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# The Processing and Content of Family Narratives in Emerging Adulthood: Gender, Family Functioning, and Associations with Identity Development

By

Sarah Morrison-Cohen

Accepted in Partial Completion

Of the Requirements for the Degree

Master of Science

Kathleen L. Kitto, Dean of the Graduate School

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**MASTER'S THESIS** 

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Sarah Morrison-Cohen

June 12, 2012

# The Processing and Content of Family Narratives in Emerging Adulthood: Gender, Family Functioning, and Associations with Identity Development

A Thesis

Presented to

The Faculty of

Western Washington University

In Partial Fulfillment

Of the Requirements for the Degree

Masters of Science

By

Sarah Morrison-Cohen

June 2012

#### Abstract

The aim of the present study was to examine the family narratives of emerging adults. While previous studies have found that interpretative narrative content in adolescents' family narratives is related to identity development, this relation has not been explored in emerging adulthood. One hundred and fifty-eight university students, most in their first year, were asked to provide written narratives of times for the family that were happy, difficult, or transitional, as well as a narrative about themselves commonly told by the family. I examined the relationship between interpretive processing and identity within and across these narrative types, controlling for family dysfunction and factual content, as well as examining moderation by gender and family dysfunction. Results showed that interpretive processing is uniquely important for the identity development of males, and post-hoc analyses revealed that this might be in part due to romantic relationship status. Results are discussed in terms of the importance of examining narrative prompts separately and the developmental implications of the unique relationship for young men as well as exploring the concept of a master family narrative within individual families and American culture.

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#### **Table of Contents**

Abstract	iv
Acknowledgments	v
List of Figures and Tables.	vii
Introduction	1
Method.	9
Results	13
Discussion	22
Limitations, Future Directions, and Conclusions.	31
References	34
Tables and Figures	44

### List of Figures and Tables

Table 1	Descriptive Statistics for all Variables of Interest
Table 2	Independent T-Tests with Means (and Standard Deviations) for Males and Females for all
	Variables of Interest
Table 3	Correlations amongst Relevant Outcome and Narrative Variables across all Narratives46
Table 4	Correlations amongst Relevant Outcome and Narrative Variables for Happy Narrative47
Table 5	Correlations amongst Relevant Outcome and Narrative Variables for Difficult Narrative48
Table 6	Correlations amongst Relevant Outcome and Narrative Variables for Change Narrative49
Table 7	Correlations amongst Relevant Outcome and Narrative Variables for Self Narrative50
Table 8	Regression Analyzes Predicting Identity Development for Total Interpretation and
	Interpretation Types Controlling for Facts and Family Dysfunction
Table 9	Regression Analysis Predicting Identity from Interpretations Split by Memory Type and
	Controlling for Facts and Family Dysfunction
Table 10	Regression Analysis Predicting Identity from Mean Valence Overall and by Memory53
Figure 1	Identity Development Predicted by Mean Total Interpretations Moderated by Gender54
Figure 2	Identity Development Predicted by Difficult Narrative Interpretations Moderated by
	Gender
Figure 3	Identity Development Predicted by Mean Other Interpretations Moderated by Gender56
Figure 4	Mean Identity Score by Gender and Relationship Status
Figure 5	Interpretative Processing by Gender and Relationship Status

The Processing and Content of Family Narratives in Emerging Adulthood: Gender, Family Functioning, and
Associations with Identity Development

In his theory of sociocultural development, Vygotsky (1978) suggested that development is a collaborative process between self and cultural context, making the self inextricable from the environment within which it matures. The first cultural context of the developing self is the family unit, a remarkably complex web of interconnections and relationships. Researchers have clearly established that the family serves an essential role for the developing self in dyadic parent-child interactions in early childhood (e.g., Fivush, 2007; Reese, Haden, & Fivush, 1993) and adolescence (e.g., McLean & Mansfield, 2012), as well as in nuclear family contexts (e.g., Bohanek, Marin, Fivush, & Duke, 2006). Yet, researchers have traditionally conceptualized parents or families as *socializers* of self-development (e.g., Bird & Reese, 2008; Farrant & Reese, 2000; Reese, Yan, Jack, & Hayne, 2010). However, drawing from sociocultural theory researchers have recently suggested that the family is not only a socializer of the self but also a part of the definition of that self (Zaman & Fivush, 2011). This integration of one's family into personal identity presumably takes place through the sharing of a body of family stories – the family narrative – and is therefore a product of the process of narrating these stories (Fivush, Bohanek, & Duke, 2008).

The aim of the current study was to examine the process of negotiating between one's family narrative and one's personal identity narrative at a developmental stage when both personal identity exploration and individuation from the family take center stage: emerging adulthood (Arnett, 2000; Greenberger & Sorensen, 1974). It is in this moment, poised between childhood and adulthood that individuals must negotiate how they will integrate the stories of their family with the story of the self. In particular, I examined the individual's *interpretation* of the family narrative. This interpretation represents the individual's tendency to engage in not only fact based narrative construction, but also in the internal state and perspective taking of the characters within the family narrative. I then examined how this interpretative processing pertains to personal identity development at an age when the exploration of and commitment to a personal identity narrative are chief developmental tasks.

#### The Family as a Context of Identity Development

Drawing on the sociocultural theory of development, Nelson and Fivush (2004) suggested that the development of a sense of self in early childhood is the result of conversations, commonly within the family

context, about the past (Nelson & Fivush, 2004). Fivush and Nelson (2006) argue that these past event conversations are essential to developing an understanding of the connection both between the present and past self and between the self and others. Thus, the family plays an essential role in such development by serving as the primary context of such conversations as well as forming the content of many important memories (Fivush & Nelson, 2006).

The conceptual model of the family's role in autobiographical self-development is that of scaffolder of children's storytelling (Bird & Reese, 2006; 2008; Reese, 2002). The development of autobiographical memory, or the ability to construct one's experiences into a chronological and coherent story of one's life (Reese, 2002), is accomplished by the family's scaffolding of narrative elaboration (Farrant & Reese, 2000). At as young as 19 months, a mother's detailed elaborations of shared memories supports the child's own developing memory skills and storytelling behaviors (Farrant & Reese, 2000). When mothers richly elaborate the content of past events, their young children demonstrate a host of positive outcomes such as autobiographical memory development, higher literacy and greater self-concept consistency, language development, emotional understanding, and theory of mind abilities (Fivush, Haden, & Reese, 2006; Reese et al., 1993). Indeed, in a longitudinal study with early adolescents, Reese and colleagues (2010) found that mother's scaffolding (or directed co-processing) of negative emotion at 40 months predicted the child's ability to recognize and discuss emotion of past events in early adolescence. Thus, the family serves an important role in cementing individual ability to process experience, particularly the emotional and subjective interpretation of such experiences.

Once these skills for processing the past are more firmly in place in middle and late childhood, the family continues to play a role in autobiographical memory and eventually in the construction of the personal story as it pertains to the self, or narrative identity development (Bohanek, Marin, & Fivush, 2008). However, the family no longer operates simply as a model of scaffolding for individuals (McLean & Morrison-Cohen, under review). Instead, as parents grow more willing to disclose their own experiences and children become

<sup>&</sup>lt;sup>1</sup> Researchers have primarily investigated these issues with mothers however Reese et al. (1993) have successfully replicated elaborative reminiscing studies with fathers, finding few differences due to parent's gender.

more invested in their own identity development, the family narrative begins to become relevant to the developing self (McLean & Morrison-Cohen, under review; Thorne, McLean, & Dasbach, 2004; Zaman & Fivush, 2011). The period between late childhood and late adolescence appears to be the time at which motivational and cognitive developments coalesce such that adolescents are able to construct a coherent life story (Habermas & Bluck, 2000; Habermas, Ehlert-Lerche, & de Silveira, 2009), as well as to place the story of the self within the context of the family history (Fivush et al. 2008; Pratt & Fiese, 2004). For example, it is at this age when researchers first note individuals beginning to draw meaningful connections through narrative between personal traits and the family's past (Fivush, Bohanek, & Zaman, 2011) and when the voices of grandparents and parents begin to appear in personal narratives (Pratt, Norris, Lawford, & Arnold, 2010).

#### The Family as the Content of Identity

Of particular interest to this study is Fivush's (2007) recent theoretical work on what is termed the *intergenerational self*. The intergenerational self is the complex multi-generational self that is embedded in this web of family narratives (Fivush, 2007; Pratt & Fiese, 2004), and is developed through the sharing of these narratives. A *family narrative* is a story commonly told in a family (McKeough & Malcolm, 2011), and can be either a shared memory from the current nuclear family, or a story from the more distant family past that occurred before the birth of the individual (Fivush et al., 2008).

The growing curiosity about the world (Piaget & Inhelder, 1969), and other people (Erikson, 1968) that flourishes in adolescence leads to an interest in how others incorporate their own lived experiences into their sense of self, as well as a strengthened ability to take other's perspectives into account in interpreting events in one's own life (Fivush et al., 2008). Thus, individuals who develop their identities against a backdrop of respected alternate identity frameworks, inherited from family narratives, have the ability to form richer connections between themselves and their contexts, as well as to more completely understand who they and their families are. In other words, having access to other life narratives that have been shared by the family may allow individuals to more freely explore their own burgeoning identity as well as providing possible respected pathways one might take through life.

The transmission of family narratives appears to be ubiquitous across developmental periods and to serve important developmental functions (Fiese, Hooker, Kotary, Schwagler, & Rimmler, 1995). In a series of

studies of family dinnertime conversations, Fivush and colleagues (2011) found that families engaged in coconstructing family narratives about once every five minutes, and that pre-adolescents whose families tell these
family narratives at higher rates tend to have fewer behavioral problems, higher well-being, higher self-esteem
and, not surprisingly, a greater knowledge of their own family history (Fivush, 2007; Fivush et al., 2008).
Further, mid-adolescents who interpret these stories by using perspective taking and forming connections
between the self and these intergenerational narratives have higher overall well-being (Fivush et al., 2011).
Fivush and colleagues (2007) posit that the positive outcomes associated with knowledge and interpretation of
family history may benefit young people by providing "meaning beyond the individual to include a sense of self
through historical time and in relation to family members" (p. 134). Therefore, we can expect that greater
interpretation of the family's narrative will relate to greater psychosocial development and specifically, in
emerging adulthood, to identity development.

At least part of the mechanism by which the connections between personal identity and the family's past are formed may be through the incorporation of the voices of family members in family stories (Pratt, Arnold, Mackey, 2001; Thorne et al., 2004). Researchers have long maintained that the ability to take the perspective of others is a primary developmental goal (Mead, 1934; Piaget & Inhelder, 1969) slowly developing over childhood (Selman, 1972) and not fully neurologically and cognitively in place until late adolescence (Choudhury, Charman, Bird, & Blakemore, 2007). The ability to take the perspective of others in childhood has been closely linked to moral development (Kohlberg, 1976; Walker, 1980), as well as to empathy (Farrant, Devine, Maybery, & Fletcher, 2012), and altruism (Underwood & Moore, 1982). To my knowledge, no study has linked perspective taking in emerging adulthood or adolescence to identity development. However, in a study examining values transmission in adolescence and representation of parent's voices, Arnold, Pratt, and Hicks (2004) found that the incorporation of parent's perspective in mid-adolescent's family narratives was positively related to healthier family relationships, authoritative parenting, parent's support of the adolescents' autonomy and, in emerging adulthood, to higher self-esteem and optimism and lower levels of depression and loneliness (Arnold et al., 2004; Mackey, Arnold, & Pratt, 2001). Fivush and colleagues (2008) suggested that one important outcome of this incorporation of other's perspectives in the family narrative in particular is the development of a subjective understanding of one's past experiences and one's own identity. These family

narratives likely provide a first comfortable "narrative space" in which understanding of other's subjective experiences are developed (Fivush et al., 2008).

#### **Current Study**

"We become ourselves through others." (Vygotsky, 1986, p. 55)

The family has plainly been established as a vital context of development for self and identity development (e.g., Bohanek et al., 2006; Fivush et al., 2006; Fivush, 2007; McLean, Pasupathi, & Pals, 2007; Reese et al, 1993). Yet only limited attention has been paid to the importance of the family as a part of personal identity. A few recent studies by Fivush and colleagues have shifted interest to the intergenerational self, and the idea that a coherent identity is formed through the negotiation of the family past with the present and future self (see also Fiese et al., 1995; Pratt et al., 2001; Pratt & Fiese, 2004). Fivush and colleagues (2007) have proposed that having a more elaborated intergenerational self is associated with identity development in early adolescents. While a few studies have provided preliminary evidence for the role of interpretive processing of family narratives in identity development (Fivush et al., 2008; Fivush et al., 2011; Zaman, & Fivush, 2011) these studies have focused on the intergenerational narratives of early adolescents. The current study sought to deepen and broaden this area of research by exploring associations between interpretative content and valence of family narratives with identity development. In particular, the current study examined the use of other's perspectives in family narratives as well as the type of family narrative provided. Additionally, I examined the relationship between interpretive processing in family narratives and identity development controlling for factual narrative content and family dysfunction. I also explored gender and family dysfunction as moderators of the relationship between narrative processing and identity development.

