

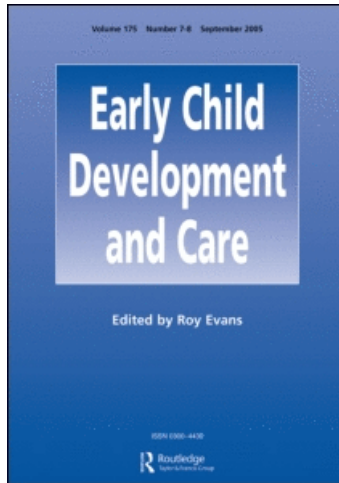
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## Early Child Development and Care

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713640830>

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Stephanie M. Curenton <sup>a</sup>; Michelle Jones Craig <sup>b</sup>

<sup>a</sup> Rutgers University, Bloustein School, New Brunswick, USA <sup>b</sup> Florida Agency for Workforce Innovation, Tallahassee, USA

First published on: 17 November 2009

**To cite this Article** Curenton, Stephanie M. and Craig, Michelle Jones(2009) 'Shared-reading versus oral storytelling: associations with preschoolers' prosocial skills and problem behaviours', *Early Child Development and Care*, First published on: 17 November 2009 (iFirst)

**To link to this Article: DOI:** 10.1080/03004430903292208

**URL:** <http://dx.doi.org/10.1080/03004430903292208>

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## Shared-reading versus oral storytelling: associations with preschoolers' prosocial skills and problem behaviours

Stephanie M. Curenton<sup>a\*</sup> and Michelle Jones Craig<sup>b</sup>

<sup>a</sup>*Rutgers University, Bloustein School, 33 Livingston Avenue, New Brunswick 08901, USA;*

<sup>b</sup>*Florida Agency for Workforce Innovation, Tallahassee, USA*

(Received 12 June 2009; final version received 28 August 2009)

Dyadic shared-reading and oral storytelling practices and their association to American preschoolers' ( $N = 33$ ) prosocial and problem behaviour was examined. The frequency (how often dyads read) and history (the child's age at first reading) were examined within shared-reading; emotion state talk and evaluative judgments were examined in both shared-reading and oral storytelling. Results revealed mothers used more positive emotion talk during shared-reading, but more negative emotion talk during oral storytelling. Mother–son dyads used more evaluative judgments during oral storytelling compared to shared-reading and compared to mother–daughter pairs in both contexts. Shared-reading practices were associated with prosocial skills, but this result was nonsignificant after including covariates. On the contrary, even after covarying literacy and language skills, there was a significant negative correlation between positive emotion state talk during oral storytelling and problem behaviour. Qualitative examples are included. Theoretical implications for differences between shared-reading versus storytelling and practical implications for the design of narrative interventions are discussed.

**Keywords:** narrative; social skills; storytelling; shared-reading; preschool; African American

### Introduction

Shared-reading and oral storytelling are family narrative practices in which parents and young children frequently engage. There has been considerable research examining the association between shared-reading and oral storytelling in terms of children's literacy outcomes (Curenton & Justice, 2008; Foster, Lambert, Abbott-Shim, McCarty, & Franze, 2005; Fritjers, Barron, & Brunello, 2000; Reese, 1995; Roberts, Jurgens, & Burchinal, 2005), but there has been less research on how these two family narrative practices are related to children's social skills. To address this gap in the research, we examined mothers' shared-reading and oral storytelling practices and their association to preschoolers' social skills, both prosocial and problem behaviour.

Determining the positive tools parents use to instil prosocial behaviour is important because positive social skills play a critical role in school success (Ladd & Price, 1987). Quite the contrary, inadequate social skill development (e.g., exhibiting problem behaviours) has been associated with peer rejection, behaviour problems and poor academic achievement (Cooper & Farran, 1988; Ladd, Birch, & Buhs, 1999;

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\*Corresponding author. Email: [curenton@rutgers.edu](mailto:curenton@rutgers.edu)

McClelland, Morrison, & Holmes, 2000; Wentzel, 1991, 1993). Problem behaviours include externalising behaviours, internalising behaviours and hyperactivity (Gresham & Elliott, 1990). To date, no study has identified the family narrative practices associated with the development of social skills or the inhibition of problem behaviours. In this study, we examined two family narrative practices, shared-reading and oral storytelling. For the purposes of our study, shared-reading was defined as the act of a mother reading a book with her child and engaging in a dialogue about the book; oral storytelling was defined as the act of a mother creating a personal narrative about her past and engaging in a dialogue about her story.

Our goal was to investigate how these narrative practices were associated with children's social skills. The rationale for the study was based on research evidence indicating social and emotional problems are often confounded with language problems (McCabe, 2005; McCabe & Meller, 2004). Given the language and social skill confound, it is wise to explore family practices that might promote language and social skill development simultaneously. As a result, we attempted to explore whether family narrative practices, such as shared-reading and oral storytelling, were associated with children's social skills. An association between narrative practices and children's social skills is conceptualised because narratives allow parents to use decontextualised language (see Curenton, Tucker, & Justice, *in press*, for a definition) to talk about emotions and to evaluate behaviour (Bird & Reese, 2006; Curenton, Craig, & Flanigan, 2008; McArthur, Adamson, & Deckner, 2005). Previous research has shown that families who communicate more emotion typically have more socially and emotionally competent children (Cassidy, Parke, Butkovsky, & Braungart, 1992), and children's emotional understanding is related to their social acceptance and prosocial behaviour (Cassidy et al., 1992; Garner, Jones, & Miner, 1994).

Two specific features of narrative practices that might be associated with children's social skills include mothers' use of internal state talk about emotions and their use of evaluative judgements about the story event. Internal state language is instrumental for understanding thoughts, feelings, desires and emotions (Bauer, Stark, Lukowski, Rademacher, & Van Abbema, 2005; Dunn, Brown, & Beardsall, 1991; Taumoepeau & Ruffman, 2006) and for healthy interaction with others (Hughes & Dunn, 1997). Fivush and Baker-Ward (2005) explain that most of the research on personal narratives about the past (*i.e.*, reminiscing) has focused on emotional state language specifically. Another aspect of narrative that prior research has examined pertains to the use of evaluative judgements of story events (Bird & Reese, 2006; Curenton et al., 2008; Reese, Haden, & Fivush, 1993). Therefore, in the present study, we chose to adopt the methodology that is standard in the line of research on past conversations.

We compared shared-reading and oral storytelling because these narrative practices are distinct enough to reveal differences in the quality and quantity of decontextualised talk (Curenton et al., 2008) and because there are differences in their prediction strength in terms of literacy/language outcomes (Reese, 1995). As researchers in the field of early literacy, we often assume shared-reading interactions produce richer conversations "because the written text free[s] the mother and child from having to construct a narrative, [therefore], both partners may [be] more likely to react to and discuss a wider range of narrative elements, including motives for actions and reactions" (McArthur et al., 2005, p. 391). However, this may not necessarily be true in relation to social skills. Research reviews and empirical studies indicate oral storytelling about autobiographical past events can produce very complex parent-child conversations which have implications for social skill development and understanding

(Bird & Reese, 2006; Cleveland & Reese, 2005; Reese, 2002; Reese & Cleveland, 2006). Therefore, in the context of fostering social skill development, oral storytelling may have an advantage over shared-reading, and more research that examines this is needed.

