

The intergenerational congruence of mothers' and preschoolers' narrative affective content and narrative coherence

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Abstract

Intergenerational congruence of mothers' and preschoolers' narratives about the mother–child relationship was examined in a sample of 198 Hispanic (59.1%), Black (19.2%), and White (21.7%) mothers and their preschool child. Mothers' narratives were obtained with the Five Minute Speech Sample and were coded for negative and positive affective content and narrative coherence. Preschoolers' narratives were collected with the MacArthur Story Stem Battery and were coded for the portrayal of the mother–child relationship and narrative coherence. Across ethn racial groups, maternal narrative coherence, but not narrative affective content, was related to preschoolers' positive portrayal of the mother–child relationship. Our findings highlight the importance of maternal narrative coherence for understanding intergenerational continuity of relational representations.

Keywords

coherence, expressed emotion, five minute speech sample, intergenerational congruence, MacArthur Story Stem Battery, narratives, parent-child relations, preschool, representations

Children's representations of their relationship with parents (i.e., their beliefs and expectations about the relationship) predict their wellbeing (Oppenheim, 2006) and presumably reflect their parents' own representations of their child (Bretherton & Munholland, 1999). Parents' and preschoolers' narratives about the parent–child relationship provide a valuable tool for assessing relational representations (Oppenheim, 2006). Although a few studies have examined the congruence of parents' and preschoolers' narratives, our study advanced this literature by evaluating intergenerational associations between *both* narrative affective content (i.e., whether the parent–child relationship is depicted as positive and supportive) and narrative coherence (i.e., whether the narrative is organized and well-rounded), which reflect different aspects of relational representations (Hesse, 2008) and may evidence distinct patterns of intergenerational continuity. Moreover, we elucidated the generalizability of patterns of intergenerational congruence across varied ethn racial groups.

Relational narratives of parents and preschoolers

Parents' narratives are usually elicited using semi-structured interviews that ask parents to narrate about the parent–child relationship. Preschoolers' narrative assessments typically employ story-stems in which the child is asked to narrate about emotionally-laden family interactions through doll play (Oppenheim, 2006). Both approaches yield distinct dimensions of relational narratives in terms of narrative affective content and narrative coherence. Studies on *affective content* in parents' narratives assess positive and negative content, such as statements of love and empathy versus criticism and dissatisfaction (Caspi et al., 2004; Daley, Sonuga-Barke, & Thompson, 2003; Polanczyk et al., 2010). In parallel, the affective content of preschoolers' play-narratives is reflected in

whether the parent–child relationship is portrayed as supportive and affectionate or harsh and rejecting (Toth, Maughan, Manly, Spagnola, & Cicchetti, 2002).

Studies on the *coherence* of parent's narratives follow Grice's (1975) conversational maxims to define a coherent narrative as one that includes organized, succinct, and authentic multifaceted descriptions of positive *and* negative aspects of the parent–child relationship. Similarly, the coherence of preschoolers' play-narratives refers to the fluency of the narrative, the extent to which it depicts a resolution of the emotional problem in the story-stem, and the consistency of the information relayed (Oppenheim, 2006).

The strength of narrative techniques rests in their power to tap the subjective reality of the narrator in a specific relationship, rather than personality traits (Beck, Daley, Hastings, & Stevenson, 2004; Caspi et al., 2004; de Haas, Bakersman-Kranenburg, & van IJzendoorn, 1994; Goldwyn, Stanley, Smith, & Green, 2000). Across studies of parents' narratives and/or preschoolers' play-narratives, positive affective content, lack of negative affective content, and/or narrative coherence are related to sensitive parenting and predictive of positive socio-emotional child outcomes (Holmberg, Robinson, Corbitt-Price, & Wiener, 2007; Hooley & Parker, 2006; Oppenheim, 2006). However, as discussed previously, narrative affective content and coherence reflect distinct representational processes (Hooley, 2007; Bretherton & Munholland, 1999), and may show different patterns of intergenerational congruence.

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Narrative affective content: Meaning and mechanisms of intergenerational continuity

Research on intergenerational continuity of narrative affective content stems from the psychiatric literature on Expressed Emotion (EE; Brown, Birley, & Wing, 1972) and Attachment literature (Bowlby, 1982). These literatures suggest that affective content reflects the narrator's attributions regarding the relationship, which are transmitted from parent to child through parents' behaviors towards the child and ultimately internalized by the child (Bullock & Dishion, 2007; George & Solomon, 1996).

