# INVESTIGATING AUTOBIOGRAPHICAL MEMORY IN RELATION TO ATTACHMENT ANXIETY AND AVOIDANCE: SELF-DEFINING MEMORIES ACROSS RELATIONAL CONTEXTS

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# INVESTIGATING AUTOBIOGRAPHICAL MEMORY IN RELATION TO ATTACHMENT ANXIETY AND AVOIDANCE: SELF-DEFINING MEMORIES ACROSS RELATIONAL CONTEXTS

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#### Thesis Abstract

Müge Özbek Akçay, "Investigating Autobiographical Memory in Relation to

Attachment Anxiety and Avoidance: Self-defining Memories across Relational

Contexts"

Early experiences with attachment figures are argued to lead to internal working models, which incorporate representations of self, others, and self-other relationships. These representations influence information processing and affect regulation in adulthood. Previous studies showed that attachment anxiety is related to heightened accessibility of negative memories whereas avoidance is related to defensive organization of memory for attachment-related stimuli. The two main aims of the present study were 1) to investigate how self-defining memories in different relational contexts differ from each other in terms of narrative (i.e. specificity and integration) and phenomenological (e.g. rehearsal) characteristics, and 2) to examine the extent to which individual differences in these characteristics can be accounted for by attachment anxiety and avoidance. Participants (57 females, 54 males) filled out the Experiences in Close Relationships - Revised (ECR-R) Scale, wrote selfdefining memories for four different relational contexts, and answered questions in relation to phenomenological characteristics and centrality of each memory. Results indicated that neither type of memory, nor attachment style was related to specificity and integration of self-defining memories. However, attachment anxiety positively influenced the degree of importance and centrality attributed to personal experiences as well as the negative affective content of these experiences. Results showed that people high on attachment anxiety more frequently thought about their relationship experiences whereas high levels of avoidance manifested itself as a tendency to communicate relationship experiences less. Additionally, women and men differed in terms of their subjective experiences about close relationships. Furthermore, close relationship memories involving different attachment figures differed in terms of their phenomenological characteristics. Overall, these findings suggest that attachment style and type of relational context influence phenomenological, but not narrative, characteristics of self-defining memories in conceptually meaningful ways.

### Tez Özeti

Müge Özbek Akçay, "Otobiyografik Hafizanın Kaygılı Bağlanma ve Kaçınma Açısından İncelenmesi: Farklı İlişkisel Bağlamlardaki Benlik Tanımlayıcı Anılar" Bağlanma figürlerine dair erken deneyimlerin, benlik, başkaları ve benlik-başkaları ilişkileri hakkında bilgiler içeren bağlanmaya ilişkin zihinsel temsillerin yer aldığı içsel çalışan modellerin oluşmasını sağladığı düşünülmektedir. Bu temsiller, yetişkinlikte bilgi işleme ve duygu denetleme süreçlerini etkilemektedir. Geçmiş çalışmalar, bağlanmayla ilişkili kaygının olumsuz anıların erişilebilirliğini arttırdığını ve kaçınmanın bağlanmaya ilişkin uyaranlara karşı savunma odaklı bir hafiza organizasyonuyla ilişkilendiğini göstermiştir. Bu çalışmanın iki temel amacı, 1) farklı ilişkisel bağlamlardaki benlik tanımlayıcı anıların anlatısal (belirginlik ve anlam/ders çıkarma) ve fenomenolojik (tekrarlama) özellikler açısından nasıl farklılaştığını araştırmak, ve 2) bu özelliklerdeki bireysel farklılıkların ne oranda bağlanmayla iliskili kaygı ve kaçınma ile açıklanabileceğini incelemekti. Katılımcılar (57 kadın, 54 erkek) Yakın İlişkilerde Yaşantılar Envanteri–II'ni doldurdu, dört farklı ilişkisel bağlam için benlik tanımlayıcı anılarını yazdı ve her anının fenomenolojik özelliklerine ve merkeziliğine ilişkin sorular yanıtladı. Bulgular, anı tipinin ve bağlanma stilinin anılardaki belirginlik ve anlam/ders çıkarma ile ilintili olmadığını gösterdi. Öte yandan, bağlanmayla ilişkili kaygı kişisel deneyimlere atfedilen önemin ve merkeziliğin derecesi ile bu deneyimlerin olumsuz duygusal yapısını pozitif olarak etkiledi. Bulgular, bağlanmayla ilişkili kaygısı yüksek kişilerin ilişkisel deneyimleri hakkında daha sık konuştuklarını, bunun yanısıra kaçınmanın ilişkisel deneyimleri daha az paylaşmaya yönelik bir tutumla ilişkilendiğini gösterdi. Ayrıca, kadınlar ve erkekler yakın ilişkilere dair kişisel deneyimleri açısından farklılık gösterdi. Buna ek olarak, farklı bağlanma figürleri ile ilgili anılar fenomenolojik özellikleri açısından farklılık gösterdi. Genel olarak bakıldığında, bulgular bağlanma stilinin ve ilişkisel bağlamın benlik tanımlayıcı anıların anlatısal değilse de, fenomenolojik özelliklerini kavramsal olarak anlamlı şekilde etkilediğine

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Dedicated to my grandmother, Nazire Aksoy.

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#### **CHAPTER I: INTRODUCTION**

Autobiographical memory (ABM) has been defined as memory for information related to self (Brewer, 1986). Self consists of a complex set of active goals of the individual and memory serves as the database of self (Conway, 2005). Thus, autobiographical memory models have emphasized the reciprocal relationship between ABM and the self, and postulated that they are closely linked (Conway & Pleydell-Pearce, 2000). In line with this reasoning, ABM has been argued to have three important (self, social, and directive) functions in one's life; maintaining continuity and coherence of the self, facilitating social interaction, and guiding future behaviors (Bluck, 2003; see also Harris, Rasmussen, & Berntsen, 2013 for a broader view). Several lines of research investigated how processes which contribute to one's sense of self affect autobiographical memory. Based on the idea that attachment representations have an impact on information processing and affect regulation for current and future relationships (Mikulincer, Shaver, & Pereg, 2003), previous studies examined whether attachment style –as a potential influencer of self and identity –was linked to how personally significant memories are encoded, stored, constructed, and retrieved (Conway, Singer, & Tagini, 2004; Mikulincer & Orbach, 1995; Sutin & Gillath, 2009). Yet, research about individual differences in attachment in relation to autobiographical memory is still rare and further studies are needed to extend existing findings. Thus, I specifically investigated to what extent attachment style is associated with the retrieval of personally significant autobiographical memories in terms of narrative characteristics and phenomenology.

# Attachment Theory

Attachment theory has adopted an evolutionary approach to emotional bonding. Bowlby (1969/1982) argued that humans are born with an innate psychobiological system, which is called the attachment system. The function of this system is to motivate people to seek proximity to their significant others (primary caregivers or attachment figures) in times of need (as cited in Mikulincer & Shaver, 2005). Proximity seeking behaviors have evolutionary value in the sense that they are necessary for physical survival and psychological well-being. Thus, they assure the protection of the species.

