

**"I'm Happy with My Mommy": Low-Income
Preschoolers' Causal Attributions for Emotions**

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This study examined low-income African American and European American preschoolers' socioemotional causal attributions. Forty-seven Young ($M = 48$ months) and Old ($M = 62$ months) preschoolers were asked to justify a puppet's current emotion and to talk about their past emotional experiences. Responses were coded for Causal Theme and Clarity. Old preschoolers were twice as likely to attribute interpersonal themes, and Young preschoolers were 4 times more likely to generate causal themes that were uncodeable. In terms of clarity, children provided clearer responses for anger and fear than they did for happiness. Old preschoolers' explanations for emotions were clearer than young preschoolers' and young African Americans', who had the most difficulty explaining emotions. Results indicate that younger preschoolers, particularly young African Americans, may need help articulating emotions. Suggestions for how adults can scaffold preschoolers' emotional reasoning are discussed.

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*"I'm Happy with My Mommy":**Low-income Preschoolers' Causal Attributions for Emotions*

It is important for researchers to investigate children's socioemotional skills, especially those of children living in low-income environments where families are exposed to numerous economic and psychological stressors (McLoyd, 1990). These stressors undoubtedly contribute to the high prevalence of socioemotional problems among low-income children (for a review see McLoyd, 1998). Nevertheless, despite the common experience of economic and psychological hardships, low-income populations are heterogeneous. Children from low-income families exhibit a range of social competences (see Bost, Vaughn, Washington, Cielinski, & Bradbard, 1998; Garner, Jones, & Miner, 1994; Jagers, Bingham, & Hans, 1996) and low-income parents exhibit a range of parenting skills (Abell, Clawson, Washington, Bost, & Vaughn, 1996). When studying children who live in poverty, researchers have overlooked the within-group variation, by opting to examine between-group differences. Due to the variation within socioeconomic groups, it is worthwhile to study low-income populations from their own perspective.

The purpose of this paper was to examine low-income children's socioemotional development from a within-group perspective by asking them to generate causal attributions for a puppet's emotion and to talk about their past emotional experiences. We examined the casual themes that children reported and how well they articulated emotion attributions. This paper contributes to the literature on children's emotion understanding by enhancing our knowledge of low-income children's emotional attributions. Although Garner's work (1994, 1997, 2000) offers thorough insight into low-income children's emotional socialization and regulation, little is known about low-income children's emotional attributions. In fact, other studies of preschoolers' emotional attributions have consisted of primarily middle-class samples (Denham, Zoller, & Couchoud, 1994; Fabes, Eisenberg, McCormick, & Wilson, 1988; Fabes, Eisenberg, Nyman, & Michealieu, 1991; Strayer, 1986). Therefore, this paper supplements our knowledge of low-income children's emotional understanding by providing examples of preschoolers' open-ended casual attributions, and it supplements our knowledge of children's emotion understanding in general by adding socioeconomic diversity to the existing body of literature.

Preschoolers' Emotion Understanding

Most of what developmental psychologists know about children's emotion knowledge is based on children's responses to emotion vignettes, in which children are presented with a stereotypical emotion scenario (e.g., a protagonist dropping his ice cream) and asked to choose among happy, sad, mad, or scared faces. There is a wealth of research demonstrating that children are capable of understanding what situations lead to which emotions using this approach (Denham, 1986; Denhan & Couchoud, 1990a, 1990b; Garner, Jones, & Miner, 1994).

Another approach to assessing children's emotion understanding is based on children's open-ended explanations for emotions. Researchers adopting this approach ask children to explain the causes of emotions. In general, research has shown that by the end of their preschool years children are knowledgeable about the causes and consequences of emotions (Harris, 1983). In fact, children's attributions of emotions are nearly as sophisticated as

adults': Fabes et al., (1988) found that children and adults agree approximately 90% of the time about the causes of emotions. Many studies report that children attribute certain causes to specific emotions. For example, children are more likely to attribute happiness to personal gain, fear to frightful fantasy figures, sadness to both material and interpersonal loss, and anger to interpersonal conflict and aggression (Denham & Zoller, 1991; Dunn & Hughes, 1998; Fabes et al., 1988; Fabes et al., 1991; Strayer, 1986). The present study adopts the later approach (i.e., evaluating children's open-ended explanations) to assessing children's emotion understanding, and we are particularly interested in children's use of interpersonal attributions.