Developed in adult schizophrenia research (Brown et al., 1972), EE studies indicate that the affective content of caregivers' narratives when asked to provide an uninterrupted 5-minute speech sample (FMSS) about their adult relative and their relationship (Magaña et al., 1986) relates to the quality of the caregiver–relative interaction and predicts clinical outcomes of the relative (Hoohey, 2007). More recently, developmental researchers assessing FMSS-EE with parents of young children found that less negative affective content and more positive affective content relate to less hostility and intrusiveness and more affection and positive regard in parenting (Bullock & Dishion, 2007; Daley et al., 2003; McCarty, Lau, Valeri, & Weisz, 2004), and to better socio-emotional adaptation of preschoolers (e.g., Caspi et al., 2004; Kim-Cohen, Moffit, Caspi, & Taylor, 2004; Tully, Arseneault, Caspi, Moffit, & Morgan, 2004). Yet, only one study has examined intergenerational continuity of EE in parent and child narratives, finding that parents' FMSS-EE related to the EE of school-aged boys in a 3-minute speech sample (Marshall, Longwell, Goldstein, & Swanson, 1990).

Three attachment studies have examined the intergenerational congruence of narrative affective content in semi-structured interviews with parents (e.g., the Parent Attachment Interview; Bretherton, Biringen, Ridgeway, Maslin, & Sherman, 1989) and play-narratives with children (Bretherton, Oppenheim et al., 1990). In a prospective study by Howes, Vu, and Hamilton (2011), maternal statements of providing comfort during the toddler period were related to preschoolers' depiction of the mother as providing a secure base. Bretherton and Page (2004) found that mothers' self-descriptions as sensitive and accepting of the child's negative feelings, and as able to engage their child's cooperation, related to preschoolers' portrayal of the mother as using appropriate discipline, but not necessarily as more affectionate or protective. In contrast, the third study by Keisler-Splau, Steele, Steele, Reiner, and Murphy (2010) failed to find significant links between mothers' statements of joy, low anger, and competent caregiving, and their 4–8-year-old children's depictions of the mother as supportive or rejecting. In sum, extant work is limited by using variable-aged child samples that have thus far yielded inconsistent findings.

Narrative coherence: Meaning and mechanisms of intergenerational continuity

Attachment theorists suggest that, in addition to assessing *the affective content* of the narrative, which reflects relational attributions, it is imperative to evaluate the *coherence* of the narrative, since it reflects information processing rules that shape the storage and retrieval of relational attributions (Hesse, 2008). According to this view, parents who process information about their child openly and free from defense are likely to construct complex yet integrated attributions regarding the child that are accessible to consciousness and

responsive to real-time feedback during parent–child interactions. These parents typically construct a *coherent* narrative that is well-organized, consistent, authentic, and multifaceted. Integrated and flexible information processing enables parents to provide responsive care to their child and to communicate openly about emotional experiences. In turn, these exchanges support preschoolers' construction of non-defensive, complex, and generally positive attributions regarding the parent–child relationship (Bowlby, 1988; Main, Kaplan, & Cassidy, 1985) as reflected in *positive relational depictions* in *coherent* play-narratives (Main et al., 1985).

In contrast, parents who defensively exclude difficult feelings about their child from consciousness may produce incoherent narratives that are inconsistent and contradictory, lack emotional integration, are meager and emotionally disengaged, and/or overly idealizing or rejecting. They may also resist discussion of negative emotional experiences, or distort emotional communications with their child, thereby contributing to their preschoolers' internalization of similarly defensive information processing rules and conflicted attributions regarding the parent–child relationship (Bretherton & Munholland, 1999). These children are apt to portray *negative relational depictions* of alienated or inconsistent caregiving figures in the context of *incoherent* play-narratives. In sum, attachment theory suggests that, beyond affective content, the coherence of parents' narratives may uniquely relate to both preschoolers' portrayal of the relationship *and* their narrative coherence.

While several studies have examined intergenerational congruence between parents' narrative coherence and children's play-narratives (Bretherton et al., 1989; Gloger-Tippelt, Gomille, Koenig, & Vetter, 2010; Goldwyn et al., 2000; Howes et al., 2011; Main et al., 1985; Miljkovitch, Pierrehumbert, Bretherton, & Halfon, 2004; Steele, Hodges, Kaniuk, Hillman, & Henderson, 2003), they remain limited in three important ways. First, they did not control for the links between parents' narrative *affective content* and child narratives. Second, only Bretherton and colleagues (1989) assessed parents' coherence when narrating about their relationship with their child, whereas, other studies have evaluated parents' coherence when narrating about their *own childhood*. Third, only Howes and colleagues (2011) examined relations between parents' coherence and *both* the content and coherence of preschoolers' play-narratives finding that maternal coherence when narrating about her *own childhood* was related to the coherence of children's play-narratives 4 years later, but not to their relationship depiction. Others have assessed children's narrative coherence (Bretherton et al., 1989) *or* affective content (Steele et al., 2003), but not both, or they did not differentiate between the two narrative features (Gloger-Tippelt et al., 2010; Goldwyn et al., 2000; Main et al., 1985; Miljkovitch et al., 2004). Hence, intergenerational associations between mother's coherence when narrating about her child and her child's narrative affective content and coherence warrants further examination.

