

# The Transmission of Birth Stories from Mother to Daughter: Self-Esteem and Mother–Daughter Attachment

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**Abstract** Sixty-two daughters provided narratives of their births and completed measures of self-esteem and mother–daughter attachment. Thirty-three of their mothers provided independent accounts of the births. Daughters who had heard the stories of their births more times wrote more descriptive and positive accounts and showed higher self-esteem and stronger attachment to their mothers than daughters who had heard the stories less often. Positivity of the mothers' narratives was correlated with daughters' self-esteem while descriptiveness of the mothers' narratives was correlated with daughters' levels of mother–daughter attachment. Raters blind to the identity of mothers and daughters made more successful matches between mothers' and daughters' stories for daughters with higher self-esteem and attachment.

**Keywords** Birth stories · Narrative identity · Self-esteem · Mother–daughter attachment

At the core of identity formation are the narrative memories that we recall from our lives (McAdams, 2001; Singer, 2004). We tell these narratives about ourselves in order to express and define who we are (Nelson, 2003). Not only do narrative memories provide a medium for self-expression and identity formation, but they also offer a way to make sense of the events in our lives. A narrative's structure can provide order, coherence, and meaning to life experiences (McAdams, 1993; Miller, 2000; Nelson, 1988; Pasupathi, 2001; Singer, 2004; Somers, 1994; Stanley, 1993; Thorne, 2000). McAdams's (1985, 1993, 1996) life story model of

identity asserts that we assemble these various narrative memories into a larger life narrative that provides us with a sense of overall unity and purpose. If narrative construction plays a critical role in individuals' sense of identity, one significant component of this unfolding narrative would be how individuals understand the origins of their own lives. The following investigation examines the role of these narratives—what researchers call *birth stories*—in the identity formation of college-aged women.

A birth story is a story that a mother tells about the events of her child's birth. The narrative may include factual utterances, such as the time and place of the birth, or interpersonal utterances, such as references to family members or to the child itself (Reese, 1996). Mothers may tell these stories to their children to provide them with a sense of pride and family unity, as well as to share feelings of love, awe, and bonding between mother and child. Because mothers and daughters share the capacity to give birth, the transmission of such a story from mother to daughter is of particular interest.

The creation and subsequent transmission of the child-birth narrative from mother to daughter raises the following questions: How do the affective and descriptive qualities of the story of one's birth link to the emerging self-concept of daughters who have recently begun the process of forging their own life stories (Habermas & Bluck, 2000)? And how does this story, as shared between mother and daughter, reflect the daughter's level of attachment to her mother?

## Creating the Childbirth Narrative

Childbirth is rife with a variety of meanings, some unique to each woman, and some shared universally. The creation of a childbirth narrative allows women to process the implications of giving birth, as well as to incorporate the

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experience into their newfound identities as mothers (Corradi, 1991; Smith, 1994). Women may create childbirth narratives as a way of ritualizing their experiences and making memories of particular personal meaning and even spiritual awakening (Soparkar, 1998).

The creation of a childbirth narrative helps to provide a framework for understanding the changes in identity brought on by giving birth and becoming a mother (Miller, 2000). Because childbirth has both personal and public significance, the ways in which women create narratives to reconcile their experiences will be affected by both their own expectations and the expectations of others (Somers, 1994). Telling her birth story may be especially important for a woman who has had a disappointing or traumatic experience (Johnston-Robledo & Barnack, 2004). A comparison of women's contemporaneous and retrospective accounts of the transition to motherhood revealed that, 9 months after the birth of their children, these women had changed certain aspects of their stories in order to present a particular picture of themselves to themselves and to others (Smith, 1994). The participants employed reconstructive devices such as glossing over difficulties in order to emphasize personal growth and downplaying change in order to highlight continuity of self.

The factual details of the birth story are stored in the mother's mind at the moment her child is born; however the emotional significance of the story will change somewhat by the child's first birthday (Soparkar, 1998). The meaning of significant emotional events develops over time as individuals reflect on the story's personal importance as well as share the story with others to glean their reactions (Thorne, 2000). As mothers process the meaning of the birth, some factual elements are lost. The emotional elements that are retained and reinforced by the intensity of feeling invoked by their recollection over time become the salient aspects of narrative account. Individuals are indeed most likely to remember events in their lives that were atypical, disruptive, and highly emotional (Thorne, 2000). Giving birth, of course, fits that description. As a testament to the significance of giving birth, women remember accurate factual and emotional details about their birth stories 15 to 20 years afterward (Soparkar, 1998).

### Telling/Retelling of the Narrative

Women tell the story of their children's births for a variety of reasons (Soparkar, 1998). First, telling provides a woman with the opportunity to be the heroine of her own story. Second, women may tell the story to dispel their disbelief relative to the birth. According to Soparkar (1998), the intensity, chaos, and pain that accompany childbirth can make the event seem surreal in retrospect. Retelling may be

a way of confirming the reality and tangibility of these life-altering events. Third, women may tell the story in an attempt to transport themselves back in time to relive the moments of triumph and elation, particularly if their birth experience was a happy one.