Zaman and Fivush (2011) have found that internal state content, a type of interpretation reflecting the internal state of the self or others, was associated with the gender of the parent whose story was being recounted. This association was such that both girls and boys were more elaborative when telling the stories of their mothers than of their fathers (Zaman & Fivush, 2011). Previous research has also shown that parent's engagement with the autobiographical narratives of their young children differs by child gender (Fivush, Berlin, Sales, Mennuti-Washburn, & Cassidy, 203; Reese et al., 1997), such that both mothers and fathers are more elaborative with daughters than with sons and provide more relationship content with girls than with boys

(Buckner & Fivush, 2000; Reese & Fivush, 1993). Thus, from an early age girls are socialized to engage in more interpretive processing than boys. However, few differences in interpretive content have been found in adult samples (Fivush & Buckner, 2003). Thus, I examined gender as a moderating variable of the relationship between identity development and interpretive processing.

Researchers have suggested that adults who engage in more interpretative and resolved narration, that is narration that goes beyond the facts of a story and resolves any negative emotion presented in the narrative, are more advanced in identity development (McLean & Pratt, 2006; McLean, Breen, & Fournier, 2010; Pals, 2006a) and demonstrate greater personal well-being (Bauer, McAdams, Pals, 2006; King & Raspin, 2004). While reporting factual elements (i.e., details that one would be able to observe or verify) is important in creating a coherent narrative, it is the interpretive elements of stories that are both developmental achievements and central to the self-understanding that is essential to adaptive functioning (Pasupathi & Wainryb, 2010). Thus, I expected that individuals who engaged in more interpretive processing above and beyond factual processing would also demonstrate greater identity development.

Additionally, interpretive processing was further categorized by who was voicing each specific interpretation in an attempt to capture the differing perspectives taken by the emerging adult within each narrative. The individual could interpret as the self or from the perspective of the parents, the family as a whole, or someone else. While, to my knowledge, no studies have investigated these different voices in emerging adults' family narratives, previous work has demonstrated the importance of parent and grandparent voices (Arnold et al., 2004; Mackey et al., 2001; Thorne et al., 2004), and has suggested that subjective perspective may play a vital role in family narratives (Fivush et al., 2008). Thus, I tentatively expected that narrative processing that demonstrated perspective taking of other or of the family as a whole (we-interpretations) would be especially important to identity development as they represent the more complex process of taking the perspective of others (Mead, 1934; Piaget & Inhelder, 1969)

While the body of family narratives that a person remembers and shares may create an overall family identity, or family myth, the individual types of family narratives are an important realm of inquiry not yet explored by family narrative researchers. Drawing on research using The Life Story Interview (McAdams, 1995), this study asked individuals to provide a happy family narrative, a narrative of a difficult time for the

family, a narrative of a time of change for the family, and a narrative that is commonly told about the individual in the family. Recent work by McLean and Mansfield (2012) suggests that interpretive processing may differ in its benefits by the type of memory being shared. While no research to my knowledge has explored different types of family narratives, it seems possible that the type of family narrative shared may play a role in the type of interpretive processing that is associated with identity development. In particular, it appears that interpretive processing occurs more frequently in negative event narratives (McLean & Thorne, 2003) and narratives about times of change (McLean & Pratt, 2006). Researchers posit that in order to incorporate negative and change experiences into one's sense of self more processing is needed to frame the story in a way that is consistent with a positive self-view (McAdams, 2006; McLean et al., 2007). In light of this research it seems likely that interpretive processing in the difficult and change family narrative will be more highly associated with personal identity development than in the happy and self-in-family stories.

In the current study, participants provided four necessarily differently valenced family narratives: positive, negative, change, and self within the family. Thus, I chose to examine the valence overall of the body of family narratives which the participant provided. This decision was made drawing on research using the Adult Attachment Interview (George, Kaplan, & Main, 1996), which assesses security of attachment through the coherence and overall positive framing of the entirety of the individual's relationship and family history. Longitudinal research using the interview has found that secure attachment status and therefore a body of family narratives that incorporates coherent and positive family stories is associated with identity achievement in adolescence (Zimmerman & Becker-Stoll, 2001).

I assessed my outcome measure of identity development via measures of identity exploration and self-concept clarity. These two conceptualizations of self-development are employed in order to capture both the exploration of identity and the clarity of self-understanding, both of which are essential to successful development for the emerging adult (Arnett, 2000; Erikson, 1968). The main difference between these two conceptualizations is that identity exploration indicates effortful work towards understanding the self. Self-concept clarity on the other hand indicates the clarity with which an individual is able to define, understand, and explain the self. While previous work on family narratives has not used this approach to assessing identity, recently McLean and Pasupathi (2012) suggested that reconciling the conceptualization of identity as a

psychosocial stage and as narrative is an important task for identity development researchers. McLean and Pasupathi (2012) recommend viewing narrative as one potential process by which individuals can reach identity achievement through exploration of the self and others. Thus, in the current study, the family narratives provided by participants represent a realm of possible identity exploration and the outcome measures represent achievement and commitment to identity goals.

Whereas individuals begin to attend to the task of negotiating the self and the family in adolescence (Fivush, et al., 2008; Pratt & Fiese, 2004), emerging adulthood provides the ideal time within which to focus an examination of this task. Emerging adulthood is not only the beginning of deeper exploration of the self (Arnett, 2000) but also generally marks the beginning of the end of cohabitation with the family (Arnett, 2000; Goldscheider, Goldscheider, Clair, & Hodges, 1999). The end of cohabitation is an important transition in Western culture marked by an improvement in the parent-child relationship (Lahelma & Gordon, 2003), and bringing with it a host of new contexts and experiences. While individuals are exploring the self, they are also sharing the self in the new contexts and relationships available to emerging adults, and sharing stories and interpretations of one's family may be a common activity. For example, this is the first time when friends may not meet one another's parents and must therefore learn about each other's pasts through the sharing of family stories. Thus, emerging adulthood is ripe for an investigation into the ways in which individuals negotiate the self within family narratives and how this negotiation relates to healthy development.

This healthy development does not, of course, occur in a realm separate from context, even once the individual has left the family home and this relationship has grown more complex (Koepke & Denissen, 2011). Thus, it was important in the current study to consider family dysfunction's relationship with both family narratives and identity development. Emerging adults entering the wider world who have come from families that support individuation and autonomy are more likely to be both high in identity exploration and commitment to identity roles (Campbell, Adams, & Dobson, 1984; Grotevant & Cooper, 1985; Willemsen & Wateman, 1991). In order to examine the impact of family dysfunction on the relationship between narrative processing and identity development I employed family dysfunction as a moderating variable. It seemed possible that processing, particularly of difficult family events, might be differentially associated with identity development depending on functioning in the family of origin.

In concluding this review, it is important to note that while I am discussing interpretation and valenced content as active, possibly causal, variables in their relationship to identity development, these data are correlational. Indeed, it is highly likely that active and positive processing of narratives is bi-directional, such that individuals with greater identity development engage more in such processing, and also that that active positive processing serves to maintain or increase well-being and self-understanding (see McLean et al., 2007). In my analyses and interpretations I have been mindful of the nature of the correlational data and the conclusions that can be drawn from them.

#### **Study Hypotheses**

- Individuals who demonstrate greater interpretive processing will demonstrate greater identity
  development when statistically accounting for frequency of factual processing of family narratives
  and family dysfunction.
  - No specific hypotheses are made as to how this relationship might differ by interpretation type or gender.
- 2) Individuals who narrate more positively valenced family narratives will demonstrate higher levels of personal identity development when statistically accounting for family dysfunction.
  - No specific hypotheses are made as to how this relationship might differ by narrative type or gender.

#### Method

#### **Participants**

For the present study, 158 participants (69 males and 79 females)were drawn from a psychology participant pool at a university in the Pacific Northwest. Because prior work has shown differences in parental stories based on marital status (McLean & Morrison-Cohen, under review), and homogeneity in novel research areas is important, individuals whose biological or adoptive parents are no longer married or who had a deceased parent were excluded from the sample. Participants' mean age was 19.13 (SD = 1.25, range 18 - 23). Participants marked their ethnicity using a series of checkboxes resulting in the following ethnic breakdown: 80% Caucasian, 15% Asian, 1% Native American Indian, 1% Latino and 0.6% African American, with 3% of participants failing to provide ethnic information. In terms of socio-economic status, 70% of participants

reported that their mother had at least a college degree and 67% of participants reported that their father had at least a college degree. Overall, 80% of participants had at least one parent with at least a college degree.

The majority of participants (89%) had at least one sibling with 46% having one sibling, 32% having two, 10% having three and 1% having five siblings. The mean age of siblings was 19.45 (SD = 5.13, range 6 - 46). The majority (68%) of participants had moved out of the family home within the three months prior to the study taking place, 10% had moved out between three and 12 months prior, and 17% had lived out of the family home for more than one year. Additionally, 75% of the sample lived within a half days drive of their parent's home. Participants reported frequent communication with their parents, with 87% of participants reporting that they spoke on the phone with their fathers at least once a week and 95% of participants reporting that they spoke on the phone with their mother at least once a week.

#### Measures

McMaster Family Assessment Device (Epstein, Baldwin, Bishop, 1983). Participants completed this 31- item scale designed to assess dysfunctional family behavior in four domains including; affective responsiveness, affective involvement, communication, and general functioning. These scales were collapsed and used as a composite family dysfunction scale ( $\alpha$  = .91) with higher values indicating greater levels of family dysfunction. Items such as "We are reluctant to show our affection for each other" were rated on a 4-point scale from 1 (Strongly Disagree) to 4 (Strongly agree). All of the subscales of the McMaster Family Assessment Device were used to create a composite family dysfunction variable.

Erikson's Psychosocial Stage Inventory (Rosenthal, Gurney, & Moore, 1981). This measure is composed of six subscales all assessing progress in each of Erikson's stages of development: trust, autonomy, initiative, industry, identity, and intimacy. Participants responded to this 64-item measure using a 5-point scale with responses ranging from 1 (Hardly ever true) to 5 (Almost always true). Examples of items of the identity subscale include, "I change my opinion about myself a lot." and "I know what kind of person I am." For the purposes of this study only the identity ( $\alpha = .80$ ) subscale was used.

**Self-Concept Clarity (Campbell et al., 1996).** This 11-item scale served to identify the clarity with which individuals view themselves ( $\alpha = .87$ ). Participants responded to items such as "Event if I wanted to, I

don't think I could tell someone what I'm really like" on a 5-point scale ranging from 1 (Disagree strongly) to 5 (Agree strongly).

#### **Demographics and Family Questionnaire**

All participants completed a demographics questionnaire developed for this study. In addition, participants answered items developed for this study in order to determine family characteristics, relationship status, and communication practices that are potentially relevant to the questions at hand.

#### Narrative Prompts

Participants were asked to respond to eight narrative prompts. As the other narratives were intergenerational narratives or narratives about the self, only four of these prompts were examined. They are as follows:

- 1) Happy Family Narrative: Please tell me about a happy time for your family.
- 2) Difficult Family Narrative: Please tell me about a very difficult time for your family.
- 3) Change Family Narrative: Please tell me about a time your family went through an important change.
- 4) Self-in-Family Narrative: Please tell a story that is told frequently in your family about you.

#### **Coding**

I completed coding with undergraduate research assistants who were blind to demographic information and study hypotheses. Eighteen percent of the narratives were used for reliability. Once reliability was reached, I coded the remaining narratives. Intraclass correlations and kappas for each code are reported below.

Facts and interpretations. Narratives were coded for the presence of interpretive versus factual clauses using a coding scheme developed by Pasupathi and Hoyt (2009) and adapted by Pasupathi and Wainryb, (2010). In this coding scheme *facts* are defined as any of the information available to bystanders of an event, (i.e., details observable with the five senses), thus "My mom travelled when she was a teenager." or "I was crying then." would both be coded as *facts*. *Interpretations*, on the other hand, capture a focus on explaining subjective experiences and internal mental states and responses, "My mom was very adventurous like that." or "We have become closer since his death." would both be coded as *interpretations*. Narratives were first split into units. To be considered a unit a clause must have a verb phrase and often these units are separated by

conjunctions. For example the sentence "I didn't dance with him because I don't like him" would be split into two units, "I didn't dance with him" (*fact*) and "Because I don't like him" (*interpretation*). Breaking down the narratives into units resulted in 315 total units coded for reliability which were then assigned a code of *fact* ( $\kappa$  = .89) or *interpretation* ( $\kappa$  = .89). After a unit was coded as an interpretation, the coder was also responsible for assigning to whom that interpretation belonged; narrator, parent(s), family (a "we-interpretation"), or other ( $\kappa$  = .91).

Valence. Narratives were coded for beginning (r = .96) and ending emotion (r = .86) on a 3-point scale, as either negative (I), neutral (2), or positive (3). Narratives could only receive a score of positive or negative if they contained demonstrable affect or emotion. These values were then averaged to obtain a mean valence score for each narrative (r = .93). Thus, a narrative that began and ended positively would receive a three for mean valence. For the purposes of present analyses the average valence across the narrative was used. In some cases, particularly in very short narratives, participants provided no affective state and thus no valence code could be given (n = 22). An example of a non-narrative would be, "My grandpa died" which was considered uncodeable as it contained no affective content. While these narratives could be coded for facts and interpretations, they were considered to be uncodeable for valence. This results in different sample sizes for subsequent analyses.

A series of independent t-tests and chi-square analyses were conducted to determine if individuals who provided one or more narratives that could not be coded for valence differed from those who provided four codeable narratives. Results showed that those who provided at least one non-narrative did not statistically significantly differ from those that provided four code-able narratives in identity development, t (156) = -.12, p = .90, or age, t (156) = .15, p = .88. However, females were statistically significantly more likely to provide four codeable narratives, (Males = 11, Females =7),  $\chi^2$  (1) = 2.51, p = .01, than males.