Narratives in ethnoracial context

Extant research has employed predominantly White European or White American samples, with the exception of Howes and colleagues (2011) who studied Mexican American mothers. Thus, little is known about the generalizability of intergenerational associations between narrative affective content and coherence across ethnoracial minority families.

EE researchers suggest that the meaning of parents' affective content may be culturally specific (Jenkins & Karno, 1992). Negative

parental comments may be especially toxic for children's emerging attributions in White Western cultures, which emphasize independence, goal-achievement, and an internal locus of control (Wamboldt, O'Connor, Wamboldt, Gavin, & Klinnert, 2000). In contrast, among Hispanic and Black mothers, negative affective content may contribute to cultural socialization (e.g., educación; Halgunseth, Ispa, & Rudy, 2006) and/or connote engagement with the child (Rosenfarb, Bellack, & Aziz, 2006), rather than hostility or rejection (Kaugars, Moody, Dennis, & Klinnert, 2007; López et al., 2004). Consistent with these assertions, EE negative affective content does *not* predict psychiatric relapse among Hispanic (e.g., López et al., 2004, but see Aguilera, López Breitborde, Kopelowicz, & Zarate, 2010, for an exception) and Black adults (Moline, Singh, Morris, & Meltzer, 1985). In a study of parent-infant dyads with a large Hispanic subsample, EE negative affective content was *not* related to observed parental sensitivity (Kaugars et al., 2007). Similarly, consistent relations between maternal negative affective content and child adjustment were *not* found in a sample of Black school-aged children (Kwon et al., 2006). Together, these findings suggest that the association between maternal negative affective content and children's less positive portrayal of the relationship could be stronger for White mothers compared to Black and Hispanic mothers.

Given cultural values of interrelatedness, EE researchers also argue that the absence of positive affective content, rather than the presence of negativity, may be particularly salient in Hispanic families (López et al., 2004). Indeed, EE positive affective content relates to decreased relapse rates among Hispanic adults, but not among White adults (López et al., 2004). Therefore, the link between mothers' positive affective content and children's more positive portrayals of the mother-child relationship may be stronger for Hispanic mothers than for White and Black mothers.

Finally, relative to narrative affective content, narrative coherence may have the same developmental meaning across ethnoracial groups because it represents universal features of human language and communication (van IJzendoorn & Bakermans-Kranenburg, 2010). Research on narratives of Hispanic and Black parents supports this view (Sher-Censor & Yates, 2012; Howes et al., 2011; Teti et al., 2008). In summary, ethnoracial variation is expected in relations between the affective content of mothers' narratives and their preschooler's portrayal of the mother-child relationship, but not in associations between mothers' coherence and either their preschooler's portrayal of the mother-child relationship, or the coherence of their play-narratives.

The current study

This investigation was the first to evaluate intergenerational congruence between mothers' narratives regarding the mother-child relationship and their preschoolers' play-narratives about the mother-child relationship as related to *both* affective content and coherence. First, we examined the intergenerational continuity of narrative affective content between maternal negative and positive affective content in the FMSS and preschoolers' portrayal of the mother-child relationship in play-narratives using the MacArthur Story Stem Battery (MSSB; Bretherton, Oppenheim et al., 1990). We hypothesized that less negative affective content and more positive affective content in mothers' FMSS would each be associated with more positive depictions of the mother-child relationship in preschoolers' MSSB play-narratives, but not with their coherence.

Second, this study was the first to evaluate the central proposition of attachment researchers that parents' narrative coherence would uniquely relate to the qualities of children's narratives beyond parents' narrative affective content. Since the FMSS-EE coding assesses only affective content, we employed a new rating system for FMSS-coherence (Sher-Censor & Yates, 2012). We expected that, over and above mothers' negative and positive affective content, their narrative coherence would be associated with preschoolers' portrayal of a supportive mother-child relationship *and* the coherence of their MSSB play-narratives.

Third, we predicted that the association between mothers' affective content and children's portrayals of the mother-child relationship would be moderated by mothers' ethnoracial background. Specifically, we expected that the association between mothers' negative affective content and children's less positive portrayal of the relationship would be stronger for White mothers compared to Black and Hispanic mothers, whereas the link between mothers' positive affective content and children's more positive portrayals of the mother-child relationship would be stronger for Hispanic mothers compared to White and Black mothers. Importantly, we further hypothesized that relations between maternal FMSS-coherence and children's MSSB play-narrative qualities would be consistent across ethnoracial groups.