Early experiences with attachment figures have been argued to lead to internal working models, which incorporate mental representations of self, others, and self-other relationships. It was suggested that attachment behaviors can be differentiated based on how people internally represent themselves and their attachment figures in close relationships (Pietromonaco & Barrett, 2000). Baldwin's (1995) description of relational schemas also depended on the idea that individuals have "cognitive structures representing regularities in patterns of interpersonal relatedness" (p. 548). Additionally, he indicated that "a relational schema is hypothesized to include a representation of one's interaction partner, along with a representation of self-with-other or self as experienced in that relationship" (p. 548).

An optimal functioning of the attachment system is dependent on the availability and responsiveness of attachment figures, which create a sense of security. Otherwise, proximity seeking strategies cannot diminish individuals' distress in the face of threat and other (secondary) affect regulation strategies are activated. Of these secondary affect regulation strategies, *hyperactivating strategies* 

such as intense and insistent proximity seeking, heightening of distressing thoughts about rejection, separation, and abandonment – even in the absence of attachment-related threat— underlie *attachment anxiety*. Additionally, *deactivating strategies* such as denial of attachment needs, suppression of thoughts related to loss, rejection, and separation, repressing negative memories, and deploying attention away from attachment-related threats to minimize distress are the basis of *attachment avoidance*. Therefore, unavailability of an attachment figure may trigger either insistent attempts of proximity seeking or deactivation of attachment system (Cassidy & Kobak, 1988; Mikulincer & Shaver, 2005; Shaver & Mikulincer, 2005). As a result of the systematic pattern of behaviors, emotions, and relational expectations, attachment style of the individual is shaped.

Existing research suggested that internal working models or relational schemas can influence information processing and affect regulation in adulthood (Edelstein, 2006; Fraley, Garner, & Shaver, 2000; Mikulincer, 1998; Mikulincer et al., 2003; Mikulincer & Florian, 1998; Mikulincer & Orbach, 1995; Mikulincer & Shaver, 2005; Pietromonaco & Feldman Barrett, 2000; Selcuk, Zayas, Günaydın, Hazan, & Kross, 2012; Shaver & Mikulincer, 2005). In addition, by guiding attention and memory, these models help individuals deal with current interpersonal situations functionally and to shape their future expectations and plans accordingly.

Autobiographical Memory: Self-Memory System (SMS)

Self-Memory System (SMS) is a conceptual framework created by Conway and his colleagues (Conway, 2005; Conway et al., 2004; Conway & Pleydell-Pearce, 2000) to account for the organization of autobiographical memory and its connection to self. This model has two premises; human cognition is goal-driven and human

memory is motivated such that autobiographical memories are constructed in a way that is consistent with the current self-images, beliefs, and active goals of the individual. As a result, consistency is suggested to lead to maintenance of a stable and coherent self.

SMS incorporates a variety of knowledge structures (e.g. episodic memory system, the working self, long-term self) and the model is frequently modified in order to explain the full range of memory phenomena. But, one of the most critical components of the model regarding autobiographical memory is long-term self because it consists of the autobiographical knowledge base and the conceptual self, which incorporates personal scripts, possible selves, and beliefs (Conway et al., 2004).

One can argue that internal working models or relational schemas are inherently located in SMS, so that they guide autobiographical remembering. Furthermore, individual differences in attachment may result in individual differences in reminiscence processes. Indeed, it was proposed that internal working models can be conceptualized as part of the working-self in SMS (Conway et al., 2004) and, these models include autobiographical knowledge of childhood, certain episodic memories, beliefs about the self and the significant others, and a variety of goal structures. The working-self specifically deals with goal management (e.g., maintenance of compatibility, coordination, and priority among goals). It is responsible for controlling access to the autobiographical knowledge base in which knowledge is represented and accessed in terms of goal-relatedness (Conway & Holmes, 2004). Moreover, Conway (2005) noted that one of the most prominent functions of the working self is to increase the accessibility of experiences which are closely related to past goals. These can be self-defining experiences or other self-

relevant memories which feature the processing of dominant goals. In short, attachment representations can be effective in shaping individual's behaviors and emotional responses in different interpersonal contexts through self-defining memories that pertain to past or current goals of the individual regarding different close relationships.

Attachment and Characteristics of Autobiographical Memories

In the literature, there are only a few studies examining the link between selfreported attachment and characteristics of autobiographical memory narratives in
young adulthood (e.g. Boyacıoğlu & Sümer, 2011; Sutin & Gillath, 2009).

Researchers mostly focused on how individual differences in certain personality
variables (e.g. psychological distress, repressive-defensiveness or avoidant coping
style) affect the characteristics of autobiographical memories. In this section, both
lines of research will be reviewed because in my view, these personality variables are
associated with attachment anxiety and avoidance (see Mikulincer & Orbach, 1995;
Vetere & Myers, 2002), to the extent that they relate to cognitive and behavioral
manifestations of anxiety, avoidance of negative affect, inclination to present self in
a positive way regardless of actual distress etc. Thus, findings of the studies
pertaining to individual differences in these variables may shape and crystallize our
understanding of how autobiographical memory characteristics relate to attachment
anxiety and avoidance as well.

Studies by Singer and colleagues (Blagov & Singer, 2004; Singer & Salovey, 1993) suggested that high defensiveness is associated with the retrieval of less specific personal memories whereas high distress is associated with high negative emotional content and more disrupted relationships in memories. However, Lardi,

Ghisletta, and van der Linden (2012) reported that repression-prone individuals (a combination of high defensiveness and low distress) had no difficulty in retrieving specific personal memories.

Still, the relationship between avoidant coping style and reduced specificity in memory recall was consistently demonstrated. Based on affect-regulation hypothesis (Williams, 1996), it was argued that retrieving fewer details are functional especially when memories are distressing and painful because such a strategy helps individuals to regulate negative affect easily. Hence, various researchers reported that avoidance (used interchangeably with repressiveness) is connected to the retrieval of less specific memories (Debeer, Raes, Williams, & Hermans, 2011; Hermans, Defrank, Raes, Williams, & Eelen, 2005) and it was also indicated that repression-prone individuals recall fewer personal experiences containing negative affect (Davis, 1987; Davis & Schwartz, 1987; Geraerts, Dritschel, Kreplin, Miyagawa, & Waddington, 2012; Hansen & Hansen, 1988; Newman & Hedberg, 1999).

Importantly, studies that focused on how negative affect is regulated or personal memories are retrieved from an attachment perspective reached similar results. To illustrate, Mikulincer and Orbach (1995) found that when instructed to recall early personal experiences of anger, sadness, anxiety, and happiness, avoidant individuals recalled few emotional memories whereas anxious individuals had a heightened accessibility of their negative memories. Fraley et al. (2000) showed that avoidant individuals recalled fewer details from an interview about attachment-related material that they had previously listened to. Researchers argued that this finding could not be explained with faster forgetting, but rather it referred to the existence of preemptive defenses due to which avoidant individuals paid less attention to the attachment-related material in the first place. In line with these

studies, Edelstein (2006) suggested that attachment avoidance, but not anxiety, is related to working memory impairments for attachment-related positive and negative emotional words. In fact, both preemptive defenses and working memory impairments may be reasons why attachment avoidance is associated with narrative incoherence (Bartholomew & Horowitz, 1991; Conway et al., 2004). Recently, Sutin and Gillath (2009) showed that coherence and emotional intensity of self-defining memories mediated the relationship between attachment avoidance and a variety of depressive symptoms. Additionally, when primed with attachment insecurity, individuals provided less coherent relationship memories but when primed with attachment security, they rated their memories as highly coherent. Negative affect was the only memory characteristic that mediated the relationship between attachment anxiety and depressive symptoms.