#### Procedure

Participants first provided informed consent and then completed all surveys using a computer based surveying program that collected responses for later analysis (*MediaLab v2008*, *Empirisoft*, *2008*). Participants completed surveys in a private room. Research assistants instructed participants to notify them when they had completed the questionnaire or if they had any questions. Participants first completed a survey about their

family history knowledge in order to jumpstart thinking about their family, answering yes or no to items such as, "Do you know where some of your grandparents met?" and "Do you know the source of your name?" Following this survey, individuals were given the prompts to elicit family stories. Following the completion of memory prompts, participants completed the family functioning survey, the self and identity surveys, and demographics. Additionally, two well-being surveys and a family storytelling survey were included in the original study for further analysis but will not be analyzed here. Upon completion of the survey the research assistant thanked and debriefed the participants as well as giving them an opportunity for questions. Additionally, participants were given a handout providing debriefing information, as well as contact information for the study administrators.

#### Results

#### **Data Reduction**

Zero-order correlations were calculated between the identity subscale of the Erikson Psychosocial Stage Inventory and the Self Concept Clarity scale. The large correlation between these two subscales (r = .71, p < .001) suggested that they should be collapsed. Thus, a mean of the average scores for each participant was calculated to create a collapsed identity score resulting in a reliable combined identity scale ( $\alpha = .90$ ).

Additionally, zero-order correlations were calculated amongst the four subscales of the McMaster's Family Assessment, all correlations were statistically significant and ranged from r = .32 to r = .58. A factor analysis using principal axis factoring in SPSS also suggested that the scales be collapsed. Bartlett's test of sphericity,  $\chi^2$  (6) = 190.62, p < .001, was statistically significant and thus the correlation matrix of association was not an identity matrix and the data were appropriate for factor analysis. The overall Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .76 and thus considered to be middling. All individual item KMO measures were greater than .72 and thus considered to be middling. One clear factor emerged with all factor pattern coefficients loading at .56 or above. Thus, these four subscales were averaged to create a family dysfunction scale for each individual. Chronbach's alpha for this final composite scale was .79.

#### **Descriptive and Preliminary Analyses**

Descriptive statistics can be seen in Table 1 for all personal development, family functioning, and narrative variables. I next conducted a series of independent samples t-tests, in order to determine if any gender

differences existed amongst these variables. The following gender comparison analyses can be seen in Table 2. When averaged across memory type and collapsed across interpretation types females' narratives contained more total units than males. This statistically significant difference is explained by the greater number of both mean total interpretations and mean total facts in the family narratives of females than in males.

When split by narrative type, no statistically significant gender differences existed in total number of interpretations. However, females used statistically significantly more facts than males in the difficult, change, and self-in-family narratives. Females and males did not statistically significantly differ in their use of facts in the happy family narrative. When averaged across memory type males and females did not statistically significantly differ in the use of the parent, other, or narrator types of interpretations. However, females did tell narratives with statistically significantly more we-interpretations than males.

#### **Correlational Analyses across Narrative Types**

I next conducted a series of Pearson's zero-order correlations for all personal, family functioning, and narrative processing variables averaged across narrative type. These analyses can be seen in Table 3.

Unexpectedly, identity development was not statistically significantly associated with mean interpretations in family narratives. When split by interpretation type, only we-interpretations were statistically significantly associated with identity development, such that individuals who used more we-interpretations in their family narratives tended to have higher levels of identity development. Identity development was also statistically significantly associated with mean valence, such that individuals who told more positive family narratives overall tended to demonstrate higher levels of identity development.

Family dysfunction was negatively and statistically significantly associated with both mean total interpretations and specifically mean we-interpretations. These associations were such that individuals who more frequently used interpretations, and specifically we-interpretations, tended to demonstrate lower levels of family dysfunction.

Of importance to later analyses, identity development and family dysfunction were also negatively and statistically significantly correlated such that individuals with higher levels of identity development tended to demonstrate lower levels of family dysfunction. Additionally, mean interpretations and mean facts were strongly positively correlated. These two findings suggested that in order to examine interpretive processing's

unique relationship with identity development it is necessary to statistically control for both facts in narratives and for family dysfunction.

#### **Correlational Analyses by Narrative Type**

In order to explore these relations within each individual narrative type I created four correlation matrices illustrating the same associations with narrative variables specific to that narrative type. In happy family narratives, seen in Table 4, identity development was not statistically significantly associated with any narrative processing variables. Family dysfunction however, was negatively and statistically significantly correlated with total interpretations in the happy family memory, such that individuals who used more total interpretations in their happy family memory tended to report less dysfunctional family behavior. In examining specific interpretation types within the happy family narrative, there was a statistically significant association between narrator-interpretations and family dysfunction, such that individuals who used more narrator interpretations tended to demonstrate lower levels of family dysfunction.

In difficult family narratives, as can be seen in Table 5, identity development was also not statistically significantly associated with any narrative processing variables. Family dysfunction however, was negatively and statistically significantly correlated with other-interpretations in the difficult family memory, such that individuals who used more other-interpretations in their difficult family narratives tended to demonstrate lower levels of family dysfunction.

In change family narratives, as can be seen in Table 6, identity development was positively and statistically significantly associated with we-interpretations, such that individuals who used more we-interpretations tended to demonstrate higher levels of identity development. Family dysfunction was also negatively and statistically significantly associated with we-interpretations as well as parent interpretations in the change family narratives. This association was such that individuals who used more we and parent-interpretations in their change family narratives tended to demonstrate lower levels of family dysfunction.

In self-in-family narratives, as in the happy and difficult narratives, identity development was not statistically significantly associated with any narrative processing variables. These analyses can be seen in Table 7. Family dysfunction however, was negatively and statistically significantly correlated with parent-

interpretations. This association was such that individuals who used more parent-interpretations in their self-infamily narratives tended to demonstrate lower levels of family dysfunction.

To summarize the zero-order correlations, identity development was statistically significantly and positively associated with mean total interpretations, mean valence, mean we-interpretations, and we-interpretations in the change family narrative. Family dysfunction was statistically significantly and negatively associated with mean total interpretations, mean we-interpretations, and mean positive valence. When split by narrative type family dysfunction was associated with narrator and total interpretations in the happy family narrative, other-interpretations in the difficult family narrative, we and parent-interpretations in the change family narrative, and parent-interpretations in the self-in-family narrative.

#### Regression Analyses Predicting Identity from Interpretive Processing

In order to investigate the unique association between interpretive processing and identity development beyond the association between identity development and factual processing, family dysfunction, and gender, I conducted a series of regression analyses. To examine differences in both interpretation-types and narrative-types I first conducted a regression analysis using total mean interpretations, and then computed these analyses for each interpretation type and then for each narrative type. In all of the following regression analyses facts were entered at step one followed by gender and family dysfunction at step 2, interpretation type at step 3, and finally the three interaction terms at step 4 created by standardizing and multiplying interpretations and gender, interpretations and family dysfunction, and gender and family dysfunction. All interactions in this analysis were probed using procedures outlined by Cohen, Cohen, West, and Aiken (2003).

In the first regression analysis, predicting identity development from mean total interpretations, family dysfunction was a statistically significant predictor of identity development at both steps two and three. These analyses can be seen in Table 8. However, in the final model, which explained 10% of the variance in identity development, the interaction between mean total interpretations and gender was the only statistically significant predictor of identity development. Thus, gender was a significant moderator of the relationship between total mean interpretations and identity development.

I then performed a simple slopes analyses (Cohen et al., 2003) in order to determine if the slopes of the relationship between interpretations and identity development were statistically significantly different from zero

for each gender. As depicted in Figure 1, the unstandardized slope computed using the standardized variables for males was .31 (SE = .16) and for females was -.05 (SE = .11). Results suggest that for females the slope of the relationship between identity development and total mean interpretations was not statistically significantly different than zero, t(150) = -.42, p = .66, but that for males the slope was statistically significantly different than zero, t(150) = 2.02, p = .046. Thus, the statistically significant and positive relationship between total mean interpretations and identity development was found only for males.

Predicting identity from interpretive processing by interpretation type. I then examined these relationships by interpretation type. As can be seen in Table 8, for other-interpretations, parent-interpretations, and we-interpretations only family dysfunction was a statically significant predictor of identity development. However, for other-interpretations the interaction between mean other-interpretations and was a statistically significant predictor of identity development. Thus, gender was a significant moderator of the relationship between mean other-interpretations and identity development.

I then preformed a simple slopes analyses (Cohen et al., 2003) in order to determine if the slopes of the relationship between other-interpretations and identity development were statistically significantly different from zero for each gender. As depicted in Figure 2, the unstandardized slope computed using the standardized variables for males was .31 (SE = .14) and for females was -.10 (SE = .11). A simple slopes analysis again showed that for females the slope of the relationship between identity development and total mean other-interpretations was not statistically significantly different than zero, t (150) = -.91, p = .36, but that for males the slope was statistically significantly different than zero t (150) = 2.24, p = .03. Thus, again the statistically significant and positive relationship between mean other-interpretations and identity development was found only for males.

It is important to interpret these regressions by interpretation type with caution. The type of interpretations in all narratives were positively correlated at between r(155) = .20 to .44, and were statistically significant at the p < .01 level, save that of the association between mean we-interpretations and mean-parent interpretations which were not statistically significantly correlated, r(155) = .09, p = .28.

**Predicting identity from interpretive processing by narrative type.** I then examined these relationships by narrative type. These analyses can be seen in Table 9. In the final model for difficult family

narratives, a similar pattern to that of mean total interpretations and other-interpretations emerged such that the interaction between total interpretations in the difficult family narrative and gender was a statistically significant predictor of identity development. It is of note that in this model family dysfunction remained a significant predictor of identity development, such that individuals who demonstrated less family dysfunction tended to demonstrate higher levels of identity development.

As gender was a significant moderator of the relationship between total difficult interpretations and identity development, I again performed a simple slopes analyses (Cohen et al., 2003). As depicted in Figure 4, the unstandardized slope computed using the standardized variables for males was .31 (SE = .12) and for females was -.10 (SE = .11). A simple slopes analysis showed that for females the slope of the relationship between identity development and total mean interpretations was not statistically significantly different than zero, t (150) = -.97, p = .33, but that for males the slope was statistically significantly different than zero, t (150) = 2.55, t = .01. Thus, the statistically significant and positive relationship between difficult interpretations and identity development was found only for males.

As can be seen in Table 9 when split by narrative type, in the happy, change, and self-in-family narratives only family dysfunction was a statistically significant predictor of identity development at all steps. <sup>2</sup>

This relationship was such that those who reported lower levels of family dysfunction also tended to report

The interaction between total happy narrative interpretations and family dysfunction bordered on statistical significance, as can be seen in Table 9. In order to probe this possibly interesting finding, I plotted this interaction by constructing three groups; the first one standard deviation below the mean for family dysfunction, the second at the mean for family dysfunction, and the third one standard deviation above the mean for family dysfunction. The unstandardized slope computed using the standardized variables of the relationship between family dysfunction and happy interpretations for one standard deviation below the mean for family dysfunction was .11 (SE = .12), for those at the mean for family dysfunction the slope was -.06 (SE = .09) and for those one standard deviation above the mean the slope was -.23 (SE = .14). I then performed a simple slopes analysis on these results. Results suggest that neither the slope one standard deviation below the mean, t = .09, t = .09, t = .09, and t = .09, t

higher levels of identity development. It is important to interpret these regressions by family narrative type with caution as frequency of interpretations in all narrative types (happy, difficult, change, and self-in-family) were positively correlated at between r(155) = .29 to .44 and were statistically significant at the p < .01 level.

Thus, to summarize the regression analyses, after controlling for family dysfunction and factual content, it appears that the relationship between identity development and mean total-interpretations, mean other-interpretations, and interpretations in the difficult family memory is moderated by gender. This moderation is such that only for males are mean total-interpretations, mean other-interpretations, and interpretations in the difficult family memory positively correlated with identity development. Thus, only for males is greater frequency of these types of interpretive processing associated with higher levels of identity development.

#### Regression Analyses Predicting Identity from Mean Valence

In order to investigate mean valence in family narratives' unique association with identity development beyond the impact of family dysfunction as well as to better understand the role of gender in these findings, I next conducted a second series of regression analyses. In the following regression analyses gender and family dysfunction were entered at step 1, mean valence at step 2 and finally the three interaction terms at step 4 created by standardizing and multiplying mean valence and gender, mean valence and family dysfunction, and gender and family dysfunction.

First in zero order correlations valence was positively and statistically significantly correlated between narrative types only for the self-in-family narrative and the difficult family narrative, r(155) = .18, p < .05, and the self-in-family narrative and the happy narrative, r(155) = .23, p < .01. Thus individuals that told more positively valenced self-in-family narratives also tended to tell more positively valenced difficult family narratives and happy family narratives.

In the first regression analysis predicting identity development from mean valence across all narratives, which can be seen in Table 10, family dysfunction was again a statistically significant predictor of identity development in the final model, such that individuals who demonstrated greater family dysfunction also tended to demonstrate lower levels of identity development. However, mean valence was a statistically significant predictor of identity development beyond its association with family dysfunction. This association was such that

individuals who told more positive family narratives overall also tended to demonstrate greater identity development. There were no statistically significant interactions in this model. As can be seen in Table 10, when split by narrative type, mean valence was not a statistically significant predictor of identity development.

