

PREDICTORS OF ADULT NARRATIVE ELABORATION: EMOTION, ATTACHMENT, AND GENDER

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ABSTRACT

When individuals first converse with others, they bring to those interactions expectations and habits of communication that are affected by many factors. In this study we looked at several factors simultaneously to see which predicted narrative elaboration in personal memories of early childhood and adolescence: self-described attachment patterns, stress of original experiences, and gender. A sample of 195 undergraduates aged 18-29 recalled their very earliest memory and their earliest memory of adolescence (in counterbalanced order) and completed the Multi-Item Measure of Romantic Attachment (Brennan, Clark, & Shaver, 1998). Positive experiences dominated both early and adolescent memories, though there were significant positive correlations between ratings of negativity (stress) and several measures of narrative elaboration in both kinds of memories. Avoidance scales correlated negatively with many measures of elaboration, while anxiety scales correlated positively only with one submeasure. In regression analyses of narrative elaboration conducted separately for early and late memories, the following significant patterns were observed: (1) females elaborated more than males; (2) more negative memories predicted more elaboration but only in early memories; and (3) avoidance scores predicted less elaboration, while anxiety scales were not significant predictors. Results are discussed in terms of the consequences of these issues for dating.

Adults' autobiographical memory involves reconstruction of events that happen to them, and that reconstruction reflects aspects of the particular event itself (such as its emotional valence, in particular negative emotion), aspects of the individual engaged in reconstruction (e.g., gender), long-standing internal working models of attachment relationships, and interactions among all these variables. Much prior work has looked at one or two of these in conjunction with each other and, in particular, much of this research has focused on children (e.g., see Fivush, Haden, & Reese, 2006, for a review). In the present study, we examine the effect of all three major variables together—gender, negative affect, and attachment pattern—in adults' autobiographical memories of early childhood and adolescence. There is a long history of looking at earliest childhood memories as being of particular interest (Adler, 1931), and a more recent one of looking at early adolescent memories as being the repository of lessons of experience derived from often negative or bittersweet initiations of one sort or another (McCabe, Capron, & Peterson, 1991). Here we focus on volunteered memories of both childhood and adolescence, with the assumption that such memories are reflective of the kind of reminiscence an individual would share with others in the process of becoming acquainted.

Gender differences in personal reminiscing have been found by a number of investigators (e.g., Bauer, Stennes, & Haight, 2003; Buckner & Fivush, 1998; Davis, 1999; Pillemer, Wink, Didonato, & Sanborn, 2003). For example, while mothers of male and female children used similar frequencies of repetitions, statements about memory, associative comments, and tangential comments from 3½ to almost 6 years of age, mothers of daughters evaluated experiences more than did mothers of sons (Reese, Haden, & Fivush, 1993). An extensive review of adults speaking with children found that, in general, mothers are more elaborative with their daughters (e.g., Fivush et al., 2006), and so are fathers (Reese & Fivush, 1993). In fact, by the time children are older (8-13 years), mothers' and daughters' narrative styles are strikingly similar in terms of length, elaboration, cohesion, coherence, and provision of temporal and spatial context (Peterson & Roberts, 2003). Girls aged 4 to 9 years have been found to use significantly more reported speech than do boys in their personal narratives (Ely & McCabe, 1993), and mothers use more reported speech than fathers in dinnertime conversation (Ely, Gleason, Narasimhan, & McCabe, 1995) and when eliciting narratives from their children (Ely, Gleason, & McCabe, 1996). Adult women elaborate their narratives more in other ways as well (Bauer et al., 2003; Pillemer et al., 2003). Their memories are also more likely to include emotion (Davis, 1999).