## The Present Study

Autobiographical memory researchers are interested in significance and functions of personal recollections in relation to one's self or relationships with others (Alea & Vick, 2010; Bluck & Habermas, 2001; Conway, 2005; Conway et al., 2004; McLean, 2005; Pasupathi, 2001). Attachment representations—as potential influencers of self and identity—have been argued to have an impact on attention, affect regulation, and memory for current and future relationships (Mikulincer et al., 2003). Yet, research about individual differences in attachment in relation to autobiographical memory is still rare. Thus, the current study investigated the extent to which attachment style is associated with the retrieval of personally significant autobiographical memories in terms of narrative characteristics (i.e. specificity and integration) and phenomenology.

This study specifically focused on the characteristics of a subcategory of autobiographical memories which is most relevant to personality processes, long-term goals, and narrative identity: Self-defining memories (SDM; Singer, Rexhaj, & Baddeley, 2007). Self-defining memories define who we are as individuals. They are vivid, affectively intense, repetitively recalled, and linked to other thematically similar memories as well as enduring concerns and unresolved conflicts of the individual (Singer & Salovey, 1993). Hence, self-defining memories are crucial sources of information about one's emotional and motivational functioning in interpersonal relationships.

In addition, this study focused on two narrative characteristics of memories; specificity and integration. Specificity is associated with recollecting memories from one's past with distinctive sensorial details, information about time, location of the event in memory etc. Integration, on the other hand, is associated with connecting past experiences with the self by means of reflecting on them and derive meaning from them about the self or world in general. In fact, these two processes have been considered important for a healthy narrative identity (Singer, Blagov, Berry, & Oost, 2013) and an optimal psychological functioning (Conway et al., 2004).

Previous studies investigated specificity and integration of self-defining memories for various age groups (McLean, 2005; McLean & Thorne, 2003; Singer et al., 2007; Wood & Conway, 2006). However, to my knowledge, this is the first study to focus on the relationship between attachment style and self-defining memories' narrative and phenomenological characteristics. Another novel aspect of the study was that self-defining memories in different relational contexts were collected in order to examine whether memory characteristics differ or not between memory types. For instance, parents, peers or romantic partners can be important attachment

figures in one's life, but recollections specific to these individuals can vary depending on changing social roles, shifting attachment needs, and different relationship characteristics (Feeney, Cassidy, & Ramos-Marcuse, 2008; Fraley & Davis, 1997; Pietromonaco & Feldman Barrett, 1997; Sibley & Liu, 2006).

Overall, focusing specifically on the reminiscence of personally important experiences in different relational context (i.e., family member, close friend, unfamiliar/nonclose acquaintance, and romantic partner), this study explored the extent to which attachment anxiety and avoidance relate to characteristics of self-defining memories, including specificity, integration, and phenomenology.

# **Hypotheses**

Hypotheses in relation to specificity:

- 1. Attachment avoidance would negatively relate to memory specificity.
- Attachment anxiety would be positively related to memory specificity due to vulnerability to rumination depending on the heightened accessibility of negative memories.

Hypothesis in relation to integration:

 It was expected that both attachment anxiety and avoidance would be negatively related to integration, pointing to difficulty in establishing healthy narrative identity.

Hypotheses in relation to phenomenology:

4. Anxiety, but not avoidance, would be related to how frequently close relationship memories are rehearsed and how central and important they are regarded to the individual's life and identity.

5. It was predicted that attachment avoidance would relate to less coherence and fewer emotional details whereas anxiety would relate to more coherence and more negative affect in close relationship memories.

# CHAPTER II: METHOD

# **Participants**

Participants were 111 Boğaziçi University students (57 females, 54 males, Age: M = 20.9, SD = 2.2). Initially, all students who were taking 1<sup>st</sup> and 2<sup>nd</sup> year psychology courses were sent an invitation to fill out an online survey. Among those who completed the survey (including the attachment scale), students who indicated to have a past and/or current relationship experience were contacted by the experimenter via e-mail and asked whether they would like to take part in a study about personal memories in return for course credit. Table 1 and Table 2 show the characteristics of the sample in terms of parental education, perceived level of income, and actual family income per month.

Table 1. Distribution of Participants Based on Parental Education Shown in Percentages

	All		Ma	iles	Females	
Degree	Mother Education (ME)	Father Education (FE)	ME	FE	ME	FE
Graduate	5%	10%	4%	7%	7%	12%
Undergraduate	34%	48%	39%	56%	30%	40%
High School	32%	23%	35%	22%	30%	23%
Secondary School	5%	7%	4%	2%	5%	12%
Primary School	19%	8%	13%	9%	25%	7%
No Education	2%	-	2%	-	2%	-
No Answer	3%	5%	4%	4%	2%	5%
Total	100%	100%	100%	100%	100%	100%

Table 2. Distribution of Participants Based on Perceived Level of Income and Actual Family Income per Month

	All	Mal	les	Fema	Females		
Level of Income	Average Income TL (AI)	N	AI	N	AI	N	
High	14750	4	18500	2	11000	2	
Middle-High	7369	31	7321	14	7413	17	
Middle	3502	58	3532	31	3470	27	
Low-Middle	2171	14	2040	5	2244	9	
Low	880	1	-	-	880	1	
No Answer	-	3	-	2	-	1	
Total	4821	111	5073	54	4592	57	

#### Materials

Participants completed the self-defining memory task and the following scales: Experiences in Close Relationships – Revised Scale (ECR – R; Fraley, Waller, & Brennan, 2000), Autobiographical Memory Questionnaire (AMQ; Fitzgerald & Broadbridge, 2012; Rubin et al., 2003), and Centrality of Event Scale (CES) – Short Form (Berntsen & Rubin, 2006).

### Self-defining Memory Task

A four-page booklet was designed to collect self-defining memories. Since there were four different relational contexts (i.e. close friend, unfamiliar/nonclose acquaintance, family member, and romantic partner), each page contained detailed instructions (see Appendix A) describing the type of memory participants are expected to write about. Following is the instruction given to the participants for a close friend memory: "Please try to recall a memory that is personally meaningful to you, which you believe defines who you are as a person. This memory should be about an important experience that you have had with *your close friends* and that you have thought about many times. It may be a memory of either a positive or a negative experience but it should be relevant to your identity and reveal something about how you feel about yourself in the context of relationships. Please describe your memory in as much detail as possible." Order of memory type was counterbalanced across participants; hence memory booklet had 4 different versions.