#### Post-Hoc Examination of Gender Moderation

Previous studies have found that the association between interpretive processing in personal narratives and well-being exists only for adolescent males (Bohanek & Fivush, 2010) and not for females, but this pattern does not appear to continue into adulthood (Bauer & McAdams, 1999; King, Scollon, Ramsey, & Williams, 2000). Thus, given my findings, the presumed association between identity development and well-being, and the importance of understanding this moderation for narrative researchers, I made the decision to further probe the moderation by gender. I speculated that perhaps the moderation by gender of the association between identity development and interpretive processing was the product of another developmental task of emerging adulthood, that of intimacy development (Erikson, 1968). Thus, I chose to further explore this moderation by examining the males in the study by relationship status. As I did not have enough power to perform a three-way interaction analyses due to the small group size, I tentatively probed this relationship in males with partial correlations and independent samples t-tests.

Male identity development and interpretive processing by relationship status. In order to explore the association between identity development and interpretive processing in males I calculated partial correlations between interpretive processing variables and identity development, controlling for family dysfunction and mean total-facts. Looking only at males, I compared those who had reported being single (n = 46) to those who had reported being in a committed relationship (n = 23). Males and females did not differ in their likelihood of being in a committed relationship,  $\chi^2$  (1) = 1.38, p = .24. Additionally, males, t (67) = -.43, p = .67, and females, t (67) = -.14, p = .89, did not differ in levels family dysfunction by relationship status.

For single males, no statistically significant associations were found between identity and mean total-interpretations, r(42) = .18, p = .25, mean other-interpretations, , r(42) = .20, p = .20, or interpretations in the difficult family narrative, r(42) = .17, p = .27. However, for males who reported being in a committed relationship, mean total-interpretations was statistically significantly associated with identity, r(19) = .49, p = .03, while mean other-interpretations, r(19) = .39, p = .08, and total interpretations in the difficult family

narrative, r(19) = .18, p = .05, bordered on significance in their association with identity development.<sup>3</sup> This association was such that those who used more of these types interpretive processing tended to be higher in identity development.

In order to further understand these gender differences I then performed a series of independent samples t-tests to determine if males in committed relationships differed from single males in their identity development or interpretive processing. Indeed, bordering on significance, males in committed relationships differed from single males in their identity development, t (67) = -1.74, p =.09, d = .43, and use of mean total-interpretations t (67) = -1.71, p =.09, d = .42. This difference was such that males in committed relationships were more identity developed and used more mean total-interpretations than single males. These differences are shown in Figures 4 and 5. Males in committed relationships and single males did not statistically significantly differ in their mean other-interpretations, t (67) = -.39, t = .70, t = .05, or interpretations in the difficult memory, t (67) = -1.48, t = .14, t = .36. It is of note that the base-rates for mean other-interpretations are very low and these differences should be interpreted with caution.

I also performed a series of independent samples t-tests to determine if females in committed relationships (n = 37) differed from single females (n = 50) in their identity development or interpretive processing. Indeed, females in committed relationships statistically significantly differed from single females in their use of other-interpretations, t (85) = 2.16, p = .03 d = .47. Interestingly, this relationship was such that females in committed relationships used statistically significantly fewer other-interpretations than those who were single. This difference is depicted in Figure 5. Additionally, females in committed relationships differed from single females in their use of interpretations in the difficult memory in ways bordering on significance, t (85) = 1.81, p = .07, d = .39. Again, this difference was such that females in committed relationships used fewer interpretations in their difficult family memories than single females. This difference is depicted in Figure 5. Females in committed relationships and single females did not statistically significantly differ in their use of

<sup>&</sup>lt;sup>3</sup> The association between identity development and interpretive processing was not present for females. However, I still probed this association for single and committed females. In the partial correlations between identity development and interpretive processing, controlling for factual content and family dysfunction for single females and females in committed relationships, identity development was not statistically significantly correlated with any type of interpretive processing (all correlations, r (46) = -.20 to .12, p = .18 to .92).

mean total-interpretations, t (85) = 1.43, p = .16, d = .31, or in their identity development, t (85) = -1.60, p = .11, d = .35. See Figure 4 for a graph of this difference for identity development.

In summarizing this tentative post-hoc probing of the correlation between identity and interpretive processing for males, it appears that it is only for males in committed relationships that this association may exist. Additionally, it appears that males in committed relationships are more identity developed and use more mean-total interpretations in their family narratives than single males bordering on significance. Interestingly, while the association between identity development and narrative processing does not appear to exist for females, females in committed relationships do appear to engage in less interpretive processing than single females approaching significance.

#### Discussion

The narratives provided in this study demonstrate the complex processing of which emerging adults are capable. While previous studies and theoretical work (Fivush, 2007; Fivush et al., 2008; 2011) have plainly established the importance of interpretive processing in the family and intergenerational narratives of adolescents, this study is the first of its kind to examine the family narratives of emerging adults. Additionally, to my knowledge, this is the first study of this nature to employ an independent non-narrative measure of identity development. Emerging adulthood represents a time of great change within the family of origin as children move out of the home (Arnett, 2001) and establish new roles within the family (Lahelma & Gordon, 2003). The findings of the current study demonstrate that family narratives, in particular the interpretive perspective-taking within these narratives and the valence of these narratives, remain related to personal development and to family functioning even when individuals no longer reside in the family home.

#### Perspective Taking in Different Narrative Types and Family Dysfunction

In examining simple associations with family dysfunction, different types of perspective taking emerged as important in different types of family-narratives. Lower levels of family dysfunction were associated with more interpretations by the narrator in happy family narratives, with more interpretations of the other in difficult family narratives, with more interpretations of the parents and of the family ("we") in change family narratives, and with more interpretations of the parents in self-in-family narratives. It is important to keep in mind that these interpretation types were correlated across narrative type. Additionally, it is likely that a

portion of these associations can be explained by presumably higher levels of elaborative memory sharing in families with lower levels of dysfunction (Fivush et al., 2011). Interestingly however, only in happy family narratives were total-interpretations associated with family dysfunction. This suggests that a lack of certain types of perspective taking within family narrative domains may in fact differentially reflect deficits in family functioning.

In happy family narratives, individuals who used more narrator-interpretations tended to report less family dysfunction. In exploring the happy family narratives of individuals who reported high levels of family dysfunction and used few narrator interpretations, it appears that this relationship may draw from a generalized mode of telling happy family experiences. The narrator-interpretation is the "I" perspective and it is exceedingly difficult to tell a coherent and elaborated story without some use of the "I". This generalized remembering of happy family experiences is reminiscent of work using the Adult Attachment Interview (AAI; George et al., 1984). Individuals categorized as dismissive-avoidant using the interview provide narratives that are characterized by "little access to memories of unpleasant childhood experiences and [a tendency] to report idealized global impressions of [a] 'normal' or 'happy' childhood" (Connors, 1997, p. 480). In the AAI, these less elaborated happy family memories are thought to reflect an adaptive tendency to gloss over the negative aspects of a childhood spent in a family with high levels of dysfunction (Bowlby, 1969). Similarly a lack of narrator interpretations in happy family narratives creates a notably "global" reflection of experience that typifies the narratives of individuals from low functioning families.

In memories of difficult times for the family, higher levels of other-interpretations were associated with lower levels of family dysfunction. Across all family-narrative types, other-interpretations tended to be from the perspective of siblings, grandparents, close family-friends, and even family pets. In difficult family narratives, these important others were often the individuals to whom the difficulty was happening. Again, in drawing from the attachment literature, the model of self and other proposed by Griffin and Bartholomew (1994) suggests that securely attached individuals have a more positive and engaged view of others. In fact, Corcoran and Mallinckrodt (2000) found that perspective-taking abilities mediated associations between attachment and conflict style in intimate partnerships. Similarly, it seems that in difficult family narratives individuals from families with high levels of dysfunction were unable or unwilling to take the perspective of the

other. This finding is likely both a reflection of the presumed lower frequency of sharing of experiences (Fivush, 2007) and the decreased comfort and interest in exploring such difficult experiences in low functioning families (Grotevant & Cooper, 1989).

In memories of change for the family, higher levels of we-interpretations and parent interpretations were associated with lower levels of family dysfunction.

Times of transition are often also times of closeness for families (Hetherington, 1989), and this perspective taking of the family and parents may reflect this closeness. Again, the ability to take such perspectives also likely reflects important sharing of feeling and experience within the family and the safe family context of high functioning families from which to take these perspectives. In addition, the parent-voice provided in these narrative often reflects knowledge of the parent's feelings of love for the individual, an aspect of family narratives that is likely very important in times of transition or uncertainty for the family.

Finally, in narratives about the self within the family, higher levels of parent interpretations were associated with lower levels of family dysfunction. This finding seems to be the most intuitive, as this prompt primarily elicited stories told from the parent's perspectives about cherished times from emerging adult's childhoods. When self-in-family narratives contained very little parent voice, the tone was altogether different from the usual light, loving and playful tone of these narratives. The inability to tell this type of story from the parent perspective may represent a lack of experience sharing in the family, but also and perhaps more importantly, a lack of concrete evidence of positive views of the self and the other as proposed by attachment researchers (Griffin & Bartholomew, 1994).

Thus, it appears that perspective taking within family narratives is both type and context specific in its association with family dysfunction. It is important to note again that these interpretations are correlated within and across narrative type and thus any conclusions drawn from these associations are only tentative. However, these findings serve to broaden research suggesting that parent voices in adolescent's family narratives are associated with parenting style (Pratt et al., 2001) and psychosocial stage development (Thorne et al., 2004). Additionally, these findings suggest that individuals may access different perspectives when recounting family narratives depending on the functioning of their family of origin, a process that is likely informed by the frequency of sharing and discussing the family's past (Fiese et al., 1995).

#### The Family Perspective in Narratives of Change and Identity

In examining associations between identity development and interpretive processing in these narratives, before controlling for any other contributing factors it is we-interpretations, and it seems particularly the we-interpretations in change family narratives, that are associated with identity development. Walsh (1996) writes that during times of family transition "family perceptions of a stressful situation or transition intersect with legacies of previous experience in the multigenerational system to forge the meaning the family makes of a challenge" (p. 8). Change narratives, which reflect transitional periods for the family as a whole, necessitate an essential reworking of the meaning the family constructs and that this reworking requires a higher level of interpretive processing in order to be integrated into the family's overall story. The ability to do this processing of family transition through the lens of the family's subjective experience of such change suggests that the individual feels close and comfortable enough to align themselves with the family perspective and that the family discussed the experience in order to process the transition together.

Thus, the ability and inclination to take the perspective of the family in these times of transition may suggest both familial closeness and openness that may be essential to healthy psychosocial development (Grotevant & Cooper, 1986). Therefore, it seems likely that these we-interpretations in change narratives reflect low levels of family dysfunction that facilitates healthy psycho-social stage development. Interestingly, we-interpretations are also negatively correlated with age such that older individuals are using fewer overall. It may also be that in emerging adulthood, when individuation from the family is more prominent (Grotevant & Cooper, 1986), the inclination to interpret from the family perspective is in decline. Importantly, these findings again suggest that while the body of family narratives may be important, interpretive processing within domains of family narratives is not to be ignored.

#### Gender, Family Narratives, and Identity

The mean levels of interpretive processing by gender reflect that, as has been found in previous research, females tell longer and more interpreted narratives than males (see Thorne & McLean, 2002).

Females in the current study used more factual content in all narratives, save in the happy family narrative. The lack of a gender difference in factual content in happy family narratives may reflect early socialization of emotion that makes the processing and integration of negative emotion more acceptable for girls than for boys

(Fivush, 1989; 1991; Fuchs & Thelen, 1988; Thorne & McLean, 2002). Additionally, while females employed more total interpretations across all narrative types this gender difference appeared at least in part to be explained by female's greater use of "we-interpretations". The greater use of we-interpretations by females may reflect that in childhood (Buckner & Fivush, 1998; 2000) and adolescence (McLean & Breen, 2009) girls tell stories with more affiliative themes, with more specific content about others, and for more relational reasons than boys.

Interpretive content, identity development, and gender. What is unique to this study is that while females may be engaging in more interpretive processing, the variability around these levels of processing is nearly identical for males and females, and their elevated level of processing does not appear to be associated with female's developing sense of personal identity. Instead, for females, family dysfunction is the primary correlate of identity development. It appears that only for males, after controlling for factual content and family dysfunction, is interpretive processing associated with identity development. This finding appears to be driven by analogous relationships in the difficult family narrative and for other-interpretations.

Previous studies have found similar moderation by gender of interpretive processing's association with well-being in adolescents (Bohanek & Fivush, 2010). However, in adulthood, gender differences have not be found in studies that link narrative processing to ego-development (Pals, 2006b) or well-being (Bauer & McAdams, 2004). These studies however, examine well-being and ego-development and not identity development and additionally do not examine family dysfunction or relationship factors. It may be that for females, whose identities seem to be more relationally bound (see Josselson, 1987) considering family of origin functioning or other relationship variables such as attachment results would have resulted in similar findings to the current study.

One way to interpret this data is that the ability and inclination to engage in interpretive processing and perspective taking within family narratives is a developmental achievement that males in emerging adulthood may be just beginning to reach. Beginning in early childhood males are socialized in using less elaborative interpretive content than females (Fivush, Berlin et al., 2003; Reese et al., 1993), and they continue to tell less detailed and interpretive narratives throughout adulthood (Fivush, 1998; Ross & Holmberg, 1990). It may be that emerging adulthood is the developmental period in which the ability to connect the self to others,

particularly to the family may become vitally important to male's developing sense of self as they attempt to "catch up" to their female counterparts in interpretive processing skills. The relationship between identity development and interpretation for males suggests that in emerging adulthood it is those males with a greater inclination to interpret their family narratives who are the most developmentally advanced. Perhaps this is because providing interpretive content makes for interesting and engaging stories, and thus males that are more able to provide these details may have more opportunity for identity development through sharing these stories. Alternatively, males who have learned to engage in interpretation and perspective-taking like their female counterparts may be developmentally advanced and thus able to access, explore, and engage in their own identity development with more skill than males who have not yet mastered this task.