### ***Shared-reading and social skills***

Although shared-reading is traditionally considered a narrative tool that promotes language and literacy skills, several studies indicate shared-reading can also be used to facilitate social-emotional development. There are two lines of research exploring the relationship between shared-reading and social skills. One line of research uses surveys to examine parents' self-reports of shared-reading practices. These self-reports typically assess the *frequency* and *history* of shared-reading activities in the home. Assessment of frequency determines how often a dyad reads together; assessment of history determines how old the child was when the dyad first began reading together (see Fritjers et al., 2000; Senechal & LeFevre, 2002). Using the survey self-report methodology, Farver, Xu, Eppe, and Lonigan (2006) found that the more parents reported reading to their children and encouraging literacy-related activities, the higher their children's social functioning. This finding is similar to that of Linver, Brooks-Gunn, and Kohen (2002), who found that a stimulating home environment lowered the effect of income on negative behaviour outcomes. In a longitudinal study, Eamon (2000) showed that fewer home literacy experiences increased the likelihood of internalising and externalising behaviours in their children. Fleming, Catalano, Oxford, and Harachi (2002) found that lack of parent involvement at home, including a low *frequency* of shared-reading, was inversely related to problem behaviours in elementary school students.

In the second line of research on shared-reading and social skills, researchers use observations to gather qualitative data from dyadic interactions. A plethora of research along this line examines dyadic interactions in terms of language/literacy outcomes (see Meagher, Arnold, Doctoroff, & Baker, 2008; Neuman, 1996; Payne, Whitehurst, & Angell, 1994), but there is less research examining social skill outcomes. Nevertheless, we know that shared-reading can be used to communicate social-emotional information because interventions reveal that teachers use stories to introduce children to prosocial themes and morals (Bhavnagri & Samuels, 1996). In this study, we attempted to add to the body of literature examining shared-reading and social skill outcomes.

### ***Oral storytelling and social skills***

Unlike shared-reading where it has been found that lower socioeconomic status (SES) families are less likely to participate than are more affluent families, oral storytelling is an activity in which families from all SES groups participate (Curenton, 2006; Heath, 1989; McCabe, 1997; Reese, 1995, 2002). Mothers use more sophisticated talk during oral storytelling than they do during shared-reading (Curenton et al., 2008). Therefore, storytelling may provide opportunities to expose children to language and reasoning skills that are not typically presented during shared-reading, and these oral language conversations might be related to social skills. In fact, research suggests that conversations between children and family members foster psychological understanding (Dunn & Brown, 1993) and social skills (Heath, 1989).

### ***Gender effects during shared-reading and oral storytelling***

For this study, we employ both self-report survey methods and qualitative observations. When examining qualitative dyadic interactions, it is important to consider the gender composition of the parent–child pair. Some research demonstrates child gender is a critical factor during shared-reading. For instance, parents make more comments when reading narrative texts with their daughters versus their sons but the opposite is true for expository texts (Anderson, Anderson, Lynch, & Shapiro, 2004), and girls are more engaged than boys during shared-reading (Meagher et al., 2008).

Furthermore, researchers have found gender differences may exist in mother–child oral storytelling conversations about the past. Although some researchers did not find gender differences overall (Dunn et al., 1991; Jenkins, Turrell, Kogushi, Lollis, & Ross, 2003), others have found that mothers use *less* emotion state language overall with their sons than with their daughters (Bird & Reese, 2006; Dunn, Bretherton, & Munn, 1987; Fivush, Brotman, Buckner, & Goodman, 2000; Garner, Jones, Gaddy, & Rennie, 1997). On the other hand, in Fivush's (1989) sample, mothers were more likely to use words like *angry* or *mad* with their sons but not with their daughters; instead, mothers used negative emotion terms (like *sad* and *cry*) to refer to someone else's emotions when talking to their daughters (Fivush, 1989). Research has found that mothers use more evaluative comments, in general, when talking about past events with their daughters than with their sons (Reese et al., 1993).

Other research points to the fact that the emotional valence of the past conversation may distinguish these cross-gender conversations even more. In general, Fivush and Wang (2005) have found that mothers use a greater variety of emotion terms when talking about past events that are negative than they do with past events that are positive; in addition, when talking about these negative events, mothers tend to use more negative emotion terms. In terms of cross-gender conversations, Bird and Reese (2006) found that parent–son dyads talked more in-depth about anger and fear than did parent–daughter dyads. This gender difference is supported by other work reporting that mothers are more elaborative when discussing anger with their sons than with their daughters (Dunn et al., 1987; Fivush, 1989). Such findings are important because research has shown that the manner in which mothers explain socially complicated memories based on sadness or anger is associated with children's social development, particularly with their self-concept (Bird & Reese, 2006).

Therefore, it is important to consider the emotional valence of the narrative interaction when investigating gender differences and mothers emotional talk. All of our dyads were asked to tell a story about a time in the past when they did something naughty – an event with a negative emotional valence that might trigger memories laden with anger, fear and sadness. They were also asked to read a story in which the main character was negatively anticipating the birth of a younger sibling; in the story, the character experiences anger, jealousy and sadness, and he acts out by running away, which is a naughty behaviour. Therefore, it will be interesting to explore gender differences within these narrative contexts. Given that mothers are more likely to discuss angry events with their sons, we might expect to find that the mothers in the mother–son dyads use more negative emotional terms and more evaluative judgements.

### ***Literacy and language as covariates***

When investigating whether shared-reading and oral storytelling are associated with children's social skills, there are two important literacy and language variables to

consider as covariates – mother’s literacy and children’s language skills. First, it is important to examine mothers’ literacy because research has shown that mothers with better literacy skills provide comments that are more complex during dyadic interactions (Curenton et al., 2008; Neuman, 1996). Mothers’ literacy skills and families’ SES are highly correlated,  $r = .63$  ( $p < .001$ ), as reported in Aram and Levin (2001), and several research studies have demonstrated there are differences in shared-reading frequency and quality based on SES (Curenton & Justice, 2008; Foster et al., 2005; Roberts et al., 2005; Yarosz & Barnett, 2001). Therefore, any study designed to examine the unique effects of shared-reading and oral storytelling on an outcome must first control for the contribution that maternal literacy makes.

The other important covariate is the language ability of the children. Research demonstrates that children with language impairments exhibit less social competence than those children with typical language development (McCabe & Meller, 2004). In fact, researchers report that language and social disorders are often reciprocal (Benner, Nelson, & Epstein, 2002; Tomblin, Zhang, Buckwalter, & Catts, 2000). Therefore, in order to obtain a “pure effect” of how shared-reading and oral storytelling are related to children’s social skills, it is necessary to covary differences in children’s language skills that might be confounded with their social skills.

