backgrounds, Harris, Olthof, Terwogt, and Hardman (1987) presented English and Dutch children ages 5,7,10, and 14 years with emotions and asked them to describe situations that would be likely to evoke them. Harris et al. found an overall increase in children's accuracy for describing situations that are likely to evoke particular emotions. The youngest children from both cultures were able to describe appropriate situations for emotions that involved distinctive facial expressions such as fear, joy, sadness, and anger. By age 7, children were also able to describe distinct situations for emotions not associated with distinctive facial expressions (such as pride, jealousy, gratefulness, worry, and guilt). With increasing age, the number of emotions that children were able to relate to distinct situations increased for children in both cultures. In a second study, Harris et al. replicated these findings for children from a remote Himalayan village in Eastern Nepal.

Fabes, Eisenberg, McCormick, and Wilson (1988) investigated knowledge about situational determinants of naturally occurring emotions in both children and adults. Findings from this study revealed that children aged 44 to 64 months used social explanations (i.e., situations involving person-person interactions such as hitting or taking toys away) significantly more often than other types of explanations when explaining why other children felt angry or distressed. Nonsocial explanations (i.e., situations involving person-object interactions such as tripping over blocks) and internal explanations (i.e., situations involving internal physical mood states such as feeling sick or feeling good)

were used more often to explain happy and sad feelings.

In a similar study, Strayer (1986) found that 4- to 5-year-olds and second graders invoked interpersonal situations significantly more often for the emotions of sadness and anger, while situations involving impersonal themes (material goods and environmental events, such as going to Disney World) were posed more often for the emotions of joy and surprise. Situations involving animals showed up most often when explaining the emotion of fear, and preschoolers were more likely than second graders to provide fantasy situations to explain the emotion of fear. Second graders were more likely than preschoolers to refer to interpersonal and achievement themes in their explanations of emotions. Interpersonal situations were especially salient in older children's explanations of sadness and anger.

DeConti and Dickerson (1994) examined the ability of preschoolers to make judgments about emotion situations in the presence and absence of information about a protagonist's goal. Responding to situations portrayed in story vignettes, 3-, 4-, and 5-year-old children showed no difference in performance regardless of whether the goal of the protagonist was made explicit or was implicit. However, the youngest children were only able to make outcome-dependent judgments of a protagonist's emotion in a situation (i.e., based on success or failure in achieving a goal) and could not make attribution dependent emotion judgments (i.e., based on causal determinants of achieved or failed goals).

In summary, children as young as two years of age can use situational cues in their judgments of how others feel in particular situations. However, young children's ability to differentiate between negative emotion situations is initially quite poor, improving with age. The same is true for children's ability to associate emotions and situations when emotions do not involve distinct facial expressions. Gross and Ballif (1991) note that although children of all ages can use information from both situations and facial expressions, there are age differences in preferences for one type of cue over another. While preschoolers and kindergartners prefer to rely spontaneously on facial cues, school-aged children are more likely to rely on situational cues. This is an important piece of

information that helps to explain the degree to which children's understanding of emotions is influenced by situational determinants. As was pointed out before, children must consider multiple and sometimes conflicting cues when evaluating emotions in naturalistic settings, such as their family environments. It is thus useful to know the degree to which situational cues inform this judgment at various ages.

### 3. Explanations of emotions in the face of conflicting information

How do children infer what another person is feeling when they are presented with multiple conflicting cues? Explanations of another person's feelings in these situations provide a window into how children integrate different sources of information in their judgments of others' emotions. They also provide insight into children's abilities to use more than one cue in their judgments of others' feelings and into their preferences for one cue over another.

Fabes et al. (1991) report that 4- to 5 year-olds are more likely than 3-year-olds to recognize that reliance on one type of cue is often not enough to infer how another person is feeling. The older children realize that several cues have to be integrated in order to make accurate judgments and can rely on multiple cues regardless of their salience and type (expressive versus situational). By contrast, 3-year-olds appear to rely on more salient cues alone.

With respect to children's abilities to deal with conflicting cues, Gnepp (1983) conducted an interesting study in which she presented children 3-to 4 years of age, and first- and sixth-graders with four types of cues: situational cues alone, expressive cues alone, congruent situational and expressive cues, and finally incongruent situational and expressive cues. Gnepp found that when expressive or situational cues are presented alone, neither cue results in superior judgments of the emotion experienced by the story character. For incongruent cues, preschoolers made predictions about the characters' emotions consistent with expressive cues (facial expression depicted in the picture) while ignoring the inconsistent information available from the situation. In contrast, older children were more likely to make predictions consistent with the