Method

Participants

The sample was drawn from the first wave of an ongoing study of representation and regulation among 250 preschooler-caregiver dyads. Dyads were excluded from analyses if they were not biological mother-child dyads (8.8%), mothers were from multiethnic or other ethnic backgrounds (5.6%), the child's IQ score was lower than 70 (.01%), the child refused to complete the narrative task (3.2%), or child narratives were not recorded because of technical problems (2.0%). The remaining 198 mothers were Hispanic (59.1%), Black (19.2%), or White (21.7%). All mothers reported English use in the home, and 57.6% reported exclusive English use. Participating children were 49.13 months on average ($SD = 2.8$) and 47.5% were female. Mothers' average age was 30.56 years ($SD = 6.07$) and 84.3% were married or cohabiting. Family socioeconomic status (SES) was assessed using the Hollingshead (1975) Four-Factor Index of Social Status ($M = 32.19$; $SD = 12.35$; e.g., clerical or sales workers).

Procedure

Mothers were recruited to participate in a study of child development via flyers in childcare centers. Exclusionary criteria included children who had a developmental disability, were not 45–54 months of age, and/or were not able to understand English. Dyads completed a 3-hour laboratory assessment. Assessments of mother and child were audio- or video-recorded, respectively. Informed consent was obtained in writing from mothers. Mothers were paid \$75 and children received a small bag of toys worth a total of \$5. Procedures were approved by the University's Human Research Review Board.

Measures

The 5-minute speech sample (FMSS; Magaña et al., 1986). Immediately following informed consent, mothers were asked to speak

for 5 uninterrupted minutes about “what kind of a person your child is, and how the two of you get along.” If the mother stopped talking before the 5 minutes elapsed, the interviewer waited 30 seconds and then prompted her to continue, saying: “Please tell me anything about (child’s name) for a few more minutes.” Four mothers (2%) opted to complete the FMSS in Spanish. Their FMSS were translated to English for coding and back-translated to Spanish by two native Spanish speakers. As in previous cross-cultural works and studies on ethnic minorities (e.g., Kaugars et al., 2007; van IJzendoorn & Bakermans-Kranenburg, 2010), the same FMSS coding systems were employed across ethnorracial groups.

FMSS-expressed emotion (FMSS-EE). In accordance with EE scoring procedures by Magaña-Amato (1993) and adapted for use with parents of young children by Wamboldt and colleagues (2000), each FMSS was transcribed and rated by 3–6 independent coders for negative and positive affective content. Coders then reviewed the FMSS audio to assess critical statements by tone. The coding team included native Spanish speakers who scored the 4 Spanish FMSS. Coders were blind to information about the family and did not train to code FMSS-Coherence. Statements of criticism (e.g., “John is a lazy child”) and milder dissatisfaction (e.g., “I’d rather she was not like that”), a negative initial statement (“We always butt heads”), and descriptions of a negative mother–child relationship (“We have never gotten along”) were composited to yield a weighted *negative affective content* score to capture dissatisfaction as a weak indicator of criticism (i.e., $2 \times \text{criticism} + 1 \times \text{dissatisfaction} + 2 \times \text{negative initial statement} + 2 \times \text{negative relationship}$; ICC = .92; Daley, Renyard, & Sonuga-Barke, 2005). Positive statements (e.g., “She is very smart”), statements of attitude (“I really love him”), positive initial statements (“She is a great girl”), and descriptions of a positive relationship (“We get along very well”) were summed to measure *positive affective content* (ICC = .98; Kaugars et al., 2007).

FMSS-coherence. Coherence coding was based on scales adapted from the Insightful Assessment (Koren-Karie & Oppenheim, 2004). First, transcripts were coded on six 7-point scales that tap elements of coherence, including: *Focus*: discussing the child and/or the mother–child relationship rather than irrelevant topics; *Elaboration*: rich narrative details (e.g., “He likes to help me. He helps me clean the house and he picks up toys in his room”); *Separateness*: portraying the child as unique with characteristics that are separate from the mother (e.g., “She knows how she wants her hair done, so I go along with what she wants”); *Concern*: concerns about the child and/or parenting (e.g., “I feel like I don’t have enough time for her”); *Acceptance*: acceptance of the full range of the child’s behaviors and characteristics (e.g., “She easily bursts into tears. Usually I sit there with her and help her calm down, and then we talk things through”); and *Complexity*: vivid descriptions of the child that are multifaceted and supported by examples from everyday life (e.g., “She is an extremely loving person. Part of being loving is that she tends to be emotional and sensitive, for example . . .”). Second, a global rating of coherence was provided on a 7-point scale that integrated the six previous scales to capture the organization, internal consistency, and authenticity of the narrative. In a coherent FMSS, the mother focused on the child and created a consistent, elaborated, complex, and believable narrative about the child. Incoherent FMSS were characterized by difficulty focusing on the child, inconsistent and contradictory descriptions of the child (e.g., stating that the child is extroverted, but providing an

example that suggests the child is introverted), failure to provide a sense of who the child is, one-sided descriptions of the child as all-positive or all-negative, and/or overwhelming concern.