### *The present study*

Several research questions were posed for this study. From a theoretical perspective, we were interested in examining differences between the two family narrative practices: Do mothers use the same amount of emotion talk and evaluative judgments across shared-reading and oral storytelling? Is this amount of talk moderated by the child’s gender? First, we hypothesised that mothers would use more emotion talk and evaluative judgements during oral storytelling versus shared-reading. Next, we hypothesised that the talk and judgements would be moderated by gender; more specifically, mothers would talk about negative emotions more with their sons than with their daughters, and they would make more evaluative judgements with their sons during oral storytelling (i.e., a negative event). Third, we hypothesised that mothers would talk more about negative emotions in the oral storytelling context than in the shared-reading context. Hence, overall, we expected to find systematic differences between the conversations during shared-reading versus the conversations during oral storytelling.

In terms of the applied focus of this study, we were interested in examining whether family narrative practices were associated with children’s prosocial skills and/or problem behaviours after controlling for individual maternal and child characteristics commonly confounded with social skills. We hypothesised that aspects of shared-reading and oral storytelling would be associated with prosocial skills and/or problem behaviours, even after partialling out the influence of individual characteristics.

## **Method**

### *Participants*

Participants included 33 mother–child dyads that were recruited from a Head Start programme in Virginia and private child care centres in Florida. Recruitment was

conducted via a letter that was sent home with children; children's parents who returned the letter were included in the sample. There were 16 mother-son pairs and 15 mother-daughter pairs. All children were preschool age ( $M = 53$  months,  $SD = 7.96$ , range = 38-66 months), and mothers ranged in age from 23 to 44 years ( $M = 30$  years,  $SD = 5.46$ ). Twenty-two parents described their child's ethnicity as African American, seven described their child as European American, and two described their children as biracial (one of Latino and European heritage and the other of Asian and African American heritage).

Nearly all of the mothers were working ( $n = 27$ ), which may explain why the vast majority (90%) of children in the sample were enrolled in a variety of early care and education programmes. Eighteen were enrolled in private child care centres within their community, nine were enrolled in Head Start, one was enrolled in pre-kindergarten in a public school, and three were not enrolled in any type of care or education programme.

### *Maternal literacy*

Indicators of maternal education and reading level were collected. Sixteen mothers had at least a four-year college degree, including 10 mothers with bachelor's degrees and six with graduate degrees. Fourteen mothers did not have a four-year college education; however, most of these women had associate's degrees ( $n = 10$ ) or vocational training ( $n = 2$ ). Only two had a high school education or less. Based on scores from the *Wide Range Achievement Test-3* (WRAT3; Wilkinson, 1993), on average, the sample had a ninth-grade reading level ( $SD = 1.85$ ), but their reading skills ranged from as low as fourth grade ( $n = 3$ ) or eighth/ninth grade ( $n = 5$ ) to as high as post-high school ( $n = 21$ ). The reliability scores for the reading subtest of the WRAT3 range from .91 to .98 (Wilkinson, 1993).

### *Children's language*

Assessment of children's receptive language skills was measured using the Test of Early Language Development (TELD; Hresko, Reid, & Hammill, 1999). The receptive language subtest measures a child's ability to comprehend spoken language across 37 items measuring semantics or syntax. The TELD is designed for use with children ages 2-7, and it is individually administered. The coefficient alphas across all the age groups range from .80 to .97.

### *Procedure*

Following the story protocol set forth in Curenton et al.'s (2008) work, mothers were asked to read the story (i.e. *Peter's Chair*; Keats, 1967) and to tell a story about a time when they were children and got in trouble for doing something naughty (i.e., the *Naughty Story*). *Peter's Chair* is a story about a boy who is struggling with the birth of his younger sibling; therefore, it provides an opportunity for the dyad to talk about both negative and positive emotions that are common to the lives of young children. The book has been used successfully in other research examining children's narrative skill (Reese & Cox, 1999). The *Naughty Story* can be viewed as an ecologically valid narrative prompt because parents, especially working-class parents, often use stories that have a negative theme/content during their everyday conversations with young

children (Burger & Miller, 1999). It is common for parents to tell children stories about the past that might have a negative theme (see work by Bird & Reese, 2006; Fivush & Wang, 2005). The *Naughty Story* is ideal for parent–child conversations about the past because it evokes an emotional memory about a one-time event that should have a strong socialisation theme (see Reese, 1995, for guidelines about conversations). Both interactions were videotaped and transcribed verbatim by trained coders using CLAN (MacWhinney, 1994).

### *Emotion state talk*

Mother utterances within the transcripts were coded for emotion state words and expressions. In addition, these words and expressions were coded for positive versus negative valence. The list of these words was comprised from a variety of research sources (see Bauer et al., 2005; Beeghly, Bretherton, & Mervis, 1986; Brown & Dunn, 1991; Burger & Miller, 1999; Curenton, 2004; Dunn et al., 1987; Farrar, Fasig, & Welch-Ross, 1997; Fivush & Wang, 2005; Hall, Nagy, & Nottenburg, 1981; Martin & Green, 2005). The decision to include only emotion terms is based on prior research that indicates that emotion talk during conversations about the past is predictive of children's developmental outcomes (Bauer et al., 2005; Beeghly et al., 1986; Brown & Dunn, 1991; Burger & Miller, 1999; Dunn et al., 1987; Farrar et al., 1997; Fivush & Wang, 2005; Hall et al., 1981; Howe, 1991; Howe, Petrakos, & Rinaldi, 1998; Martin & Green, 2005)<sup>1</sup>.

In prior research, emotion state terms are analysed as frequencies rather than proportions (Adams, Kuebli, Boyle, & Fivush, 1995; Bird & Reese, 2006; Fivush, 1989); however, we chose to control for story length variation by calculating a proportion score. This proportional score was calculated by dividing the total number of words spoken in a given category by the total number of words the mother spoke. This resulted in proportional scores for *negative emotion talk* and *positive emotion talk*, and these are used in the analyses. Nevertheless, the *number of positive and negative emotion words* along with this proportional score is reported in the descriptive tables because the frequency score is more intuitive to interpret, and thus, has greater face validity.

### *Evaluative judgements*

Transcripts were coded for reflections/evaluations (see Curenton et al., 2008) that address repercussions for immoral behaviour, judgements about the story character's feelings, thoughts or behaviour, and/or opinions. Examples of comments include: "Do you know how I tell you that stealing is wrong?" or "I got a spanking for that." Other researchers have used similar coding schemes to study evaluative comments during conversations about the past (Bird & Reese, 2006). Evaluation comments in a narrative are a key feature of oral storytelling because they provide information as to why the narrative is being told and/or how the events of the story should be interpreted (Bruner, 1986; Labov, 1972).

