

**PRIMARY CAREGIVERS' REACTIONS TO THEIR HEAD START
PRESCHOOLERS' NEGATIVE EMOTIONS: PREDICTING EMOTION
COMPETENCE AND SOCIAL COMPETENCE IN A LOW-INCOME,
ETHNIC MINORITY SAMPLE**

by

Kristen A. King

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Master of Arts in Psychology

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ABSTRACT

Primary caregivers' reactions to preschoolers' negative emotions and their relation to social and emotion competence were examined in 95 primary caregiver-child dyads from a low-income, primarily African American, Head Start sample. After controlling for primary caregivers' self-reported depressive emotions, disorganized parenting, and harsh parenting, several significant relations were found between caregivers' self-reported reactions to children's negative emotions and teacher ratings of children's emotion and social competence. Helping children cope and reacting with distress to children's negative emotions predicted child emotion lability/negativity and disruptive behavior problems. Caregiver encouragement of emotion expression predicted boys' emotion regulation ability. Emotion regulation fully mediated the effect of caregiver expression encouragement on boys' prosocial behavior.

Chapter 1

INTRODUCTION

The mechanisms through which emotion socialization produces emotion competence are particularly important to understand because of the well-established links between children's emotion competence and social competence. Emotion knowledge, which includes the abilities to recognize and accurately label emotion expressions and feelings and to understand emotion-situation relations, is one component of emotion competence. In a social information processing model, children rely on their knowledge of emotions to identify social cues and respond appropriately in social interactions (Lemerise & Arsenio, 2000). Deficits in emotion knowledge, such as misidentification of anger cues, contribute to children's social and behavior problems, while accurate emotion knowledge helps children successfully navigate their social environments (Denham et al., 2002; Fine, Izard, Mostow, Trentacosta, & Ackerman, 2003; Fine, Trentacosta, Izard, Mostow, & Campbell, 2004; Mostow, Izard, Fine, & Trentacosta, 2002). However, accurate emotion knowledge alone does not make a child socially competent; a child must also learn proper emotion regulation skills to utilize emotion prosocially.

Although definitions of emotion regulation vary (see discussion in Cole, Martin, & Dennis, 2004), the term generally includes the idea that emotions regulate other processes (e.g., cognitions and behaviors) and that emotions must, themselves, be regulated for optimal functioning (e.g., downregulation of intense emotion arousal).

Emotion regulation ability predicts children's social functioning in longitudinal studies (Eisenberg et al., 1995; Eisenberg et al., 1997), and children with difficulty in self-regulation of emotion have more behavior problems (Eisenberg et al., 2001). Emotion regulation ability also predicts children's resilience against risk factors (Buckner, Mezzacappa, & Beardslee, 2003; Lengua, 2002), which makes emotion regulation particularly important for children in at-risk communities.

Children gain emotion knowledge and emotion regulation skills through emotion socialization processes which first occur in the context of the family. In a review of parental socialization of emotion, Eisenberg, Cumberland, and Sprinrad (1998) categorized research on the topic into three areas: parents' emotion expression, parents' discussion of emotions with their children, and parents' reactions to children's emotions. Although family emotional expressiveness has been heavily studied (e.g. Halberstadt, Cassidy, Stifter, & Parke, 1995; Halberstadt & Eaton, 2003; Halberstadt, Fox, & Jones, 1993), the research literature on emotion socialization practices beyond simple encouragement or suppression of children's emotion expression is less developed (Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002).

Everyday incidents in which parents react to their children's negative emotions are likely to be particularly important emotion socialization experiences with potential to impact children's emotion knowledge and regulation ability. Some parents might act quickly to lessen children's experience of negative feelings, while others might use children's negative emotions as teaching opportunities (Fabes et al., 2002).. These strategies have very different implications for children's development of emotion knowledge. Parents' strategies in dealing with their children's negative emotions might

influence how children learn to cope with emotional arousal and thus be essential to children's development of emotion regulation.

Parent Emotion Socialization and Child Emotion Regulation

Researchers have developed different models through which parental emotion socialization might impact child emotion regulation ability. Gottman, Katz, and Hooven (1996) elucidated a theory of parental meta-emotion philosophy, which they defined as parents' organized sets of feelings and beliefs about their own and their children's emotions. Parents with an emotion coaching meta-emotion philosophy validate their children's emotions, view children's negative emotions as teaching moments, and help their children problem-solve issues that lead to negative emotions. In a longitudinal study that followed 56 two-parent, primarily white, families with preschoolers for three years, parent meta-emotion philosophy related to a physiological measure of children's emotion regulation abilities which, in turn, predicted child outcomes (Gottman et al., 1996).

The relation between parent reactions to children's emotions and child emotion regulation might influence child disruptive behavior. In a study of 120 families with fourth graders, mothers' acceptance of their children's anger and sadness related positively to children's emotion regulation ability (Ramsden & Hubbard, 2002). Although acceptance of children's negative emotions did not relate directly to teacher-rated child aggression, the authors inferred that it related indirectly by influencing the children's emotion regulation ability which, in turn, correlated inversely with aggression. Although they did not assess child emotion regulation, Katz and Windecker-Nelson (2004) found a higher level of emotion coaching in mothers of children without conduct problems than in mothers of children with conduct problems. Evidence from intervention

research suggests that changing the way parents react to children's negative emotions can influence children's emotion regulation ability. An intervention that increased parents' encouragement of children's emotion expression and use of emotion-focused parenting techniques while decreasing parents' critical and dismissive reactions towards children's emotions resulted in lower child negative emotionality and decreases in children's behavior problems (Havighurst, Harley, & Prior, 2004).

To facilitate research on how parents deal with their children's emotions, Fabes, Eisenberg, and Bernzweig (1990) developed the Coping with Children's Negative Emotions Scale (CCNES), a likert-scale measure on which parents report their likelihood of reacting in different ways to their children's fear, anger, and sadness. Responses on the CCNES include three supportive parent reactions (expressive encouragement, emotion-focused, and problem-focused) and three non-supportive parent reactions (distress, minimization, and punitive).

Eisenberg, Fabes, and colleagues conducted a series of studies using the CCNES which demonstrated relations between parents' self-reported reactions to children's negative emotions and children's emotion and social competence. Mothers who reported that they were likely to react to their preschoolers' negative emotions with distress rated their children as higher on negative affect (Eisenberg & Fabes, 1994). Mothers' emotion-focused reactions related to higher levels of constructive responses and lower levels of non-constructive responses by their preschoolers in anger situations (Eisenberg & Fabes, 1994). Observed intensity of preschoolers' and kindergartners' negative emotionality related directly to parents' minimization and punitive reactions (Fabes, Leonard, Kupanoff, & Martin, 2001). Children's negative emotional intensity mediated the

relation between harsh and distressed parent responses to children's negative emotions and children's social competence (Fabes et al., 2001). Punitive reactions to preschoolers' and kindergartners' negative emotions predicted poorer emotion regulation at a six-year follow up (Eisenberg et al., 1999). Punitive, minimization, and distress reactions were all linked with increased risk of problem behaviors at follow up, although more significant relations were found for boys than for girls.

Research with the CCNES in families with school-aged children has also shown relations between parents' reactions to children's negative emotions and children's emotion and social competence. In a study of 148 eight-to-fourteen-year-olds, mothers' problem-focused reactions related positively to children's social functioning and coping, whereas mothers' minimizing reactions related to lower levels of social competence and higher levels of avoidant coping (Eisenberg, Fabes, & Murphy, 1996). Emotion-focused reactions, problem-focused reactions, and encouragement of emotion expression were related to boys' comforting behaviors. Girls whose mothers gave moderate encouragement of emotion expression performed best at a comforting task. Punitive and minimizing reactions related to low child socioemotional competence in a study of 109 children ages 6 to 10 (Jones, Eisenberg, Fabes, & MacKinnon, 2002). Problem-focused reactions were positively related to socioemotional competence for boys but negatively associated for girls. In addition, parental emotion-focused reactions interacted with children's negative emotionality such that emotion-focused responding predicted negative socioemotional outcomes if children were particularly reactive to negative stimuli. Families in this study were working- and middle-income, and participants were ethnically

diverse. In the other studies using the CCNES reported above, the vast majority of the children were white and from middle- to upper-middle-income, two-parent homes.