This proposal is at least in part supported by post-hoc analyses that demonstrated that the association between overall interpretive processing and identity development is present only for males who are in committed relationships. For all females and for single males no association was found between identity development and interpretive processing. As would be expected, females and males who are in relationships are more identity developed (though females not statistically significantly) than those not in romantic relationships. Eriksonian (1968) psychosocial stages presume that individuals must obtain a certain level of identity development before engaging in intimacy development. Erikson's (1968) seminal work has been supported by longitudinal findings showing direct links between ego development in adolescence and intimacy in young adulthood (Beyers & Seiffge-Krenke, 2010).

Previous research has suggested that in childhood, sense of self for girls is more closely tied to relationships while for boys it is tied to autonomy and achievement (Harter, 1999). In adolescence, intimacy in female-female friendships appears to come largely from self-disclosure and conversation while males maintain such closeness through activity (McNelles & Connolly, 1999). Additionally, adolescent girls appear to desire this type of intimate disclosure at an earlier age than adolescent boys (Buhrmester & Furman, 1987). Girls then, are not only socialized to engage in more interpretive processing of shared memories than boys, but are also more motivated to disclose and connect through shared experience than their male counterparts. Throughout childhood and adolescence girls are therefore presented with more practice at the interpretation and perspective taking necessary in romantic relationships. Johnson and colleagues (2007) have shown emerging adult males

who report more emotional closeness in their cross-gender friendships also tend to be more identity committed. Additionally, researchers have found that emerging adult males who are more accomplished perspective takers also demonstrate greater warmth and better communication skills in their romantic relationships (Davis & Oathout, 1987) and demonstrate better marital adjustment (Long & Andrews, 1990).

Interestingly, in examining mean levels of narrative processing it appears that males in relationships engage in more interpretation than their single counterparts. However, for females this trend appears to be reversed, whereby females in relationships are actually engaging in less interpretive processing than single females. This finding suggests that perhaps there is a "meeting in the middle" that occurs when males and females enter the intimacy stage of development in emerging adulthood, such that males begin to engage in more interpretive processing and females in less, at least in these family narratives. It may be that continued socialization through romantic partnership requires that females and males make changes to their methods of conversational engagement and perspective taking in order to better communicate with one another.

In order to better understand these findings it is necessary to take a look at the family narratives of males in this study, the following narrative is from a 20-year-old male who is in a committed relationship with a fairly high level of identity development (+1.07 standard deviations) and interpretation (+1.81 standard deviations):

My brother has had really bad depression his whole life, and has suffered from tons of mental disorders that make him somewhat antisocial. He also suffers from Bi-Polar Disorder, which has made living with him just a very difficult and stressful experience. One time though, when I was about twelve years old I came home from school to find a letter adressed to me sitting on the staircase and then when I went into the bathroom, my brother's body was laying there in the bathtub filled with dark red water. I was completely home alone at the time and had to call 911 and my family, and after that things just became really bad. It was my brother's first suicide attempt and he was only about seventeen years old, and so the state ordered him to go to a mental institution for a few months and my family really struggled with everything, because we just had no idea what to do. We always knew he had problems and he'd been going to see tons and tons of psychiatrists and had been put on tons of different medications for all different sorts of things, but nothing really ever helped. Problems continued with him from then on, and more suicide attempts followed, but that was probably the worst in regards to forcing my family to confront that issue and then struggle with whether to tell other friends or not, and how to go about things. [sic]

In contrast, the following is a narrative of an 18-year-old male who is not in a committed relationship who has a similar level of identity development (+1.51 standard deviations) but a low level of interpretation (-.95 standard deviations):

A very difficult time for my family was last year (2010). My grandpa's health was failing him (now he has improved and is in assisted living with his wife) and my uncle (dad's brother) had once again gotten out of prison and stole from my grandpa. These things, along with college to pay for (for my older sister) and having two teenage boys in the house (my brother and me) placed many stresses on my parents and the family as a whole.

What is demonstrated in these two narratives of mortality is the difficulty the second, uncommitted male appears to have in engaging in the emotional content of his family's difficult experiences. While he provides the facts that help us understand what was happening at the time, he does little to flesh out how others in his family were feeling. He alludes to "many stresses" on his parents but does little to explain the subjective experience for himself, his brother, or his parents of what must have been a harrowing period. Thus, even though this single male is at the same level of identity development as the committed male, he does not yet seem to be interpreting his family's difficult experiences. In contrast, in the committed male's narrative presented above, the difficult time is described in-depth, subjectively, and from multiple perspectives. From these narratives, and others in this study I would suggest that perhaps for males, these interpretive processing skills are at least partly the result of relationship experiences. Additionally, identity development may be less relationally situated for males and thus be able to develop, up to a certain point, regardless of narrative processing abilities. I would argue that this finding is not relevant simply for family narratives, but that family narratives may represent a more affiliative framework within which these perspective-taking skills are highlighted.

Thus, it is clear that the ability to interpret and perspective-take within important past family situations is an essential tool for engaging in intimate partnership. The association between interpretive processing and identity development for males in romantic relationships needs further parsing out in order to be clearly explicated. Likely, there are multiple bidirectional pathways to achieving identity development, high interpretive processing, and a romantic relationship for emerging adult males. It may be that once males are intimately connected with a partner they are thrust into engaging in more interpretive processing. This processing may in turn further identity development. Alternatively, it may be that males that are in committed relationships receive more practice in such narrative processing and thus are able to more fully explore their

own identities. Finally, it could be that males who are more identity developed are also more inclined to construct highly interpretive narratives and thus more capable of being in committed romantic relationships.

## The Valence of Family Narratives and Identity

Possessing a body of family narratives that was overall more positively framed was associated with identity development even after controlling for family dysfunction. This finding suggests that like the analysis of the AAI (see Dykas & Cassidy, 2011 for a review), it is the individual's *representation* of the family that counts and not simply what the family has experienced. These representations, termed Internal Working Models (IWM; Bowlby, 1973) in the attachment literature are conceptualized as prototypes (Sroufe, Egeland, Carlson, & Collins, 2005), or filters, through which interpersonal information is processed (Dykas & Cassidy, 2011). In other words, it is the interpretation and valence of the telling of the family stories that is related to personal psychosocial development regardless of family experience. Additionally, unlike interpretive processing, this association was not found in individual narrative types, but instead only when valence was considered across the types of family narratives the individual provided. Thus, as long as the positive outweighs the negative in the body of these shared family narratives, identity development can go unthreatened by negative family experiences.

In interpreting the relationship between overall valence of these family narratives and identity development, connections can be drawn to theoretical and empirical work on master narratives (McAdams, 2006; 2008; Thorne & McLean, 2003; Westrate & McLean, 2010) and family paradigms (Reiss, 1989). Master narratives are culturally accepted frameworks through which personal narratives are told (Thorne & McLean, 2003). When an individual employs such a framework to tell their personal narrative they can position the self as aligned with or against that narrative construction (Thorne & McLean, 2003). For instance, McAdams has suggested that an American master narrative is that of redemption, a story framework that moves from negative to positive. Research on the American master narrative has found that those employing a redemptive structure to frame their life stories have higher well-being and self-esteem (McAdams, 2006; McAdams et al., 2001; McLean & Breen, 2009; McLean & Lilgendahl, 2008). Additionally, Thorne and McLean (2006) identified three master narrative types, (each exemplifying concern, toughness, and vulnerability) in adolescents' stories of trauma and Westrate and McLean (2010) found that a cohort specific American gay-master narrative

appeared to exist for homosexual men. Importantly, when one's story naturally fits within the accepted master narrative of the larger culture (whether that be America at large or a cohort specific sexual identity) it is often not told, whereas an individual who positions themselves as differing from the master narrative must first acknowledge it and then work against it actively in narration (Thorne & McLean, 2003).

Additionally, Reiss's (1989) experimental work exploring the Family Paradigm suggests that families operate by shared organizational principles at the subliminal level that are preserved by action (in the form of rituals and routines). Reiss (1989) suggests that families share assumptions about the world that are developed over time which are constructed and reinforced by experience and behavior of individual members (Reiss, 1989). While Reiss's work does not look at family narratives, I suggest that one way to access family assumptions about the world may be through narrative, just as narrative provides access to personal assumptions and identity (McLean et al., 2007).

In connecting these two theories, I suggest that there is possibly both a master narrative within the family that represents the assumptions of the family paradigm as well as a master American family narrative that is more accepted by the culture at large. That is, that individuals may draw from their family's developed assumptions about the world in framing the valence of these individual narratives. Additionally, in the body of family narratives that are shared with the outside world, an acceptable framework that is more positive may be important to further development. In possessing this more accepted family narrative structure, individuals may more easily and comfortably share family stories with others, and thus have more opportunities for connection and processing through interpretation. Conversely, having a more developed sense of identity likely allows an individual to more fluidly integrate and re-frame negative narratives into the overall more positive and acceptable narrative structure.

## Limitations, Future Directions, and Conclusions.

It is necessary to address some important limitations to this study. First, while, this study takes a developmental standpoint on identity and family narratives the study was not longitudinal in nature and thus any conclusions about developmental processes are limited. Second, this study examined family narratives that are likely to be commonly shared verbally rather than through a writing task. It may be that writing these family narratives is a confound in assessing the interpretive processing that takes place within them. Perhaps

individuals are more likely to engage in interpretive processing in written versus oral narration. Third, family dysfunction was assessed through a validated survey, however most individuals had moved from the family home within the last three months and thus these scores may be confounded by the individuation process that participants were likely currently experiencing. Fourth, in terms of socioeconomic status, family structure, and ethnic makeup, the sample employed for this study was overwhelmingly homogeneous, drawing upon mostly Caucasian individuals whose parents had also attended college and those who biological or adoptive parents were still living together. Thus, these findings may not generalize well to the population of emerging adults as a whole and it is possible that the gendered findings in this study are culturally and family structure specific. Finally, this study is correlational in nature and thus any conclusions that can be drawn from it must take into account that no assumptions were made as to the causal nature of the variables.

In terms of future directions it will be essential for researchers to explore family narratives across the lifespan and longitudinally, in order to explore some of the processes by which differing levels of interpretation and identity development occur. Additionally, a greater exploration of gendered development in emerging adulthood and in particular the relationships between interpretive processing, intimacy, and identity are a clear next step. Finally, exploring more diverse samples is an important task for researchers of family narratives as the content and processing of family narratives is likely highly culturally, family structure, and socioeconomically dependent.

In conclusion, the development of personal identity is a task that requires the integration of the past with the present, and in emerging adulthood the family remains a crucial part of both. As emerging adults negotiate living away from the safety and security of the family they are met with the task of explaining who they are and where they come from. Some of this explanation is likely accomplished through the sharing of family narratives. Within family narratives it is clear that the ability to tell a positive story that engages the perspective of important others reflects both a healthy family of origin and for males in romantic relationships, self-concept clarity and self-exploration. The suggestion that in emerging adulthood only males in committed relationships benefit from such processing in their psychosocial stage development represents an important first step in exploring the gender differences found in many narrative studies. Regardless of gender however, at this developmental moment, on the brink of adulthood and leaving adolescence behind, it is clear that the processing

of family narratives serve as both a tie to the individual's family past and a window into the individual's present personal and relational development.

## References

- Arnett, J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469-480. doi:10.1037/0003-066X.55.5.469
- Arnold, M., Pratt, M. W., & Hicks, C. (2004). Adolescents' representations of parents' voices in family stories:

  Value lessons, personal adjustment, and identity development. In M. W. Pratt, B. H. Fiese, M. W.

  Pratt, B. H. Fiese (Eds.), *Family stories and the life course: Across time and generations* (pp. 163-186). Mahwah, NJ: Lawrence Erlbaum Associates Publishers
- Bauer, D. R., & McAdams, D. P. (1999). Life story coherence and its relation to psychological well-being.

  Narrative Inquiry, 9, 69-96.
- Bauer, J. J., McAdams, D. P., & Pals, J. L. (2008). Narrative identity and eudemonic well-being. *Journal of Happiness Studies*, 9(1), 81-104. doi:10.1007/s10902-006-9021-6
- Beyers, W., & Seiffge-Krenke, I. (2010). Does identity precede intimacy? Testing Erikson's theory on romantic development in emerging adults of the 21<sup>st</sup> century. *Journal of Adolescent Research*, 25, 387-415. doi: 10.1177/0743558410361370
- Bird, A., & Reese, E. (2006). Emotional reminiscing and the development of an autobiographical self. *Developmental Psychology*, 42, 613-626. doi:10.1037/0012-1649.42.4.613
- Bird, A., & Reese, E. (2008). Autobiographical memory in childhood and the development of a continuous self.

  In F. Sani, F. Sani (Eds.), *Self continuity: Individual and collective perspectives* (pp. 43-54). New

  York, NY: Psychology Press.
- Bohanek J. G., & Fivush, R. (2010). Personal narratives, well-being, and gender in adolescence. *Cognitive Development*, 25, 368-379. doi: 10.1016/j.cogdev.201008.003
- Bohanek, J. G., Marin, K. A., & Fivush, R. (2008). Family narratives, self, and gender in early adolescence. *The Journal of Early Adolescence*, 28, 153-176. doi: 0.1177/0272431607308673
- Bohanek, J. G., Marin, K. A., Fivush, R., & Duke, M. P. (2006). Family narrative interaction and children's sense of self. *Family Process*, 45, 39-54. doi: 10.1111/j.1545-5300.2006.00079.x
- Bowlby, J. (1969). Attachment and loss: Vol. 1. Attachment. New York, NY: Basic Books.
- Bowlby, J. (1973). Attachment and loss: Vol 2. Separation: Anxiety and anger. New York, NY: Basic Books.