Negative emotion attached to memories, especially the stressfulness of remembered events, has long been seen to exert conflicting and complicated effects on the memory of individuals of all ages (see Baddeley, 1990, and Deffenbacher, Bornstein, Penrod, & McGorty, 2004, for reviews). Sometimes highly negative affect such as stress results in vivid memories in children (Terr, 1979, 1988) even for something as overwhelming as witnessing a parent's

murder (Malmquist, 1986). This increase may be due to the fact that children discuss negative events frequently. A review of work on autobiographical memory found that mothers were more elaborative when discussing highly negative events as compared to positive ones (Fivush et al., 2006). Stress sometimes increases memory also in adults, as in the case of Australian firefighters (e.g., McFarlane, 1988). However, others find that highly distressing events compromise memory, both in adults (Deffenbacher et al., 2004) and children (Peterson, 2010; Peterson & Warren, 2009; Sales, Fivush, Parker, & Bahrick, 2005). Some reviews have found that highly traumatic events strengthen memory for key stressors although they interfere with memory for peripheral details (Chae, Ogle, & Goodman, 2009; Christianson, 1992). Still other researchers have found that children growing up in violent communities narrate positive and negative events differently; children reported more objects and people and descriptive detail in narratives of positive experiences, while they included more information about their thoughts and emotions and were more coherent when discussing negative experiences (Fivush, Hazzard, Sales, Sarfati, & Brown, 2003). In short, highly negative emotion seems to have complex effects on memory.

A third factor that affects autobiographical memory is the attachment patterns of narrators. Past research has found that highly *avoidant* people recalled less information (due to less initially encoding) about a stimulus interview than did nonavoidant adults (e.g., Fraley, Garner, & Shaver, 2000). In contrast, both mothers and children who are securely attached are generally found to be more elaborative (Liable & Panfile, 2009; Oppenheim & Koren-Karie, 2009; see Fivush et al., 2006, for review of a number of articles that make this point). Moreover, past research (McCabe, Peterson, & Connors, 2006) found that the more securely a mother rated her child, the longer and more elaborate were that child's narratives to a friendly stranger, a finding that we seek to replicate in the present study with young adults.

Although not assessing attachment per se, other researchers have also found that the quality of parent-child relationships is related to adults' earliest memories as well as memories of adolescence. For example, Italian university students were asked to recall memories from before age 6. Males with better parent-child relationships (more involved, more supportive, and with a more affectively positive parent-child interaction history) recalled more early memories than did males with less positive parent-child relationships (Peterson, Smorti, & Tani, 2008). As well, Italian women with warmer relationships with their mothers had earlier first memories. A study of Canadian young adults also found that the quality of parent-child relationships influenced the accessibility of early memories as well as how early their first memory was (Peterson & Nguyen, 2010). In terms of memories of later childhood, Italian adults' memories of different periods of childhood reflect developmental changes in parent-child relationships (Peterson, Bonechi, Smorti, & Tani, 2010) as well as the quality of those relationships (Tani, Bonechi, Peterson, & Smorti, 2010). Thus, there is

converging evidence using divergent measures suggesting that the quality of parent-child relationships impacts young adults' memories of childhood.

Past research has demonstrated interactions among these major influential variables. Chae et al. (2009) found, for example, that avoidant individuals exhibit "defensive exclusion" in the face of highly negative emotional events, events that would otherwise activate their attachment system to seek comfort they have repeatedly been denied. Fivush and Sales (2006) found that more anxiously attached mothers, however, engaged in *more* elaborated reminiscing about a highly traumatic event (asthmatic attack) than did more securely attached mothers.

In the present study, we propose to look at gender, negative emotion, and attachment patterns at the same time when investigating memory. We focus on young adults, specifically university students, because they are theorized to be immersed in the process of integrating their memories in order to construct life stories. The life-story model (e.g., McAdams, 2001, 2003, 2006) emphasizes the importance of one's memories in developing a personal life story, which in turn has implications for adult identity and psychological well-being. These life-stories are constructed by individuals in late adolescence and early adulthood, and thus university-aged individuals are at an ideal age for studying memories of significant self-selected events. In the present study, participants chose what they wished to remember and rated the affect attached to the experiences they reported. Attachment constructs were also assessed.

METHOD

Participants

Participants included 90 female and 105 male undergraduates, aged 18-29 years (Mean = 19.4 years, s.d. = 2.02). Participants received credit for participation from their General Psychology instructor.

Procedure

Memories

Participants recalled their very earliest memory (between the ages of 0-8 years) and earliest memory of adolescence (12-18 years) in response to the following written instructions:

Please describe in detail your very *earliest* memory of an experience that you had when you were between the ages of birth and 8 years (12 and 18 years). Remember it must be of a *specific* experience that you can *clearly visualize* even today.

Half of the subjects recalled their childhood memory first, half their adolescent memory.