Parent Emotion Socialization and Child Emotion Knowledge

Because young children learn much about emotions in the family context, parents' reactions to their children's negative emotions could also be expected to relate to children's emotion knowledge. Although a number of studies have examined the impact of general positive or negative parenting (e.g., Bennet, Bendersky, & Lewis, 2005), physical discipline (e.g., Fine et al. 2004), emotion discourse (e.g., Dunn, Brown, & Beardsall, 1991; Martin & Green, 2005) and maternal emotionality or emotion expressivity (e.g., Arsenio, Segin, & Siegel, 2004; Garner & Power, 1996) on children's emotion knowledge, few have looked specifically at how parents react to their children's emotions.

Some researchers have looked for links between parent reactions to children's emotions and children's emotion labeling or recognition knowledge, while others have looked for links with children's emotion situation knowledge. In a study of 36 preschoolers, CCNES Distress Reactions correlated significantly and negatively with children's emotion labeling knowledge, while Emotion Focused and Problem Focused Reactions correlated significantly and positively with emotion labeling knowledge (Fabes et al., 2002)

A series of studies by Denham and colleagues linked parent reactions to children's emotions to aggregate emotion knowledge scores encompassing both emotion labeling and emotion situation knowledge. In a sample of 47 families, mothers' emotion expressions in response to their preschoolers' emotions and mothers' use of emotion-

coaching practices were coded during structured, emotion-related interactions (Denham, Zoller, & Couchoud, 1994). After controlling for child age and language ability, higher emotion knowledge scores in boys, but not girls, were predicted by mother explanations about emotions, higher positive emotional responsiveness, and lower negative emotional responsiveness. In a study using aggregated observational and self-report measures of parents' reactions to preschoolers' emotions, ignoring children's emotions predicted lower emotion knowledge after controlling for age (Denham, Mitchell-Copeland, Strandberg, Auerbach, & Blair, 1997). CCNES scores and observed reactions to children's negative emotions were aggregated to predict emotion knowledge in a study of 134 preschoolers (Denham & Kochanoff, 2002). Mothers' positive reactions to children's emotions predicted three- and four-year-old children's emotion knowledge, but mothers' negative reactions did not predict emotion knowledge.

The emotion knowledge studies reported above were all conducted in primarily white, middle or upper-middle class families. In a study of 46 low-income, primarily African American families, mothers' suppression of children's negative emotion expression did not relate to preschoolers' emotion labeling knowledge after controlling for child age, but it did predict lower emotion situation knowledge about anger situations (Garner, Carlson Jones, & Miner, 1994).

Potential Effects of Poverty and Ethnic Minority Status on Parenting and Child

Outcomes

As described above, most research on parents' reactions to children's negative emotions has been conducted in white, middle- to upper-middle-income households. This is unfortunate because families at socio-demographic risk might particularly benefit from

emotion-centered interventions (Izard, Trentacosta, King, & Mostow, 2004). In a review of developmental psychopathology and mental health within ethnic minority populations in the United States, Garcia Coll and Garrido (2000) described how minorities face unique threats due to social stratification and its effects. Poverty may impact children through problems such as malnutrition, decreased developmental resources, poor education and health care, and chronic stress. Research on children's emotion regulation conducted with low-income and ethnic minority families has detected similar patterns to the research with more advantaged samples (see discussion in Raver, 2004). However, different relations among parenting practices and child outcomes might be found in families in at-risk populations because of factors such as increased depressive emotions in parents, higher levels of family disorganization, and harsh parenting.

One route through which poverty affects child outcomes may be through increased incidence of depressive symptoms in low-income parents. Levels of depression are elevated in low-income mothers (see, e.g., Chaudron et al., 2005). A study of 429 inner-city families related economic pressure on the family to perceived ineffective parenting both directly and indirectly through increased depressive emotion in parents (Elder, Eccles, Ardel, & Lord, 1995). Research with working and middle-class African American mothers found that families with higher maternal depression and lower maternal education had decreased levels of child-centered parenting (Bluestone & Tamis-LeMonda, 1999). In a study of 53 low-income mothers, maternal depressive symptoms related to poorer quality mother-child interactions, including lower maternal sensitivity, engagement, and affection (Albright & Tamis-LeMonda, 2002). Depressive symptoms in mothers related to higher family conflict and decreased positive parenting practices in a

longitudinal study of 302 low-income African American families (Sagrestano, Paikoff, Holmbeck, & Fendrich, 2003). In a longitudinal study of 299 low-income families, maternal depressive symptoms predicted boys' externalizing behaviors after controlling for negative child emotionality, parental conflict, and maternal acceptance (Owens & Shaw, 2003).

Chaotic living conditions may be another path through which poverty has adverse effects on children's socioemotional adjustment (Evans, Gonnella, Marcynyszyn, Gentile, & Salpekar, 2005). Lack of consistency, predictability, and controllability in a child's environment may hinder healthy development. Low-income families are more likely to face chaotic living conditions that deprive children of predictable, structured, sustained interactions with their parents. In a longitudinal study, family disorganization mediated the impact of poverty on adolescents' self-regulation (Evans et al., 2005). In a study of inner-city families, family cohesion and routine served as protective factors against the impact of stress on child internalizing and externalizing behavior problems (Kliewer & Kung, 1998).

Results from a recent meta-analysis supported the idea that the relation between poverty and child behavior problems is mediated by harsh, inconsistent parenting (Grant et al., 2003). Punitive, non-responsive parenting occurs more frequently in low-income families (Evans, 2004), and low socioeconomic status relates inversely with positive dimensions of parenting (Bluestone & Tamis-LeMonda, 1999; McLoyd, Jayaratne, Ceballo, & Borquez, 1994). Harsh or authoritarian parenting practices may interact bidirectionally with child negative emotional reactivity in a cycle that inhibits children's development of emotion knowledge and emotion regulation (Scaramella & Leve, 2004).

A study of middle-income and low-income mothers of preschoolers found higher levels of authoritarian parenting beliefs in the low-income mothers (Martini, Root, & Jenkins, 2004). These authoritarian beliefs related to lower levels of maternal control over hostile emotions directed at children expressing sadness or fear.

Although there is evidence that childrearing practices differ across ethnic groups in the United States, there is little consensus on the degree or nature of the difference (McLoyd, Cauce, Takeuchi, & Wilson, 2000). National survey data support the idea that African American families are more likely than others to use physical punishment, but there are regional variations (Goodman, 1997) and parenting practices vary widely within low-income ethnic minority populations (e.g., Kelley, Power, & Wimbush, 1992). Moreover, research on the impact of physical discipline in ethnic minority population has had conflicting findings (e.g., Lansford, Deater-Deckard, Dodge, Bates, & Pettit, 2004; Simons et al., 2002). In a six-year longitudinal study of 1,990 children, spanking predicted the development of behavior problems in white, African American, and Hispanic children, after controlling for sex, income-to-needs ratio, and maternal emotional support (McLoyd & Smith, 2002). However, in all three ethnic groups, physical punishment related to behavior problems only for children with low levels of maternal emotional support. Thus harsh, nonsupportive parenting, rather than physical punishment alone, may lead to negative child outcomes.

Goals and Hypotheses

As described above, past research on how parents' reactions to children's negative emotions relate to children's emotion and social competence has been conducted primarily in white, middle-to-upper-middle class two-parent families. This research

extends study on this topic to a low-income, predominantly African American population. Specifically, it investigates how primary caregivers' reactions to children's negative emotions relate to preschoolers' emotion regulation ability, emotion knowledge, social competence, and disruptive behaviors. Studies focusing on emotion-related parenting practices have failed to include other variables described above that are also likely to influence children's emotion and social competence, particularly in at-risk populations. Assessing caregiver depressive emotions, disorganized and inconsistent parenting, and harsh parenting will enable a determination of whether caregivers' reactions to children's negative emotions remain significant predictors of child emotion and social competence after removing the effects of other key variables.