## Experiences in Close Relationships – Revised Scale

This scale was developed by Fraley et al. (2000) and is consisted of 36 items assessing adult attachment in anxiety (e.g. "When my partner is out of sight, I worry

that he or she might become interested in someone else.") and avoidance (e.g. "I am nervous when partners get too close to me.") dimensions (18 items for each dimension). Participants are asked to indicate the extent to which each statement reflects their thoughts and feelings in romantic relationships on a 7-point Likert scale ranging from 1 "totally disagree" to 7 "totally agree". In Turkish version of the scale (see Selçuk, Günaydın, Sümer, & Uysal, 2005), odd-numbered statements constitute the anxiety items (17-21 are negatively-keyed) whereas even-numbered statements constitute the avoidance items (4-8-16-18-20-22-24-26-30-32-34-36 are negatively-keyed). Anxiety and avoidance scores of each participant are calculated by averaging the ratings in each relevant dimension after negatively-keyed items are reverse-scored. In this sample, mean anxiety score was 3.48 (SD = 1.07) and mean avoidance score was 2.94 (SD = 1.03). Cronbach's  $\alpha$ s for Turkish version are .86 and .90 for avoidance and anxiety dimensions, respectively. In this study, avoidance ( $\alpha$  = .91) and anxiety ( $\alpha$  = .90) dimensions had high internal consistency as well. See Appendix B for the scale.

# <u>Autobiographical Memory Questionnaire</u>

This questionnaire was developed by Rubin, Schrauf, and Greenberg (2003) and measures the extent of recollective experience and belief in accuracy in autobiographical memories (e.g., As I remember the event, I can see it in my mind; As I remember the event, I can recall the setting where it occurred; Since it happened, I have talked about this event) on a 7-point Likert scale (The rating scales are presented in the Appendix C). The questionnaire used in this study was consisted of 21 items in the following order; 1. reliving, 2. see, 3. hear, 4. layout, 5. feel the same now, 6. thought about, 7. setting, 8. actually remember, 9. in words, 10. back in time, 11. perspective, 12. coherent story, 13. significance, 14. imaginary/real, 15.

positive emotions, 16. negative emotions, 17. talked about, 18. consequences, 19. aware time of day, 20. importance, and 21. age-at-event. It should be noted that in contrast to other studies using this questionnaire (Fitzgerald & Broadbridge, 2012; Rubin et al., 2003), testify item was excluded and emotion item was separated into 2 parts for negative and positive emotion ratings in this study. Participants filled out this questionnaire for each of their four memories.

### Centrality of Event Scale

This scale was developed by Berntsen and Rubin (2006) and measures the extent to which negative life events are evaluated as central to life story and identity of individuals (e.g., I feel that this event has become a central part of my life story; This event permanently changed my life). The short form of the scale consists of 7 items and participants are asked to indicate to what degree they agree or disagree with the statements on a 5-point Likert scale (see Appendix D). In this study, participants completed CES for each of their four memories and a total centrality of event score was calculated for participants' each memory by summing the ratings on all items. Reliability analyses yielded acceptable results for all four events (Cronbach's as ranging from .93 to .94). Although originally focused on individual differences in PTSD symptomatology and trauma history, this scale can also be useful for measuring the centrality of positive events. Boals (2010) reported a trend towards higher ratings for negative events and indicated that scores for positive events were not related to psychological health.

#### Procedure

Prior to the study, the experimenter informed participants that the study would be related to personal memories and they could provide or disclose any details that they

deemed suitable. Participants were told that they were free to leave any time they want.

All participants provided written informed consent (see Appendix E). They were asked to read through instructions carefully and to write down a self-defining memory for each of the four different relational contexts on memory booklet in the specified order. After writing memories, participants were asked to complete AMQ and CES for each memory, respectively. Finally, they filled out the demographic form<sup>1</sup> (see Appendix F). Participants were tested in groups. The testing session took approximately an hour.

# Coding

In order to code structure and meaning in self-defining memory narratives, "the classification system and scoring manual for self-defining memories" was used (Singer & Blagov, 2000). Structure concerns the specificity of the memory. Singer and Blagov (2000) indicated that if the event in memory reflects single event characteristics such as unique occurrence with distinctive details and a brief duration of less than 24 hours, then it is called a specific event. Otherwise, series of events developing over consecutive days/in a lengthy period of time (episodic) or same kind of repeated events (generic) are categorized as summary events. Meaning or integration, on the other hand, concerns the explicit meaning-making statements about what the event in memory has taught the individual about her-/himself or the world in general. Memories in which details about time, location, importance, emotion, and/or attribution about event(s) are specified are still coded as

<sup>&</sup>lt;sup>1</sup>Some participants were asked to fill out the attachment scale after they had completed the study due to technical problems.

nonintegrative unless individuals particularly elaborate on higher meaning derived from memory.

In this sample, a number of participants (9% of females, N=5; 19% of males, N=10) wrote only 3 memories out of 4. Thus, data contained a total of 429 memories. Overall, intercoder agreement between three coders (the experimenter and two independent coders) was satisfactory (90% for 2 levels of specificity, 78% for 2 levels of integration). Cohen's  $\kappa$  was .72 and .52 for 2 levels of structure and meaning, respectively (Freelon, 2010). Disagreements were resolved by discussion. Appendix G shows coding examples for different types of memories.

#### CHAPTER III: RESULTS

The present study asked two main questions. One of them was how self-defining memories in different relational contexts differ from each other in terms of narrative (i.e. specificity and integration) and phenomenological (e.g. recollection, rehearsal) characteristics. The other one was to investigate the extent to which individual differences in these characteristics can be accounted for by attachment anxiety and avoidance. Given that gender may be an important factor influencing these relationships, it was included as a between-subjects variable. Firstly, findings pertaining to the first question will be reported and secondly, findings in relation to attachment anxiety and avoidance will be reported.

Narrative Characteristics of Different Types of Memories

Majority of the memories were specific (75.5 %) and nonintegrative (69%). There was a significant relationship between memory specificity and integration ( $\chi^2(1, N = 429) = 4.21, p = .04$ ) such that nonintegrative memories were more likely to be specific compared to integrative memories. However, as can be seen in Figure 1, this relationship did not emerge for individual memory types (Close friend:  $\chi^2(1) = .09, p = .75$ ; Unfamiliar/nonclose:  $\chi^2(1) = 2.62, p = .11$ ; Family member:  $\chi^2(1) = 2.39, p = .12$ ; Romantic partner:  $\chi^2(1) = 2.15, p = .14$ ).

Given that participants wrote self-defining memories in different relational contexts, potential relationships between type of memory and narrative characteristics of memories (i.e. specificity and integration) were explored. Chi-square tests showed that type of memory was related to neither specificity ( $\chi^2(3) = 3.87$ , p = .27) nor integration ( $\chi^2(3) = .99$ , p = .80). Furthermore, there was no gender difference for total number of specific and integrative memories each participant

wrote out of 4 (specific memories: females, M = 2.84, SD = 1.16; males, M = 2.98, SD = 1.12; t(109) = -.64, p = .52; integrative memories: females, M = 1.23, SD = 1.16; males, M = 1.17, SD = 1.16; t(109) = .28, p = .78).