Negative Emotion

Ratings of memory affect were assessed by participants in response to the following question, asked separately for early and adolescent memories: How would you describe your feelings at the time of this experience? Participants rated their affect as follows:

- 0 = neutral
- 1 = positive
- 2 = bittersweet (a mix of positive and negative affect)
- 3 = negative.

Self-Ratings of Attachment Patterns

After recalling their experiences, participants then completed the Multi-Item Measure of Adult Romantic Attachment (Brennan et al., 1998). Following Brennan et al., each subject was given a score on two dimensions underlying Ainsworth's attachment classifications: (a) an Avoidance dimension, and (b) an Anxiety dimension. Specifically, the Avoidance dimension included self-described avoidance of intimacy, discomfort with closeness, and self-reliance. The Anxiety dimension included self-described preoccupation with attachment (wanting to merge with one's partner, needing a lot of reassurance), jealousy and/or fear of abandonment, and fear of rejection—what other attachment researchers term ambivalent or resistant attachment.

Scoring of Early and Later Memories

The complexity of narratives has been measured in a number of ways, and here we adapted the extensive coding system of narrative properties described in Peterson and Roberts (2003, after Buckner & Fivush, 1998; Fivush, 1991), focusing on:

1. narrative length in words;
2. informativeness (unique mentions of people, objects, locations, activities, attributes, times, cognitions, emotions); and
3. coherence (use of connectives).

Length

An important property of narratives is how long they are, i.e., whether they are lengthy or terse and minimal. Length was measured by counting the total number of words in the narrative.

New (Unique) Units of Information

This measures how informative the narrative is, i.e., what information the child provides that is new and different. The following subcategories were scored:

- Person (“*Mom* took me to the hospital”)
- Object (“I threw the *ball*”)
- Activity (“We were *playing*”)
- Attributes (“The box was *heavy*”)
- Location (“She went to the *mall*”)
- Emotion (“I was *happy* to see her”)
- Cognition (“I *forgot* to turn it off”)
- Time (“His party was *yesterday*”)
- Total units of unique information: The total number of units scored from all of the above elements in this category.

Markers of Coherence

Connectives provide coherence because they inform listeners about the relations between sentences. The following categories of connectives were assessed and combined into a total number of connectives used:

- Temporal linking terms: Terms that temporally link things together (e.g., *then, first, next, later, before, after*)
- Causal/conditional connectives: Words that link two causally connected events (e.g., *because, so, if, while, until*; see Fivush, 1991)
- Other connectives: Any word that joins two clauses together (e.g., *and, but, or*) but does not imply cause or condition. This excludes temporal linking terms and causal connectives.
- Total connectives: The total number of connectives of all three types.

Reliability of Scoring

Fifteen percent of the transcripts were independently coded by two coders. For Unique Units of Information, Cohen’s kappa was .90, representing almost perfect agreement (Landis & Koch, 1977). (The other categories only involved counting, not judgment.)

RESULTS

Comparison of Early and Adolescent Memories

Adolescent memories were significantly longer than early memories in terms of words ($t(194) = 3.654, p < .001$) and in terms of total units of unique information ($t(194) = 4.339, p < .001$). Though the number of connections in adolescent memories (Mean = 2.76, $SD = 2.29$) was greater than those in early

memories (Mean = 2.44, $SD = 1.95$), the difference narrowly missed being significant ($t(194) = -1.917, p < .057$). Over 40% of both early childhood and adolescent memories were reported to have been positive ones, while almost half were bittersweet or negative, as is shown in Table 1. Very few were neutral. There were no significant gender differences in rated affect in either early or adolescent memories.

Gender

Table 2 lists the many variables that revealed a significant gender difference, and in each case women produced more than did men. In both their earliest and adolescent memories, women produced longer narratives that had more markers of coherence and more unique information.

Negative Emotion

There were significant positive correlations (Pearson's) between ratings of the emotion of early memories and the following: length in words ($r = .13, p < .05$); total connectives ($r = .19, p < .05$); temporal connectives ($r = .188, p < .008$); unique activities ($r = .22, p < .05$); unique times ($r = .15, p < .05$); unique cognitions ($r = .20, p < .005$); unique emotions ($r = .28, p < .001$); and total units of unique information ($r = .13, p < .05$). Thus, the more negative the memory, the greater the use of all the aforementioned. As one would expect, there was no correlation between the rated emotion of early memories and any of those of late (very different) memories. Some of these correlations are depicted in Table 3.