Women often share their childbirth narratives with their children, once the children have grown old enough to be able to understand the stories. Parent-child conversations provide a format in which a child learns how to retrieve autobiographical memories (Fivush & Hudson, 1990; Nelson & Fivush, 2004). Parents of both genders tell more elaborative stories about the past to their daughters than to their sons (Reese & Fivush, 1993). Furthermore, mothers talk more about emotions, and mention more types of emotion, to daughters than to sons (Kuebli & Fivush, 1992). In telling more detailed and emotional accounts of past events to their daughters, mothers are teaching their daughters about what is important and self-defining in women's lives.

Reese (1996) analyzed the content of birth stories told by 35 women to their young children. Analysis of the birth stories revealed that they were highly interpersonal stories. Most of the mothers' talk was focused on the child or the child in relation to other people. An analysis of the content of the stories by age and gender of the child revealed that the mothers of daughters and younger children focused on interpersonal aspects of the story, whereas mothers talking to sons and older children told more child-focused stories. Reese posited that perhaps daughters are socialized from the time they are very young to see themselves in the context of family and friends, whereas sons are raised to be independent and self-sufficient. Although Reese studied young children's interactions with their mothers around the telling of their birth stories, no prior study has looked at late adolescents' and young adults' internalization of their mothers' stories of their births. Given that late adolescence is a critical time in the launching of one's first coherent life narrative (Habermas & Bluck, 2000), it would be highly informative to examine the nature and role of birth narratives in young adult daughters' emerging sense of identity.

### The Internalization of the Narrative by the Daughter: Daughter's Self-Esteem and Mother-Daughter Attachment

Once a mother has shared the birth story with her daughter even once, the daughter may internalize the story and make it her own. A child's appropriation of such a narrative provides clear evidence of the transition of the narrative from biography to autobiography (Reese, 1996; Thorne, 2000). The birth story's origin as a reported story makes it no less important in its place in the life story of an individual (Reese, 1996). In fact, it is possible that reported stories that have been

incorporated into an individual's life story have an effect on the individual's self-concept equal to that of actual memories.

Previous research has not addressed whether the internalization of childbirth narratives might be linked to children's self-esteem. In the present study we examined the relationship between self-esteem and the internalization of the birth story by late adolescent (college-aged) daughters. The relationship between the degree of positivity of the mothers' actual narratives and the daughters' self-esteem was examined as well. How the mother feels about her daughter may be reflected in how the mother characterizes those first moments that they bonded together; these feelings as expressed in the birth story may then be linked to how the daughter currently feels about herself. The affective tone that the mother uses to frame her narrative when telling it to her daughter may be internalized by the daughter and may be one of several early experiences that contribute to the daughter's overall self-esteem.

The mother–daughter relationship has been emphasized across the literature as the first major relationship that a daughter has (Charles, Frank, Jacobson, & Grossman, 2001; Chodorow, 1978, 2002; Kitamura & Muto, 2001; Klockars & Sirola, 2001). Infancy is the key period during which mother–daughter attachment bonds take shape (Klockars & Sirola, 2001; Poehlmann & Fiese, 2001; Teti, 2000). Mothers and daughters who form secure bonds early on reap many psychological benefits (Klockars & Sirola, 2001). A daughter's level of attachment to her mother may affect how she views childbirth and motherhood in general. Although the importance of the mother–daughter relationship has long been established, the relationship of mother–daughter attachment and childbirth narratives has not been studied. The internalization of this narrative clearly reflects a way of imagining one's entry into the world and the kind of reception this arrival received. Further, for daughters it provides an image of how a vital role in womanhood is enacted and experienced emotionally by the primary role model in their lives. For these reasons, along with other important memories from childhood, it might be linked not only to self-esteem, but also maternal attachment, reflecting both its commentary on the offspring's sense of self-worth *and* the integrity of the mother–child bond. In the present study we examined the relationship between the internalization of the childbirth narrative by daughters and the strength of the daughters' attachment to their mothers.

## The Present Research

In order to study the relationship between birth stories and daughters' self-esteem and attachment to their mothers, we devised a project with two complementary elements. The first part was to collect daughters' stories of their own births

in order to explore the relationship of their stories to self-esteem and attachment to their mothers.

It was also of interest to examine whether there would be a correspondence between the daughters' stories and the birth stories written by their mothers. Additionally, we examined whether there would be any relationship between the qualities of the mothers' narratives and daughters' reported self-esteem and attachment to their mothers.

To accomplish this, we conducted two waves of data collection: one focused on daughters, and the other focused on mothers. For clarity, these will be presented as two separate studies.

## Study 1

### Design and hypotheses

In the first study, we sought to explore the relationship between a young woman's self-esteem and attachment to her mother and the narrative she wrote about her own birth, based on the information her mother had told her about this event. The Rosenberg self-esteem scale (Rosenberg, 1965) and adult attachment scale (Cicirelli, 1995) were administered, in addition to a birth story narrative prompt with accompanying questions that were generated for this study.

We expected that the daughters who signed up for this study would be able to provide brief narrative accounts of their birth based on versions provided by their mothers. It was hypothesized that (1) daughters who had heard the story of their births *more times* would show higher self-esteem and stronger attachment to their mothers than would daughters who had heard the story less often, and that (2) *longer, more descriptive, and more positive* stories would be associated with higher self-esteem and stronger mother–daughter attachment.