- Buckner, J. P., & Fivush, R. (1998). Gender and self in children's autobiographical narratives. *Applied Cognitive Psychology*, 12, 407-429.
- Buckner, J. P., & Fivush, R. (2000). Gendered themes in family reminiscing. Memory, 8, 401-412.
- Buhrmester, D., & Furman, W., (1987). The development of companionship and intimacy. *Child Development*, 58, 1101-1113.
- Campbell, E., Adams, G. R., & Dobson, W. R. (1984). Familial correlates of identity formation in late adolescence: A study of the predictive utility of connectedness and individuality in family relations.

  \*Journal of Youth and Adolescence, 13, 509-525.
- Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology*, 70, 141-156. doi: 10.1037/0022-3514.70.1.141
- Choudhury, S., Charman, T., Bird, V., & Blakemore, S-J. (2007). Development of action representation during adolescence. *Neuropsychologia*, 45, 255-262.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied Multiple Regression/Correlation Analysis for the Behavior Sciences* (3rd Ed.). Mahwah, NJ: Routledge Academic.
- Connors, M. E. (1997). The renunciation of love: Dismissive attachment and its treatment. *Psychoanalytic Psychology*, *14*, 475-493.
- Corcoran, K. O., & Mallinckrodt, B. (2000). Adult attachment, self-efficacy, perspective taking, and conflict resolution. *Journal of Counseling and Development*, 78, 473-483.
- Davis, M. H., & Oathout, H. (1987). Maintenance of satisfaction in romantic relationships: Empathy and relational competence. *Journal of Personality and Social Psychology*, 53, 397-410. doi: 10.1037.0022-3514.53.2.397
- Dykas, M. J., & Cassidy, J. (2011). Attachment and the processing of social information across the life span:

  Theory and evidence. *Psychological Bulletin*, 137, 19-46.
- Erikson, E. (1968). Identity, Youth and Crisis. New York, NY: Norton.
- Epstein, N. B., Baldwin, L. M., & Bishop, D. S. (1983). The McMaster family assessment device. *Journal of Marital and Family Therapy*, 9, 171 180. doi: 10.1111/j.1752-0606.1983.tb01497.x

- Farrant, B. M., Devine, T. A. J., Maybery, M. T., & Fletcher, J. (2012). Empathy, perspective taking and prosocial behavior: The importance of parenting practices. *Infant and Child Development*, 21, 175-188. doi: 10.1002/icd.740
- Farrant, K., & Reese, E. (2000). Maternal style and children's participation in reminiscing: Stepping stones in children's autobiographical memory development. *Journal of Cognition and Development*, 1, 193-22. doi: 10.1207/S15327647JCD010203
- Fiese, B. H., Hooker, K. A., Kotary, L. Schwagler, J., Rimmer, M. (1995). Family stories in early stages of parenthood. *Journal of Marriage and Family*, *57*, 763-770. doi: 10.2307/353930
- Fivush, R. (1989). Exploring sex differences in the emotional content of mother-child conversations about the past. *Sex Roles*, 20, 675-691.
- Fivush, R. (1991). Gender and emotion in mother-child conversations about the past. *Journal of Narrative and Life History*, 1, 325-341.
- Fivush, R. (1998). Gendered narratives: Elaboration, structure, and emotion in parent-child reminiscing across the preschool years. In C. P. Thompson, D. J. Herrmann, D. Bruce, J. D. Read, D. G. Payne, & M. P. Toglia (Eds.), *Autobiographical memory: Theoretical and applied perspectives* (pp. 79-104). Mahwah, NJ: Erlbaum.
- Fivush, R. (2007). Remembering and reminiscing: How individual lives are constructed in family narratives. *Memory Studies*, 1, 45-54. doi: 10.1177/1750698007083888
- Fivush, R., Berlin, L. J., Sales, J., Mennuti-Washburn, J., & Cassidy, J. (2003). Functions of parent-child reminiscing about emotionally negative events. *Memory*, 11, 179-192. doi:10.1080/741938209
- Fivush, R., Bohanek, J. G., & Duke, M. (2008). The intergenerational self: Subjective perspective and family history. In F. Sani (Ed.), *Individual and collective self-continuity*. Mahwah, NJ: Erlbaum.
- Fivush, R., Bohanek, J. G., & Zaman, W. (2011). Personal and intergenerational narratives in relation to adolescents' well-being. In T. Habermas (Ed.), *The development of autobiographical reasoning in adolescence and beyond, 131*, 45-57. doi:10.1002/cd.288
- Fivush, R., & Buckner, J. P. (2003). Creating gender and identity through autobiographical narratives. In R. Fivush, C. A. Haden, R. Fivush, C. A. Haden (Eds.), *Autobiographical memory and the construction*

- of a narrative self: Developmental and cultural perspectives (pp. 149-167). Mahwah, NJ: Lawrence Erlbaum.
- Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development*, 2006, 1568-1588. doi: 10.1111/j.1467-8624.2006.00960.x
- Fivush, R., & Nelson, K. (2006). Parent-child reminiscing locates the self in the past. *British Journal of Developmental Psychology*, 24, 235-251. doi:10.1348/026151005X57747
- Fuchs, D., & Thelen, M. H. (1988). Children's expected interpersonal consequences of communicating their effective state and reported likelihood of expression. *Child Development*, *59*, 1314-1322.
- George, C., Kaplan, N., & Main, M. (1996). Adult Attachment Interview. Unpublished manuscript, Department of Psychology, University of California, Berkeley, CA (third edition).
- Goldscheider, F., Goldscheider, C., Clair, P. T., & Hodges, J. (1999). Changes in returning home in the United States, 1925-1985. *Social Forces*, 78, 695-721.
- Greenberger, E., & Sorensen, A. B. (1971). Toward a concept of psychosocial maturity. *Center For Social Organization Of Schools Report*, Johns Hopkins University, *108*.
- Griffin, D., & Bartholomew, K. (1994). Models of self and other: Fundamental dimensions underlying measures of adult attachment. *Interpersonal Relations and Group Processes*, 67, 430-445.
- Grotevant, H. D., & Cooper, C. R. (1998). Individuality and connectedness in adolescent development: Review and prospects for research on identity, relationships, and context. In E. Skoe, A. von der Lippe, E. Skoe, A. von der Lippe (Eds.), *Personality development in adolescence: A cross national and life span perspective* (pp. 3-37). Florence, KY: Taylor & Frances.
- Habermas, T. & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin*, 126, 748-769. doi: 10.1037/0033-2909.126.5.748
- Habermas, T., Ehlert-Lerche, S., & de Silveira, C. (2009). The development of the temporal macrostructure of life narratives across adolescence: Beginnings, linear narrative form, and endings. *Journal of Personality*, 77, 527-560. doi: 10.1111/j.1467-6494.2008.00557.x

- Harter, S. (1999). The construction of the self: A developmental perspective. New York, NY: Guilford Press.
- Hetherington, E. M. Coping with family transitions: Winners, losers, and survivors. *Child Development*, 60, 1-14.
- Johnson, H. D., Brady, E., McNair, R., Congdon, D., Niznik, J., & Anderson, S. (2007). Identity as a moderator of gender differences in the emotional closeness of emerging adult's same and cross-sex friendships. *Adolescence*, 42(165), 1-23.
- Josselson, R. (1987). Finding herself: Pathways to identity development in women. Hoboken, NJ: Jossey-Bass Publishers.
- King, L. & Raspin C. (2004) Lost and found possible selves, subjective well-being, and ego development in divorced women. *Journal of Personality*, 72, 603-632. Doi: 10.111/j.0022-3506.2004.00274.x
- King, L. A., Scollon, C. K., Ramsey, C., & Williams, T. (2000). Stories of life transition: Subjective well-being and ego development in parents of children with Down Syndrome. *Journal of Research in Personality*, 24, 509-536.
- Koepke, S., & Denissen, J. A. (2012). Dynamics of identity development and separation–individuation in parent–child relationships during adolescence and emerging adulthood - A conceptual integration. *Developmental Review*, 32(1), 67-88. doi:10.1016/j.dr.2012.01.001
- Kohlberg, L. (1976) Moral stages and moralization: The cognitive-developmental approach. In T. Lichkona (Ed.), *Moral development and behavior: Theory, research, and social issues.* New York, NY: Holy, Rinehart, & Winston.
- Lahelma, E., & Gordon, T. (2003). Home as a physical, social and mental space: Young people's reflections on leaving home. *Journal of Youth Studies*, *6*, 377-390. doi: 10.1080/1367626032000162104
- Long, E. C., & Andrews, D. W. (1990). Perspective taking as a predictor of marital adjustment. *Journal of Personality and Social Psychology*, *59*, 126-131. doi: 10.1037/002-3514.59.1.126
- Mackey, K., Arnold, M., & Pratt, M. W. (2001). Adolescents' stories of decision making in more and less authoritative families: Representing the voices of parents in narrative. *Journal of Adolescent Research*, 16(3), 243-268. doi:10.1177/0743558401163001

- McAdams, D. P. (1995). The Life Story Interview. *Foley Center for the Study of Lives*. Retrieved March 9, 2012, from http://www.sesp.northwestern.edu/foley/instruments/interview/
- McAdams, D. P. (2006). *The redemptive self: Stories Americans live by*. New York, NY: Oxford University Press.
- McAdams, D. P. (2008). Personal narratives and the life story. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research*. (pp. 242-262). New York, NY: Guilford.
- McKeough, A., & Malcolm, J. (2011). Stories of family, stories of self: The development of autobiographical reasoning in adolescence and beyond. In T. Habermas. (Ed.)., *New directions for child and adolescent development*, 131, 59-71. doi:10.1002/cd.289
- McLean, K. C., & Breen, A. V. (2009). Processes and content of narrative identity development in adolescence: Gender and well-being. *Developmental Psychology*, 45, 702-710. doi:10.1037/a0015207
- McLean, K. C., Breen, A. V., Fournier, M. A. (2010). Constructing the self in early, middle, and late adolescent boys: Narrative identity, individuation, and well-being. *Journal of Research on Adolescence*, 20, 166-187. doi: 10.1111/j.1532-7795.2009.00633.x
- McLean, K. C., & Lilgendahl, J. (2008). Why recall our highs and lows: Relations between memory functions, age, and well-being. *Memory*, 16(7), 751-762. doi:10.1080/09658210802215385
- McLean, K. C. & Mansfield, C. (2012). The co-construction of adolescent narrative processes: Narrative processing as a function of adolescent age, gender, and maternal scaffolding. *Developmental Psychology*, 48, 436-447. doi: 10.1037/a9925563
- McLean, K. C., & Morrison-Cohen, S. C. (Under review). Moms telling tales: maternal disclosure with adolescents in conversations about the personal past.
- McLean, K. C., & Pasupathi, M. (2012). Processes of identity development: Where I am and how I got there. *Identity: An international journal of theory and research*, 12(1), 8-28.
- McLean, K. C., Pasupathi, M., Pals, J. P. (2007). Selves creating stories creating selves: A process model of self-development. *Personality and Social Psychology Review*, 11, 262-280. doi: 10.1177/1088868307301034

- McLean, K. C., & Pratt, M. W. (2006). Life's little (and big) lessons: Identity statuses and meaning-making in the turning point narratives of emerging adults. *Developmental Psychology* 42, 714-722. doi: 10.1037/0012-1649.42.4.714
- McLean, K. C., & Thorne, A. (2003). Adolescent's self-defining memories about relationships. *Developmental Psychology*, *39*, 635-645.
- McNelles, L. R., & Connolly, J. A. (1999). Intimacy between adolescent friends: Age and gender differences in intimate affect and intimate behavior. *Journal of Research on Adolescence*, 9(2), 143-159. doi: 10.1207/s15327785jra0902\_2
- Mead, M. (1934). Kinship in the Admiralty Islands. New York, NY: American Museum of Natural History.
- Nelson, K., & Fivush, R. (2004). The emergence of autobiographical memory: A social culture developmental theory. *Psychological Review*, 111, 486-511. doi: 10.1037/0033-295X.111.2.486
- Pals, J. L. (2006a). Constructing the 'springboard effect': Causal connections, self-making, and growth within the life story. In D. P. McAdams, R. Josselson, A. Lieblich, D. P. McAdams, R. Josselson, A. Lieblich (Eds.), *Identity and story: Creating self in narrative* (pp. 175-199). Washington, DC: American Psychological Association. doi:10.1037/11414-008
- Pals, J. L. (2006b). Narrative identity processing of difficult life experiences: Pathways of personality development and positive self-transformation in adulthood. *Journal of Personality*, 74, 1079-1110. doi: 10.1111/j.1467-6494.2006.00403.x
- Pasupathi, M., & Hoyt, T. (2009). The development of narrative identity in late adolescence and emergent adulthood: The continued importance of listeners. *Developmental Psychology*, 45, 558-574. doi:10.1037/a0014431
- Pasupathi, M., & Wainryb, C. (2010). On telling the whole story: Facts and interpretations in autobiographical memory narratives from childhood through midadolescence. *Developmental Psychology*, 46, 735-746. doi:10.1037/a0018897
- Piaget, J., & Inhelder, B. (1969) *The psychology of the child*. (H. Weaver, Trans.). New York, NY: Basic Books.