Each subject–verb proposition (also referred to as communication-unit) was coded as 1 if it met the requirements for a reflection/evaluation. The total number of items coded as 1 was calculated to obtain a raw frequency score. Again, to control for variations in story length, the total number of evaluative judgements was divided by the total number of subject–verb propositions for the story, resulting in a proportion score.

This proportion score was used in the analyses, but the *number of evaluative judgements* is reported as a descriptive.

### *Indicators of shared-reading*

Mothers were asked to indicate the frequency of their shared-reading practices via two self-report items that are commonly used in the literature to assess home literacy practices (Fritjers et al., 2000; Payne et al., 1994; Senechal & LeFevre, 2002). One question assessed the *frequency of shared-reading* (“In a typical week, how many times do you read with your child?”), and responses included 1 (*not at all*), 2 (*1 time*), 3 (*2–3 times*) and 4 (*4 or more times*). A second question assessed the *history of shared-reading* (“About how old was your child the first time you read to him/her?”), and responses included 1 (*less than 1 year old*), 2 (*1–2 years old*) and 3 (*3 or 4 years old*). These questions were analysed as separate items because they represent distinct, non-correlated aspects of shared-reading ( $r = -.12, p = \text{ns}$ ). Other studies have also analysed these items separately (see Fritjers et al., 2000; Payne et al., 1994).

### *Social Skills Rating System*

During a one-on-one interview with a trained researcher, mothers responded to items read to them from the Social Skills Rating System (SSRS; Gresham & Elliott, 1990). Given that our sample consisted of mothers with varying degrees of literacy, the measure was read to the mothers in order to control for any variation in their reading abilities. Mothers responded to statements in the SSRS using the prescribed response scheme for the measure. Standard scores were calculated for each child for prosocial skills and for problem behaviours. Reliability for the parent-form of the preschool version of the SSRS is .90 for the total social skills scale (referred to in this study as prosocial skills) and .73 for the problem behaviours scale.

## **Results**

### *Preliminary analyses*

Because research has shown that girls, on average, have fewer behaviour problems than boys (Fleming et al., 2002), we conducted preliminary analyses to investigate potential gender-related differences in prosocial skills and problem behaviour. There were no gender differences in terms of prosocial skills,  $t(29) = .87, p = \text{ns}$ , or problem behaviours,  $t(29) = -1.09, p = \text{ns}$ . Similarly, there were no gender differences for self-reported shared-reading practices:  $t(27) = 1.18, p = \text{ns}$  for weekly frequency of shared-reading and  $t(27) = .36, p = \text{ns}$  for the earliest age at which the dyad began shared-reading. Therefore, within this sample, girls and boys are equally socially competent, and they were equally exposed to shared-reading activities in the home.

### *Overall descriptive statistics*

Descriptive statistics for the study variables are listed in Table 1. These data indicate that, on average, mothers reported reading to their children about 2–3 times per week

Table 1. Descriptive statistics for study variables.

	Mean	SD	Range	N
Emotion talk during oral storytelling				
Number of negative emotion terms	3.97	3.26	0–12	31
Proportion of negative emotion terms	.02	.02	.00–.06	31
Number of positive emotion terms	.94	1.60	0–5	31
Proportion of positive emotion terms	.00	.01	.00–.02	31
Number of evaluation judgements	4.67	3.39	0–14	30
Proportion of evaluation judgements	.12	.09	.00–.36	30
Emotion talk during shared reading				
Number of negative emotion terms	.88	1.47	0–6	33
Proportion of negative emotion terms	.02	.00	.01	33
Number of positive emotion terms	2.30	2.71	0–11	33
Proportion of positive emotion terms	.07	.01	.02	33
Number of evaluation judgements	1.91	3.18	0–14	33
Proportion of evaluation judgements	.05	.06	0–.06	33
Shared-reading practices				
Frequency of shared-reading	3.03 <sup>a</sup>	.78	2–4	29
Child's age at first shared-reading	1.28 <sup>b</sup>	.59	1–3	29
Language and literacy skills				
Mother's reading score	102.00	14.34	67–120	29
Children's receptive language	102.60	16.50	74–125	30
Social readiness indicators				
SSRS: Prosocial behaviour	100.68	9.99	76–116	31
SSRS: Problem behaviour	101.90	11.44	84–134	31
TELD: Receptive language	102.60	16.50	74–125	30

<sup>a</sup>Based on the scale, this score is interpreted as about 2–3 times per week.

<sup>b</sup>Based on the scale, this score is interpreted as the child being less than 1 year old at the first reading.

and that they began shared-reading when the child was less than one year old. The scores for the standardised assessments of mothers' literacy skills and children's language skills indicate that the sample performed at the national average on these measures (all means) were approximately 100 with a standard deviation of 10–15 points. Therefore, we can confirm that this sample was normal in terms of language and literacy skills. Finally, in terms of social skills the sample was within the normative ranges for prosocial skills and problem behaviours.

### *Examining shared-reading versus oral storytelling*

To answer the first and second set of research questions, we conducted a repeated measures analysis of variance (ANOVA) with the within-subject factors as Narrative Context (shared-reading versus oral storytelling) and Emotion Valence (negative versus positive emotion words) and the between-subject factor being Child's Gender (boy versus girl). The dependent variable for this ANOVA was the proportion of

emotion words the mother used. Results revealed there were no significant main effects for Narrative Context, Wilk's  $\Lambda = .93F(1,28) = 2.01, p = ns$ , or for Emotion Valence, Wilk's  $\Lambda = .91, F(1,28) = 2.67, p = ns$ . There were also no significant interaction effects for gender: Narrative Context  $\times$  Gender, Wilk's  $\Lambda = .93, F(1,28) = 1.99, p = ns$  and Emotion Valence  $\times$  Gender, Wilk's  $\Lambda = .99, F(1,28) = .18, p = ns$ . There was, however, a significant cross-over interaction between Narrative Context  $\times$  Emotion Valence, Wilk's  $\Lambda = .41, F(1,28) = 41.07, p < .001, \eta^2 = .60$ . On average, mothers used more positive emotion terms than negative ones during shared-reading, but they used more negative emotion terms than positive ones during oral storytelling. Table 1 details the means for these results, and Figure 1 depicts the interaction.

To examine how mothers used evaluative judgments, a similar ANOVA was conducted with Narrative Contexts as the within-subject factor, Child Gender as the between-subject factor and the proportion of evaluative judgments as the dependent variable. Results revealed there was a significant main effect for Narrative Context, Wilk's  $\Lambda = .62 F(1,28) = 17.03, p < .001, \eta^2 = .38$ . During shared-reading, mothers made about two reflections or evaluations to the story character's bad behaviour, but they made about four references to the immorality or ramifications for her bad behaviour during oral storytelling, as evidenced by the *Evaluative* raw scores. There was also a significant main effect for Child Gender,  $F(1,28) = 14.07, p < .001, \eta^2 = .33$ . Mothers made more of these comments with their sons ( $M = .12, SE = .01$ ) versus with their daughters ( $M = .05, SE = .01$ ). The significance of these main effects were nearly overshadowed by a trend effect for a Narrative Context  $\times$  Child Gender interaction, Wilk's  $\Lambda = .87 F(1,28) = 4.13, p < .06, \eta^2 = .13$ . Figure 2 depicts that mothers used more evaluative judgments with their sons during oral storytelling than they did during shared-reading, and they used more than mother-daughter dyads in both contexts.