### Method

**Participants** The participants were 61 women at a small liberal arts college in the Northeast. Fifty-four of the women were European–American, two were African–American, one was Caribbean–American, one was Portuguese–American, one was Hispanic, and two indicated “Other”. The women ranged in age from 18 to 26 years, with a mean age of 19.59. All of the participants had been raised by their biological mothers. None of them had ever witnessed a live childbirth. Fifty-seven of the 61 participants were able to recount a story of their birth; 56 of them named their mother as the primary source who had told them the story.

**Measures** Participants completed the Rosenberg self-esteem scale (1965). They rated each of the ten items on

a Likert scale from 1 (Strongly Disagree) to 4 (Strongly Agree). Sample items include “I am able to do things as well as other people” and “I certainly feel useless at times.” This scale is one of the most widely used measures to assess self-esteem. Internal reliability (Cronbach’s  $\alpha$ ) in this sample was 0.89.

Participants also completed the adult attachment scale (Cicirelli, 1995), a measure of mother–daughter attachment, which is divided into four subscales that measure reunion, separation, love, and security. The 16 item inventory is scored on a Likert scale from 1 (Strongly Disagree) to 4 (Strongly Agree). A sample reunion item is “I feel a sense of joy to be with my mother again after we have been separated for a while.” A sample separation item is “The thought of losing my mother is deeply troubling to me.” A sample love item is “When I am with my mother I feel I am with someone I can trust completely.” A sample security item is “When I am alone and anxious, my mother is the first person I think of.” Internal reliability was calculated for the four subscales as well as the total mother–daughter attachment scale. Internal reliability (Cronbach’s  $\alpha$ ) for the total scale was 0.94, for reunion 0.94, for separation 0.82, for love 0.89, and for security 0.91. In a sample of adult daughters and their elderly mothers, Cicirelli found that higher levels of attachment were positively correlated with love, trust, and hours spent caring for the mothers.

The participants were then given the birth stories questions and narrative prompts, which instructed them to write a narrative of the story of their birth. In addition to providing a written account of their birth story, they were asked various questions, including whether their mothers had shared their birth stories with them many times, a few times, or never, the primary source from whom they had heard the story of their births, whether or not they had been raised by their biological mothers, and whether or not they had ever witnessed a childbirth.

**Procedure** Participants were recruited through class announcements, a posting in the psychology department that advertised the research as a study about “birth stories” that involved self-report questionnaires and a writing task, and through convenience methods in which friends and acquaintances of the first author were told about the study and invited to participate. All participants were first instructed about their option to give their mother’s name to be contacted as a potential participant in Study 2. The participants were forewarned not to discuss the study with their mothers if they wished them to participate. The participants read and signed the informed consent form and then completed the adult attachment scale, the Rosenberg self-esteem scale, the birth story narrative questions and prompts, and the demographics questions. After the participants had completed the materials they were thanked and

debriefed. The participants had the choice of three prompts to which to respond. The narrative prompts read as follows:

“My mother has told me the story of my birth and it goes something like this...” or, “I do not remember my mother ever telling me my birth story, but I do know the following details of my birth...” or, “I do not know any information regarding the circumstances of my birth. I would guess that my mother and I have never talked about this because....”

The narratives were coded on the following variables: *descriptiveness*, *positivity*, and *negativity*. The *descriptiveness* of the narratives was rated on a scale of 0–3, such that 0=no information at all (participants who indicated that they had never been told the story of their birth), 1=minimal information (a story that included only time, place, and other basic factual details), 2=more specific details (a story that had some story-like qualities, such as attention to chronology, or reference to characters other than the mother, and included interpersonal information as well as factual details), 3=rich in detail (a more elaborative story that included factual and interpersonal details, followed a clear sequence of events, and may have included humor or reference to a family anecdote regarding the birth). Two student raters were trained in the coding details by reading through the coding protocol and then practicing on pilot data.

The *positivity* of the narratives was rated on a scale of 0–3, such that 1=few or no positive elements, 2=some positive elements, and 3=a great deal of positive elements. The stories were assigned a positivity rating of “0” if the participant did not write about her birth. Positive elements were defined as the mention of any positive words, such as “happy, joy, smiling, humor, or joke.”

The *negativity* of the narratives was rated on a scale of 0–3, such that 1=few or no negative elements, 2=some negative elements, 3=a great deal of negative elements. Again, the narratives of participants who wrote about something other than their own births were assigned a negativity rating of “0.” Negative elements were defined as the mention of words such as “painful, frightened, anxious, disappointment, complications, or struggle.”

The inter-rater agreement for descriptiveness of the narratives was 0.78 (kappa=0.48), for positivity 0.84 (kappa=0.69) and for negativity 0.78 (kappa=0.59).

## Results

The means and standard deviations for the daughters’ scores on the self-report measures are presented in Table 1. The birth stories ranged in length from 23 to 351 words, with a mean of 109.90 words. The majority of the daughters indicated that their mothers had told them the story of their

**Table 1** Descriptive statistics of self-report measures ( $n=57$ ).

Measure	Mean	Standard deviation
1. M–D attachment total	49.37	10.49
2. M–D reunion	13.13	2.93
3. M–D separation	11.59	2.67
4. M–D love	13.43	2.77
5. M–D security	11.22	3.05
6. Self-esteem	31.77	4.71

M–D Mother–daughter.

births a few times ( $M=2.02$ ). Eight of the participants indicated that they had never been told the story of their births. Overall, the stories written by the daughters were somewhat descriptive ( $M=1.85$ ); however they did not include very many positive ( $M=1.39$ ) or negative ( $M=1.46$ ) elements. Stories that were rated as more descriptive also contained more affective information (positive  $r=0.52$ ,  $p<0.001$ ; negative  $r=0.39$ ,  $p<0.01$ ). Most importantly, daughters who had heard their birth stories more times wrote significantly more descriptive ( $r=0.45$ ,  $p<0.001$ ) and more positive ( $r=0.32$ ,  $p<0.01$ ) accounts than did daughters who had heard the story fewer times.