Table 1. Rating of Negativity of Emotion in Memories

Rating	Total		Female		Male	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Early memories:						
3 – Negative	68	34.9	36	40.0	32	30.5
2 – Bittersweet	24	12.3	8	8.9	16	15.2
1 – Positive	90	46.2	41	45.6	49	46.7
0 – Neutral	13	6.7	5	5.6	8	7.6
Later memories:						
3 – Negative	56	28.7	28	31.1	28	26.7
2 – Bittersweet	48	24.6	25	27.8	23	21.9
1 – Positive	85	43.6	34	37.8	51	48.6
0 – Neutral	6	3.1	3	3.3	3	2.9

Table 2. Significant Gender Differences in Variables

Variable	Female <i>M</i> (<i>SD</i>)	Male <i>M</i> (<i>SD</i>)	<i>t</i> (193)	<i>p</i> <
Early memories				
Words	79.5 (42.8)	64.8 (44.2)	2.35	.01
Connectives	3.0 (2.0)	1.9 (1.8)	4.18	.001
Causal comm.	1.0 (1.2)	.6 (1.2)	2.26	.01
Total units info	25.7 (13.6)	22.1 (13.7)	1.88	.05
People	2.8 (2.2)	1.8 (1.4)	3.86	.001
Activities	8.0 (4.6)	6.1 (4.3)	3.03	.01
Emotions	1.0 (1.2)	.5 (0.9)	3.32	.001
Adolescent memories				
Words	94.2 (47.3)	73.3 (49.3)	3.00	.01
Connectives	3.1 (2.4)	2.5 (2.2)	1.81	.05
Total units info	31.1 (14.2)	25.3 (15.8)	2.67	.01
People	2.7 (1.8)	1.9 (1.8)	3.00	.01
Objects	3.1 (2.6)	2.3 (2.3)	2.10	.05
Locations	2.5 (2.0)	2.0 (1.6)	1.80	.05
Actions	8.7 (4.9)	7.4 (5.2)	1.74	.05
Times	1.9 (1.5)	1.4 (1.5)	2.28	.05
Cognitions	1.3 (1.4)	.8 (1.2)	2.54	.05
Emotions	.9 (1.1)	.5 (0.8)	2.65	.005

Subjects' ratings of emotion in their late memories positively correlated with narrative elaboration, but with only two such measures: total connectives ($r = .13$, $p < .05$) and late memory cognitions ($r = .145$, $p < .05$). Once again, the more negative the reported feeling, the more frequent were uses of connectives and mentions of cognitions. There was no significant correlation between negative emotion and total units of unique information in later memories ($r = .09$, n.s.). As one would expect, there were no correlations between the emotion ratings of late memories and any aspect of early memories. Moreover, there was no correlation between ratings of emotion in early memories and that of emotion in later memories ($r = .07$, n.s.).

Attachment

Pearson's correlations were calculated between scores on the Multi-Item Measure of Adult Romantic Attachment (Brennan et al., 1998) and narrative variables. Scores on the avoidance scale significantly correlated with 11 measures of the amount of elaboration in early and later memories, with more avoidant

Table 3. Intercorrelations between Dependent and Independent Variables

Measure	EM Length (words)	EM Unique info	EM Connectives	AM Length (words)	AM Unique info	AM Connectives	Gender	EM Emotion	AM Emotion	Avoidance
EM Unique info	.96**	1.000								
EM Connectives	.83**	.78**	1.000							
AM Length	.57**	.56**	.44**	1.000						
AM Unique info	.58**	.59**	.44**	.94**	1.000					
AM Connectives	.44**	.43**	.44**	.78**	.74**	1.000				
Gender	-.17**	-.16*	-.23**	-.21**	-.19**	-.15*	1.000			
EM Emotions	.13*	.13*	.19**	.05	.02	.05	-.07	1.000		
AM Emotions	.03	.07	.04	.11	.09	.13*	-.08	.07	1.000	
Avoidance	-.14*	-.13*	-.11*	-.16*	-.17**	-.15*	-.05	.13*	.08	1.000
Anxiety	.09	.10	.09	.07	.05	.08	-.17*	.07	.08	-.05

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

individuals having less unique information in their early and adolescent narratives (see Table 4). As well, more avoidant individuals had shorter and less coherent childhood and adolescent narratives. Interestingly, as is shown in Table 3, the more avoidant the individual, the more negative the emotion in early memories.