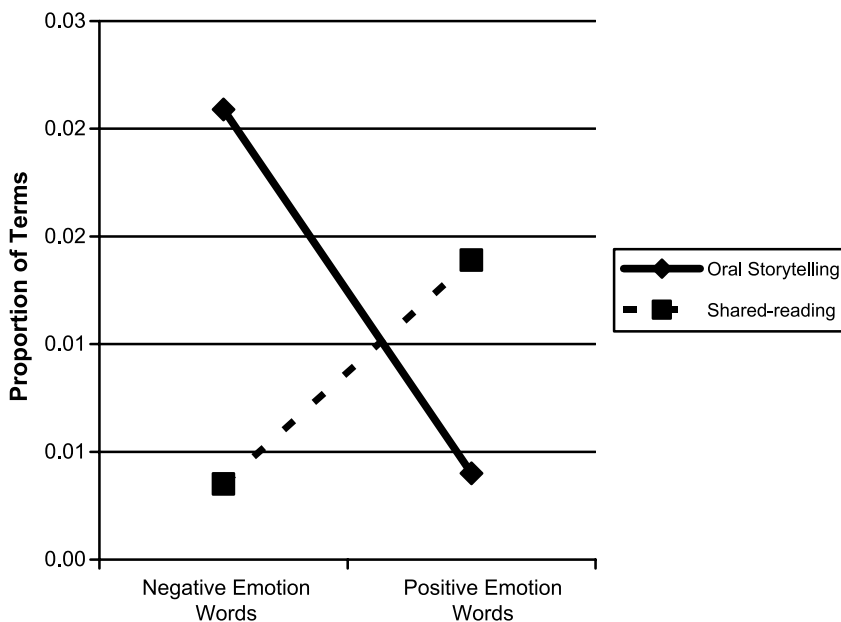


Figure 1. Proportion of emotion talk across shared-reading and oral storytelling.

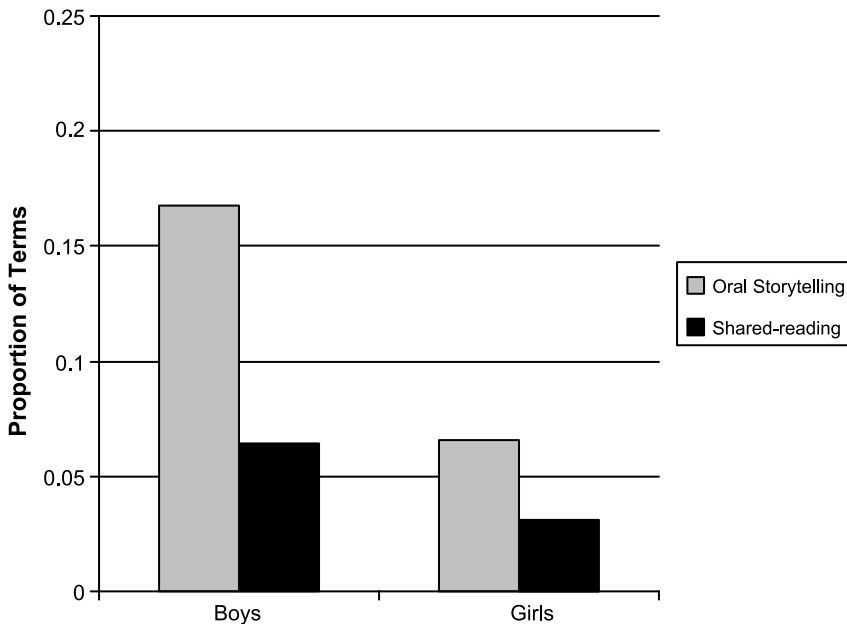


Figure 2. Proportion of evaluative judgements by child's gender.

### *Shared-reading and oral storytelling association with social skills*

#### *Prosocial skills*

The bivariate correlations in Table 2 demonstrate no aspects of oral storytelling were significantly correlated with children's prosocial skills. However, several aspects of shared-reading were significantly associated with these skills, including the frequency of shared-reading (positively correlated) and the age at which the dyad first began reading together (negatively correlated). There were also aspects of mothers' talk during shared-reading that were associated with prosocial skills. For instance, mothers' use of positive and negative emotion terms and her use of evaluative judgments were associated with prosocial skills.

Table 2 also reveals several of the aspects of shared-reading and oral storytelling were associated with mothers' literacy and children's language skills. However, when these individual mother and child characteristics were used as covariates, results indicated there were no longer significant associations between *any* shared-reading practices and prosocial skills. Thus, in terms of shared-reading, it appears maternal literacy and child language are mediating factors.

#### *Problem behaviour*

In Table 3, the correlations for children's problem behaviour indicate a different pattern than was found for prosocial skills. Unlike the bivariate results for prosocial skills, neither self-reports of shared-reading practices nor mothers' talk during shared-reading were correlated with problem behaviours. The only significant correlate to problem behaviours was the amount of positive emotion talk used during oral storytelling: mothers' use of positive talk during her story was associated with fewer behaviour problems.

Table 2. Bivariate and partial correlations among oral storytelling, shared-reading and prosocial skills.

	1	2	3	4	5	6	7	8	9	10	11
1. Proportion negative emotion terms: oral storytelling	—	.50**	.52**	.15	-.11	-.24	.06	.28	.24	.11	-.27
2. Proportion positive emotion terms: oral storytelling		—	.40*	.08	-.31	.04	.13	.44*	.28	.21	-.08
3. Proportion evaluative judgements: oral storytelling			—	.23	.26	-.05	-.08	.21	-.08	-.08	-.32+
4. Frequency of shared-reading				—	-.10	.08	.07	.12	.38*	.28	.01
5. Age at first shared-reading					—	-.06	-.31	-.17	-.43*	-.65**	-.48**
6. Proportion negative emotion terms: shared-reading						—	.10	.28	.37*	.34+	.22
7. Proportion positive emotion terms: shared-reading							—	.41*	.34+	.29	.40*
8. Proportion evaluative judgements: shared-reading								—	.37*	.27	.18
9. Children's prosocial skills									—	.57**	.34+
10. Mother's literacy										—	.51**
11. Children's language											—
Controlling for mother's literacy and children's language skills											
1. Proportion negative emotion terms: oral storytelling	—	.48*	.52**	.10	-.16	-.28	.19	.32	.30		
2. Proportion positive emotion terms: oral storytelling		—	.35+	-.03	-.28	-.06	.10	.42*	.23		
3. Proportion evaluative judgements: oral storytelling			—	.20	.29	-.06	-.05	.24	-.05		
4. Frequency of shared-reading				—	.06	-.05	-.03	.01	.26		
5. Age at first shared-reading					—	.29	-.10	.00	-.12		
6. Proportion negative emotion terms: shared-reading						—	.04	.33	.21		
7. Proportion positive emotion terms: shared-reading							—	.31	.17		
8. Proportion evaluative judgements: shared-reading								—	.25		

\* $p < .05$ ; \*\* $p < .01$ .