The first hypothesis was that daughters who had heard the stories of their births more times would have higher self-esteem and stronger levels of mother–daughter attachment. In support of the first hypothesis, there was a significant correlation between the number of times the daughters reported having heard the stories of their births and their levels of self-esteem; daughters who had heard the stories of their births more often tended to show higher self-esteem than did those who had heard the stories less often (see Table 2). The first hypothesis was also supported by a correlation between the number of times the daughters had heard the birth story and their levels of mother–daughter security, which was a subscale of the mother–daughter attachment scale (AAS; see Table 2). There were no significant relationships with any of the other subscales of the AAS or the total AAS scores.

**Table 2** Correlations of daughters' narrative variables ( $n=61$ ) and daughters' self-report measures ( $n=57$ ).

Scale	BS #	DES	POS	NEG
M–D total	0.23	0.30*	0.14	0.16
M–D reunion	0.15	0.28*	0.12	0.09
M–D separation	0.22	0.29*	0.11	0.20
M–D love	0.14	0.24	0.13	0.06
M–D security	0.32*	0.31*	0.15	0.23
Self-esteem	0.27*	0.32*	0.26*	–0.07

M–D Mother–daughter, BS # frequency (many times, a few times, never) daughter indicates mother has told her the story of her birth, DES descriptiveness, POS positivity, NEG negativity.

\* $p<0.05$ .

The second hypothesis was that daughters who wrote longer, more descriptive, more positive stories would have higher self-esteem and stronger mother–daughter attachment than those who wrote shorter, less descriptive, or more negative stories. In support of the second hypothesis, the descriptiveness of the daughters' narratives was significantly correlated with the daughters' self-esteem, total score of mother–daughter attachment, and scores on the subscales of mother–daughter reunion, separation, and security (see Table 2). The descriptiveness of the narratives and the love subscale of the AAS approached significance,  $p=0.06$ . Also in support of the second hypothesis, the positivity of the daughters' narratives was significantly correlated with the daughters' levels of self-esteem. Contrary to expectation, however, the positivity of the daughters' narratives was not correlated with any of the mother–daughter attachment variables.

### Discussion of study 1

The goal of Study 1 was to investigate the relationship between the narratives that daughters wrote to recount the story of their own births and their measures of self-esteem and attachment to their mothers. The majority of the hypotheses were supported.

Daughters who had heard the stories of their births more times displayed higher self-esteem and also indicated more secure relationships with their mothers. The more frequently told stories were rated as more descriptive and positive in nature. One possible explanation for these results is that mothers were more likely to share positive, rather than neutral or negative, elements of the birth with their daughters, thus slanting the account of the story that the daughter heard in a positive direction. It is also possible that more positive stories were more likely to be replayed and internalized by daughters who had begun to forge their own affirming life narratives.

As Smith (1994) showed, women are likely to gloss over difficulties when reminiscing about the birth of their child in order to emphasize their own personal growth. Birth stories are the stories of how one's children came into the world, and so the telling of this story implies that the birth, and the person who was born, are important to the teller of the story. Perhaps daughters who had heard the stories of their births more often felt more secure about their relationships with their mothers as a result of the sharing and communicative nature of the relationship shared by the mother and daughter. It could also be that daughters who felt a more secure relationship with their mothers may have been more likely to engage in intimate and mutually self-disclosing conversations with them. These exchanges, based on a supportive foundation, might include discussions of the daughter's birth and the mother's feelings and actions during that landmark event in both of their lives.

The second hypothesis, that longer, more descriptive, more positive stories would be associated with higher self-esteem and mother–daughter attachment, was also partially supported. Daughters who wrote more descriptive stories had higher self-esteem and higher mother–daughter attachment. Daughters who knew more about their births and thus were able to generate more descriptive stories may have had higher levels of self-esteem and mother–daughter attachment because such increased knowledge about how they came into the world and about the act of birthing, which is an intimate act between mother and child, led to a more positive self-acceptance, as well as a feeling of increased closeness with their mothers. Alternatively, daughters with high self-esteem and strong attachments to their mothers may have engaged in more in-depth discussion about the daughter’s birth, thus allowing for a more elaborate and affectively rich story to emerge over time.

Daughters whose stories were high in positivity had higher self-esteem; however there was no effect for mother–daughter attachment. The positivity reflected in a daughter’s narrative about her birth, considering that everything she knows about her birth has been told to her by others (Reese, 1996), may be associated with higher self-esteem because the positivity of the daughter’s own narrative is a reflection of the positive elements included in the narrative that was told to her. It follows that hearing a positive story about one’s coming into the world would lead to positive feelings about oneself, as the opposite was established by Wrye’s (1996) finding that very negative birth stories have the potential to lower an individual’s self-esteem significantly. On the other hand, individuals who are currently feeling good about themselves may be prone to recall the more positive, as opposed to negative, features of all narratives from their lives, including the more positive elements from their birth narrative.