Based on results of previous research with other populations, helping children cope with their negative emotions by helping them deal with their distress or solve the distressing problem is expected to relate to higher emotion and social competence. Encouraging children to express their emotions is also expected to relate to higher emotion and social competence. Punitive and minimizing reactions to children's negative emotions, as well as caregiver distress reactions, are expected to relate to lower emotion and social competence. Relations between reactions to children's negative emotions and children's prosocial and disruptive behaviors may be indirect, through effects on emotion lability/negativity or through effects on emotion regulation. Based on inconsistent findings regarding child sex in past research on parent reactions to children's negative emotions, sex will be included as a variable but no sex-specific predictions will be made. Previous research has not addressed the impact of caregiver reactions to children's negative emotions in the context of caregiver depressive emotions, disorganized

parenting, and harsh parenting. However, because of their theorized importance as emotion socialization experiences, caregiver reactions to children's emotions are expected to remain predictive of child emotion competence after controlling for these variables.

Chapter 2

METHOD

Participants

Head Start preschoolers and their primary caregivers from urban and suburban areas of a mid-sized city in the mid-Atlantic states participated in the study. Families were recruited in three waves in the spring, summer, and fall of 2005. Caregivers received a small monetary reward for completing the interview.

Participants were 95 caregiver-child dyads recruited from 28 Head Start classrooms. All primary caregivers were women; 58 children were girls and 37 were boys. Child ages at testing ranged from 3.19 years to 5.88 years, with a mean age of 4.54 years ($SD = .70$). Caregiver reports indicated that 85% of children were African American, 5% were Hispanic, and 10% were of multiple ethnicities.

Of the 95 primary caregivers, 82 were mothers, 8 were grandmothers, and 5 had other relationships with the children. Ages ranged from 18 to 68; median age was 28 ($M = 31.07$, $SD = 9.70$). Caregiver income from employment ranged from \$0 to \$48,000, with a median income of \$12,000 ($M = 12,515$, $SD = 11,881$); 34% of caregivers reported zero employment income. The median household income from employment was \$19,600. Years of formal schooling ranged from 8 to 16, $M = 11.94$ years, $SD = 1.41$. Seventeen percent of caregivers were married and 17% were living with a partner. Number of

children in households ranged from 1 to 7, $M = 2.84$, $SD = 1.43$. Forty-six percent of families had moved at least once in the past year.

Procedures

Child testing. Research assistants took individual children aside during free-play time to administer the tests in a quiet area, usually a table immediately outside of the classroom. The Peabody Picture Vocabulary Test-3 (PPVT-3; Dunn & Dunn, 1997), a widely-used test of receptive vocabulary, was the first measure administered to each child. This test provided a control measure for children's verbal ability and test-taking ability.

In a second testing session, research assistants administered emotion knowledge tests using color photographs of children's faces expressing various emotions. Photographs primarily depicted African American and Hispanic children and had been verified by consensus in previous research as depicting particular emotion expressions (happy, sad, mad, or scared). In a 12-item emotion situation knowledge task, research assistants read a short description of an event likely to elicit a particular emotion and asked children to point to the one of four photographs which portrayed the child described. In a 12-item emotion expression labeling task, the research assistant asked the preschooler what emotion was felt by a child in a photograph. The emotion situation knowledge task had only fair internal reliability ($\alpha = .56$), while the emotion expression labeling task had good internal reliability ($\alpha = .91$). Immediately following these tests, the research assistant completed the Inattention scale of the General Assessment of Test Session Behavior (GATSB; Glutting & Oakland, 1993). Because a few children had very

high scores on this measure, data for children scoring in the top 10% on Inattention were removed from analyses that included emotion knowledge.

Teacher ratings. Teachers rated each child using two measures (see Appendix A, Teacher Measures). The Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997) is a 24 item likert-scale measure comprising two factors: emotion regulation ability and lability/negativity. The Emotion Regulation subscale ($\alpha = .85$) assesses empathy, emotional displays in various situations, and self-awareness of emotion. The Emotion Lability/Negativity subscale ($\alpha = .91$) measures dysregulated negative emotions, mood lability, and inflexibility. In this data set, the correlation between scales was $r = -.40, p < .001$.

The Adaptive Social Behavior Inventory (ASBI; Hogan, Scott & Bauer, 1992) is a 30-item likert-scale measure assessing prosocial and disruptive behavior. This instrument was designed for and validated in high-risk preschooler populations, including ethnically-diverse Head Start samples (Greenfield, Iruka, & Munis, 2004; Greenfield, Wasserstein, Gold, & Jorden, 1997). In order to minimize content overlap with items on the ERC, four items were removed from the Prosocial scale (resulting $\alpha = .90$) and two from the Disrupt scale (resulting $\alpha = .74$) for all statistical analyses (see notes on ASBI in Appendix A).

Primary caregiver interviews. Research assistants or the author administered questionnaires orally in individual interviews with caregivers. Caregivers circled answers on their own copies of the forms to maintain privacy. Caregivers completed the Coping with Children's Negative Emotions Scale (CCNES; Fabes et al., 1990), the Differential Emotions Scale-IV (DES-IV; Izard, Libero, Putnam, & Haynes, 1993), and the Parenting

Dimensions Inventory-Short Version (PDI-S; Power, 2002) as part of a larger interview (see Appendix B, Caregiver Measures).

The CCNES is a self-report measure of parents' responses to their children's negative emotions. The measure consists of 12 parenting scenarios involving children's negative emotions (fear, sadness, and anger), followed by six possible parent responses. Parents report the likelihood of each response on a 7 point likert scale.

Responses fall into six categories that represent the six scales of the measure. The Expressive Encouragement scale ($\alpha = .86$) measures the degree to which parents accept and encourage their children's expression of negative emotion. The Emotion-Focused Responses scale ($\alpha = .81$) assesses the degree to which parents use strategies to ease their children's distress. The Problem-Focused Responses scale ($\alpha = .77$) assesses the extent to which parents respond by helping the child solve the distressing problem. The Distress Reactions scale ($\alpha = .63$) measures the degree to which parents become distressed themselves when children express negative emotions. The Punitive Reactions scale ($\alpha = .84$) reflects the extent to which parents punish children's negative emotion expression. The Minimization Reactions scale ($\alpha = .81$) measures the extent to which parents devalue or minimize the seriousness of their children's negative emotional experiences.

A study of the measure's psychometric properties (Fabes et al., 2002) confirmed that the six scales of CCNES have good internal reliability (Cronbach's alpha for 12-item scales ranged from .69 to .85) and adequate test-retest reliability (correlations across four months ranged from .56 to .83). Eisenberg et al. (1999) found that parents' responses on the CCNES over a six-year longitudinal study showed consistency, with correlations across time for the six scales ranging from .33 to .75. Results of Fabes et al. (2002) and

other published studies using the measure provide evidence for its validity (e.g., Eisenberg et al., 1996; Eisenberg et al. 1999; Fabes et al., 2001). Fabes et al. (2002) found that only the Distress Reactions scale score related to a social desirability measure. A factor analysis by Fabes et al. (2002) found support for only four factors; it did not distinguish between Minimization and Punitive Reactions or between Problem-Focused and Emotion-Focused Reactions.

The DES-IV (Izard et al., 1993) is a 36-item self-report measure assessing the frequency of experiencing 11 discrete emotions and inner-directed hostility in day-to-day life. It is one of few measures assessing discrete emotions and has been used successfully in past research with low-income mothers (e.g., Ackerman, Izard, Schoff, Youngstrom, & Kogos, 1999). Caregivers reported frequency of emotion experience on a five-item likert scale. For the purposes of this study, Sadness, Shame, Anger, and Inner-Directed Hostility scales were summed to form a depressive emotionality scale (12 items, $\alpha = .90$).