- Pratt, M. W., Arnold, M., & Mackey, K. (2001). Adolescents' representations of the parent voice in stories of personal turning points. In D. P. McAdams, R. Josselson, A. Lieblich, D. P. McAdams, R. Josselson, A. Lieblich (Eds.), *Turns in the road: Narrative studies of lives in transition* (pp. 227-252).
  Washington, DC: American Psychological Association. doi:10.1037/10410-009
- Pratt, M.W., & Fiese, B.H. (2004). Family stories and the life course: Across time and generations. Mahwah, NJ: Erlbaum.
- Pratt, M. W., Norris, J. E., Lawford, H., & Arnold, M. L. (2010). What he said to me stuck: Adolescents' narratives of grandparents and their identify development in emerging adulthood. *Narrative development in adolescence: Creating the storied self* (pp. 93-112). New York, NY: Springer. doi:10.1007/978-0-387-89825-4 5
- Reese, E. (2002). Social factors in the development of autobiographical memory: The state of the art. *Social Development*, 11, 124-142. doi:10.1111/1467-9507.00190
- Reese, E., & Fivush, R. (1993). Parental styles of talking about the past. *Developmental Psychology*, 29, 596-606.
- Reese, E., Haden, C. A., & Fivush, R. (1993). Mother-child conversations about the past: Relationships of style and memory over time. *Cognitive Development*, 8, 403-430. doi: 10.1016/S0885-2014(05)80002-4
- Reese, E., Yan, C., Jack, F., & Hayne, H. (2010). Emerging identities: Narrative and self from early childhood to early adolescence. In K. C. McLean, M. Pasupathi, K. C. McLean, M. Pasupathi (Eds.), *Narrative development in adolescence: Creating the storied self* (pp. 23-43). New York, NY: Springer Science + Business Media. doi:10.1007/978-0-387-89825-4\_2
- Reiss, D. (1981). *The family's construction of reality*. Cambridge, MA: The President and Fellows of Harvard College.
- Rosenthal, D. A., Gurney, R. M., & Moore, S. M. (1981). From trust to intimacy: A new inventory for examining Erikson's stages of psychosocial development. *Journal of Youth and Adolescence*, 10, 525-538. doi: 10.1007/BF02087944

- Ross, M., & Holmberg, D. (1990). Recounting the past: Gender differences in the recall of events in the history of a close relationship. In J. M. Olson & M. P. Zanna (Eds.), *Self-inference processes: The Ontario Symposium, Vol.* 6 (pp.135-152). Hillsdale, NJ: Erlbaum.
- Selman. R. L. (1971). Taking another's perspective: Role-taking development in early childhood. *Child Development*, 42, 1721-1734.
- Sroufe, L. A., Egeland, B., Carlson, E. A., & Collins, W. A. (2005). *The development of the person: The Minnesota study of risk and adaptation from birth to adulthood.* New York, NY: Guilford Press.
- Thorne, A., & McLean, K. C. (2002). Gendered reminiscence practices and self-definition in late adolescence. Sex Roles, 46, 267-277.
- Thorne, A., & McLean, K. C. (2003). Telling traumatic events in adolescence: A study in master narrative positioning. In R. Fivush & C. A. Haden (Eds.) *Autobiographical memory and the construction of a narrative self: Developmental and cultural perspectives.* (pp. 169-185). Mahwah, NJ: Lawrence Erlbaum.
- Thorne, A., McLean, K. C., & Dasbach, A. (2004). When parents' stories go to pot: Telling personal transgressions to teenage kids. In M. W. Pratt, B. H. Fiese, M. W. Pratt, B. H. Fiese (Eds.), *Family stories and the life course: Across time and generations* (pp. 187-209). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Underwood, B., & Moore, B. (1982). Perspective-taking and altruism. Psychological Bulletin, 91, 143-173.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1986). Concrete human psychology. Psikhologiya, 1, 51-64.
- Walker, L. J. (1980). Cognitive and perspective-taking prerequisites for moral development. *Child Development*, 51, 131-139.
- Walsh, F. (1996). The concept of family resilience: Crisis and challenge. *Family Process*, *35*, 251-281. doi: 10.1111/j.1545-5300.1996.00261.x
- Westrate, N. M., & McLean, K. C. (2010). The rise and fall of gay: A cultural-historical approach to gay identity development. *Memory*, 18, 225-240. doi:10.1080/09658210903153923

- Willemsen, E. W., & Waterman, K. K. (1991). Ego identity status and family environment: A correlational study. *Psychogical Reports*, *69*, 1203-1212.
- Zaman, W., & Fivush, R. (2011). When my mom was a little girl...: Gender differences in adolescents' intergenerational and personal stories. *Journal of Research on Adolescence*, 21, no. doi: 10.1111/j.1532-7795.2010.00709.x
- Zimmermann, P., & Becker-Stoll, F. (2001). Stability of attachment representations during adolescence: The influence of ego-identity status. *Journal of Adolescence*, 25, 107-124. doi:10.1006/jado.2001

Table 1 Descriptive Statistics for all Variables of Interest (N = 158)

	Observed	Observed	М	SD
	Min	Max		
Age	18.00	23.00	19.13	1.25
Family Dysfunction	1.23	3.00	1.96	.37
Identity Development	1.97	4.77	3.56	.67
Mean Valence	1.13	2.50	1.92	.25
Happy Memory Valence	1.50	3.00	2.48	.46
Difficult Memory Valence	1.00	3.00	1.38	.46
Change Memory Valence	1.00	3.00	1.98	.46
Self-Memory Valence	1.00	5.00	1.91	.32
Mean Total Interpretations	.25	18.00	5.23	3.26
Happy Memory Interpretations	.00	35.00	4.69	4.34
Difficult Memory Interpretations	.00	33.00	7.35	5.63
Change Memory Interpretations	.00	23.00	5.77	4.27
Self-Memory Interpretations	.00	24.00	3.09	3.48
Mean Narrator Interpretations	.00	10.25	2.40	1.88
Mean We Interpretations	.00	5.50	1.52	1.17
Mean Parent Interpretations	.00	8.33	1.27	1.38
Mean Other Interpretations	.00	3.25	.35	.57
Mean Total Facts	.25	25.50	8.38	4.70
Happy Memory Facts	.00	49.00	8.87	7.28
Difficult Memory Facts	.00	47.00	9.18	8.10
Change Memory Facts	.00	24.00	6.58	5.20
Self-Memory Facts	.00	34.00	8.92	6.38
Total Narrative Units	3.00	146.00	47.12	25.57

Table 2

Independent T-tests with Means (and Standard Deviations) for Males and Females for all Variables of Interest (N = 158)

	Male	Female	t	df	Cohen's d
	(N = 69)	(N = 89)			
Age	19.28 (1.45)	19.02 (1.06)	1.22	119.46	.20
Family Dysfunction	1.94 (.34)	1.97 (.39)	49	156.00	.08
Identity Development	3.54 (.69)	3.58 (.67)	36	156.00	.06
Mean Valence	1.91 (.26)	1.93 (.25)	42	138.00	.08
Happy Valence	2.50 (.47)	2.47 (.45)	.38	149.00	.07
Difficult Valence	1.37 (.47)	1.39 (.46)	332	152.00	.04
Change Valence	2.02 (.43)	1.95 (.42)	1.08	150.00	.16
Self Valence	1.83 (.41)	1.97 (.51)	-1.77	144.00	.30
Mean Total Interpretations	4.56 (3.09)	5.75 (3.30)	-2.31*	156.00	.37
Happy Interpretations	3.94 (4.78)	5.27 (3.88)	-1.93	156.00	.31
Difficult Interpretations	6.26 (4.81)	8.11 (6.10)	-1.96	156.00	.33
Change Interpretations	5.23 (3.92)	6.18 (4.51)	-1.39	156.00	.23
Self Interpretations	2.70 (2.76)	3.40 (3.94)	-1.26	155.00	.21
Mean Narrator Interpretations	2.22 (1.78)	2.54 (1.96)	-1.06	156.00	.19
Mean We Interpretations	1.20 (1.07)	1.76 (1.18)	-3.12**	156.00	.50
Mean Parent Interpretations	1.15 (1.41)	1.35 (1.36)	89	156.00	.14
Mean Other Interpretations	.28 (.59)	.41 (.54)	-1.52	156.00	.23
Mean Total Facts	6.78 (3.91)	9.69 (7.49)	-3.94**	156.00	.49
Happy Memory Facts	7.81 (6.92)	9.69 (7.49)	-1.61	156.00	.26
Difficult Memory Facts	6.71 (5.78)	11.09 (9.09)	-3.68**	150.67	.58
Change Memory Facts	5.33 (3.97)	7.54 (5.83)	-2.82**	153.31	.44
Self-Memory Facts	7.28 (5.55)	10.19 (6.71)	-2.92**	156.00	.47
Total Narrative Units	39.00 (23.31)	53.49 (25.58)	-3.66**	155.00	.59

*Note.* \* *p* <.05, \*\* *p* <.01.

Table 3  $Correlations \ amongst \ Relevant \ Outcome \ and \ Narrative \ Variables \ across \ all \ Narratives \ (N=158)$ 

	1	2	3	4	5	6	7	8	9	10
1. Age										
2. Family Dysfunction	.02									
3. Identity Development	.03	24**								
4. Mean Valence	22**	08	.20*							
5. Mean Total Interpretations	10	16*	.04	.30**						
6. Mean Total Facts	02	10	03	.04	.62**					
7. Mean Narrator Interpretations	03	09	.00	.20*	.86**	.56**				
8. Mean We Interpretations	17*	16 <sup>*</sup>	.16*	.27**	.57**	.25**	.28**			
9. Mean Parent Interpretations	11	10	03	.17*	.61**	.42**	.37**	.09		
10. Mean Other Interpretations	.00	10	.05	.17	.59**	.45**	.44**	.20*	.30**	

Table 4 Correlations amongst Relevant Outcome and Narrative Variables for Happy Narrative (N = 151)

					-					
	1	2	3	4	5	6	7	8	9	10
1. Age										
2. Family Dysfunction	.02									
3. Identity Development	.04	26**								
4. Mean Valence	12	.04	.11							
5. Mean Total	17*	20*	01	.18*						
Interpretations	1/	20	01	.10						
6. Mean Total Facts	01	08	04	09	.47**					
7. Mean Narrator	10	19 <sup>*</sup>	.00	.09	.82**	.42**				
Interpretations	10	17	.00	.09	.62	.42				
8. Mean We Interpretations	16	13	.05	.17*	.43**	.01	01			
9. Mean Parent	14	.01	11	.10	.61**	.37**	.41**	09		
Interpretations	1 <del>4</del>	.01	11	.10	.01	.37	.41	09		
10. Mean Other	03	12	02	.12	.69**	.51**	.51**	00	.59**	
Interpretations	03	12	02	.12	.07	.51	.51	00	.37	

Table 5

Correlations amongst Relevant Outcome and Narrative Variables for Difficult Narrative (N = 154)

_										
	1	2	3	4	5	6	7	8	9	10
1. Age										
2. Family Dysfunction	.02									
3. Identity Development	.03	24**								
4. Mean Valence	08	12	.09							
5. Mean Total	12	00	02	.27**						
Interpretations	12	08	.02	.27						
6. Mean Total Facts	.06	09	09	.04	.35**					
7. Mean Narrator	00	01	0.1	12	.82**	.34**				
Interpretations	.00	01	01	.12	.82	.34				
8. Mean We Interpretations	18*	06	.09	.33**	.45**	.03	.14			
9. Mean Parent	10	02	07	10	.51**	.16*	.19*	00		
Interpretations	10	02	07	.12	.51	.16	.19	09		
10. Mean Other	0.5	17*	00	00	.42**	25**	.26**	07	00	
Interpretations	05	17*	.09	.09	.42	.25**	.26	.07	.00	

Table 6 Correlations amongst Relevant Outcome and Narrative Variables for Change Narrative (N = 152)

	1	2	3	4	5	6	7	8	9	10
1. Age										
2. Family Dysfunction	.04									
3. Identity Development	.05	25**								
4. Mean Valence	11	11	.14							
5. Mean Total	.07	16	.12	.14						
Interpretations	.07	10	.12	.14						
6. Mean Total Facts	09	08	.02	.12	.36**					
7. Mean Narrator	11	.01	02	.11	.70**	.22**				
Interpretations	.11	.01	02	.11	.70	.22				
8. Mean We Interpretations	03	17*	.23**	.04	.55**	.10	.02			
9. Mean Parent	02	20*	.02	.09	.49**	.33**	10	02		
Interpretations	.02	20	.02	.09	.49	.33	.10	03		
10. Mean Other	07	05	02	.09	.47**	.19*	.29**	.22**	0.1	
Interpretations	.07	.05	.02	.09	.4/	.19	.29	.22	01	

Table 7

Correlations amongst Relevant Outcome and Narrative Variables for Self Narrative (N = 146)

	1	2	3	4	5	6	7	8	9	10
1. Age										
2. Family Dysfunction	.03									
3. Identity Development	.04	26**								
4. Mean Valence	06	.01	.13							
5. Mean Total Interpretations	09	02	.00	.04						
6. Mean Total Facts	10	.00	.03	07	.41**					
7. Mean Narrator	10	0.4	00	06	.91**	.43**				
Interpretations	12	04	.00	06	.91	.43				
8. Mean We Interpretations	08	04	09	.10	.11	.14	.05			
9. Mean Parent Interpretations	06	17*	.03	.07	.20*	.14	.16*	.00		
10. Mean Other	0.4	11	00	1.5	.34**	06	16	02	1.5	
Interpretations	.04	.11	.00	.15	.34	.06	.16	03	.15	