The findings of Study 1 showed a clear connection between the narratives that daughters wrote about their own births and their self-esteem and attachment to their mothers. Considering that all but one of the participants of Study 1 named their mothers as the primary sources who had told them the stories of their births, an examination of the narratives written by their mothers about the same event would be particularly relevant.

## Study 2

### Design and hypotheses

In Study 2 we examined narratives written by mothers about their daughters’ births, in conjunction with the narratives that were collected from their daughters in Study 1, in order to

explore the transmission of the birth story from mother to daughter.

It was hypothesized that (1) mothers who wrote more descriptive and more positive birth stories would have daughters with higher self-esteem and who reported a higher degree of attachment to their mothers than would mothers who wrote less descriptive and less positive birth stories, and (2) the birth stories written by daughters with higher self-esteem and stronger attachment to their mothers would contain more similar elements to their mothers’ narratives of their births.

### Method

*Participants* The participants were 33 women who were invited to participate because their daughters participated in Study 1. Thirty-two of the participants were European–American and one was African–American. The women ranged in age from 38 to 59 years. Their mean age was 48.10. Two had a high school education, 4 had some college education, 16 were college graduates, 8 had master’s degrees, and 2 had doctoral degrees. The participants had given birth between one and four times; the mean number of times they had given birth was 2.39. Nine of the participants indicated that they had had complications during their childbirth experiences; they mentioned difficulties such as painful back labor, inducement, a high-risk multiple birth, emergency C-section, profuse bleeding during C-section, placenta previa, and minor birth defects.

*Measures* The participants were asked to complete the birth story questions and narrative prompts, which asked them to write a narrative account of their daughter’s birth and to indicate whether they had told their daughters the stories of their birth many times, a few times, or never. The participants were also asked several demographics questions and questions about their childbirth experiences, such as the nature of any complications and their method of childbirth preparation, if any.

*Procedure* Seventy-eight percent ( $n=48$ ) of the daughters who participated in Study 1 provided their mothers’ names and a way to contact them so that they could be invited to participate in Study 2. The mothers received the survey via mail or e-mail, depending on which method their daughters had indicated was most convenient. The women who received the survey via mail received a cover letter that explained the aims of the study and the importance of their participation. They also received a packet that consisted of the informed consent form to be signed and returned, the birth story questions and narrative prompts, and the demographics questions. The women who received the same materials via e-mail also received instructions on how to

open the file attachment and how to indicate their answers to survey questions by bolding their responses. Sixty-nine percent of the mothers who were contacted and invited to participate in Study 2 returned their materials.

The mothers' narratives of their daughters' births were coded on the same three variables as in Study 1: *descriptiveness*, *positivity*, and *negativity*. Because all of the mothers reported at least some information about their daughters' births, there were no "0" ratings in Study 2. The inter-rater agreement for descriptiveness of the mother's stories was 0.82 ( $\kappa=0.58$ ) for positivity 0.70 ( $\kappa=0.51$ ) and for negativity 0.79 ( $\kappa=0.50$ ).

The narratives of the daughters whose mothers had participated in Study 2 were grouped with the mothers' narratives for additional analysis. The content of the mothers' and daughters' narratives was coded under the following seven categories: preparation, during labor, the birth itself, mothers' feelings, factual details, interpersonal details, and anecdote. The categories were devised from the overall content of the stories collected in Study 1 and Study 2 and from Soparkar's (1998) analysis of mothers' oral childbirth narratives. Preparation included setting the scene of the story, the mother's first signs of labor and going to the hospital or setting up for a home birth. The during labor category included information about pain, pain management, cervical dilation, inducement, length of labor, pushing, who delivered the baby, and medical intervention (such as the use of forceps). The mothers' feelings category addressed the mothers' feelings at the time of their daughters' births. The interpersonal details category consisted of any mention of people, such as the baby's father, other relatives, or friends, in the story. The anecdote category addressed the mention of any aspect of the birth story as an anecdote in the family.

Three independent raters who were blind to the aims of the study matched the mothers' and daughters' stories to each other based on any similar details in the stories. To complete this process, the stories were typed onto index cards and randomly assigned letters; mothers' stories were color-coded red and daughters' were blue. The raters were instructed to match each daughter's story to the story they believed was written by her mother. The average percentage of agreement among the raters was 83.3%.

## Results

The mothers' birth stories were longer and more descriptive than the stories collected from their daughters in Study 1. The mothers' reported number of times that they had shared their story with their daughters matched the daughters' estimates ( $M=2.18$ ,  $r=0.45$ ,  $p<0.01$ ). The mothers' stories ranged in length from 47 to 1,300 words; the mean length was 375.42 words.

The mothers' narratives were highly descriptive ( $M=2.67$ ). They also contained a greater number of both positive ( $M=1.94$ ) and negative ( $M=1.76$ ) statements than did their daughters' narratives. Unlike Study 1, in which the daughters' narrative variables were correlated with each other, there were no significant intercorrelations among any of the mothers' narrative variables. Also in contrast to Study 1, in which there was a correlation between the number of times the daughters reported their mothers had told them the story of their birth and the descriptiveness and positivity of the daughters' own versions of the birth stories, there was no relationship between the frequency with which the mothers reported telling their daughters the stories of their births and the mothers' narrative variables.