Pearson's correlations between the anxiety scale and most important narrative measures are shown in Table 3 and were not significant. Greater anxiety correlated positively and significantly with only one sub-measure of elaboration, namely unique people mentioned in early memories ($r = .142, p < .05$).

Regression Analyses

We chose six dependent variables to focus on in separate regression analyses, namely length in words, total unique elaboration, and coherence (total connectives), each examined separately for early and late memories. All four independent variables were entered into stepwise regression analysis—gender, negative emotion, attachment avoidance, and attachment anxiety. Descriptive statistics for the variables entered into the regression analyses (both independent and dependent) are shown in Table 5.

As is shown in Table 6, results of regression analyses of length showed that the three predictor variables significantly accounted for some variation, with $R^2 = .069$ for length of early memories, $R^2 = .073$ for length of adolescent memories. Gender and avoidance significantly predicted length for both early and later memories. The emotion of early memories only predicted length in early memories. Anxiety about attachment did not predict length of either memory.

Table 4. Correlations between Elaboration and Avoidance Scores

Words in early memories	($r = -.14^*$)
Total unique information in early memories	($r = -.13^*$)
Total connectives in early memories	($r = -.11^*$)
Unique objects in early memories	($r = -.18^*$)
Unique locations in early memories	($r = -.15^*$)
Words in later memories	($r = -.16^*$)
Total unique information in later memories	($r = -.17^*$)
Total connectives in later memories	($r = -.17^*$)
Unique objects in later memories	($r = -.15^*$)
Unique locations in later memories	($r = -.19^{**}$)
Unique activities in later memories	($r = -.16^*$)

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

Table 5. Descriptive Statistics for Independent and Dependent Variables in Regression Analyses

	<i>N</i>	Minimum	Maximum	Mean	<i>SD</i>
EM Length	195	5.0	262.0	71.55	44.08
AM Length	195	.0	258.0	82.97	49.39
EM Unique info	195	4.0	83.0	23.71	13.63
AM Unique info	195	.0	88.0	27.79	15.47
EM Total Connectives	195	0	18.0	4.38	3.26
AM Total Connectives	195	0	17.0	4.97	3.55
EM Emotion	195	0	3.00	1.75	1.01
LM Emotion	195	0	3.00	1.79	.90
Avoidance	195	1.00	4.94	2.90	1.04
Anxiety	195	1.35	6.28	3.71	1.00

The results of the two regression analyses of unique units of information are presented in Table 7. The predictor variables accounted for some variation in total unique elaboration in early memories, $R^2 = .025$, as well as in later memories, $R^2 = .068$. Gender was a significant predictor of total unique elaboration in both early and later memories. Avoidance significantly predicted unique elaboration in adolescent but not early memories. Neither emotion nor anxiety about attachment predicted significant unique elaboration in either early or later memories.

As shown in Table 8, results of the two analyses of coherence in terms of total connectives used revealed again a modest prediction by some predictor variables, with $R^2 = .103$ for total connectives in early memories and $R^2 = .047$ for total connectives in adolescent memories. As in three of the four prior analyses, avoidance was a significant predictor of coherence in both early and later memories. As in all four prior analyses, gender significantly predicted use of connectives in early and adolescent memories. As in one prior analysis, emotion predicted coherence in early but not adolescent memories. As before, anxiety did not significantly predict coherence.