Interpersonal Emotion Attributions

The study of children's causal attributions has evolved over time. At one point children were viewed as behaviorists who understood others based on external situations and behaviors (Shantz, 1983). Later, theory of mind researchers showed that children understood how internal states relate to emotions (Wellman & Banerjee, 1991). More recently, Dunn and Hughes (1998) examined working-class children's emotion explanations within the context of interpersonal relationships by asking them to explain their mother's, their friend's, and their own emotions. They found that children most frequently provided interpersonal explanations for anger and sadness.

The notion of interpersonal relationships contributing to children's emotional knowledge seems logical. Studies examining emotion talk demonstrate that adults socialize children toward the interpersonal aspects of emotions. Feeny, Eder, and Rescorla (1996) found that when adults and preschoolers engaged in conversations about the past, they were more likely to talk about emotions in the context of interpersonal relationships. Specifically, they talked about emotions in the context of friendships, such as playing with friends and having fun with them. Given that parents socialize their children toward interpersonal themes, it is not surprising that children conceptualize emotions in terms of interpersonal causes. For example, Fabes et al. (1998) found that children use interpersonal attributions more frequently than internal or external attributions. Additionally, Strayer's (1986) and Dunn and Hughes' (1998) findings indicate that interpersonal causes are mentioned particularly for children's attributions of sadness, anger, and happiness.

Perhaps parents socialize children to *conceptualize* emotions in an interpersonal context because children actually *experience* emotions in an interpersonal context (Fabes et al., 1988; Garner & Spears, 2000). When Garner and Spears (2000) observed Head Start children they found that interpersonal reasons were often the cause of children's anger and sadness. Children were most often angered by disputes over material possessions (70% of the time) and physical aggression (20%). The causes of children's sadness were more variable; approximately, 35% of children were saddened by physical aggression, 30% by disputes over material possessions, and 20% by teacher reprimands. These results indicate that the interpersonal conflicts associated with anger and sadness sometimes overlap, which supports Denham and Couchoud's (1990b) claim that the causes of anger and sadness depend on personal interpretations of situations. For example, one child could become angry when a toy is taken away, whereas another child could become sad.

Researchers have indeed found that children often confuse the causes for anger and sadness. Preschoolers erroneously attributed sadness to the protagonist in the anger vignette

(Borke, 1971; Denham & Couchoud, 1990b; Reichenbach & Masters, 1983). However, Levine (1995) found that by the time children are kindergartners they are able to distinguish between the two: Children attributed anger to scenarios in which there was an aversive conflict and sadness to scenarios in which there was a personal loss. Thus, as children mature they become more sophisticated in distinguishing between the causes of sadness and anger, but nevertheless, the causes for both are likely to be interpersonal.

Children also attribute interpersonal causes for happiness. Although it is more common for children to report external reasons, such as personal gain, as the cause for happiness (see Fabes et al., 1998 and Strayer, 1986), Dunn and Hughes (1998) found that children mentioned interpersonal causes almost as frequently as they did external reasons. Interpersonal attributions for happiness tend to revolve around personal closeness and companionship. For example, Dunn and Hughes report that when children were asked what makes their mothers and friends happy, they replied, "My dad makes mum happy" and "When her friends are here" (p. 178).