The narrative variables of the mothers' and daughters' narratives were significantly related to each other. There was a correlation between the descriptiveness of the daughters' stories and the number of times their mothers indicated having told the stories to them ( $r=0.44$ ,  $p<0.01$ ). The positivity of the daughters' stories was correlated with the positivity of the mothers' stories ( $r=0.46$ ,  $p<0.01$ ). Likewise, the negativity of the daughters' stories was correlated with the negativity of the mothers' stories ( $r=0.52$ ,  $p<0.01$ ). There was no correlation between the descriptiveness of the daughters' stories and the descriptiveness of the mothers' stories.

There were significant correlations among the mothers' narrative variables and the daughters' self-report measures (see Table 3). There was a significant correlation between the descriptiveness of the mothers' narratives and the daughters' total levels of attachment to their mothers ( $r=0.37$ ,  $p<0.05$ ); mothers who wrote more descriptive narratives had daughters who indicated higher levels of attachment. The daughters' scores on the subscales of reunion and love on the mother–daughter attachment scale were significantly correlated with the descriptiveness of the mothers' narratives as well ( $r=0.52$ ,  $0.44$ ,  $p<0.01$ , respectively). The positivity of the mothers' narratives was significantly correlated with the daughters' levels of self-esteem ( $r=0.42$ ,  $p<0.01$ ) and their scores on the mother–daughter reunion subscale of the AAS ( $r=0.39$ ,  $p<0.05$ ). There were no significant relationships between the negativity of the mothers' narrative variables and the daughters' self-report measures.

Table 4 presents the percentages of mothers' and daughters' narratives that mentioned details under each content category. Mothers and daughters were approximately equally as likely to include interpersonal details and to make reference to a family anecdote in the narratives that they wrote, whereas slightly more mothers' narratives included factual information than did the narratives written by their daughters. Mothers' narratives contained more information about their preparation for the birth and events during labor than did daughters' narratives, as well as more depic-

**Table 3** Correlations among daughters' self-report measures ( $n=57$ ) and mothers' narrative variables ( $n=33$ ).

DSRM	MDES	MPOS	MNEG
Self-esteem	0.32	0.42**	-0.08
M-D total	0.37*	0.32	0.09
M-D reunion	0.52**	0.39*	0.13
M-D separation	0.17	0.27	0.09
M-D love	0.44**	0.25	0.03
M-D security	0.20	0.23	0.05

*DSRM* Daughters' self-report measures, *MDES* descriptiveness of mothers' narratives, *MPOS* positivity of mothers' narratives, *MNEG* negativity of mothers' narratives, *M-D* mother-daughter.

\* $p < 0.05$ .

\*\* $p < 0.01$ .

tions of their feelings throughout the entire process. The majority of mothers' and daughters' narratives contained specific information about the birth itself.

A regression was conducted with daughters' self-esteem as the dependent variable and mothers' narrative descriptiveness, mothers' narrative positivity, daughters' narrative descriptiveness, and daughters' narrative positivity as the predictor variables. The overall regression was significant,  $R=0.58$ , adjusted  $R=0.33$ ,  $F(4, 27)=3.38$ ,  $p < 0.05$ . Mothers' narrative positivity,  $\beta=0.42$ ,  $p < 0.05$ , and daughters' narrative descriptiveness,  $\beta=0.39$ ,  $p < 0.05$ , were significant predictors of self-esteem.

The three independent raters were able to match 17, 19, and 24, respectively, of the total 33 mothers' narratives to their daughters' narratives. For the purpose of analysis, the pairs of mother-daughter stories were considered "matched" if two or three of the raters had been able to match the mother's and daughter's versions of the birth story together. The stories were labeled "not a match" if none or only one of the raters had been able to match the daughter's story to her mother's.

A one-way MANOVA, with whether or not the raters were able to match the mothers' and daughters' stories to

**Table 4** Content of daughters' ( $n=33$ ) and mothers' ( $n=33$ ) birth story narratives in percentages.

Category	Daughters (%)	Mothers (%)
Preparation	29.3	78.8
During labor	11.0	28.8
The birth itself	63.6	75.8
Mothers' feelings	24.2	66.7
Factual details	25.3	33.4
Interpersonal details	60.6	62.2
Anecdote	24.2	21.2

each other as the between subjects factor and the number of times the daughters reported that their mothers had told them the stories of their births and the number of times the mothers reported that they had told their daughters the stories of their births as the dependent variables, was conducted. The MANOVA yielded a Wilks's  $\lambda=0.70$ ,  $F(2, 30)=6.58$ ,  $p < 0.01$ . Both the number of times the daughters indicated that they had been told the stories of their births and the number of times their mothers indicated that they had told their daughters the stories were significantly related to whether or not the raters were able to match the mothers' and daughters' stories together; matched stories were significantly more frequently told, as indicated by both mothers and daughters. The univariate ANOVA for the number of times the daughters indicated that their mothers had told them the stories of their births was significant,  $F(1, 32)=1.52$ ,  $p=0.02$ . The univariate ANOVA for the number of times the mothers indicated that they had told their daughters the stories of their births was also significant,  $F(1, 32)=3.41$ ,  $p=0.002$ .