Table 3. Correlations between oral storytelling, shared-reading and problem behaviours.

	1	2	3	4	5	6	7	8	9	10	11
1. Proportion negative emotion terms: oral storytelling	—	.50**	.52**	.15	-.11	-.24	.06	.28	-.18	.11	-.27
2. Proportion positive emotion terms: oral storytelling		—	.38*	.06	-.32	.03	.12	.44*	-.46*	.21	-.06
3. Proportion evaluative judgements: oral storytelling			—	.19	.25	-.07	-.12	.19	-.22	-.08	-.29
4. Frequency of shared-reading				—	-.13	.05	.03	.08	-.19	.28	.06
5. Age at first shared-reading					—	-.07	-.34	-.19	.08	-.65**	-.48**
6. Proportion negative emotion terms: shared-reading						—	.08	.27	.31	.34	.25
7. Proportion positive emotion terms: shared-reading							—	.40*	-.09	.29	.45*
8. Proportion evaluative judgements: shared-reading								—	-.04	.27	.22
9. Problem behaviour									—	.19	.32
10. Mother's literacy										—	.51**
11. Children's receptive language											—
Controlling for mother's literacy and children's language skills											
1. Proportion negative emotion terms: oral storytelling	—	.48*	.52**	.10	-.16	-.28	.19	.32	-.17		
2. Proportion positive emotion terms: oral storytelling		—	.35	-.03	-.28	-.07	.10	.42*	-.56**		
3. Proportion evaluative judgements: oral storytelling			—	.20	.29	-.06	-.05	.24	-.15		
4. Frequency of shared-reading				—	.06	-.05	-.03	.01	-.25		
5. Age at first shared-reading					—	.29	-.10	.00	.26		
6. Proportion negative emotion terms: shared-reading						—	.04	.32	.28		
7. Proportion positive emotion terms: shared-reading							—	.31	-.02		
8. Proportion evaluative judgements: shared-reading								—	-.07		

\* $p < .05$ ; \*\* $p < .01$ .

There were even different patterns among the covariates when the outcome was problem behaviours in comparison to prosocial behaviours. Like the results for prosocial behaviour, the age when the dyad reported beginning to read together was associated with mothers' literacy and children's language skills. Also consistent was the relationship between the use of positive emotion terms during shared-reading and children's language skills. However, maternal literacy and child language were not associated with problem behaviours, as they had been for prosocial behaviour.

When mothers' literacy and children's language were used as covariates, the significant negative relationship between positive emotion talk and problem behaviours became even *stronger*. In the case of problem behaviours, maternal literacy and child language are not mediating variables. Thus, there appears to be something unique about how a mother tells an oral story that is related to her child's problem behaviours, and this storytelling style is not dependent on her literacy skills or her child's language skills.

### *Qualitative examples*

We present qualitative examples that demonstrate the association between positive emotion talk and children's problem behaviour (see Appendix). These examples provide compelling depictions of how dyads at the two extremes of the quantitative data can differ. The examples are introduced not only with statistics about the emotion terms and problem behaviours but also with contextual information about the dyads in terms of their language/literacy skills, ethnicity and early education attendance. These examples illustrate how mothers use positive emotion terms like "fun" and "share" to reframe the naughty event; for instance, they used these terms to provide evaluative comments about what the child should do (i.e. "We have to share, right" or "That's not fun [... to miss out on activities]"). Quite the opposite, the examples in which the children had more problem behaviours were plagued by bouts of irrelevant conversation exchanges as evidenced by the dyad being off task repeatedly.

### **Discussion**

The purpose of this study was to investigate whether dyadic home narrative interactions were associated with preschoolers' prosocial skills and problem behaviours. We examined two types of family narrative practices between mothers and children: shared-reading and oral storytelling. Both the frequency (how often dyads read) and the history (the child's age when the dyad began reading) were examined within shared-reading, and emotion state talk and evaluative judgements were examined across both shared-reading and oral storytelling. The aspects of these two family narrative practices were then correlated with prosocial and problem behaviour outcomes. The findings have both theoretical and practical implications. The results are discussed below.

### *Shared-reading versus oral storytelling*

For theoretical purposes, we addressed whether there were differences between shared-reading and oral storytelling. First, we investigated whether mothers talked about emotions differently during shared-reading versus oral storytelling. Contrary to our hypotheses, mothers did not talk about emotions differently across the two narrative

contexts. They used both positive and negative emotion terms at the same rate. Despite these null main effects, a significant cross-over interaction indicated that story context and emotional valence are intertwined, at least in this study. Mothers used more positive emotion talk during shared-reading and more negative emotion talk during oral storytelling.

This interaction has important methodological implications for understanding how story prompts can affect the discourse during a narrative interaction. In this study, the oral storytelling prompt may have elicited more negative emotional talk because they were asked to talk about a past event that had a negative connotation (i.e., the *Naughty Story*). Similarly, the same story prompt influence might explain the main effect findings showing that overall mothers used more reflective/evaluation judgements during oral storytelling in comparison to shared-reading. Because the *Naughty Story* prompt specifically asked mothers to recount childhood misbehaviour, it implicitly provided a situation for the mothers to reflect on and/or evaluate this behaviour.

In essence, mothers used the oral storytelling context as a socialisation tool by taking the opportunity to make more comments and judgements about misbehaviour. Although the story prompt for the shared-reading interaction was one that could have also evoked judgements about misbehaviour because the character was engaged in a very naughty behaviour (i.e. he ran away from home), mothers were not as likely to use shared-reading as the same type of socialisation tool. Our results actually speak to the strength of talking about a personal past event of misbehaviour rather than reading a book about misbehaviour. As compared to explaining the behaviour of a fictional storybook character, a parent who recounts her own past misbehaviour in an oral storytelling may be more critical and thoughtful because she has greater insight into the consciousness landscape of the story given that she is the main character (see Bruner [1986] and Curenton [2004] for a description of story landscapes). Therefore, parent-child oral stories may provoke more sophisticated dialogue around negative emotions and misbehaviour than do shared-reading interactions.