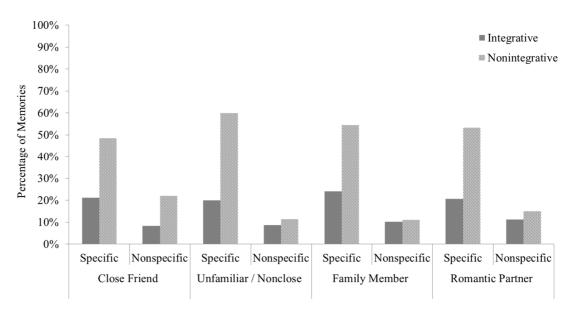


Figure 1. Relationship between Specificity and Integration for Different Types of Memories

Phenomenological Characteristics of Different Types of Memories

Descriptive characteristics of all study variables (e.g. AMQ items, centrality of event score, narrative length) can be seen in Table 3. In order to examine how gender and type of memory influenced phenomenology of self-defining memories, a series of 2 x 4 ANOVAs were carried out with gender as between-subjects and type of memory as within-subjects factors. The analyses were based on AMQ ratings of participants who wrote all 4 memories in the self-defining memory task. ANOVA results are shown in Table 4. (See Appendix H for additional figures depicting mean ratings for each AMQ item separately).

Table 3. Descriptive Characteristics of Study Variables

		Overa	1	
	М	SD	Min.	Max.
Reliving	5.54	1.39	1	7
See	5.78	1.29	1	7
Hear	5.39	1.57	1	7
Layout	5.51	1.56	1	7
Feel the Same Now	5.29	1.60	1	7
Thought About	5.16	1.63	1	7
Setting	6.26	1.19	1	7
Actually Remember	6.03	1.19	1	7
In Words	4.82	1.70	1	7
Back in Time	5.43	1.63	1	7
Perspective	1.98	0.93	1	3
Coherent Story	5.20	1.54	1	7
Significance	4.98	1.71	1	7
Imaginary/Real	6.59	0.80	3	7
Positive Emotions	3.35	2.23	1	7
Negative Emotions	4.61	2.20	1	7
Talked About	3.78	1.97	1	7
Consequences	4.84	1.77	1	7
Aware Time of Day	5.53	1.58	1	7
Importance	5.39	1.52	1	7
Age-at-Event	16.54	4.33	4	25
Centrality of Event Score	20.44	7.73	7	35
Narrative Length	102.67	56.82	7	451

Table 4. Effects of Gender, Type of Memory, and Their Interaction on AMQ Ratings

					ANOVA				
		Gender (G)	)	T	ype of Memor	y (TM)		G x TM	
Items on AMQ	df	F	Partial η <sup>2</sup>	df	F	Partial η <sup>2</sup>	df	F	Partial η <sup>2</sup>
n dish s	(1.04)	1.064	010	(2.282)	4.810***	0.40	(2.202)	602	007
Reliving	(1,94)	1.864	.019	(3,282)	4.810	.049	(3,282)	.683	.007
See	(1,94)	3.424	.035	(3,282)	6.059***	.061	(3,282)	.231	.002
Hear	(1,94)	1.763	.018	(3,282)	5.581***	.056	(3,282)	.253	.003
Layout	(1,94)	.005	.000	(3,282)	9.091****	.088	(3,282)	1.042	.011
Feel the Same Now	(1,94)	5.231*	.053	(3,282)	3.291*	.034	(3,282)	.433	.005
Thought About	(1,94)	6.698*	.067	(3,282)	6.930****	.069	(3,282)	.782	.008
Setting	(1,94)	.999	.011	(3,282)	.299	.003	(3,282)	.454	.005
Actually Remember	(1,94)	4.850*	.049	(3,282)	3.321*	.034	(3,282)	1.245	.013
In Words	(1,94)	3.871	.040	(3,282)	3.299*	.034	(3,282)	.854	.009
Back in Time	(1,93)	2.089	.022	(3,279)	3.395*	.035	(3,279)	.182	.002
Coherent Story	(1,94)	1.691	.018	(3,282)	3.566*	.037	(3,282)	.400	.004
Significance	(1,94)	5.493*	.055	(3,282)	11.914****	0.112	(3,282)	.451	.005
Imaginary / Real	(1,94)	1.595	.017	(3,282)	.468	.005	(3,282)	.188	.002
Positive Emotions	(1,93)	1.610	.017	(3,279)	1.287	.014	(3,279)	2.133	.022
Negative Emotions	(1,94)	3.637	.037	(3,282)	1.013	.011	(3,282)	3.260*	.034
Talked About	(1,94)	14.039****	.130	(3,282)	8.462****	.083	(3,282)	.557	.006
Consequences	(1,94)	7.194**	.071	(3,282)	12.232****	.115	(3,282)	.171	.002
Aware Time of Day	(1,93)	.158	.002	(3,279)	3.821*	.039	(3,279)	.557	.006
Importance	(1,93)	7.014*	.070	(3,279)	19.469****	0.173	(3,279)	.349	.004

Note. \*p < .05; \*\*p < .01; \*\*\*p < .005; \*\*\*\*p < .001.

For 7 out of 15 AMQ items, there was a main effect of gender. As can be seen in Table 5, females gave higher ratings for *thought about* and *talked about* as well as *significance*, *consequences*, and *importance* items compared to males.

Ratings on these items can be regarded as indicators of two latent phenomenological variables; rehearsal (*thought about*, *talked about*) and impact (*significance*, *consequences*) (Fitzgerald & Broadbridge, 2012). Hence, it can be stated that the observed gender difference was pronounced for rehearsal and impact items on AMQ.

In addition, females' remember/know judgments (*actually remember*) indicated that they were more likely than males to believe that they actually remembered the event rather than just knowing that it happened. In a similar vein, females reported having felt the same emotions that they had felt then as they remembered the event to a greater extent than males.

Table 5. Mean (Standard Deviation) AMQ Ratings for Females and Males

	Gender						
_	Fen	nale	Ma	le			
Items on AMQ	M	$\overline{SD}$	M	SD			
Reliving	5.64	0.78	5.41	0.83			
See	5.92	0.68	5.63	0.87			
Hear	5.52	0.92	5.23	1.23			
Layout	5.51	1.01	5.50	0.99			
Feel the Same Now	5.52	1.03	5.02	1.10			
Thought About	5.42	1.01	4.85	1.15			
Setting	6.33	0.72	6.18	0.80			
Actually Remember	6.18	0.62	5.85	0.85			
In Words	5.04	1.19	4.55	1.25			
Back to the Time	5.57	0.98	5.24	1.24			
Coherent Story	5.33	1.00	5.05	1.12			
Significance	5.21	0.92	4.72	1.11			
Imaginary / Real	6.63	0.57	6.55	0.64			
Positive Emotions	3.18	1.53	3.55	1.26			
Negative Emotions	4.86	1.59	4.31	1.11			
Talked About	4.21	1.25	3.28	1.17			
Consequences	5.09	0.99	4.54	1.02			
Aware Time of Day	5.49	1.08	5.57	0.96			
Importance	5.60	0.73	5.14	0.97			

There was a main effect of type of memory for the majority of AMQ items (15 out of 19). Most of the time, this effect was a result of the contrast between ratings of unfamiliar/nonclose and romantic partner memories. Participants' ratings on AMQ items for different types of memories are presented in Table 6.