Chi squares were performed to test whether mothers' and daughters' stories that were matched with each other reflected the daughters' higher self-esteem and attachment to their mothers (see Table 5). The daughters were divided into groups of high and low self-esteem and high and low attachment by taking the median values for those variables, 30.5 and 51, respectively, and classifying all those participants below the median as "low" and all those at or above it as "high". The matching of the stories and daughters' self-esteem was significant at the 0.05 level; the stories of daughters with high self-esteem were more likely to be able to be matched with their mothers' stories. Similarly, daughters with higher total attachment to their mothers had more matched stories and fewer mismatched stories, whereas daughters with lower levels of attachment had fewer matches and more mismatches,  $p < 0.001$ .

## Discussion of study 2

The goal of Study 2 was to explore the transmission of birth stories from mother to daughter, and many implications regarding this transmission were revealed. The significant relationship between the mothers' and daughters' narrative variables indicates that the transmission of birth stories does indeed occur. With the exception of eight participants who did not know any information about the stories of their births, most daughters wrote stories similar to their mothers' accounts. The content analysis presented in Table 4 indicates that the narrative structure of both mothers' and daughters' birth stories were generally quite similar. As might be expected, mothers provided more information about their internal feeling states and about their condition prior to the birth.



**Table 5** Chi squares of daughters' self-esteem ( $n=32$ ) and M–D attachment ( $n=33$ ) associated with matching stories between mother and daughter.

Daughters' variables	Match	No match	Total
High self-esteem	15	4	19
Low self-esteem	6	7	13
High M–D attachment	18	3	21
Low M–D attachment	4	8	12

M–D Mother–daughter.

The first hypothesis, that mothers who wrote more descriptive and positive childbirth narratives would have daughters with higher levels of self-esteem and mother–daughter attachment, was supported. The descriptiveness of the mothers' narratives was correlated with the daughters' levels of mother–daughter attachment, and the positivity of the mothers' narratives was associated with daughters' self-esteem and the mother–daughter reunion subscale of the total mother–daughter attachment scale. The descriptiveness of mothers' narratives might be related to the daughters' levels of mother–daughter attachment because mothers who wrote more detailed and descriptive accounts of their daughters' births may have had closer relationships with their daughters in which such details were shared. Furthermore, assuming that the mothers framed the stories of the daughters' births that they wrote for this study similarly to the way they have told the stories to their daughters, it follows that the positivity of the mothers' narratives was correlated with their daughters' self-esteem, as hearing a positive story about one's birth would be likely to contribute to a positive self-image and feelings of being wanted. The multiple regression, which indicated that mothers' narrative positivity and daughters' narrative descriptiveness were the best predictors of daughters' self-esteem, reveals that elements from both the mothers' and daughters' accounts of the birth story have a significant relationship to the daughters' levels of self-esteem.

Hypotheses related to the similarity of the mothers' and daughters' birth stories and mother–daughter attachment and self-esteem were also confirmed. First, mothers' and daughters' stories that were matched by raters were significantly more likely to have been told more often, according to both mothers' and daughters' self-reports. Second, matched stories between mothers and daughters were more likely to have been written by daughters who had higher self-esteem as well as stronger overall attachment to their mothers. These significant findings reinforce the hypothesis that the transmission of the birth story from mother to daughter may reflect the daughter's feelings about herself and the quality of the mother–daughter relationship.

## General Discussion

Taken together, the findings of Study 1 and Study 2 suggest that daughters' birth stories are linked to their self-esteem and their relationships with their mothers. For the majority of these participants, the story of their birth was transmitted from mother to daughter and they had incorporated several aspects of this account into their own narrative constructions of their origins. Further, the relationship between how often they had heard the story of their birth and their self-esteem and mother–daughter attachment was moderately strong. Daughters who have heard their birth stories more times, and whose own accounts more closely matched their mothers' versions, showed significantly higher self-esteem and indicated closer relationships with their mothers.

### Limitations of the present research

There were several factors that limited the present research. The sample, particularly in Study 2, was ethnically homogeneous. It would have been ideal if all of the mothers whose daughters participated in Study 1 had been able to participate in Study 2; however, some daughters indicated that they did not want their mothers to be contacted for participation, and some mothers chose not to participate after they received the materials for the study. The narratives of the mothers who chose not to participate themselves or who were never contacted because their daughters did not want them to participate may have differed in significant ways from the narratives that were collected.

Though the sample was highly similar in educational background, it is also possible that differences in mothers' verbal facility or education might have also influenced the quality of the written narratives produced. Future studies would want to make sure that education or verbal IQ could be measured and co-varied in order to insure that these factors were not influencing the match between mother and daughter narratives. Yet leaving aside educational similarities or disparities, it is also clear that not all the mothers who elected to participate in the second phase of their study shared the same level of attachment with their daughters, nor were their birth stories uniformly positive. The pattern of significant correlations that emerged in Study 2 indicates that this selected sample of mothers was differentiated enough to allow for meaningful variation to emerge.

Inevitably, we relied on daughters' self-reports regarding their self-esteem and relationships with their mothers. It is possible that positivity biases might have affected both the narratives and self-evaluations. However, the use of raters to code the narratives and then match the congruence between mother and daughter narratives introduced a dimension not based in self-report. The fact that the raters' matches of the mother and daughter narratives corresponded with daughters'

ratings of positive maternal attachment and self-esteem was one of the more striking and confirming findings of the present investigation.