In summary, it appears that children have a repertoire of knowledge about the interpersonal causes of emotions. The bulk of the previous research examining causal attributions has focused on linking the causal attribution with specific emotions (Denham et al., 1991; Dunn et al., 1998; Fabes et al., 1988). However, the present study attempts to examine causal attributions as they relate to preschoolers' age. Strayer (1986) investigated how children's causal attributions changed with age, but she compared preschoolers to second-graders. She found that second graders used more interpersonal themes than the preschoolers. Our goal is to examine how causal attributions change throughout the preschool period; therefore, we are examining two age groups within the preschool period. Based on Strayer's work it is assumed that interpersonal attributions are more mature and sophisticated given that the second-graders, as well as a group of adults, cited interpersonal causes the most frequently when asked to explain emotions. Thus, we expect older preschoolers to use more interpersonal explanations than younger preschoolers.

Clarity of Emotional Attributions

A second goal of this study is to examine how well children articulate their causal attributions. The emotion research using situation vignettes reports that children first master positive emotional concepts (i.e., happiness) followed by negative emotional concepts (i.e., sadness, followed by anger, and then fear) (Denham & Couchoud, 1990a). Several studies have found that fear is the most difficult emotional concept for children to grasp (Denham & Couchoud, 1990a; Garner, Jones, & Miner, 1994; Michalson & Lewis, 1985). Denham and Couchoud (1990b) believe that this is because the socialization of fear is different from other emotions. For example, children are often told not to be afraid, and adults talk less about their fear and may not exhibit it as openly and readily as anger or sadness, especially in front of children. Researchers speculate that sadness and anger may be difficult for children to understand because these emotions often overlap and depend on personal interpretation (Denham & Couchoud, 1990a; Garner et al., 2000; Levine, 1995).

Hence, based on the emotion literature in which situation vignettes are used, negative emotions appear to be more difficult for children to conceptualize, and as a result children may have more difficulty articulating these emotions clearly. In Dunn & Hughes' (1998) study, in which open-ended explanations were used, they assessed the clarity of children's

emotion explanations. However, they did not compare children's clarity ratings across the four emotions. Thus, at the present time it is unclear whether children have more difficulty conceptualizing *and* articulating negative emotions. Our study attempts to supplement the literature on this topic by examining children's articulation clarity across the various emotions. It is hypothesized that children will have higher clarity ratings for positive emotions versus negative emotions.

We also investigated whether children were better at explaining their own emotions versus those of a puppet. Dunn and Hughes' (1998) study demonstrates that children are better at articulating their own emotions versus those of their friends and mothers. However, in the present study children's own emotion explanations are compared to those of a fictional protagonist, a puppet. Children's own emotion explanations were compared to a puppet's because this format is more akin to procedures used in situation vignette tasks and other social cognitive tasks, such as false belief tasks; in those tasks, children are asked to take the perspective of a protagonist they have no relationship with. Similar to prior findings (Dunn & Hughes, 1998), we expect children to have higher articulation clarity ratings for their own emotions. Furthermore, because of age-related advances in language ability and social cognitive reasoning, we hypothesize that there will be age differences in articulation clarity. Older preschoolers are expected to have higher clarity ratings than younger preschoolers for both their own emotions and the puppet's emotions.

The Present Study

The purpose of this study was to examine low-income children's socioemotional causal attributions. First, we investigated how the attribution of causal themes develops throughout the preschool years. It was expected that as preschoolers matured, they would be more likely to endorse specific causal themes, particularly interpersonal themes. Secondly, we investigated how well children explain emotions. It was hypothesized that clarity ratings would be lower for negative versus positive emotions. Additionally, it was hypothesized that older preschoolers would receive higher clarity ratings for both their own and a puppet's emotions than younger preschoolers would.

Method

Participants. All children were recruited via letters to parents or parent meetings for a larger study exploring preschoolers' narrative skills and social cognition. Participants were 47 preschoolers from a midsize southern city. The majority of children (68%) were enrolled in one of six local Head Start centers. The remaining 32% attended one of three private preschools (viz., the Salvation Army, YMCA, or a local preschool designed to serve low-income and working-class families) by using childcare subsidies from Temporary Aid to Needy Families. Fifty-five percent of the sample consisted of European Americans and 45% consisted of African Americans. There were approximately equal numbers of African Americans and European Americans in both Head Start and private preschools.