Of particular interest, romantic partner memories were given the highest ratings among other memory types for all AMQ items, except *feel the same now*. For this item, participants gave the highest ratings for family member memories.

Moreover, impact items (*significance* and *consequences*) were given equally high ratings for close relationship memories with parents, peers, and partners.

Table 6. Mean (Standard Deviation) AMQ Ratings for Different Types of Memories

				Type of Mem	ory			
	Close	Friend	Unfamiliar / N	onclose Acq.	Family N	Member .	Romantio	Partner
Items on AMQ	M	SD	M	SD	M	SD	M	SD
Reliving	5.60 <sub>a,b</sub>	1.31	5.14 <sub>a</sub>	1.43	5.58 <sub>a,b</sub>	1.40	5.82 <sub>b</sub>	1.35
See	5.74 <sub>a</sub>	1.20	5.42 <sub>a</sub>	1.46	5.85 <sub>a,b</sub>	1.22	6.13 <sub>b</sub>	1.17
Hear	5.35 <sub>a</sub>	1.50	5.04 <sub>a</sub>	1.72	5.34 <sub>a</sub>	1.51	5.80 <sub>b</sub>	1.44
Layout	5.33 <sub>a</sub>	1.65	5.19 <sub>a</sub>	1.62	5.41 <sub>a</sub>	1.53	6.10 <sub>b</sub>	1.24
Feel the Same Now	5.23 <sub>a,b</sub>	1.54	4.99 <sub>a</sub>	1.67	5.58 <sub>b</sub>	1.44	5.36 <sub>a,b</sub>	1.71
Thought About	5.29 <sub>b</sub>	1.54	4.64 <sub>a</sub>	1.72	5.23 <sub>b</sub>	1.57	5.49 <sub>b</sub>	1.56
Setting	6.18 <sub>a</sub>	1.28	6.26 <sub>a</sub>	1.09	6.30 <sub>a</sub>	1.23	6.30 <sub>a</sub>	1.18
Actually Remember	6.04 <sub>a,b</sub>	1.17	5.76 <sub>a</sub>	1.36	6.05 <sub>a,b</sub>	1.13	6.25 <sub>b</sub>	1.02
In Words	4.74 <sub>a</sub>	1.61	4.61 <sub>a</sub>	1.68	4.74 <sub>a,b</sub>	1.77	5.18 <sub>b</sub>	1.69
Back in Time	5.36 <sub>a,b</sub>	1.65	5.24 <sub>a</sub>	1.67	5.27 <sub>a,b</sub>	1.74	5.81 <sub>b</sub>	1.43
Coherent Story	5.10 <sub>a,b</sub>	1.58	4.93 <sub>a</sub>	1.55	5.25 <sub>a,b</sub>	1.51	5.51 <sub>b</sub>	1.48
Significance	5.12 <sub>b</sub>	1.61	4.20 <sub>a</sub>	1.83	5.25 <sub>b</sub>	1.62	5.36 <sub>b</sub>	1.50
Imaginary / Real	6.59 <sub>a</sub>	0.69	6.48 <sub>a</sub>	0.98	6.65 <sub>a</sub>	0.81	6.65 <sub>a</sub>	0.68
Positive Emotions	3.01 <sub>a</sub>	2.06	3.34 <sub>a</sub>	2.24	3.49 <sub>a</sub>	2.31	3.55 <sub>a</sub>	2.30
Negative Emotions	4.91 <sub>a</sub>	2.05	4.41 <sub>a</sub>	2.30	4.57 <sub>a</sub>	2.23	4.54 <sub>a</sub>	2.21
Talked About	4.11 <sub>b</sub>	2.01	3.43 <sub>a</sub>	1.92	3.30 <sub>a</sub>	1.77	4.29 <sub>b</sub>	1.97
Consequences	5.03 <sub>b</sub>	1.68	4.00 <sub>a</sub>	1.88	5.08 <sub>b</sub>	1.65	5.24 <sub>b</sub>	1.58
Aware Time of Day	5.44 <sub>a</sub>	1.42	5.21 <sub>a</sub>	1.78	5.58 <sub>a,b</sub>	1.45	5.86 <sub>b</sub>	1.60
Importance	5.48 <sub>b</sub>	1.26	4.51 <sub>a</sub>	1.72	5.83 <sub>b</sub>	1.44	5.75 <sub>b</sub>	1.27

Note. Means in the same row that do not share the same subscript are significantly different from each other in Bonferonni corrected post-hoc comparisons.

However, this finding was in contrast with significantly lower ratings regarding unfamiliar/nonclose memory category. There were no effects of gender and type of

memory for *setting* and *imaginary/real* items. Furthermore, interaction between these two factors was not significant for any of the AMQ items, except *negative emotions*  $(F(3, 282) = 3.26, p = .02, \eta_p^2 = .03)$ . In order to find the significant gender difference(s) across memory types, 4 t-tests were conducted.

Results indicated that females (M = 5.54, SD = 1.87) and males (M = 4.16, SD = 2.01) were significantly different from each other for close friend memories (t(94) = 3.48, p < .01). There was also a marginally significant difference between females (M = 4.81, SD = 2.25) and males (M = 3.93, SD = 2.27) for unfamiliar/nonclose memories (t(94) = 1.89, p = .06).

Centrality of Event, Age-at-Event, and Narrative Length

In the same way as AMQ items, a number of 2 (gender) x 4 (type of memory) ANOVAs were conducted for participants' centrality of event score –sum of ratings for all 7 items in CES –, age-at-event estimations, and number of words in memory narratives to examine potential gender and memory type differences. Gender had a significant main effect only for narrative length (F(1, 94) = 3.96, p = .05,  $\eta_p^2 = .04$ ), indicating that females wrote significantly longer narratives compared to males. Nevertheless, as illustrated in Table 7, females and males were comparable with respect to centrality of event score and age-at-event.

Table 7. Mean (Standard Deviation) Centrality of Event Score, Age-at-Event, and Narrative Length for Females and Males

			Gender		
	Fen	nale		Ma	ale
	M SD			M	SD
Centrality of Event Score	21.19	5.29		19.56	5.00
Age-at-Event	16.72	2.70		16.37	2.73
Narrative Length	111.05	45.98		92.76	43.54

A significant main effect of type of memory was observed only for centrality of event score (F(3, 282) = 10.39, p < .01,  $\eta_p^2 = .10$ ) and age-at-event (F(3, 279) = 25.92, p < .001,  $\eta_p^2 = .22$ ). Means and standard deviations across memory types are presented in Table 8. For centrality of event, nonclose/unfamiliar memory ratings were significantly low compared to ratings of all other types of memories. Besides, unfamiliar/nonclose memories did not significantly differ from close friend and family member memories for age-at-event. However, all other post-hoc comparisons were significant. That is to say, family memories were earlier compared to close friend memories. In turn, close friend and unfamiliar/nonclose memories were earlier than romantic partner memories. Interaction was significant for none of these variables.