The PDI-S is a 53-item self-report measure of parenting style and discipline methods. It includes the most reliable and valid scales from the Parenting Dimensions Inventory (Slater & Power, 1987), a widely-used parenting measure. The validity of the PDI was originally established in studies of single-parent, as well as two-parent families, and the PDI has been used with ethnic minorities, including African American mothers (e.g., Bluestone & Tamis-LeMonda, 1999; Kelley et al., 1992; Kelley, Sanchez-Hucles, & Walker, 1993). The 11 scales of the PDI assess parents' nurturance, consistency, permissiveness, organization, and method of disciplining their child. Because the focus of this study was caregivers' responses to children's negative emotions, PDI data were used only to provide two control variables for the central analyses: Harsh Parenting (10 items,

$\alpha = .90$), the sum of the standardized values for Physical Punishment and Scolding, and Disorganized Parenting (8 items, $\alpha = .73$), the sum of the standardized values for Inconsistency and Organization (inverse).

Chapter 3

RESULTS

Descriptive Statistics

Data were entered twice and cross-checked to ensure accuracy. All analyses were performed using SPSS. Descriptive statistics for major variables are presented in Table 1.

Initial analysis of CCNES scores. Because CCNES Punitive and Minimizing reaction scale scores were strongly correlated ($r = .59, p < .001$), had loaded together in a factor analysis performed by the first author of the measure (Fabes et al., 2002), and represented two ends of a continuum rather than theoretically distinct constructs, these scale scores were standardized and averaged. A Punitive/Minimizing Reaction variable ($\alpha = .90$) was used in the analyses reported below.

Most caregivers broadly endorsed Emotion-Focused and Problem-Focused reactions, so both scale scores had a high negative skew. To correct for the source of the skew and produce variables with distributions closer to normality, Power's (2002) recommendations for correcting PDI scores for individual differences in response styles were followed. Scores for Emotion-Focused and Problem-Focused Reactions were divided by the mean score of each parent across all response types, yielding ratio scores indicating caregivers' likelihood of reporting these types of responses more or less often than other types. Both before and after this transformation, Emotion-Focused Reactions

and Problem-Focused Reaction scores were strongly correlated ($r = .70, p < .001$ for raw scale scores, $r = .64, p < .001$ for transformed scores). Because these scales were theoretically similar and had fallen together in factor analysis in Fabes et al.'s (2002) study of the CCNES' psychometric properties, they were standardized and averaged into a Helping Children Cope variable for all analyses.

Relation of CCNES scores to demographic variables. A one-way ANOVA indicated no significant child sex differences in parent-reported reactions to children's negative emotions. Bivariate correlations showed no relations between reported reactions to children's negative emotions and child age, caregiver income, or household income. There was a significant positive correlation between years of education completed by the primary caregiver and caregiver tendency to report Helping Children Cope versus other reactions, $r = .25, p < .05$. Caregiver age was inversely related to reports of Helping Children Cope, $r = -.24, p < .05$. Higher child PPVT-3 scores related to lower caregiver report of Punitive/Minimizing Reactions, $r = -.23, p < .05$.

Relation of CCNES scores to control variables. Zero-order correlations between CCNES scores and Caregiver Depressive Emotions, Harsh Parenting, and Disorganized Parenting are reported in Table 2. Although shared method variance makes interpretation of these correlations problematic, the correlations do confirm that Caregiver Depressive Emotions, Harsh Parenting, and Disorganized Parenting are possible confounds of the predictors of interest.

Caregiver Reactions to Children's Negative Emotions: Relations to Children's Emotion Regulation and Emotion Lability/Negativity

Zero-order correlations between predictor variables (CCNES scores) and the outcome variables of Emotion Regulation and Emotion Lability/Negativity are presented in Table 3. There was a significant positive relation between Punitive/Minimizing Reactions and Emotion Lability/Negativity, $r = .24, p < .05$, and a significant inverse relation between Helping Children Cope and Emotion Lability/Negativity, $r = -.24, p < .05$.

Regression models were used to investigate whether caregiver reactions to children's negative emotions would relate to child emotion regulation ability and child lability/negative emotionality after accounting for caregivers' depressive emotions, harsh parenting techniques, and disorganized, inconsistent households. The CCNES variables were entered in the final block of regression models that included Caregiver Depressive Emotions in block 1 and Disorganized Parenting and Harsh Parenting in block 2.

The model predicting Emotion Lability/Negativity is shown in Table 4. Although Caregiver Depressive Emotions predicted child Emotion Lability/Negativity before other variables were entered, it lost significance when parenting variables were included in the model. In the final model, Disorganized Parenting, caregivers' Distress Reactions to children's negative emotions, and caregivers' Helping Children Cope reactions to children's negative emotions all predicted child Emotion Lability/Negativity. Overall, caregiver reactions to children's negative emotions explained 9% of the variance in child Emotion Lability/Negativity, although ΔR^2 only approached significance, $p < .06$.

In the regression model predicting Emotion Regulation, no predictors were significant. Before caregiver reactions to children's negative emotions were added to the model, Disorganized Parenting predicted child Emotion Regulation, $\beta = -.24, t = -2.22, p$

< .05. However, in the final model, Disorganized Parenting only approached significance, $\beta = -.21$, $t = -1.82$, $p < .08$.

Zero-order correlations between CCNES scale scores and ERC scale scores were also calculated separately for each sex (see Table 3). For girls only, Helping Children Cope had an inverse relation with Emotion Lability/Negativity, $r = -.32$, $p < .05$. For boys only, Expression Encouragement by caregivers related positively to Emotion Regulation, $r = .47$, $p < .01$. Regression equations were used to determine whether significant interactions existed between sex and Helping Children Cope in the prediction of Emotion Lability/Negativity or between sex and Expression Encouragement in the prediction of Emotion Regulation. The sex by Helping Children Cope interaction was not a significant predictor of Emotion Lability/Negativity after main effects were partialled out. However, sex and Expressive Encouragement did interact significantly in the prediction of Emotion Regulation, $t = 2.48$, $p < .05$.

Regression models including the control variables of Caregiver Depressive Emotions, Disorganized Parenting, and Harsh Parenting were run separately for each sex. For girls, Disorganized Parenting approached significance in the prediction of child Emotion Regulation, $\beta = -.27$, $t = -1.83$, $p < .08$. In the equation for boys, caregiver Expressive Encouragement was the sole significant predictor of Emotion Regulation, $\beta = .49$, $t = 2.73$, $p < .05$.

Caregiver Reactions to Children's Negative Emotions and Children's Emotion Knowledge

Because emotion knowledge task scores had moderate to high correlations with age and PPVT-3 scores, partial correlations between CCNES scores and emotion

knowledge task scores, controlling for age and PPVT-3, were calculated in the initial step of this analysis (Table 5). Expression Encouragement related significantly to emotion expression labeling ability, partial $r = .24, p < .05$.

To investigate whether caregiver reactions to children's negative emotions impacted emotion knowledge after accounting for the control variables, CCNES variables were entered in the final block of regression models that included Caregiver Depressive Emotions in block 1 and Disorganized Parenting and Harsh Parenting in block 2 (Table 6). Expression Encouragement approached significance as a predictor of emotion expression labeling ability, $\beta = .14, t = 1.91, p < .06$, in the regression model controlling for child age, child verbal ability, Caregiver Depressive Emotions, Disorganized Parenting, and Harsh Parenting. Caregiver Depressive Emotions was a significant predictor of emotion expression labeling knowledge before parenting variables were added but only approached significance in the final model, $\beta = -.14, t = -1.75, p < .09$. Child age and verbal ability were both significant predictors of emotion expression labeling knowledge. The regression model predicting emotion situation knowledge had no significant predictors aside from child age.