The first author coded FMSS-coherence, and 24% of the cases were rated by a second coder (ICC_{coherence} = .89). Coders were blind to any other information about the family and did not train to code FMSS-EE. Consistent with prior studies (Oppenheim, 2006), coherence scores were dichotomized to highlight the distinction between coherent and incoherent narratives and deemphasize individual differences within the coherent range (i.e., 5–7) and the incoherent range (i.e., 1–4; Kappa = .83, 90.9% agreement). The validity of the FMSS-Coherence coding system was established in previous work with this same sample, showing that, across ethnorracial groups, preschoolers of coherent mothers evidenced fewer behavior problems than preschoolers of incoherent mothers (Sher-Censor & Yates, 2012).

The MacArthur Story Stem Battery (MSSB; Bretherton, Oppenheim et al., 1990). Children completed 6 stems from the widely-used MSSB procedure (Oppenheim, 2006). Examiners presented typical family situations and conflicts to the child using a family of doll rabbits and invited the child to “Show me and tell me what happens next.” Examiners provided encouragement in accordance with standardized guidelines (e.g., “Does anything else happen in the story?”) and structured queries if the child did not spontaneously address (or apprehend) the main issue of the story (e.g., “What did they do about George’s burned hand?”). The story stems included Spilled juice, Hot gravy, Lost keys, Parental separation, Parental reunion, and Park outing (see Bretherton, Oppenheim et al., 1990 for details). In line with extant studies on ethnorracial minorities (e.g., Toth et al., 2012), the same MSSB coding scales were employed across ethnorracial groups. Coders were blind to information about the family and interrater reliability was calculated across 57.4% cases.

MSSB-portrayal of the mother-child relationship. The child’s depiction of the mother–child relationship in each story-stem was rated on a 5-point *relationship expectation scale* and summed across stories (ICC = .85; Robinson, Mantz-Simmons, Macfie, & the MacArthur Narrative Group, 1992, 1996). At the low end of the scale (1), mothers were portrayed as aggressive, harsh, rejecting or ineffectual (e.g., “Susan said: ‘My tummy hurts,’ and mom said, ‘You are a bad, naughty girl. Go to your room!’”). At the high end of the scale (5), mothers were portrayed as safe, rewarding, and consistent (e.g., “Honey! You did such a great job.”).

MSSB-Coherence. Narrative coherence was rated for each story using an 11-point scale that captured three narrative elements: the fluency of the narrative, the extent to which the child engaged the problem in the story, and the child’s resolution of the problem (ICC = .86; Robinson et al., 1992, 1996). Following Olds and colleagues (2004), we dichotomized the coherence scale to differentiate incoherent narratives (i.e., 0–4) in which the child presented an illogical sequence of events, did not address the problem, and/or did not resolve the problem (e.g., “I don’t know what happens, I don’t know . . . Susan was flying”) from coherent narratives (i.e., 5–10) in which the child depicted an organized sequence of events, addressed the problem and resolved it (e.g., “Mom said: ‘Go to time out.’, then mom said, ‘Okay Susan, you can come eat dinner now.’ Then Susan said: ‘I’m sorry I spilled the juice,’ and they all

Table 1. Descriptive statistics for study variables by child sex and mother's ethnoraical background.