Research on preschoolers' social cognition has found that children's social perspective-taking skills become more sophisticated at 55 months (Wellman, Cross, & Watson, 2001); therefore, there is a meaningful distinction in perspective-taking abilities between preschoolers who are younger than 55 months and those who are more mature. As a result of those findings, the present sample was divided based on age to reflect differences in their social cognitive reasoning.

Children were divided into a *Young* ($M = 48$ months, $SD = 4.32$, range 41-55 months, $N = 24$) and an *Old* ($M = 62$ months, $SD = 2.97$, range 56-69, $N = 23$) group based on a dichotomous median split of the sample's age range. The median age for the sample was 55 months. The Young group comprised thirteen 3-year-olds and eleven 4-year-olds who were 55 months or younger; the Old group comprised a few ($n = 4$) 4-year-olds who were older than 55 months and nineteen 5-year-olds. There were nearly equivalent numbers of boys and girls across the age groups: 12 young and 12 old boys, and 12 young and 11 old girls. Table 1 provides a description of the sample in terms of ethnicity and age.

Table 1.

Mean Age by Ethnicity and Age Group

	Mean Age	Standard Deviation	<i>N</i>
African Americans			
Young	47.50	3.78	10
Old	61.73	1.79	11
European Americans			
Young	47.79	4.81	14
Old	61.83	3.83	12

Materials & Procedure

Emotion Explanations. Stimuli consisted of 4 puppets with faces depicting the four basic emotions (happy, sad, mad, scared). Each puppet represented a specific gender, race, and emotion. For example, a European American girl had a happy face, a European American boy had a mad face, an African American boy had a sad face, and an African American girl had an angry face. The experimenter showed the puppet and described his/her emotion. For example, children were shown the happy puppet and told, "This is Holly. Holly says, 'I am so happy today!'" First, children were asked, "Why do you think Holly is happy?" This question assessed children's ability to explain other people's emotions.

Next, the experimenter asked children to talk about their past emotional experiences, "Tell me about a time when you were happy." If children were hesitant, the experimenter prompted with standard probes that addressed concrete actions associated with the emotion. For example, the experimenter would say, "What do you do when you are happy? Do you smile or laugh?" If the child acknowledged these actions, then the experimenter reframed the emotion question in terms of these concrete actions, "Tell me about a time when you smiled or laughed because you were happy." If the child, still failed to provide a response then the experimenter proceeded to the next emotion. This format was repeated for all of the emotions.

Language and Cognitive Skills. As part of the larger study, all children were given the Language and Cognition Subscale of the Early Screening Inventory-Revised (ESI-R; Meisels, Mardsen, Wiske, & Henderson, 1997). There are two age-normed versions of the ESI-R, the

ESI-K for children age 4;7 to 6 and the ESI-P for children age 3 to 4;6. Children were given the appropriate version for their age. Test-retest reliability for ESI-K was .87, and for the ESI-P it was .98. For the present study, the questions on the subscale were used as a general approximation of children's language and cognitive skills; they were not used to assess children's developmental risk. Scores on this subscale ranged from 0-12 with higher scores indicating more skills.

A preliminary Race (2) x Age (2) x Gender (2) analysis of variance was conducted in order to assess any differences between the groups in terms of language skills. There was a significant age effect, $F(1,46) = 9.25, p < .01$. Older preschoolers ($M = 9.13, SD = 2.36$) had higher scores than younger preschoolers ($M = 6.58, SD = 3.01$), which is typical given that older children usually have better language skills. There were no main effects for Race or Gender or significant interactions, indicating that both African Americans and European Americans, as well as boys and girls, had equivalent language/cognitive scores.

Coding Schemes

Causal Theme. Children's responses for each emotion were audiotaped and transcribed. Responses from the transcripts were analyzed for content by coding for a priori *Causal Themes*, which refers to the reason children gave for the emotion. Causal themes included Internal-Mental State causes (i.e., personality traits, mental states, perceptions), External-Situational events and activities (e.g., weather, getting a gift, monsters, playing outside), and Interpersonal-Relationship causes (e.g., conflict, physical aggression, spending time with loved ones). If the child refused to respond or provided an illogical answer, her response was rated as Uncodeable-Miscellaneous. Children's responses were tallied, resulting in an Internal, External, Interpersonal, and Uncodeable score. See Appendix A for a detailed description of the Casual Theme coding scheme.