To look for possible interactions between sex and caregiver reactions to children's negative emotions in the prediction of emotion knowledge, partial correlations were also calculated separately by sex. These correlations did not reach significance. Regression models divided by sex also had no significant predictors of emotion knowledge besides age and verbal ability.

Caregiver Reactions to Children's Negative Emotions and Children's Behaviors

Zero-order correlations between CCNES scale scores and ASBI Prosocial and Disrupt scale scores were all non-significant. Regression models were used to investigate whether caregiver reactions to children's negative emotions would impact child behavior after controlling for caregivers' depressive emotions, disorganized parenting, and harsh parenting. CCNES variables were entered in the final block of regression models that included Caregiver Depressive Emotions in block 1 and Disorganized Parenting and Harsh Parenting in block 2. There were no significant predictors in the regression model for Prosocial Behavior. When this model was run for boys alone, Expressive Encouragement was the sole significant predictor of Prosocial Behavior, $\beta = .43$, $t = 2.33$, $p < .05$. The model for Disruptive Behavior is presented in Table 7. Disorganized Parenting, Distress Reactions, and Helping Children Cope predicted Disruptive Behavior.

When zero-order correlations were calculated separately for each sex, only one relation was significant: caregiver encouragement of emotion expression related to higher prosocial behavior for boys, $r = .34$, $p < .05$. A regression model was used to determine whether significant interactions existed between sex and Expression Encouragement in the prediction of Prosocial Behavior. After the main effects of sex and Expression Encouragement were partialled out, the interaction was nonsignificant.

Indirect Relations Between Child Behaviors and Caregiver Reactions to Children's Negative Emotions.

Emotion Lability/Negativity had a strong direct correlation with disruptive behavior, $r = .73$, $p < .01$, and an inverse correlation with prosocial behavior, $r = -.57$, $p < .01$. Emotion regulation had an inverse correlation with disruptive behavior, $r = -.23$, $p < .05$, and a strong direct correlation with prosocial behavior, $r = .79$, $p < .01$.

Based on relations among variables, only one mediation analysis could be conducted: an investigation of whether caregiver encouragement of emotion expression affected boys' prosocial behavior through its impact on boys' emotion regulation (see discussion of mediation in Baron & Kenny, 1986). Because the potential mediator and the outcome variable were both teacher ratings, common method variance might artificially inflate the relation between the mediator and the outcome variable. To help correct for this problem, the variance due to a second teacher rating, Emotion Lability/Negativity, was partialled out of Emotion Regulation in all analyses. After this correction, the relations necessary to conduct a mediation analysis were still significant: Expressive Encouragement predicted Prosocial Behavior ($\beta = .34, p < .05$), Expressive Encouragement predicted Emotion Regulation ($\beta = .48, p < .01$), and Emotion Regulation had a unique effect on Prosocial Behavior after partialling out Expressive Encouragement ($\beta = .63, p < .01$).

After controlling for Emotion Regulation, Expressive Encouragement no longer predicted boys' Prosocial Behavior ($\beta = .06, p > .10$). Two regressions were conducted to run a Sobel's test to determine if the drop in significance was significant. In the first, Expressive Encouragement predicted Emotion Regulation. In the second, Expressive Encouragement and Emotion Regulation predicted Prosocial Behavior. Based on these equations, the Sobel's test was significant, $z = 2.883, p < .01$. Emotion Regulation thus fully mediated the effect of caregiver encouragement of boys' emotion expression on boys' prosocial behavior.

Table 1

Description of Major Variables (N = 95)

Variable	Minimum	Maximum	Mean	SD
PPVT-III Verbal Ability	60	123	87.35	11.55
EK: Situation Knowledge	1	11	5.84	2.26
EK: Expression Labeling	0	12	6.54	3.85
ERC Regulation	16	32	24.48	4.41
ERC Lability/Negativity	15	55	27.07	8.09
ASBI Prosocial	32	57	47.05	7.12
ASBI Disrupt	5	15	7.54	2.50
DES-IV Depressive Emotion	12	51	23.97	8.67
PDI Disorganized Parenting	-2.77	4.10	.00	1.57
PDI Harsh Parenting	-2.25	4.44	.00	1.68
CCNES Distress Reaction	1.00	4.50	2.53	.79
CCNES Punitive/Minimizing Rxn	1.46	5.42	2.69	.83
CCNES Expressive Encouragement	2.33	7.00	5.60	1.00
CCNES Helping Children Cope	-4.01	1.71	.00	.91

Table 2

Zero-Order Correlations Between Caregivers' Reactions to Children's Negative Emotions and the Control Variables of Caregiver Depressive Emotionality, Harsh Parenting, and Disorganized Parenting(N = 95)

	Caregiver Depressive Emotions	Harsh Parenting	Disorganized Parenting
Distress Reaction	.31**	.31**	.20 ^a
Punitive/Minimizing Reaction	.43**	.41**	.25*
Expressive Encouragement	.06	-.20 ^a	-.24*
Helping Children Cope	-.37**	-.31**	-.13

Note. ** $p < .01$. * $p < .05$. ^a $p < .10$.

Table 3

Zero-Order Correlations Between Caregivers' Reactions to Children's Negative Emotions and Emotion Regulation Checklist Scale Scores (N = 95)

CCNES Score	Emotion Regulation	Emotion Lability/Negativity
<u>All Children</u>		
Distress Reaction	-.18 ^a	.00
Punitive/Minimizing Reaction	-.11	.24*
Expressive Encouragement	.10	-.04
Helping Children Cope	.12	-.24*
<u>Boys Only</u>		
Distress Reaction	-.12	.01
Punitive/Minimizing Reaction	.02	.25
Expressive Encouragement	.47**	.03
Helping Children Cope	-.04	-.13
<u>Girls Only</u>		
Distress Reaction	-.22 ^a	.02
Punitive/Minimizing Reaction	-.17	.25 ^a
Expressive Encouragement	-.09	-.02
Helping Children Cope	.17	-.32*

Note. ** $p < .01$. * $p < .05$. ^a $p < .10$.

Table 4

Child Emotion Lability/Negativity Regressed on Caregivers' Reactions to Children's Negative Emotions and Control Variables (N = 95)

Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>
<u>First Model</u>				
Depressive Emotions	.19	.10	.21*	2.01*
<u>Second Model</u>				
Depressive Emotions	.10	.10	.11	1.00
Disorganized Parenting	1.08	.54	.21*	1.99*
Harsh Parenting	.83	.49	.17 ^a	1.69 ^a
<u>Final Model</u>				
Depressive Emotions	.06	.10	.07	.61
Disorganized Parenting	1.38	.55	.27*	2.50*
Harsh Parenting	.93	.52	.19 ^a	1.78 ^a
Distress Reaction	-3.60	1.32	-.35**	-2.72**
Punitive/Minimizing Rxn	-.54	1.54	-.05	-.35
Expressive Encouragement	.52	.83	.07	.63
Helping Children Cope	-3.53	1.53	-.39*	-2.31*

Note. ΔR^2 for final block = .09, $p < .06$.

** $p < .01$. * $p < .05$. ^a $p < .10$.

Table 5

Partial Correlations Between Caregiver Reactions to Children's Negative Emotions and Emotion Knowledge Scores, Controlling for Age and PPVT-III Verbal Ability (N = 95)

CCNES Score	Emotion Expression Labeling Knowledge	Emotion Situation Knowledge
Distress Reaction	-.09	-.04
Punitive/Minimizing Reaction	-.15	-.02
Expressive Encouragement	.24*	.10
Helping Children Cope	.16	.05

Note. * $p < .05$. ^a $p < .10$.