#### Suggestions for future research

The results of this research have many implications for the role of the birth narrative in the relationships of mothers and daughters. Future researchers could examine whether it is the transmission of the birth story that is uniquely associated with daughters' levels of self-esteem and mother–daughter attachment or whether the transmission of other family stories, not directly related to childbirth, from mother to daughter would yield similar results. Ideally a follow-up study could be conducted with the daughters of Study 1 after they have given birth themselves, if, in fact, they go on to become mothers, to see whether becoming mothers has an effect on the way daughters understand the stories of their births and subsequently their self-esteem and attachment to their own mothers.

#### Conclusion

The transmission of birth stories from mother to daughter appears to have a significant relationship to daughters' sense of themselves and their feelings about their mothers. The descriptiveness and positivity of mothers' birth narratives, as well as how often mothers share these narratives with their daughters, are clearly linked to daughters' levels of self-esteem and mother–daughter attachment. There is some support for these findings in the literature. The linkage of mother–child communication and the child's self-esteem has been documented. Baird (2002) studied the effects of parents' self-disclosure about an event from their past on their adolescent children's self-esteem. Children whose mothers had disclosed more information indicated a closer connection to them and the children's reported connection to their mothers had a direct link to their levels of self-esteem. Children who reported a closer connection with their mothers, perhaps influenced by the mother having shared an event from her past, had higher self-esteem. Reese (2002) argued that attachment security in the mother–child relationship is a critical factor for the socialization and development of children's life histories. Supporting this idea, Fivush and Vasudeva (2002) found that mothers who report a more secure attachment bond were more elaborative when reminiscing with their children.

The present research has established a connection between mother–daughter communication about the stories of the daughters' births and late adolescent daughters' self-esteem and levels of attachment to their mothers. The direction of this relationship is, at present, unknown. Whether the results show that mothers and daughters who communicate about intimate events in their lives, such as birth stories, do so because of an

existing close relationship in which the daughters report high levels of self-esteem and attachment to their mothers, or whether the transmission of the birth story, and possibly other family stories as well, leads to the daughters' feelings of increased self-esteem and mother–daughter attachment, has yet to be established. However, this study's confirmation that birth stories, transmitted by mothers and recounted by their young adult daughters, show reliable correlations to self-esteem and mother–daughter attachment, argues strongly for their potential role in these young women's narrative construction of their emerging identities.

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#### Appendix

*Low descriptiveness:* “I was born in the middle of a big snowstorm. My dad had a hard time getting my mom to the hospital because the roads were too slick. My birth was one of the easiest. I was a small, five pound baby.”

*High descriptiveness:* “My parents were 25 years old, they had been married about a year, my mom found out she was pregnant. She was incredibly happy, as was my father. I was born two weeks late. My mom went into labor during the night, but it wasn't overly painful, so she decided to wait a while to go to the hospital. My mom remembers eating a ton of cherry Jell-O, and taking a shower, counting the roses on the wallpaper. She still didn't want to leave, but my dad convinced her. All in all, it wasn't overly painful. Supposedly, I was crying before I was born. I had Apgars of 10 and 10, which my mother is very proud of, because she had no drugs during labor, just a lot of yoga. They called my grandparents who (as they tell me on my birthday every year) jumped in the car. My aunt, a nurse at another hospital, kept her uniform on and snuck into the nursery to find me. I had crazy black hair and was 7 lbs. 10 oz. and 21.5 inches long. My mom tells me this story in great detail every year on my birthday.”

*Low positivity (excerpted):* “...my dad was busy with something, maybe work, and so when my mom was ready, my grandfather picked her up and drove her to the hospital. They got stuck in traffic—it was in New York City—and almost didn't make it to the hospital. I don't remember if they were in a cab or a car. I remember a couple of other details. I think my dad may have stopped for McDonald's on the way to the hospital and was late (my mom loves to bring that up!) and I think my mom was seriously ill while she was pregnant at one point. We don't really talk about it a lot.”

*High positivity:* “I guess my grandparents and my mother have never told me about my actual birth—but my grandmas have told me how excited they were to come see me in the

hospital right after I was born and how much love they felt—and my mom told me that when she held me in her arms, right after I was born, she felt a love that she never had before, and she said I would never feel that love until I had my first child.”

*Low negativity (excerpted):* “I was born at home in an apartment in Concord, New Hampshire...I was born on March 7, 1984 at 10:46 A.M....I don’t recall how long the labor was, but I know that as a midwife my mother was likely to have taken any pain in stride. It was most definitely a drug-free birth. This is as much as I know. Well, except that I weighed 7 lbs. 11 oz. at birth, and had lots of hair.”

*High negativity (excerpted):* “...when I was born the next morning, although the birth seemed normal at first, I was not breathing. Doctors put me in an incubator, thinking that within a few seconds I would be breathing, but when I did not take a breath, an ambulance rushed me to a larger hospital about 45 min away. My parents had to drive to that hospital, where they weren’t allowed to hold me until the following day. With medical help, I began breathing and have been healthy ever since. When my mother tells me about my birth she talks most about how scary it was for her when the doctors didn’t know what was going on....”

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