Clarity of Attributions. Responses from the transcripts were also coded for Clarity following the format set forth by Dunn and Hughes (1998). The clarity rating measured the child's ability to articulate emotion attributions. In essence, it is a measure of how well children explain emotions. Dunn and Hughes employed a 5-point scale, but in the current study children's responses were rated for clarity using a 6-point scale in order to characterize responses that were highly sophisticated and story-like. Appendix B provides a more detailed summary of the Clarity scale and examples of children's responses.

Inter-rater Reliability. Two trained coders who were blind to children's demographic characteristics and blind to the experimental hypotheses independently coded responses from children's transcripts for Casual Theme and Clarity. The responses of 25 randomly selected participants were checked for reliability. Inter-rater agreement for both Casual Theme and Clarity was 88% ($k = .84$). Any disagreements were resolved through discussion. Our reliability ratings were nearly equivalent to Dunn and Hughes' (1998), whose kappa statistics were an average of .85 for theme and .87 for clarity.

Results

Causal Theme

Preliminary results indicated that there were no race or gender effects for casual theme, but there were significant age trends. Thus, children's causal themes for each of the emotional

prompts were analyzed in relation to their age. A cross tabulation of Age (2) x Theme (4) revealed significant differences between the age groups across the themes, $\chi^2(3) = 30.80$, $p < .01$, $\phi = .39$. Traditionally, a phi coefficient (ϕ) of .10 is a small effect, .30 is a medium effect, and .50 is a large effect. Thus, the present effect size is between medium and large.

A Bonferroni correction was used to control for Type I error in the follow-up analyses ($p < .01$). Follow-up chi-square analyses for each theme revealed that older children were more likely to endorse interpersonal themes, $\chi^2(1) = 7.68$, $p < .01$. Older children were 2.4 times more likely to endorse interpersonal themes, such as "Cause those kids don't want to be her friend" or "I miss my daddy. He in jail. He in jail now." On the other hand, younger children were 4 times more likely to generate responses that were classified as uncodeable, $\chi^2(1) = 18.96$, $p < .01$. Interestingly, both groups were equally likely to attribute external causes to emotions, and there was no significant age difference for internal themes. Table 2 illustrates the percent of children at each age group who endorsed specific causal themes.

Table 2.

Percentage of Theme Endorsement by Age

	Young	Old
Internal	9%	20%
External	35%	36%
Interpersonal*	14%	33%
Uncodeable*	42%	11%

* $p < .01$

Clarity of Attributions

Preliminary tests indicated that there were no significant gender effects; therefore, gender was not included in any of the analyses. Race did, however, influence children's clarity ratings, so it was included in the following analyses. In order to assess the clarity of children's emotional responses, a repeated-measures analysis of covariance was performed. The within-subject variables were Target (2) (i.e., self vs puppet responses) and Emotion (4); the between-subject variables were Race (2) and Age (2); the covariate was language scores.