Table 6

Child Emotion Labeling Knowledge Regressed on Caregivers' Reactions to Children's Negative Emotions and Control Variables, Final Block (N = 85)

Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>
Age	4.05	.40	.71**	10.10**
PPVT-3	.09	.02	.25**	3.47**
Depressive Emotions	-.06	.04	-.14 ^a	-1.75 ^a
Disorganized Parenting	-.07	.19	-.03	-.35
Harsh Parenting	-.19	.18	-.09	-1.08
Distress Reaction	.32	.47	.06	.67
Punitive/Minimizing Reaction	.27	.54	.06	.49
Expressive Encouragement	.53	.28	.14 ^a	1.91
Helping Children Cope	.43	.52	.10	.83

Note. ** $p < .01$. * $p < .05$. ^a $p < .10$.

Table 7

Child Disruptive Behavior Regressed on Caregivers' Reactions to Children's Negative Emotions and Control Variables (N = 95)

Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>
<u>First Model</u>				
Depressive Emotions	.04	.03	.13	1.21
<u>Second Model</u>				
Depressive Emotions	.01	.03	.04	.34
Disorganized Parenting	.34	.17	.22*	2.00*
Harsh Parenting	.17	.16	.12	1.11
<u>Final Model</u>				
Depressive Emotions	.00	.03	.00	.01
Disorganized Parenting	.47	.18	.29**	2.67**
Harsh Parenting	.24	.17	.16	1.46
Distress Reaction	-1.142	.42	-.36**	-2.73**
Punitive/Minimizing Rxn	-.26	.49	-.08	-.53
Expressive Encouragement	.33	.26	.13	1.24
Helping Children Cope	-1.08	.48	-.38*	-2.22*

Note. ΔR^2 for final block = .10, $p < .05$.

** $p < .01$. * $p < .05$. ^a $p < .10$.

Chapter 4

DISCUSSION

Several relations between primary caregivers' reactions to Head Start preschoolers' negative emotions and children's emotion and social competence remained significant after controlling for caregiver depressive emotions, disorganized parenting, and harsh parenting. Results provide some support for the hypothesis that caregiver reactions to children's negative emotions are important socialization experiences for the development of child emotion and social competence. Results also extend evidence on the importance of caregiver reactions to child emotions to a low-income, ethnic minority population.

Discussion of Results

Caregiver reports of helping children cope with their negative emotions predicted teacher-reported child emotion lability/negativity and teacher-reported disruptive behavior problems. Caregivers who helped children deal with their distress or solve the underlying problems had children with lower negative emotionality and lower disruptive behavior problems. These results are consistent with the idea that children learn emotion-focused or problem-focused coping skills during interactions with their parents or other caregivers. Although some previous research found sex differences for correlates of problem-focused and emotion-focused coping (Eisenberg et al., 1996; Jones et al., 2002), the interaction between sex and helping children cope was not a significant predictor of

child emotion lability/negativity. Combining emotion-focused and problem-focused reactions into one variable in this study may have precluded findings of sex differences.

High caregiver arousal during interactions with children experiencing negative emotions was expected to model poor emotion regulation and to impede caregivers' efforts to help children learn emotion regulation skills. Contrary to this prediction, caregiver-reported distress reactions to their children's negative emotions related to lower emotion lability/negativity and lower disruptive behaviors. Because caregiver distress reactions did not relate to lability/negativity or disruptive behaviors in zero-order correlations, it may be important in interpreting these results to consider the effect of caregiver distress reactions in the context of the other variables in the regression equations. Partialling out variance due to caregiver depressive emotions provided a control for overall caregiver negative emotionality, which may have changed the meaning of the distress reactions variable to make it more specific to caregiver-child interactions than in previous studies. A moderate level of emotion arousal might encourage parents to help children deal with their negative emotions in order to ease their own, and their children's, distress. Controlling for disorganized and harsh parenting further narrowed the meaning of the distress reactions variable. In the context of consistent, nurturing parenting, emotionally-charged interactions with caregivers centering on children's emotions may be particularly salient and constructive socialization experiences. In their review of literature on parent reactions to preschoolers' negative emotions, Eisenberg et al. (1998) noted that past studies regarding correlates of parental distress reactions had mixed findings.

Punitive and minimizing reactions to children's negative emotions, although significantly related to emotional lability/negativity in zero order correlations, lost significance in the full regression model. Caregiver depressive emotions were also only predictive of emotion lability/negativity before other parenting variables were controlled. Disorganized parenting predicted lability/negativity in the final model. Relations between punitive and minimizing reactions to children's negative emotions and child negative emotionality found in previous research (e.g., Fabes et al., 2001) may have been due to caregiver, household, or parenting factors not controlled in those studies.

It is also possible that elevated levels of disorganized parenting in at-risk families affect the impact of parent emotion socialization practices. The caregivers in this study were quite different in income level, education level, ethnicity, and marital status from caregivers included in previous research on parent reactions to children's negative emotions. Disorganized households and inconsistent parenting predicted child emotion lability/negativity and disruptive behavior problems even when emotion-specific parenting practices were included in the regression models. As explored in Evans et al. (2005), chaotic living conditions of low-income families interfere with parent-child interactions that normally serve to teach children emotion competence. Parent-child emotion discourse might be further compromised in this population because of low caregiver education levels and low child verbal ability. In support of these ideas, caregiver education had a positive relation with helping children cope with their negative emotions, a response that predicted adaptive outcomes in this sample, and caregiver-reported minimizing and punitive reactions related inversely to child verbal ability.

Most of the predicted relations between caregiver reactions to children's emotions and emotion regulation, which were expected based on research conducted primarily in white, middle- and upper-income samples, were not found in this study. For boys only, caregiver encouragement to express negative emotions predicted emotion regulation ability. Although previous research had linked parent encouragement of children's emotion expression with positive outcomes for both genders (e.g., Gottman, et al., 1996), Eisenberg et al. (1996) found that high levels of expressive encouragement were beneficial for boys, while a moderate level was optimal for girls.

Results for analyses of emotion knowledge did not provide firm support for a relation between caregiver reactions to children's negative emotions and child emotion knowledge. However, caregiver encouragement of child emotion expression related to children's emotion expression labeling knowledge in zero-order correlations and approached significance in the regression model, where it was the strongest predictor. Parenting control variables also failed to predict emotion knowledge scores. Age was a strong predictor of emotion knowledge, leaving little variance to be explained by the other variables in the model. Variables not included in the model, such as educational experience, might be more predictive of children's emotion knowledge. It is also possible that the measures of emotion knowledge used in this study were inadequate given the broad nature of the construct. Most past studies that have found relations between parenting factors and child emotion knowledge have predicted an aggregate of emotion situation knowledge and emotion labeling knowledge. The relatively low internal reliability of the emotion situation knowledge scores suggest that the situation knowledge measure used in this study may have had structural problems.

This study provided only limited evidence that child emotion regulation mediates the impact of caregiver reactions to children's negative emotions on child behavior. Emotion regulation fully mediated the relation between caregiver encouragement of boys' emotion expression and boys' prosocial behavior. However, this finding must be interpreted with caution. Data were concurrent, which raises question about the direction of mediation. In addition, the mediator and outcome variable were both teacher-report data, which may have inflated their correlation. To help correct for the problem of common method variance, the variance due to a second teacher rating was partialled out of the mediator in the analyses.

Although zero-order correlations did not show direct relations between caregivers' reactions to children's negative emotions and children's behaviors, they might relate indirectly through emotion regulation or emotion lability/negativity. After removing items from the ERC that overlapped with items from the ASBI, relations between ERC scale scores and ASBI Disrupt and Prosocial behavior scales remained significant. It is possible that caregiver reactions to children's negative emotions affected emotion regulation which, in turn, related to social competence and disruptive behaviors. A similar domino-type relation between parent emotion socialization practices, emotion regulation, and disruptive behaviors was found by Ramsden and Hubbard (2002).