	Child sex		Mother's ethnoraical background			Univariate F/χ^2	
	Male ($n = 104$) $M (SD)/n (%)$	Female ($n = 94$) $M (SD)/n (%)$	Hispanic ($n = 117$) $M (SD)/n (%)$	Black ($n = 38$) $M (SD)/n (%)$	White ($n = 43$) $M (SD)/n (%)$	Child sex	Mother's ethnoraical background
Mother's negative affective content ^a	.36 (.68)	.27 (.51)	.30 (.61)	.44 (.73)	.27 (.46)	.35	.88
Mother's positive affective content ^a	3.89 (3.03)	3.91 (2.88)	3.84 (3.00)	3.95 (2.56)	4.05 (3.20)	.01	.10
Maternal coherence							
Coherent mothers	31 (15.7)	38 (19.2)	36 (18.2)	13 (6.6)	20 (10.1)	2.45	3.44
Incoherent mothers	73 (36.9)	56 (28.3)	81 (40.9)	25 (12.6)	23 (11.6)		
Child's positive portrayal of the relationship ^a	11.04 (4.77)	14.73 (5.54)	12.27 (5.26) ^b	11.63 (5.33) ^b	15.26 (5.48)	22.40 ^{***}	5.51 ^{**}
Number of child's coherent narratives ^a	1.94 (1.45)	3.36 (1.47)	2.54 (1.58)	2.34 (1.53)	3.07 (1.72)	34.15 ^{***}	1.99
Maternal receptive vocabulary	24.21 (5.19)	25.36 (4.43)	23.91 (4.84) ^b	24.84 (4.77)	27.00 (4.39)	.09	6.62 ^{**}
Child IQ ^a	94.35 (12.91)	96.73 (14.02)	93.55 (11.64) ^b	93.51 (13.99) ^b	102.48 (15.50)	1.15	7.67 ^{**}

Notes. ^aUnivariate ANOVA results not shown for child sex \times mother's ethnoraical background due to nonsignificant effects.

^bSignificantly different from White.

** $p < .01$. *** $p < .001$.

ate dinner."; Kappa = .69, 85% agreement). The number of coherent narratives was used for analyses (ICC = .85).

The Shipley-Hartford Institute of Living Scale (SILS; Shipley, 1940). Because differences in the qualities of mothers' FMSS may stem from individual differences in their verbal skills, rather than their representations regarding their child, we assessed maternal receptive vocabulary using the Shipley-Hartford Institute of Living Scale (SILS) vocabulary subscale. The SILS is widely used as a brief assessment of intellectual ability, and has been employed in samples with Black and Hispanic adults (Bowers & Pantle, 1994), including mothers of young children (Camp & Morgan, 1984). Mothers were asked to circle a word with the same meaning as a target word from four possible options. Correct answers were summed over 40 items. The SILS was not administered to the 4 mothers who completed the FMSS in Spanish.

The Wechsler Preschool and Primary Scale of Intelligence – III (WPPSI-III; Wechsler, 2002). Previous works suggest that child IQ is associated with preschoolers' narratives qualities (e.g., Toth et al., 2002). Therefore, we assessed preschoolers' IQ using the Vocabulary and Block Design subtests of the Wechsler Preschool and Primary Scale of Intelligence (WPPSI-III), which yielded an abbreviated assessment of child IQ (Wechsler, 2002). Verbal IQ was assessed using the Vocabulary subtest, including a receptive test in which children aged < 48 months point at pictures to identify orally presented words, and an expressive test in which children aged \geq 48 months verbally explain what orally-presented words mean. Performance IQ was assessed using the Block Design subtest in which children were asked to assemble blocks to match models.

Data preparation and missingness

All data were examined for nonnormality (Afifi, Kotlerman, Ettner, & Cowan, 2007). Maternal negative affective content was positively skewed (skew = 2.53 and kurtosis = 6.10), and square root transformed (skew = 1.63 and kurtosis = 1.31) for these analyses. Data for 12 mothers who did not complete the vocabulary subscale

of the SILS were imputed using the Expected Maximization algorithm in LISREL 8.70 (Jöreskog & Sörbom, 2001).

Results

Preliminary analyses

As shown in Table 1, girls depicted more positive mother-child relationships and had more coherent narratives than boys. Children of White mothers portrayed more positive relationships than children of Hispanic and Black mothers. Children of White mothers also had higher IQ scores than children of Black and Hispanic mothers. As shown in Table 2, higher child IQ was associated with more positive relational depictions and greater coherence in children's narratives. Hispanic mothers earned lower receptive vocabulary scores than White mothers (see Table 1), and, as shown in Table 2, maternal receptive vocabulary was associated with increased maternal narrative coherence and with children's portrayal of more positive relationships. Mothers' age was associated with more maternal negative affective content. Family SES was related to less maternal positive affective content and to children's more positive portrayals of the mother-child relationship (See Table 2). Therefore, we included child sex, maternal ethnoraical background, maternal receptive vocabulary, child IQ, mothers' age, and family SES as covariates in these analyses. Marital status, number of languages spoken in the home, child age, and birth order were not related to the study variables, and thus were not included in further analyses.¹

Intergenerational narrative congruence

At the bivariate level, mothers' negative and positive affective content scores were not associated with children's portrayal of the mother-child relationship or their coherence. However, maternal coherence was associated with *both* children's portrayal of a more positive relationship and with more coherent child narratives (see Table 2).