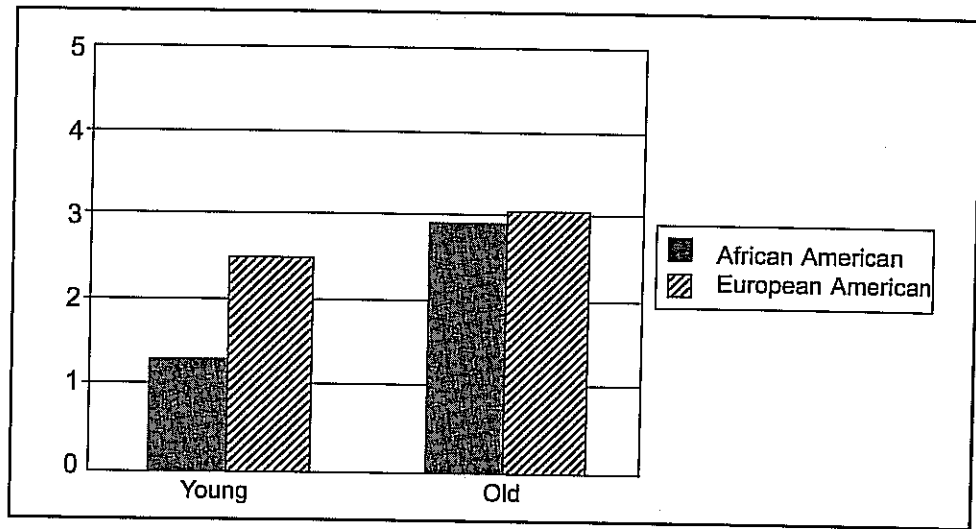
Contrary to the hypotheses results revealed no within-subject main effect or interactions for Target, indicating no overall differences in children's articulations of their own versus the puppet's emotions. Similarly, there was no within-subject main effect for emotion, which reveals that children explained positive and negative emotions equally well.

The between-subjects effects were significant for Age, Race, and the Age x Race interaction. As predicted, older children ($M = 3.00$, $SD = .61$) received higher clarity ratings than younger children ($M = 2.03$, $SD = 1.7$), $F(1,42) = 10.46$, $p < .01$, $\eta^2 = .20$. European Americans ($M = 2.75$, $SD = .83$) received higher clarity ratings than African Americans ($M = 2.20$, $SD = 1.22$), $F(1,42) = 4.27$, $p < .05$, $\eta^2 = .09$. The interaction revealed that young,

African Americans had scores that were significantly lower than old African Americans and both young and old European Americans, $F(1,42) = 5.90, p < .01, \eta^2 = .12$. According to Judd and McClelland (1989), η^2 effect size estimates range from small ($\eta^2 = .03$) to medium ($\eta^2 = .10$) to large ($\eta^2 = .30$); thus, the estimates for these effect sizes, which range from .09-.20, are in the medium range. Figure 1 illustrates this interaction effect.

Figure 1.

Mean clarity rating by age and race.



Discussion

In this study low-income preschoolers' casual attributions and articulation of emotions were examined. The results indicated that older preschoolers provided more complex and sophisticated emotion attributions. Older preschoolers were better at linking emotions to specific causes: Only 10% of old preschoolers' responses were incoherent in comparison to 44% of young preschoolers. Additionally, older children's responses were clearer and more linguistically complex. For instance, an older preschoolers' response typically consisted of a sensible subject-verb clause, such as "Cause it's wintertime," an explanation given for the puppet's happiness. On the other hand, young preschoolers were more likely to respond using one-word phrases, such as "A sad face," an explanation given for the puppet's sadness. Overall, the findings demonstrate a difference between older and younger children's emotion explanations, and these results are consistent with those found in previous studies (Feeny, Eder, & Rescoral, 1996).

We were primarily interested in whether the use of interpersonal causal themes was related to age, and our findings indicate that it was. Older children were more than twice as likely to attribute interpersonal themes. The fact that older preschoolers endorsed interpersonal themes more frequently than younger preschoolers indicates that older children view emotions as caused by interactions with others. These findings are similar to those of Feeny, Eder, and Rescorla's (1996) who found that 4-year-olds talked more about interpersonal aspects of

emotions than 3-year-olds. Furthermore, Strayer's (1986) work reported that both second-graders and adults cited interpersonal causes the most frequently when asked to explain emotions. Thus, it could be argued that linking interpersonal causes to emotions reflects a more mature conceptualization of emotions. The present findings suggest that the later part of the preschool period (e.g., age 4 ½ to 5) may be the time when children begin to develop an attribution bias towards interpersonal explanations for emotions.