### *Gender effects*

Another aspect we were interested in examining was whether there were differences in conversations between mother-son dyads during the two narrative contexts versus mother-daughter dyads. Our findings indicated several null as well as significant results, which only adds to the conflicting research on gender differences during narrative interactions (see Dunn et al., 1991; Fivush et al., 2000; Garner et al., 1997; Jenkins et al., 2003). We found mothers used the same amount of emotion talk with boys and girls, but they made more evaluative judgements about behaviour with their sons versus with their daughters. Also, there was a trend for a significant interaction highlighting, again, the importance of narrative context: Mother-son dyads used more evaluative judgements during oral storytelling than they did during shared-reading. Given the nature of the oral story, this interaction gives support for previous researchers who have found mothers were more likely to discuss negative emotions and events with boys rather than girls (Bird & Reese, 2006; Dunn et al., 1987; Fivush, 1989). Our further findings echo Fivush's (1989) work because we found a significant main effect indicating mothers were more likely to talk about causes and consequences of bad behaviour with their sons versus with their daughters.

According to Anderson et al. (2004), gender differences in terms of self-reported shared-reading interactions are rarely studied, and no studies were found which

examine gender differences specifically in terms of the frequency and history of shared-reading. Our study adds to the literature because we attempted to examine gender differences in shared-reading practices; however, there were only null findings in this area. In this socioeconomically diverse sample of primarily African Americans, mothers reported having begun reading when the children were, on average, less than 1 year old, regardless of whether the child was male or female. Mothers also reported reading to both boys and girls an average of 2–3 times per week.

### *Narratives and social skills*

For practical purposes, we were interested in investigating how family narrative practices were associated with children's prosocial skills and problem behaviours. Many studies indicate the importance of shared-reading to social skills (Bhavnagri & Samuels, 1996; Farver et al., 2006), and previous research has established that children's prosocial skills are positively associated with oral language interactions (Cassidy et al., 1992; Dunn & Brown, 1993; Heath, 1989). We attempted to investigate the association between narrative practices and social skills in order to provide evidence for the design of future interventions, and the results of our study suggest several promising practical implications.

We found that self-reported aspects of shared-reading, namely the weekly frequency of shared-reading and the age at which the dyad began reading, were associated with better prosocial skills. Along the same lines, the amount of both positive and negative emotion talk and use of evaluative judgements was correlated with children's prosocial skills. Unfortunately, further analyses revealed this association was an artefact of language and literacy skills acting as mediators between shared-reading and prosocial skills. The association between the history and frequency of shared-reading and prosocial skills was no longer significant after covarying mothers' literacy and children's language skills. Interestingly, there were no aspects of oral storytelling associated with prosocial behaviour. Neither mothers' use of emotion words nor evaluative judgements during oral storytelling were significantly related to children's prosocial skills.

In terms of problem behaviours, none of the aspects of shared-reading were related to children's scores on problem behaviours. Although Fleming et al. (2002) found that a low frequency of shared-reading interactions was associated with problem behaviours in elementary school students, no evidence of such a relationship was evident in our preschool sample. The only family narrative practice associated with problem behaviours was found during oral storytelling. Mothers who used fewer positive emotion terms during their *Naughty Story* had children with more problem behaviours, and this result was significant even after covarying for individual differences in mothers' and children's language/literacy skills. Such results suggest a strong link between framing a negative past event using positive emotion terms and fewer problem behaviours. This work supports Bird and Reese (2006) who found that when mothers explain negative emotions better, children have better social competence skills.

### *Future directions and implications*

This study contributes to the literature because it is the first to examine mother–child dyads in both shared-reading and oral story interactions while examining child social skills as an outcome. The results highlight the importance of studying multiple narrative contexts because they provide further evidence demonstrating that storytelling is a

dyadic task distinct from shared-reading (see Curenton et al., 2008), and they show that aspects of oral storytelling may be related to social competence in a way that shared-reading is not. Although the sample size was moderate ( $N=33$ ), it is comparable to other studies of dyadic interactions (see Aram & Levin, 2001; Reese, 1995).

This study also contributes to the field because it employs an ethnically and SES diverse normative sample across measures of self-reported shared-reading and observations of shared-reading and oral storytelling. Our findings contribute to the literature examining parental self-reports of shared-reading practices with Head Start children (Payne et al., 1994), other urban children (Fritjers et al., 2000) and middle-income children (Senechal & LeFevre, 2002). Both of the prior studies were interested in specifically examining home literacy practices in relation to children's language and literacy skills. Like other researchers, we found that, as individual items, the frequency of shared-reading and the age at which the dyad began reading was related to children's language/literacy skills (Fritjers et al. 2000; Payne et al, 1994). However, Senechal and LeFevre report that these aspects of shared-reading, either alone or combined with other items, were not related to their sample's reading scores. Perhaps the present results differ from Senechal and LeFevre's because our sample is diverse in terms of SES, parental education and ethnicity; Senechal and LeFevre indicate that the education level of their sample was higher than what is found in the general Canadian population. Payne and colleagues demonstrate in their work when a sample is low-income, an environmental input, such as shared-reading, explains a larger portion of the variance in children's skills than it does when the sample is middle income and displays fewer environmental risk factors.

Future research should examine differences in level of SES in regards to the relationships between shared-reading and oral storytelling and children's social skills. Oral storytelling is practiced across all SES groups (Curenton, 2006; Heath, 1989; McCabe, 1997; Reese, 1995, 2002), whereas shared-reading is less likely to be practiced in lower SES families (Yarosz & Barnett, 2001). Learning how the relationships between shared-reading and oral storytelling and children's social skills vary by SES would provide valuable insight for interventions in working with the unique needs of these families.

### Acknowledgements

We are grateful to the families who participated in this study and to Nadia Flanigan, Marion Johnson and Katie Roberson who helped with data collection and coding.

### Notes

1. Our initial coding included volition and cognitive internal state terms as well, but these terms were not associated with the outcomes in the study. Given that a large body of prior research has examined the relationship between emotion state terms and children's social development, we decided to only include emotion terms to follow the current line of evidence in the field.
2. These examples have been edited for clarity by taking out redundant utterances, unintelligible comments and irrelevant remarks that are not related to the story.

### Notes on contributors

Stephanie M. Curenton is an assistant professor at Rutgers University in the public policy programme at the Bloustein School. She earned her PhD in developmental and community psychology from the University of Virginia. After receiving her degree, she spent two years as

a Society for Research on Child Development Policy fellow, examining early care and education interventions and policies in the Administration for Children and Families, Child Care Bureau. She studies the development of low-income and minority children within various ecological contexts, such as parent-child interactions, early childhood education programme, and related state and federal policies. She has been the principal investigator on a National Research Council pre-doctoral fellowship from the Ford Foundation and several university-funded research projects. Presently, she serves as the co-director for a federally funded study with the Education Development Center, Inc., (EDC) that investigates the impact of pre-K expansion on child care for low-income families. This project is funded by a grant from the US Department of Health and Human Services, the Office of Program Research and Evaluation. She has been recognised as a national leader in the early education field through her appointment to the governing board of the *National Association for the Education of Young Children* (NAEYC).