Limitations and Future Directions for Research

As when interpreting results of any study examining concurrent data and lacking a controlled design, caution must be used to avoid confusing correlation with causality. It is likely that relations between caregivers' reactions to children's emotions and child outcomes are bidirectional. For example, children with better control of their emotions

might encourage more positive parenting techniques (see discussion in Gottman et al., 1996). Longitudinal data would allow a path analytic study of the direction of effects. Results of the Eisenberg et al. (1999) longitudinal study supported the idea that parents' punitive reactions to children's negative emotions have a bidirectional relation with children's negative externalizing emotions.

Another limitation of this study is heavy reliance on primary caregiver and teacher-report measures. Because of possible reporter bias, observation measures of caregivers' reactions to children's negative emotions should be included in future research. In addition, behavioral and/or physiological measurement of emotion regulation would provide beneficial information and reduce method variance problems.

Despite the limitations of the present study, it does provide a foundation for future research on emotion socialization practices in low-income families, a population at elevated risk for child behavior problems (NICHD Early Child Care Research Network, 2005). It also has implications for interventions. Teaching parents to encourage boys to verbally express their negative emotions might improve their emotion regulation skills and decrease disruptive behavior problems. In addition, despite the likely bidirectionality of parenting effects and child variables, encouraging parents to teach children to use emotion- and problem-focused coping strategies to deal with their negative emotions seems appropriate.

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APPENDIX A

Teacher Measures

Emotion Regulation Checklist

For the following 24 items, please rate the child on a scale of 1(Rarely/Never) to 4 (Almost always). Please circle the answer that most closely describes the child.

Rarely/ Never	Some- times	Often	Almost Always	
1	2	3	4	1. Is a cheerful child.
1	2	3	4	2. Exhibits wide mood swings (child's emotional state is difficult to anticipate because s/he moves quickly from a positive to a negative mood).
1	2	3	4	3. Responds with positive emotions to neutral or friendly overtures by adults.
1	2	3	4	4. Transitions well from one activity to another; doesn't become angry, anxious, distressed or overly excited when moving from one activity to another.
1	2	3	4	5. Can recover quickly from upset or distress (for example, doesn't pout or remain sullen, anxious, or sad after emotionally distressing events).
1	2	3	4	6. Is easily frustrated.
1	2	3	4	7. Responds with positive emotions to neutral or friendly overtures by peers.
1	2	3	4	8. Is prone to angry outbursts.
1	2	3	4	9. Is able to delay gratification.
1	2	3	4	10. Takes pleasure in the distress of others (for example, laughs when another person gets hurt or punished; seems to enjoy teasing others).
1	2	3	4	11. Can modulate excitement (for example, doesn't get "carried away" in high energy play situations or overly excited in inappropriate contexts).
1	2	3	4	12. Is whiny or clingy with adults.
1	2	3	4	13. Is prone to disruptive outbursts of energy and exuberance.

1	2	3	4	14. Responds angrily to limit-setting by adults.
1	2	3	4	15. Can say when s/he is feeling sad, angry or mad, fearful or afraid.
1	2	3	4	16. Seems sad or listless.
1	2	3	4	17. Is overly exuberant when attempting to engage others in play.
1	2	3	4	18. Displays flat affect (expression is vacant or inexpressive; child seems emotionally absent).
1	2	3	4	19. Responds with negative emotions to neutral or friendly overtures by peers (for example, may speak in an angry tone of voice or respond fearfully).
1	2	3	4	20. Is impulsive.
1	2	3	4	21. Is empathetic towards others; shows concern when others are upset or distressed.
1	2	3	4	22. Displays exuberance that others find intrusive or disruptive.
1	2	3	4	23. Displays appropriate negative emotions (anger, fear, frustration, distress) in response to hostile, aggressive or intrusive acts by peers.
1	2	3	4	24. Displays negative emotions when attempting to engage others in play.

Adaptive Social Behavior Inventory

Please circle the number/response that best describes the child.

Rarely or Never	Some times	Almost Always	
1	2	3	* 1. Understands others' feelings, like when they are happy, sad or mad
1	2	3	2. Is helpful to other children
1	2	3	3. Is obedient and compliant
1	2	3	* 4. When you give him/her an idea for playing, he/she frowns, shrugs shoulders, pouts or stamps foot
1	2	3	5. Follows rules in games
1	2	3	* 6. Gets upset when you don't pay enough attention
1	2	3	* 7. Is sympathetic toward other children's distress, tries to comfort others when they are upset
1	2	3	8. Waits her/his turn in games or other activities
1	2	3	9. Is open and direct about what he/she wants
1	2	3	10. Cooperates with your request
1	2	3	11. Can easily get other children to pay attention to him/her
1	2	3	12. Says nice or friendly things to others
1	2	3	13. Will join a group of children playing
1	2	3	14. In social activities, tends to just watch others
1	2	3	15. Follows household or classroom rules
1	2	3	16. Says "please" and "thank you" when reminded
1	2	3	17. Asks or wants to go play with other children
1	2	3	*18. Is calm and easy-going
1	2	3	19. Plays games and talks with other children
1	2	3	20. Shares toys or possessions
1	2	3	21. Teases other children, calls them names
1	2	3	22. Is confident with other people

1	2	3	23. Prevents other children from carrying out routines
1	2	3	24. Tends to be proud of things she/he does
1	2	3	*25. Accepts changes without fighting against them or becoming upset
1	2	3	26. Bullies other children
1	2	3	27. Is interested in many and different things
1	2	3	28. Is worried about not getting enough
1	2	3	29. Is bossy, needs to have his/her way
1	2	3	30. Enjoys talking with you

* = item removed from analyses due to overlap with ERC item(s)

APPENDIX B

Caregiver Measures

 Response Scale: 1 2 3 4 5 6 7
 Very Unlikely Medium Very Likely

7. If my child is about to appear in a recital or sports activity and becomes visibly nervous about people watching him/her, I would:

- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| a. help my child think of things that he/she could do to get ready for his/her turn (e.g., to do some warm-ups and not to look at the audience) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| b. suggest that my child think about something relaxing so that his/her nervousness will go away | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| c. remain calm and not get nervous myself | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| d. tell my child that he/she is being a baby about it | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| e. tell my child that if he/she doesn't calm down, we'll have to leave and go home right away | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| f. encourage my child to talk about his/her nervous feelings | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

8. If my child receives an undesirable birthday gift from a friend and looks obviously disappointed, even annoyed, after opening it in the presence of the friend, I would:

- | | | | | | | | |
|--|---|---|---|---|---|---|---|
| a. encourage my child to express his/her disappointed feelings | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| b. tell my child that the present can be exchanged for something the child wants | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| c. <u>NOT</u> be annoyed with my child for being rude | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| d. tell my child that he/she is over-reacting | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| e. scold my child for being insensitive to the friend's feelings | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| f. try to get my child to feel better by doing something fun | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

DES-IV Emotions and Feelings

Directions: On the following pages you will find a series of statements that people use to describe how they feel. Read each statement and decide how often it describes how you feel in your daily life. Circle one of the numbers 1 - 5 that indicates how often the statement is true of you in your day-to-day life. On the 5 point scale, 1 = rarely or never, and 5 = very often.