One reason why older preschoolers may use more interpersonal causal reasoning is because of their increasing ability to understand internal states. A meta-analysis of the theory of mind literature (see Wellman, Cross, & Watson, 2001) reports that around 4 ½ children master a critical feat in internal state understanding (*viz.*, passing a false belief task, which demonstrates their understanding that people can have mistaken beliefs). Therefore, at this age children may become more attuned to others' internal states and behavior, which could facilitate their understanding that other people's thoughts and behaviors can influence someone's emotions. Dunn & Hughes' (1998) work confirms the link between social perspective-taking and emotion explanation, particularly when children are 4 ½. Yet despite the advances in social cognitive perspective-taking typical of this age group, the older preschoolers in the present study did not provide more sophisticated responses for the puppet's emotions than the younger preschoolers did. This result could be due to the fact that 4-year-olds in general, not just those 4 ½ or older, frequently talk about others' feelings (Feeny, Eder, & Rescorla, 1996).

Surprisingly, our results failed to demonstrate a difference between children's articulation clarity across the four basic emotions. This finding is contrary to the results found when situation vignettes are used (Denham & Couchoud, 1990b). Studies examining children's open-ended causal attributions of emotions did not compare the quality of children's explanations across emotions (Denham, Zoller, & Couchoud, 1994; Dunn & Hughes, 1998; Fabes et al., 1991). In the present study, we used a clarity rating system that was modeled after Dunn & Hughes (1998); their mean scores for clarity were within the same range and generally followed the same pattern as our scores. Thus, it appears that children are able to explain positive and negative emotions clearly. However, these results will need to be replicated, perhaps by comparing situation-vignettes and open-ended explanations.

Young African Americans' Performance

Although the original hypotheses did not propose racial differences, the findings from this study revealed that certain groups of children have more difficulty explaining emotions. Young African Americans' clarity ratings were significantly lower than the other cohorts of children. Their responses tended to consist of random remarks that failed to answer the questions. This difficulty articulating emotions was specific to young African Americans; old African Americans were just as competent as the other children at explaining their emotions. It is the young African American's responses that were responsible for decreasing the overall mean performance of the African Americans in general.

This race result must be viewed with caution. When considering African Americans as a group their average performance was lower than European Americans, but it should be noted that there was a wide range of articulation ability within their group. In fact, 76% ($n = 16$) of the African Americans had at least one response that was rated

as having good clarity, but there were 5 young African Americans with consistently poor clarity ratings who may have negatively influence the whole racial groups' performance.

There are several reasons why the young African Americans may have had difficulty explaining emotions. First, it could be argued that they had poorer language and cognitive skills. The preliminary analysis for language skills demonstrated no differences between African American and European Americans language skills; furthermore, language skills were used as a covariate in the analyses. Thus, poorer language skills cannot be an explanation.

Secondly, it could be suggested that these children were exposed to poor parental emotional socialization practices due to their young age. Parent's emotion talk during storytelling is related to children's emotion understanding using situation vignettes (Garner, Jones, Gaddy, & Rennie, 1997). Or perhaps the children in the young African American cohort were exposed to harsh, negative parenting, whereas the children in the other cohorts were not. Research shows that for middle-class, European Americans maternal anger is negatively associated with preschoolers' emotion understanding using vignettes (Denham, Zoller, & Couchoud, 1996), but conflicting evidence is found for low-income African Americans. For low-income African American children negative parental emotional socialization practices are positively related to children's emotion understanding (Garner, Jones, & Miner, 1994). In the current study parental socialization practices were not assessed so no conclusions can be drawn about children's emotional socialization. Future work should examine parental socialization in relation to children's emotion explanations.

Strengths and Limitations

The current study had both strengths and limitations. A limitation is that this work was merely descriptive, therefore, no clausal conclusions can be drawn. Future research exploring children's emotion attributions could employ emotion vignettes, open-ended formats, as well as parental socialization measures. Such multi-method work would allow for conclusions that could provide more insight into how emotion causal attributions develop. A strength is that it provided child-generated emotion explanations. Using an open-ended format children were able to use their own words and reasoning strategies to talk about emotional experiences. The intention was to demonstrate that children use different causal themes and to illustrate these themes by age.