Michelle Jones Craig is a research analyst in the Quality Initiative Unit of the Office of Early Learning in Florida's Agency for Workforce Innovation. She earned her PhD in child development from Florida State University. She has worked as an independent consultant for the Policy Group for Florida's Families and Children gathering statewide information about child screenings and assessments to inform a report being prepared for Florida's Children and Youth Cabinet. In addition, she has served as an independent consultant for the Children's Forum, a statewide non-profit, on the Partners in Education and Research for Kindergarten Success (PERKS) project, which was funded by a grant from the Early Childhood Educator Professional Development Program of the US Department of Education. In her current role at the Agency for Workforce Innovation, she is primarily responsible for an electronic publication, *Research Bulletin: Improving Quality through Practical Research Applications*, which brings current research and practical tools to Florida's local early learning coalitions and state partners. She analyses the Florida Kindergarten Readiness Screener (FLKRS) data on children who have participated in the School Readiness and Voluntary Pre-kindergarten programs. She serves on Florida's Family Strengthening Initiative work group for the Child Abuse Prevention and Permanency plan, initiated by the Governor's Office. She also supports the agency director in her appointment to Florida's Children and Youth Cabinet.

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## Appendix<sup>2</sup>

### Low/average score problem behaviours

#### *Example no. 1*

This dyad was African American and the child was enrolled in Head Start. The mother had average literacy skills (standard score of 101, post-high school reading level), but the child had below average language skills (standard score of 76). The son had the *lowest problem behaviours* score of the sample (standard score of 89), and the mother used one of the highest proportions of positive emotion terms (proportion = .02, 3 total words).

- M: You want me to tell you a story about me when I was in school? [*Mom gently pulls child's arm to get his attention and child nods head yes*]
- M: One Halloween mommy had to make a cat mask, and I made it black, and I put little pipe cleaners so I could put it around my ears. And guess what happened?
- C: What?
- M: One of my classmates – cause he was cleaning up – he threw it away. Mommy was sad. And mommy yelled and mommy shouldn't [have] yelled. Mommy had to sit outside in time out. That ... [*child interrupts*]
- C: Why?
- M: ... was the one time mommy got in trouble at school.
- C: Why?
- M: Mommy never got in trouble again cause she didn't like to miss out on all the fun everybody else was having.
- C: Why?
- M: Why?
- M: Cause I don't want to miss. Don't you have fun at school? [*Child shakes head yes*]
- M: See when you get in trouble, and you get time out, don't you miss out on things?
- C: No.
- M: Well you don't go to time out, [*mom pulls child's nose in a playful way*] but if you did you would miss out on things. And that's not fun.

#### *Example no. 2*

This dyad was European American and the child was enrolled in a private child care center. The mother had average literacy skills (standard score of 118, post-high school reading level), and the son had average language skills (standard score of 116). The son exhibited an *average number of problem behaviours* (standard score of 97), and mother used one of the highest proportions of positive emotion terms (proportion = .02, 2 total words).

- M: Can I tell you a story real quick?
- C: No.
- M: No?
- M: [*Mom picks child up to put him in her lap.*] Come here. Let me tell you a story. One time a long time ago when mommy was your age. I was playing outside with my friends. And something happened that I didn't like.
- C: What?
- M: One of them took the ball away from me. And I didn't like it. And you know what? My mommy and daddy kinda got mad at me. And you know why? Cause I wasn't sharing. We have to share right?
- C: Right.
- M: Right. We play nice with our friends and we share toys. [*Child sits in mom's lap and faces mom throughout the story.*]

### High score problem behaviours

#### *Example no. 3*

This dyad was African American and the child was not enrolled in an early care or education programme. The mother had average literacy skills (standard score of 97, high school reading

level), and the daughter had average language skills (standard score of 91). The daughter exhibited *more problem behaviours than average* (standard score of 119), and her mother used no positive emotion terms (proportion = .00, 0 words).

M: Let me tell you a story.

C: No.

M: You got to tell me a story. Look it. You see what happened to mommy arm right there? [*Holding her elbow up and pointing to her arm*]

C: Yes.

M: How'd that happen?

C: Cause you bumped into me.

M: No mommy was riding a bike one day. And mommy wasn't listening to grandmother. Mommy fell off the handlebars. I fell, and look what happened. Look what happened to my elbow. You see that right there? [*Pointing to her elbow.*] I fell and I hurt myself, and it was bleeding. I ran in the house, and I dropped on the bed. I put all that blood all over the bed and all over the pillows. And grandmother was mad at me. She fussed at me, and my daddy fuss at me. I got in trouble. I got whooped. They whoop me for not listening, for riding on that handlebar. You know, like I be telling you, "Don't ride on the handlebar. Don't ride on the handlebar. Don't ride on the handlebar." [*Mom is tickling child; child is screaming.*]

#### Example no. 4

This dyad was multi-ethnic with the mother identifying as European American and the son as Latino American. The child was enrolled in a YMCA child care center. The mother had average literacy skills (standard score of 116, a post-high school reading level), and the son had average language skills (standard score of 113). The son exhibited *more problem behaviours than average* (standard score of 116), and his mother used no positive emotion terms (proportion = .00, 0 words).

M: Do you think mommy's ever done anything bad?

C: No.

M: No? I did once.

C: Yeah. Were you a baby?

M: I was more like a kid.

[*Child slides off couch and moves to the floor to do some exercises because he is complaining about his leg hurting. The dyad diverges from topic for 11 conversational exchanges.*]

M: I was little.

[*The dyad now diverges for 6 conversational exchanges because the child wants to see his baby brother who is waiting in the hallway.*]

M: Do you want to hear what I did when I was little?

C: Yeah.

M: Yeah?

[*Dyad diverges from topic by talking about problems the child is having with his butt and because the child brings the mother her cell phone because he wants to call his father. They are off topic for 13 conversational exchanges.*]

M: Do you wanna hear what I did or no?

C: Yeah. [*Child is whining.*]

M: You don't have to hear it.

C: I want to [*Child whines*].

M: You want to hear what I did? [*Child is laying on couch with face down and shaking head yes.*].

M: I was talking to a little girl, and she took my toy. Then I got mad at her. And what do you think I did to her?

C: Used hands.

M: I what?

C: Hands.

M: I what?

C: Hands!

M: I hands?

C: Yeah.

M: What does that mean?

C: Hit.

M: Oh, I hit her. [*Mother shakes her head yes.*] What do you think my mommy told me?

C: No hitting.

M: No hitting. And what did she say? We have to use our gentle hands. Right? [*Child shakes head yes.*] Yeah. Have you ever hit anybody?

C: Yeah.

M: Yeah. What does mommy say to you?

C: Don't hit.

M: And use? Use gentle hands. Yep. You ok? [*Child is lying face down on couch.*]

C: [*Child raises head up.*] Shake hands. Right?

M: Shake hands. That's how we ... That's friendship. I think so.