Table 8. Mean (Standard Deviation) Centrality of Event Score, Age-at-Event, and Narrative Length for Different Types of Memories

		Type of Memory							
	Close	Friend	Unfamiliar / No	onclose Acq.	Family	Member	Romanti	c Partner	
	M	SD	M	SD	M	SD	M	SD	
Age-at-Event	17.14 <sub>b</sub>	3.54	15.92 <sub>a,b</sub>	4.93	14.42 <sub>a</sub>	4.99	18.70 <sub>c</sub>	2.00	
Centrality of Event Score	$20.78_{b}$	7.37	17.38 <sub>a</sub>	7.76	21.57 <sub>b</sub>	7.42	$22.04_{b}$	7.61	
Narrative Length	$104.20_{a}$	54.38	100.01 <sub>a</sub>	58.23	97.79 <sub>a</sub>	47.79	$108.70_{a}$	65.68	

*Note.* Means in the same row that do not share the same subscript are significantly different from each other in Bonferonni corrected post-hoc comparisons.

The Relationship between Attachment and Memories' Narrative and
Phenomenological Characteristics

Prior to research findings, the logic behind the analyses that were carried out in STATA will be briefly mentioned. Because of the fact that the present data contained four different observations (in this case, memories) from each individual, they were clustered in nature. Thus, it should be specified in the analyses that observations were independent between clusters (in this case, participants), but not necessarily

within clusters. In a situation like this, a very useful option called "clustered/robust" in STATA replaces standard errors in data with robust standard errors to correct for the violation of independence between observations (Long & Freese, 2006). As a matter of fact, the SPSS data file contained 96 lines of data representing each person in the variance analyses; however, the STATA data file contained 429 lines of data representing each memory in the clustered/robust regression analyses. Yet, grouping memories by participant id ensured that both within- as well as between-cluster (N = 111) variability and error were taken into account. More detailed information about how to use STATA while analyzing clustered data can be found in Long and Freese (2006).

## Results Pertaining to Narrative Characteristics

First, the role of attachment anxiety and/or avoidance on narrative characteristics of memories was examined. In order to do so, two separate binary logistic regression (clustered/robust) analyses were conducted in STATA with gender, anxiety score, avoidance score, their interaction, and dummy variables of three memory types (close friend, family member, and romantic partner) as predictor variables whereas specificity and integration of memories as criterion variables. Results showed that none of the variables predicted specificity (Wald  $\chi^2(7) = 8.55$ , p = .28) or integration (Wald  $\chi^2(7) = 3.39$ , p = .84) of self-defining memories in these data.

# Results Pertaining to Phenomenological Characteristics

Next, the role of attachment anxiety and/or avoidance on phenomenological characteristics of memories was examined. This time, linear regression (clustered/robust) analyses indicated that anxiety score was a significant predictor for the ratings of the following phenomenological qualities; *thought about*, F(7, 110) =

5.77, p < .01,  $R^2 = 0.09$ , negative emotions, F(7, 110) = 2.70, p < .05,  $R^2 = 0.04$ , consequences, F(7, 110) = 8.25, p < .01,  $R^2 = 0.14$ , and importance, F(7, 110) = 11.55, p < .01,  $R^2 = 0.17$ , as well as centrality of event score, F(7, 110) = 8.59, p < .01,  $R^2 = 0.12$ . Furthermore, avoidance score was a significant predictor for ratings of *talked about* item on AMQ, F(7, 110) = 6.74, p < .01,  $R^2 = 0.10$ .

Based on b coefficients of each variable in regression equations in Table 9, one can make the following interpretations: For every unit increase in anxiety score, thought about ratings were predicted to be .25 units higher (p = .006) and being a female predicted thought about ratings to be .52 units higher compared to being a male (p = .01). Additionally, being a close friend memory predicted thought about ratings to be .62 units higher (p = .003) compared to unfamiliar/nonclose memory category which I excluded from regression analyses in order to make a comparison. Since comparisons between different memory types mirrored the patterns in post-hoc tests of previously mentioned variance analyses, they will not further mentioned.

For every unit increase in anxiety score, *negative emotions* was predicted to be .32 units higher (p = .004) and being a female predicted *negative emotions* ratings to be .53 units higher compared to being a male (p = .042). Consequences ratings were predicted to be .27 units higher (p = .005) and being a female predicted *consequences* ratings to be .44 units higher compared to being a male (p = .01). *Importance* ratings were predicted to be .23 units higher (p = .003) and being a female predicted *importance* ratings to be .34 units higher compared to being a male (p = .03). Centrality of event scores were predicted to be 1.47 units higher (p = .002). Lastly, for every unit increase in avoidance score, *talked about* ratings were predicted to be .30 units lower (p = .015), but being a female predicted *talked about* ratings to be .76 units higher compared to being a male (p = .002).

Table 9. Anxiety and Avoidance Scores as Significant Predictors of AMQ Ratings and Centrality of Event

Criterion Variables	Linear Regress Predictor Variables	510n b	Robust SE	t	р
Criterion variables	redictor variables	υ	Robust SE	ı	ρ
Thought About	<del>-</del> -				
	Gender	.52	.20	2.61	.01
	Anxiety Score	.25	.09	2.83	.006
	Avoidance Score	04	.10	41	.68
	Interaction	.03	.08	.46	.65
	Close Friend	.62	.20	3.06	.003
	Family Member	.66	.19	3.39	.001
	Romantic Partner	.86	.17	5.08	.000
Talked About					
	Gender	.76	.24	3.11	.002
	Anxiety Score	.007	.11	.07	.94
	Avoidance Score	30	.12	-2.48	.01
	Interaction	.03	.09	.37	.71
	Close Friend	.58	.24	2.39	.01
	Family Member	.01	.22	.07	.94
	Romantic Partner	.71	.22	3.18	.002
Negative Emotions					
	Gender	.53	.26	2.06	.04
	Anxiety Score	.32	.11	2.94	.004
	Avoidance Score	08	.12	68	.49
	Interaction	.04	.08	.52	.60
	Close Friend	.50	.27	1.88	.06
	Family Member	.27	.27	1.00	.32
	Romantic Partner	.32	.28	1.13	.26
Consequences	_				
	Gender	.44	.17	2.52	.01
	Anxiety Score	.27	.09	2.84	.005
	Avoidance Score	09	.10	89	.37
	Interaction	.14	.10	1.45	.15
	Close Friend	1.00	.22	4.55	.000
	Family Member	1.26	.23	5.46	.000
	Romantic Partner	1.33	.22	5.80	.000
Importance					
	Gender	.34	.16	2.14	.03
	Anxiety Score	.23	.07	3.07	.003
	Avoidance Score	08	.07	-1.13	.26
	Interaction	.05	.06	.74	.46
	Close Friend	.95	.19	4.85	.000
	Family Member	1.43	.20	7.07	.000
	Romantic Partner	1.24	.18	6.87	.000
Centrality of Event					
	Gender	1.34	.89	1.50	.13
	Anxiety Score	1.47	.45	3.21	.002
	Avoidance Score	38	.50	76	.44
	Interaction	.68	.48	1.41	.16
	Close Friend	3.36	.87	3.83	.000
	Family Member	4.84	.90	5.37	.000
	Romantic Partner	4.88	.86	5.63	.000