Two hierarchical regressions, one for child's depiction of the mother-child relationship and one for the number of child coherent narratives, evaluated the intergenerational congruence of mother and child narrative features after controlling for child sex (i.e., male

Table 2. Intercorrelations among study variables ($N = 198$).

Variable	1	2	3	4	5	6	7	8	9
1. Mother's negative affective content	–	–.12	–.22**	–.01	–.02	.06	–.02	.14*	.07
2. Mother's positive affective content		–	.12	–.05	.08	.001	.10	–.01	–.17*
3. Mother's coherence ^a				.19**	.17*	.26***	.09	–.01	.13
4. Child's positive portrayal of the relationship					.56***	.16*	.28***	.03	.16*
5. Number of child's coherent narratives						.09	.30**	–.01	.09
6. Maternal receptive vocabulary							.25**	.04	.38**
7. Child IQ								.21*	.28***
8. Mother's age									.16*
9. Family SES									

Notes. ^a Mother's coherence is coded as follows: 0 = incoherent, 1 = coherent.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3. Regression results of child narratives qualities on maternal affective content and maternal coherence ($N = 198$).

Variables in regression	Child narratives			
	Positive portrayal of the relationship		Number of coherent narratives	
	β	ΔR^2	β	ΔR^2
Block 1		.21***		.27***
Child sex (Male = 0; Female = 1)	.31***		.42***	
Mother's ethnoraical background (non-Hispanic = 0; Hispanic = 1)	.06		.05	
(non-White = 0; White = 1)	.19*		.09	
Maternal receptive vocabulary	.03		–.02	
Child IQ	.19**		.27***	
Mother's age	.00		–.03	
Family SES	.04		–.02	
Block 2		.01		.003
Mother's negative affective content	.01		.03	
Mother's positive affective content	–.07		.05	
Block 3		.02*		.01
Maternal coherence (Incoherent = 0; coherent = 1)	.14*		.13	
Total R^2	.24		.31	
Final model	$F(10, 187) = 5.50***$		$F(10, 187) = 7.46***$	

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

= 0, female = 1), mother's ethnoraical background (i.e., non-Hispanic = 0, Hispanic = 1; non-White = 0, White = 1), maternal receptive vocabulary, child IQ, mother's age, and family SES. Mother's negative and positive affective content scores were entered in the second block, followed by mother's narrative coherence (incoherent = 0, coherent = 1) in the third block. The fourth block included six interaction terms between the three FMSS variables (mother's negative affective content, positive affective content, and coherence) and the two ethnoraical codes (Hispanic versus non-Hispanic and White versus non-White). Continuous predictors were centered to reduce colinearity and facilitate the interpretation of interactions (Kraemer & Blasey, 2004).

Paralleling the bivariate relations, maternal affective content was not related to children's portrayal of the mother-child relationship or the number of child coherent narratives. In contrast, maternal narrative coherence was related to children's more positive portrayals of the relationship; however, after controlling for background variables and maternal affective content, maternal narrative coherence was no longer related to more coherent child narratives (see Table 3). Finally, nonsignificant interaction terms between mother's narrative variables and mother's ethnoraical background (all p 's > .179) are not shown.

Discussion

This is the first investigation of intergenerational continuity in *both* narrative affective content and narrative coherence between mothers and their children. Across ethnoraical groups, mothers' narrative coherence, but not their narrative affective content, was related to their preschooler's narrative portrayal of a positive mother-child relationship and to the coherence of their play-narratives, though the latter relation became non-significant when controlling for family background variables. Although the effect sizes of our findings were small (Cohen, 1992), they suggest that mothers who narrated fluently and provided a complex, yet clear, well-integrated, and authentic portrayal of the mother-child relationship were more likely to have a preschooler who portrayed the mother as responsive and supportive. Children of incoherent mothers (i.e., mothers who provided a meager, idealized, negative, concerned, and/or inconsistent narrative) depicted a less positive mother-child relationship.

These findings are consistent with prior research showing that mothers' coherence when narrating about their own childhood experiences was associated with their child's narration qualities

(e.g., Bretherton, Ridgway et al., 1990; Howes et al., 2011). Yet our study extends prior works in two important ways. First, we systematically assessed *both* affective content and coherence in the narratives of mothers *and* their preschool-aged children. Our findings demonstrate that *only* mothers' narrative coherence, and not their affective content, related to the affective content of child narratives. Second, our study suggests that this link can be generalized to Hispanic and Black families.

The lack of association between mothers' and preschoolers' narrative affective content may follow from necessary differences in how narratives are collected from adults versus young children. Mothers narrated about the child and their relationship using the FMSS, whereas children completed story-stems about hypothetical family interactions in the MSSB. Although story completion techniques are developmentally appropriate and empirically validated for research with preschoolers (Oppenheim, 2006), asking young children to provide exclusively verbal narratives about the mother-child relationship and/or administering new story-stems that are limited to mother-child interactions may have revealed greater congruence between the affective content of mothers' and children's narratives. Indirect support for this proposal comes from a study by Marshall and colleagues (1990), which found intergenerational congruence in narrative affective content using the FMSS with parents and their older, school-aged children.