 $Table \ 8 \\ Regression \ Analyzes \ Predicting \ Identity \ Development \ for \ Total \ Interpretation \ and \ Interpretation \ Types \ Controlling \ for \ Facts \ and \ Family \ Dysfunction. (N=158)$ 

		Total			We			Other			Narrato	or		Paren	t
	В	SE B	β	В	SE B	β	B	SE B	β	$\boldsymbol{B}$	SE B	β	В	SE B	β
Step 1															
Mean Total Facts	03	.08	03	03	.08	03	03	.08	03	03	.08	03	03	.08	03
Step 2															
Mean Total Facts	06	.08	06	06	.08	06	06	.08	06	06	.08	06	06	.08	06
Gender	.01	.08	.01	.01	.08	.01	.01	.08	.01	.01	.08	.01	.01	.08	.01
Family Dysfunction	25	.08	25**	25	.08	25**	25	.08	25**	25	.08	25**	25	.08	25**
Step 3															
Mean Total Facts	09	.10	093	08	.08	08	09	.09	09	07	.10	07	03	.09	03
Gender	001	.08	001	02	.08	02	.002	.08	.002	.01	.08	.01	.02	.08	.02
Family Dysfunction	24	.08	24**	22	.08	23**	24	.08	24**	25	.08	25**	25	.08	25**
Mean Interpretation Type	.06	.10	.06	.14	.09	.14	.06	.09	.06	.01	.10	.01	07	.09	07
Step 4															
Mean Total Facts	15	.10	15	08	.08	08	11	.09	11	10	.10	10	04	.09	04
Gender	02	.08	02	.06	.13	.06	01	.08	01	.004	.08	.004	.01	.08	.01
Family Dysfunction	21	.08	21	03	.14	03	21	.08	21**	22	.08	22**	23	.08	23**
Mean Interpretation Type	.11	.10	.11	.15	.09	.13	.09	.09	.08	.04	.10	.04	04	.09	04
Interpretation Type x Gender	18	.09	18*	06	.07	12	20	.08	20*	12	.08	12	08	.08	08
Interpretations Type x Family Dysfunction	04	.08	05	12	.07	22	.05	.07	.05	07	.07	07	.06	.09	.06
Family Dysfunction x Gender	12	.08	12	07	.08	06	12	.08	12	09	.08	09	09	.08	08
Total $R^2$		.10			.12			.10			.10			.10	
Total F (7, 150)		2.40*			2.91*	*		2.42*			2.29*	:		2.38*	

Note. \* p < .05, \*\*p < .01. Gender was dummy coded as male = 1 and female = 2.

Table 9  $Regression\ Analysis\ Predicting\ Identity\ from\ Interpretations\ Split\ by\ Memory\ Type\ and\ Controlling\ for\ Facts\ and\ Family\ Dysfunction\ (N=158)$ 

	Нарру				Difficult			Change			Self in Family		
	В	SE B	β	В	SE B	β	В	SE B	β	В	SE B	β	
Step 1													
Total Facts in Memory Type	03	.08	03	09	.08	09	.01	.08	.01	.04	.08	.04	
Step 2													
Total Facts in Memory Type	05	.08	05	11	.08	11	01	.08	01	.03	.08	.03	
Gender	.01	.08	.01	.01	.08	.01	.01	.08	.01	.02	.08	.02	
Family Dysfunction	24	.08	24**	25	.08	25**	24	.08	24**	24	.08	24**	
Step 3													
Total Facts in Memory Type	03	.09	03	13	.08	13	05	.09	05	.03	.09	.03	
Gender	.01	.08	.01	.01	.08	.01	.01	.08	.01	.02	.08	.02	
Family Dysfunction	25	.08	25**	24	.08	24**	23	.08	23**	24	.08	24**	
Total Interpretations in Memory Type	04	.09	04	.05	.08	.05	.10	.09	.10	01	.09	01	
Step 4													
Total Facts in Memory Type	09	.09	09	15	.08	15	05	.09	05	.02	.09	.02	
Gender	001	.08	001	.01	.08	.01	.01	.08	.01	.03	.08	.03	
Family Dysfunction	25	.08	25**	21	.08	21*	21	.08	21**	20	.08	20*	
Total Interpretations in Memory Type	06	.09	06	.08	.08	.08	.10	.09	.10	.01	.09	.01	
Total Interpretations in Memory Type x Gender	05	.09	05	21	.08	21*	09	.08	09	05	.09	05	
Total Interpretations in Memory Type x Family Dysfunction	17	.09	$17^{\dagger}$	.04	.08	.03	02	.09	02	09	.07	11	
Family Dysfunction x Gender	12	.08	12	13	.08	13	09	.08	09	.09	.08	09	
Total $R^2$		.09		.12		.08		.09					
Total F (7, 150)		2.21*			2.99*	*		1.83			1.98		

*Note.* \* p < .05, \*\*p < .01, † <.10. Gender was dummy coded as male = 1 and female = 2.

Table 10

Regression Analysis Predicting Identity from Mean Valence Overall and by Memory

	N	Aean Ove	erall		Happ	y		Difficu	lt		Chang	e	S	elf in Fa	mily
		(N = 140)	0)		(N = 15)	51)	(N = 154)				(N = 152)			(N = 14)	-6)
	В	SE B	β	В	SE B	β	В	SE B	β	В	SE B	β	В	SE B	β
Step 1															
Gender	02	.08	02	.01	.08	.01	.003	.08	.003	.002	.08	.003	.003	.08	.003
Family Dysfunction	27	.08	28**	26	.08	26**	24	.08	24**	25	.08	25**	26	.08	27**
Step 2															
Gender	002	.09	002	.01	.08	.01	.001	.08	.001	.01	.08	.01	02	.08	02
Family Dysfunction	26	.09	27**	27	.08	27**	23	.08	23**	24	.08	24	26	.08	27**
Mean Valence in Memory Type	.21	.10	.16*	.19	.12	.13	.07	.09	.07	.15	.11	.12	.27	.17	.13
Step 3															
Gender	.20	.08	.02	.03	.08	.03	.004	.08	.004	.03	.08	.03	.07	.35	.08
Family Dysfunction	22	.08	23**	25	.08	25**	20	.08	21*	23	.08	23**	61	.36	62
Mean Valence in Memory Type	.22	.10	.17*	.19	.12	.13	.08	.09	.07	.13	.11	.10	.31	.38	.15
Mean Valence x Family Dysfunction	12	.10	10	14	.12	10	08	.09	07	11	.08	11	.19	.18	.39
Mean Valence x Gender	10	.11	08	18	.12	13	02	.09	02	15	.11	12	06	.19	11
Family Dysfunction x Gender	05	.08	05	04	.08	04	08	.08	08	15	.11	11	09	.19	09
Total $R^2$		.12			.11			.07			.09			.08	
Total F (6, 151)		3.09**	:		2.95*	*		1.90			2.39*			2.68*	:

Note. \* p < .05, \*\*p < .01. Gender was dummy coded as male = 1 and female = 2. All regressions for memory types were performed excluding those participants who provided a memory for that narrative type that was considered uncodeable. For the overall regression analysis any individual who provided an uncodeable memory for any of the four narrative types was excluded from analysis.

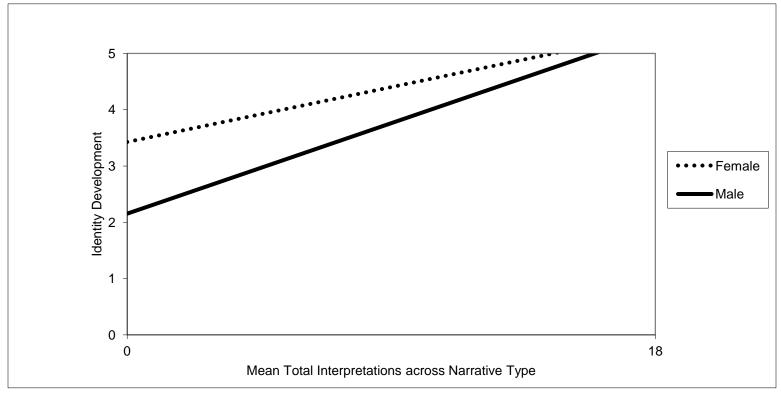
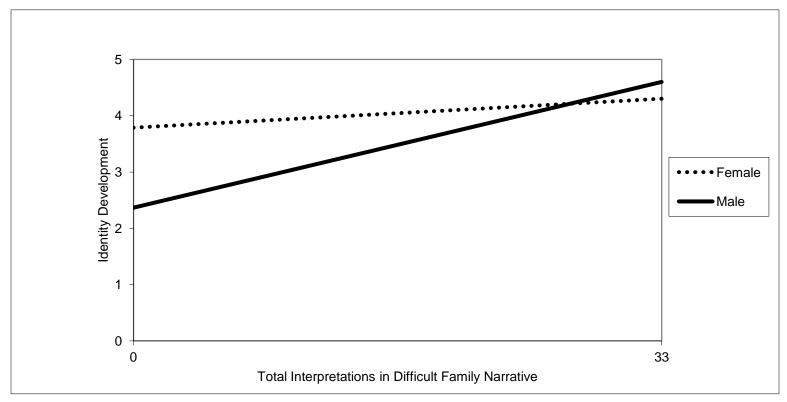
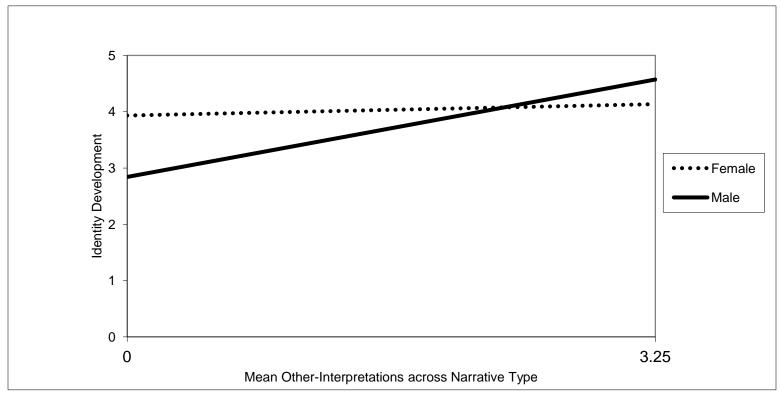


Figure 1. Identity development predicted by mean total interpretations and identity development moderated by gender. Simple slopes analyses determined that the slope of the line for males does statistically significantly differ from zero, but that the slop of the line for females does not statistically significantly differ from zero.



*Figure 2*. Identity development predicted by difficult narrative interpretations moderated by gender. Simple slopes analyses determined that the slope of the line for males does statistically significantly differ from zero, but that the slop of the line for females does not statistically significantly differ from zero.



*Figure 3*. Identity development predicted by mean other-interpretations moderated by gender. Simple slopes analyses determined that the slope of the line for males does statistically significantly differ from zero, but that the slop of the line for females does not statistically significantly differ from zero.

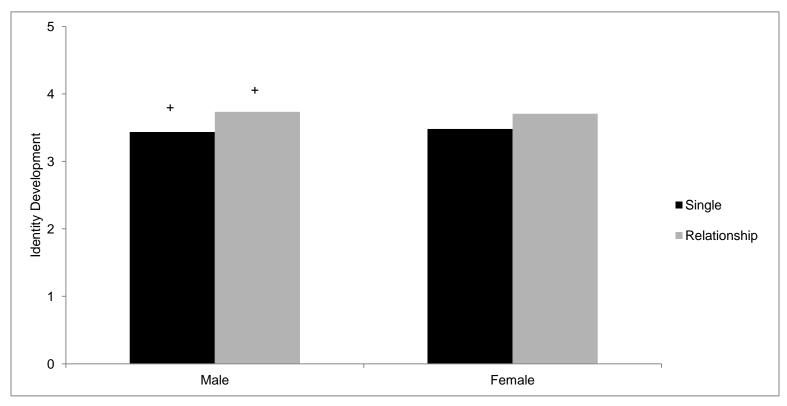


Figure 4. Mean identity score by gender and relationship status. A + indicates a difference approaching significance, p < .10.

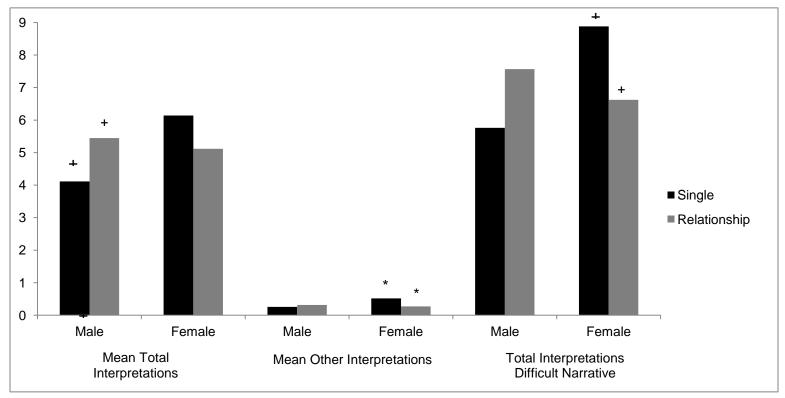


Figure 5. Interpretive processing by gender and relationship status. A + indicates a difference approaching significance, p < .10. A \* indicates a statistically significant difference, p < .05.