DISCUSSION

Individuals' inclinations to reveal anecdotal information about themselves significantly reflected aspects of their working models of attachment, especially the tendency to be avoidant, as well as their gender and at times the emotion of the event they elected to narrate. As predicted, scores on a measure of avoidant

Table 6. Regression Results:
Prediction of Length (in Words) in Memories

Step	Variable	R^2	R^2 change	Final β	t	p
Early Memories ^a						
1	Gender	.028	.028	-.165	-2.36	.019
2	Avoidance	.050	.022	-.167	-2.37	.019
3	Emotion	.069	.019	.139	1.97	.050
Adolescent Memories ^b						
1	Gender	.045	.045	-.220	-3.16	.002
2	Avoidance	.073	.028	-.169	-2.42	.016

^aExcluded variable: Anxiety

^bExcluded variables: Emotion, Anxiety

Table 7. Regression Results:
Prediction of Total Unique Information in Memories

Step	Variable	R^2	R^2 change	Final β	t	p
Early Memories ^a						
1	Gender	.025	.025	-.158	-2.22	.027
Adolescent Memories ^b						
1	Gender	.035	.035	-.195	-2.80	.006
2	Avoidance	.068	.033	-.182	-2.61	.010

^aExcluded variable: Emotion, Avoidance, Anxiety

^bExcluded variables: Emotion, Anxiety

attachment significantly predicted length and coherence in both early and adolescent memories, while it predicted unique information in later, but not early, memories. Also as expected, gender significantly predicted length, informativeness, and coherence of both early and adolescent memories. Self-ratings of emotion predicted both length and coherence of early, but not later, memories. Scores on a measure of attachment anxiety correlate positively with only one sub-measure of elaboration, but do not contribute to prediction of length, informativeness, or coherence in either early or later memories.

Table 8. Regression Results:
Prediction of Coherence (Total Connectives) in Memories

Step	Variable	R^2	R^2 change	Final β	t	p
Early Memories ^a						
1	Gender	.052	.052	-.221	-3.21	.002
2	Emotion	.081	.030	.192	2.77	.006
3	Avoidance	.103	.022	-.150	-2.17	.031
Adolescent Memories ^b						
1	Avoidance	.023	.023	-.159	-2.26	.025
2	Gender	.047	.024	-.155	-2.20	.029

^aExcluded variable: Anxiety

^bExcluded variables: Emotion, Anxiety

In this study, women elaborated early and adolescent memories in a number of ways significantly more than did men, a finding that is in keeping with other researchers exploring elaboration in personal memory narratives (e.g., Bauer et al., 2003; Fivush et al., 2006; Peterson & Roberts, 2003; Reese & Fivush, 1993). Women's narratives were longer, more coherent, and full of more unique information than were men's narratives. Such findings regarding autobiographical memory are quite different from the general and increasing lack of gender differences found in meta-analyses of other—usually impersonal—measures of verbal ability (Hyde & Linn, 1988). Perhaps the personal relevance of these narratives accounts for the discrepancy in findings. Also, gender was a significant predictor for all three measures of elaboration in both early and later memories.

In terms of emotion, positive memories were the most likely to be related by participants, but they talked more, as well as more elaborately and coherently, about negative early childhood experiences. The largest single category of personal memories offered by participants in this project was positive in the case of both early and adolescent memories, accounting for over 40% of memories in each case. On the other hand, almost half of both early and adolescent memories were either bittersweet or wholly negative. Very few memories were neutral. Emotion significantly correlated with a number of measures of elaboration in early narratives, including length, total connectives, and total amount of unique information about people, objects, activities, attributes, locations, emotions, cognitions, and times. Emotion of early memories also predicted length and coherence in regression analysis. The more negative the experience, as rated by the narrators,

the more they elaborated upon early memories. In contrast, emotion of adolescent memories only correlated with the coherence of those memories and did not predict either measure of informativeness. Perhaps the discrepancy in findings between early and adolescent memories is due to the fact that negative early experiences are more likely to be discussed with parents and, therefore, more likely to be remembered despite our tendency to forget much of what happens to us in early childhood. Whatever the explanation, the discrepancy in relations between emotion and memory for early versus adolescent memories reflects a long-standing inconsistency in findings regarding the relationship between stress and memory.

Congruent with the findings of Fraley et al. (2000), attachment avoidance negatively correlated with a number of variables and significantly and negatively predicted total unique information in both early and adolescent memories, as well as total unique information in early, but not in adolescent, memories. The more an individual agreed with statements such as "I prefer not to show a partner how I feel deep down," "I want to get close to my partner, but I keep pulling back," and "I don't feel comfortable opening up to romantic partners" (Brennan et al., 1998), the less that individual was inclined to give extensive information about past childhood or adolescent experiences and the less coherent were their narratives. On the other hand, adults who scored low on the avoidance scale, like securely attached children talking with parents (Fivush et al., 2006) and securely attached children talking with friendly non-related adults (McCabe et al., 2006), were inclined to elaborate upon their personal experiences; the lower they scored on avoidance, the more they elaborated.