In your daily life, how often do you....	Rarely or Never	Hardly Ever	Some times	Often	Very Often
1. Feel regret, sorry about something you did	1	2	3	4	5
2. Feel sheepish, like you do not want to be seen	1	2	3	4	5
3. Feel glad about something	1	2	3	4	5
4. Feel like something stinks, puts a bad taste in your mouth	1	2	3	4	5
5. Feel you can't stand yourself	1	2	3	4	5
6. Feel embarrassed when anybody sees you make a mistake	1	2	3	4	5
7. Feel unhappy, blue, downhearted	1	2	3	4	5
8. Feel surprised, like when something suddenly happens you had no idea would happen	1	2	3	4	5
9. Feel like somebody is a low-life, not worth the time of day	1	2	3	4	5
10. Feel shy, like you want to hide	1	2	3	4	5
11. Feel like what you're doing or watching is interesting	1	2	3	4	5
12. Feel scared, uneasy, like something might harm you	1	2	3	4	5

13. Feel mad at somebody	1	2	3	4	5
14. Feel mad at yourself	1	2	3	4	5
15. Feel happy	1	2	3	4	5
16. Feel like somebody is "good for nothing"	1	2	3	4	5
17. Feel so interested in what you're doing that you're caught up in it	1	2	3	4	5
18. Feel amazed, like you can't believe what's happened, it was so unusual	1	2	3	4	5
19. Feel fearful, like you're in danger, very tense	1	2	3	4	5
20. Feel like screaming at somebody or banging on something	1	2	3	4	5
21. Feel sad and gloomy, almost like crying	1	2	3	4	5
22. Feel like you did something wrong	1	2	3	4	5
23. Feel bashful, embarrassed	1	2	3	4	5
24. Feel disgusted, like something is sickening	1	2	3	4	5
25. Feel joyful, like everything is going your way, everything is rosy	1	2	3	4	5
26. Feel like people laugh at you	1	2	3	4	5
27. Feel like things are so rotten it could make you sick	1	2	3	4	5
28. Feel sick about yourself	1	2	3	4	5
29. Feel like you are better than somebody	1	2	3	4	5
30. Feel like you ought to be blamed for something	1	2	3	4	5
31. Feel the way you do when something unexpected happens	1	2	3	4	5

32. Feel alert, curious, kind of excited about something unusual	1	2	3	4	5
33. Feel angry, irritated, annoyed with somebody	1	2	3	4	5
34. Feel discouraged, like you can't make it, nothing's going right	1	2	3	4	5
35. Feel afraid	1	2	3	4	5
36. Feel like people always look at you when anything goes wrong	1	2	3	4	5

The Parenting Dimensions Inventory – Short Form

For the questions that follow, you will be asked about your attitudes and behavior toward your child in Head Start. Please answer all questions in regard to this child.

The following statements represent matters of interest and concern to some parents. Not all parents feel the same way about them. Circle the number which most closely applies to you and your child.

	Not at all Like Me 1	Not Much Like Me 2	Somewhat Like Me 3	Pretty Much Like Me 4	Very Much Like Me 5	Exactly Like Me 6
1. I encourage my child to talk about his or her troubles					1	2 3 4 5 6
2. I always follow through on discipline for my child, no matter how long it takes.					1	2 3 4 5 6
3. Sometimes it is so long between my child's misbehavior and when I can deal with it, that I just let it go.					1	2 3 4 5 6
4. My child and I have warm intimate moments together.					1	2 3 4 5 6
5. There are times I just don't have the energy to make my child behave as he or she should.					1	2 3 4 5 6
6. Once I decide how to deal with a misbehavior of my child, I follow through on it.					1	2 3 4 5 6
7. I encourage my child to be curious, to explore, and to question things.					1	2 3 4 5 6
8. My child can often talk me into letting him or her off easier than I had planned.					1	2 3 4 5 6
9. I find it interesting and educational to be with my child for long periods.					1	2 3 4 5 6
10. I make sure my child knows that I appreciate what he or she tries to accomplish.					1	2 3 4 5 6
11. I believe that once a family rule has been made, it should be strictly enforced without exception.					1	2 3 4 5 6
12. I respect my child's opinion and encourage him/her to express it.					1	2 3 4 5 6
13. My child convinces me to change my mind after I have refused a request.					1	2 3 4 5 6

For each of the following statements, circle the number which indicates how often the statement is true of your family.

	Never 1	Once in a while 2	Sometimes 3	Frequently 4	Most of the time 5	Always 6
1. We have a regular dinner schedule each week.						1 2 3 4 5 6
2. Our house is clean and orderly.						1 2 3 4 5 6
3. Our family is organized.						1 2 3 4 5 6
4. We get everything done around the house that needs to be done.						1 2 3 4 5 6

Listed below are pairs of statements concerning parents' attitudes toward childrearing. For each pair, read both statements. Then determine which statement you agree with most, and circle the letter in front of that statement. Circle ONLY ONE letter per item.

1. A. Nowadays parents place too much emphasis on obedience in their children.
B. Nowadays parents are too concerned about letting children do what they want.

2. A. Children need more freedom to make up their own minds about things than they seem to get today.
B. Children need more guidance from their parents than they seem to get today.

3. A. I care more than most parents I know about having my child obey me.
B. I care less than most parents I know about having my child obey me.

4. A. I try to prevent my child from making mistakes by setting rules for his/her own good.
B. I try to provide freedom for my child to make mistakes and to learn from them.

5. A. If children are given too many rules, they will grow up to be unhappy adults.
B. It is important to set and enforce rules for children to grow up to be happy adults.

Listed below are several situations which frequently occur in childhood. You may or may not have had these experiences with your child. Imagine that each has just occurred and rate how likely it is that you would do EACH of the responses listed below the situation.

1. After arguing over toys, your child hits a playmate.

(Circle a number for EACH response.)

	Very unlikely to do		Very likely to do	
a. let situation go	0	1	2	3
b. take something away (e.g., no dessert, no TV) or add an additional chore (e.g., clean up toys)	0	1	2	3
c. send to room or isolate by sitting in a chair	0	1	2	3
d. spanking or hitting	0	1	2	3
e. talk to the child (e.g., discuss alternatives, discuss your reasons for wanting the child to do or not do something)	0	1	2	3
f. scold the child	0	1	2	3
g. remind your child of the rule or repeat the direction	0	1	2	3

2. Your child becomes sassy while you discipline him or her.

(Circle a number for EACH response.)

	Very unlikely to do		Very likely to do	
a. let situation go	0	1	2	3
b. take something away (e.g., no dessert, no TV) or add an additional chore (e.g., clean up toys)	0	1	2	3
c. send to room or isolate by sitting in a chair	0	1	2	3
d. spanking or hitting	0	1	2	3
e. talk to the child (e.g., discuss alternatives, discuss your reasons for wanting the child to do or not do something)	0	1	2	3
f. scold the child	0	1	2	3
g. remind your child of the rule or repeat the direction	0	1	2	3

3. You receive a note from your child's teacher that your child has been disruptive at school. (Circle a number for EACH response.)

	Very unlikely to do		Very likely to do	
a. let situation go	0	1	2	3
b. take something away (e.g., no dessert, no TV) or add an additional chore (e.g., clean up toys)	0	1	2	3
c. send to room or isolate by sitting in a chair	0	1	2	3
d. spanking or hitting	0	1	2	3
e. talk to the child (e.g., discuss alternatives, discuss your reasons for wanting the child to do or not do something)	0	1	2	3
f. scold the child	0	1	2	3
g. remind your child of the rule or repeat the direction	0	1	2	3

4. You catch your child lying about something he or she has done that you would not approve of. (Circle a number for EACH response.)

	Very unlikely to do		Very likely to do	
	0	1	2	3
a. let situation go	0	1	2	3
b. take something away (e.g., no dessert, no TV) or add an additional chore (e.g., clean up toys)	0	1	2	3
c. send to room or isolate by sitting in a chair	0	1	2	3
d. spanking or hitting	0	1	2	3
e. talk to the child (e.g., discuss alternatives, discuss your reasons for wanting the child to do or not do something)	0	1	2	3
f. scold the child	0	1	2	3
g. remind your child of the rule or repeat the direction	0	1	2	3

5. You see your child playing at a busy street that you have forbidden him or her to go near for safety reasons. (Circle a number for EACH response.)

	Very unlikely to do		Very likely to do	
	0	1	2	3
a. let situation go	0	1	2	3
b. take something away (e.g., no dessert, no TV) or add an additional chore (e.g., clean up toys)	0	1	2	3
c. send to room or isolate by sitting in a chair	0	1	2	3
d. spanking or hitting	0	1	2	3
e. talk to the child (e.g., discuss alternatives, discuss your reasons for wanting the child to do or not do something)	0	1	2	3
f. scold the child	0	1	2	3
g. remind your child of the rule or repeat the direction	0	1	2	3