Recommendations for Parents and Educators

Parents and teachers should make efforts to help young preschoolers learn to articulate their emotions. Adults can help children understand emotions by talking about feelings and their causes. If adults talk to children when they are distressed or angry, these children are more likely to understand emotions (Dunn & Brown, 1994). Harris (1995) speculates that children benefit from the congruence between their personal perspective on their emotions and an objective third-person perspective. For example, Harris offered the following scenario:

The child hesitates to enter a darkened room. An observant [adult] will notice the hesitation and supply the child with a verbal description or a question about what he or she is feeling: "Are you afraid of the dark?"
(369)

These types of experiences allow the child to connect their experience of fear with an adult's interpretation (or conceptualization), which leads to advancements in the child's interpretation and conceptualization of their emotions.

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Appendix A.

Codes for Causal Theme

I. Internal—Mental

1. Characteristics about the person (she's mean, she's being nice, cause she happy today)
2. Mental States (beliefs, thoughts, wants, likes/dislikes, dreaming)
3. Perceptual (hear, feel, taste)
4. Denied wants – not specific to people (I didn't get a new car)

II External—Situational

1. Supernatural/imaginary force (monsters)
2. Physical condition of body or environment (it's raining, it's dark)
3. Being in a physical environment (outside, at a party, at school)
4. Social deviance (murder, stealing)
5. Focus on an object or presence of animals (toys, candy, alligator)
6. Activity (playing, running, didn't spill her drink)
7. Celebrating/participating in an event or specific days (she had a birthday party, Monday)
8. Physical appearance (happy face, sad face)

III. Interpersonal—Relationships

1. Conflict or animosity (teasing me)
2. Physical aggression (my mom hit me, I got a spanking)
3. Loss/rejection (friends won't play with her, miss my dad)
4. General interpersonal (being with her, love her brother, wants his mommy)
5. Empathy for others (when my brother felt better)
6. Control/denied wants because of a person (my mom wouldn't let me)

IV. Uncodeable/Miscellaneous

1. Use emotion to explain emotion (because she is happy)
2. Not responding to correct emotion (talking about being mad when the question is happy)
3. Denying emotion
4. "I don't know", "cause"
5. Nonsense/inaudible/incoherent/random remarks
6. Refusal/no response

Appendix B.

Clarity Ratings

0 = No Response

Description: No response; refusal; denial

Examples: "No"; "I don't know"; "Never"

1 = Random remarks

Description: Using the emotion to explain the emotion; responses that do not logically answer the question; incoherent remarks

Examples: "At home like anything. I don't like this thing. I don't like anything" or "Cause her leg was popping out" or "Yeah. Yeah. Cause he got to."

2 = Adequate Response

Description: Short responses that answer the question in one word or a short phrase

Examples: "Monsters" or "My mommy" or "Cause a monster"

3 = Good Responses

Description: Includes a sensible clause that has both a subject and a verb; may not answer correct emotion, but still is good response

Examples: "He didn't spill his drink." or "Cause it's dark outside." or "Cause he thinks somebody stole his toys."

4 = Elaborate Response

Description: Has more than one sentence/clause; may be hard to follow, but in general it is sensibly linked by an overarching idea or theme

Examples: "My daddy came home. Then my daddy in jail. And I did happy. I aint mad at him. No, no, uh, no. Not me." or "Her probably gonna go tutoring and do homework and go do some stuff that was really nice." or "I feel happy to my mommy. But I don't [like] my Neta."

5 = Story-like response

Description: Must have 3 or more sentences/clauses; may seem story-like because they talk about past experiences; might even include dialogue; they are clear and logical; may seem unrealistic or imagined

Examples: "When I went into the childcare room and there was someone in there scary that was sitting down under the table. And it was really dark. And I was screaming and crying" or "Cause she was thinking about her mom cause her mom leaves her at home. And that's why she mad at her mom. Cause her mom leaves her at home. Everybody left her at home. But her mom said 'You can stay up here with her um her um angel.' 'No, I won't! I'm going to school cause I can't stay with her when I'm going to school."