The present study did not find interactions between attachment pattern and emotion. But perhaps the disinclination of avoidant individuals to elaborate their memories may be at least in part attributable to the fact that in past research many avoidant individuals have been found to idealize attachment figures. The Adult Attachment Interview, for example, finds that the narrative discourse of dismissing avoidant individuals contains relatively little negative affect (Solomon & George, 2008). Not only do avoidant individuals avoid elaborating their memories, they avoid talking about negative experiences, which are the kind of experience we found most likely to be elaborated.

To illustrate these differences, consider the following two samples of early childhood memories by a woman who scored low on the avoidance scale and another who scored high on that scale:

Memory 1: "The earliest memory I have is my first day at Children's World. My cousin was showing me around, telling me who everybody was, etc. He asked me to pick out the people I wanted to be friends with. I pointed to Kyra, Chuckie, Roy, Max, Paul, and Tom. He **then** asked me who I wanted to meet first **and** I pointed to Tom. We walked over to where he was playing "King of the Mountain" on a trashbag **and** I asked him if I could play too. The last thing I remember is him saying yes." (96 words, 10 clauses, 3 connectives in bold face)

This is the earliest memory reported by an 18-year-old Caucasian woman, who described it as a positive experience and was low on the avoidant (1.50) scale (with 1 being lowest possible score received). Note that she mentions seven people and describes her cousin's support on what otherwise might have been a scary day for her.

Memory 2: "I lost my favorite blanket when I was three **and** was really upset **and** cried myself to sleep. I ended up getting it back, though. **But** at the time, I was crushed. I remember sitting in a rocking chair in my basement just crying for hours." (46 words, 7 clauses, 3 connectives)

This lost blanket narrative was reported by another 18-year-old Caucasian woman who scored very high on the avoidance scale (i.e., 4.89; highest score recorded was 4.94). She described it as a negative (stressful) memory, which is typical of other highly avoidant individuals. There is no mention of any other person in this memory—only the inanimate, beloved blanket.

In this study, anxious (otherwise known as preoccupied, resistant, or ambivalent) attachment was only significantly associated with gender, with women scoring higher on that particular measure. Attachment anxiety positively, though weakly, correlated with only one sub-measure of elaboration but did not contribute significantly to the overall prediction of any aspect of elaboration. In this respect we did not replicate the results of Fivush and Sales (2006) with anxious mothers of asthmatic children, though it must be noted that the pattern was in a similar direction and that the levels of stress involved were very different (visit to an emergency room for asthma versus the various negative, but usually not life-threatening, events our participants reported).

The results of this study have implications for young adults in the midst of seeking life partners, especially in this age of e-mail exchanges. Women write more elaborately than do men, and quite possibly feel somewhat shortchanged in the long run by what they perceive as men's tendency not to communicate sufficiently (Tannen, 1990). Individuals who describe themselves as displaying an avoidant approach on the Brennan et al. (1998) Multi-item Measure of Adult Romantic Attachment also avoid disclosing information about themselves even when writing anonymously. Clinicians working with individuals who struggle to achieve intimacy with romantic partners may find this reluctance to reveal information about their personal experiences to be an important target for therapy.

As is always the case, the present study has several limitations due to the choice of instruments and scoring systems used. For one thing, the Brennan et al.'s (1998) scale contrasts "anxious" with "avoidant" individuals. However, avoidant individuals may be just as anxious as the so-called anxious individuals (called by others ambivalent, resistant, or, in adults, preoccupied). Anxiety leads avoidant individuals to fear intimacy and self-disclosure and to develop a false self-sufficiency.

Another concern pertains to the fact that here we looked at the relationship between romantic attachment self-reports and narrative elaboration. True attachment rests on the dual experience of another person as both a secure base for exploration and a safe haven in times of stress. Not all romantic relationships meet these criteria. Thus, this study must be considered more an extension of prior work linking parent-child attachment and narrative elaboration to the arena of romantic relationships rather than a confirmation of that previous work.

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