While parent-child congruence in narrative affective content may emerge over time and/or with consistency in assessment strategy, our findings bolster arguments made by attachment researchers who suggest that the coherence of mothers' narratives about their child is a stronger indicator of mothers' representations and information processing, and consequently uniquely relates to the qualities of child narratives beyond mothers' narrative affective content (Oppenheim, 2006). The same flexible information processing that engenders narrative coherence may facilitate a mother's accurate and sensitive responding to her child, her open communication about emotionally laden experiences, and her ability to scaffold her child's emergent capacity to make meaning of her/his emotional experiences (Main et al., 1985; Oppenheim, 2006). Together, these maternal behaviors may influence preschoolers' internalized expectations regarding the mother-child relationship. The broader investigation of which this study is a part will evaluate these processes by examining prospective links between mothers' narrative qualities, observed mother-child interaction patterns in structured teaching tasks and semi-structured emotion dialogues, and children's narrative qualities as revealed in play and, at later time points, verbal narration.

We expected that mothers' ethnic/racial background would moderate the links between narrative affective content of mothers and their preschoolers. However, the non-significant intergenerational associations in narrative affective content were consistent across ethnic/racial groups. Since there were fewer Black and White mothers compared to Hispanic mothers in our sample, the unequal group sizes may have limited our power to detect differences in these patterns of associations. Studies with balanced and larger groups of families from each ethnic/racial background are needed to further evaluate this hypothesis. Narrative studies of ethnic/racial minorities may also benefit from exploring the effects of acculturative processes, which were not examined here.

Attachment theory suggests that parents' representations influence parenting and, by extension, the parent-child relationship (Bowlby, 1988). Similarly, children's representations likely guide child behavior, which reciprocally influences parents' attributions and information processing regarding the relationship (Sameroff,

2009). Planned extensions of this study will allow us to address directional hypotheses regarding transactional relations among mother and preschooler narrative qualities that could not be addressed in this cross-sectional study.

Additional limitations of our study point to areas for growth. First, narrative research may benefit from exploring relationships beyond the mother-child dyad, particularly father-child relationships. Second, while the affective content and coherence of maternal narratives were assessed by different coders, preschoolers' relational portrayals and narrative coherence were evaluated by the same coders. Although this approach is typical in child narrative studies (e.g., Howes et al., 2011), future studies may benefit from employing separate coding teams for each aspect of preschoolers' narratives.

Our results suggest that, as early as the preschool years, the qualities of children's narratives about close relationships are meaningfully related to those of their mothers. Many prevention and intervention programs seek to promote the emotional quality of the mother-child relationship, and still more rely on mothers' descriptions of the child and the relationship during diagnosis and therapy. Our study joins prior works (e.g., Bretherton et al., 1989) that highlight the importance of attending to a mother's coherence when talking about her child because it may serve as a valid indicator of the mother's representation of her relationship with the child and, in a complementary fashion, of the child's representation of the mother-child relationship.

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Note

1. Potential differences may exist in mothers' verbal productivity during the FMSS. Because the scoring of FMSS affective content is based on counting affective utterances, speaking more during the FMSS could contribute to higher scores on the affective content scales. The amount that mothers speak may also relate to their narrative coherence because one of the operationalizations of incoherence is having little to say about the child and providing meager descriptions of her/him. Indeed, we found that mothers' FMSS word counts were associated with more FMSS negative affective content ($r = .20, p = .005$) and with increased narrative coherence ($r = .26, p < .001$). However, higher word count was not associated with demographic variables, except for family SES ($r = .18, p = .010$) and marital status ($t[196] = -2.83, p = .005$, i.e., married or cohabiting mothers spoke more than single, divorced, or widowed mothers). Importantly, however, FMSS word count was *not* related to mothers' ethnic/racial background ($F[2, 195] = 2.14, p = .121$), nor to maternal receptive vocabulary ($r = .10, p = .167$), suggesting that the amount mothers spoke during the FMSS may reflect emotional processes rather than English proficiency or cultural norms. Moreover, the word count of mothers' FMSS was not related to their preschoolers' relationship depictions ($r = .02, p = .778$) or coherence ($r = -.003, p = .969$) in their MSSB narratives. Because word count is substantively related to the operational definition of narrative incoherence, and given the pattern of associations between FMSS

word count and other study variables, we did not include word count in our analyses.

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