#### CHAPTER IV: DISCUSSION AND CONCLUSIONS

To my knowledge, this was the first study to examine 1) how self-defining memories in different relational contexts differ from each other in terms of narrative (i.e. specificity and integration) and phenomenological (e.g. rehearsal) characteristics, and 2) the extent to which individual differences in these characteristics can be accounted for by attachment anxiety and avoidance. Novel findings were as follows: Results indicated that neither type of memory, nor attachment style was related to specificity and integration of self-defining memories. However, attachment anxiety positively influenced the degree of importance and centrality attributed to personal experiences as well as the negative affective content of these experiences. Results showed that people high on attachment anxiety more frequently thought about their relationship experiences whereas high levels of avoidance manifested itself as a tendency to communicate relationship experiences less. Additionally, women and men differed in terms of their subjective experiences about close relationships. Furthermore, close relationship memories involving different attachment figures differed in terms of their phenomenological characteristics. Overall, these findings suggest that attachment style and type of relational context influence phenomenological, but not narrative, characteristics of self-defining memories in conceptually meaningful ways.

#### Role of Attachment

### Specificity and Integration of Memories

Based on the integrative model of narrative identity, Singer et al. (2013) emphasized the importance of the ability to produce specific autobiographical memories (especially for emotion regulation and goal management) along with an appreciable attempt to derive higher meaning from previous experiences. However, in a study by

Singer et al. (2007), it was also mentioned that older adults engaged in meaning making to a greater extent than younger adults, possibly due to the fact that reminiscence in old age serves different functions (e.g., sharing lessons about life, conveying wisdom etc.) In this study, majority of self-defining memories were specific (75.5 %) and nonintegrative (69 %), which is possibly related to the age of the participants. The sample was comprised of college students and the finding was in line with previous studies conducted with similar age groups (Blagov & Singer, 2004; Singer et al., 2007; Wood & Conway, 2006). Importantly, the present study showed that this finding held true for SDMs in different types of relational contexts. In other words, specificity and integration were not related to memory type.

This study also examined whether individual differences in attachment anxiety and avoidance were associated with narrative characteristics (i.e., specificity and integration) of self-defining memories. One of the predictions was that avoidance would be negatively related to both specificity and integration. This prediction was based on the idea that avoidance is associated with problems concerning narrative identity. Additionally, anxiety was hypothesized to relate negatively to integration, but to relate positively to memory specificity. Since people high on attachment anxiety often worry about their close relationships and have difficulty in down-regulating distress, it was expected that they would recall specific memories at a high rate, without noticing or acknowledging what these memories have taught them about themselves or world in general. Contrary to the hypotheses, the results indicated that attachment style was not related to specificity and integration of self-defining memories in these data. Although this finding is original in and of itself, it is also unexpected given that different forms of avoidance were

consistently linked with overgeneral memory in the literature (Blagov & Singer, 2004; Geraerts et al., 2012; Hermans et al, 2005).

#### Phenomenological Characteristics and Other Features

There were a number of predictions with respect to attachment anxiety and avoidance, and memory characteristics such as rehearsal, narrative coherence, emotion, and centrality. It was hypothesized that anxiety would relate positively to rehearsal and centrality of close relationship memories. In addition, it was expected that avoidance would be related to less coherence and emotional detail in memories whereas anxiety would relate to more coherence and negative affect.

In line with these hypotheses, regression analyses showed that attachment anxiety significantly predicted participants' *importance* and *consequences* ratings as well as centrality of event scores. As anxiety scores increased, so did participants' ratings on these items. Notably, the strongest effect was on the centrality of event among these items. Based on these findings, it was concluded that people high on attachment anxiety consider their experiences in close relationships as more important, more consequential, and more central to their life story and identity. Given that thoughts, feelings, and attitudes of people with high attachment anxiety towards their close relationships are intertwined with distress, attributing such importance to (mostly negative aspects of) their close relationships may explain why these people usually suffer from a vicious circle of anxiety, stress, depressive symptoms, and rumination (Berntsen & Rubin, 2006). The finding that attachment anxiety also predicted negative emotions ratings to be higher further strengthens this argument (Sutin & Gillath, 2009). Also, the lack of relationship between avoidance and (positive/negative) emotional ratings was interpreted as a support to the

prediction that avoidance would be related to emotional bluntness (fewer emotional details).

Rehearsal items on AMQ such as thought about and talked about were differently affected by attachment anxiety and avoidance. Anxiety predicted thought about ratings to be higher whereas avoidance predicted talked about ratings to be lower. In fact, the way that attachment anxiety relates to rehearsal of and negative affect in self-defining memories supported the idea that hyperactivating strategies underlie attachment anxiety. As mentioned before, Cassidy and Kobak (1988) coined the term *hyperactivating strategies* to refer to insistent attempts to attain proximity and support from attachment figures. Additionally, Shaver and Mikulincer (2005) referred to them as heightening of distressing thoughts about rejection, separation, and abandonment. Mikulincer and Shaver (2005) argued that hyperactivating strategies result in increased vigilance for detecting threat-related cues in the environment, intense negative emotional reactions to threatening events, heightened ruminative thinking about those events, and keeping concerns and worries about relationships active in working memory. Thus, it was not unforeseen that attachment anxiety, which is shaped by hyperactivating strategies, is closely connected to high ratings of rehearsal (thought about) and negative affect for relational memories in these data.

Intriguing thing was that for the first time, this study showed how attachment anxiety and avoidance are linked to different ways of rehearsing close relationship memories. AMQ has two different rehearsal items; *talked about* and *thought about*, which tap overt and covert rehearsal, respectively. The results indicated that on the one hand, attachment anxiety did not relate to overt rehearsal in meaningful ways, but it was related to participants' higher ratings on covert rehearsal. That is to say,

the more anxious the participant is, the more frequently s/he thinks about relational experiences. This can be interpreted as reflecting the link between anxiety and rumination. On the other hand, avoidance was associated with significantly low levels of overt rehearsal but it did not relate to covert rehearsal as anxiety did. Thus, participants high on avoidance reported that they prevent themselves from talking about their close relationships. One can argue that to avoid communicating relational experiences is a consequence of deactivating strategies (denial of attachment needs, and avoidance of emotional involvement, intimacy and dependence in close relationships, Cassidy & Kobak; 1988; Mikulincer & Shaver, 2005) adopted by avoidant individuals. Furthermore, the finding with regard to attachment anxiety, avoidance, and their association with different forms of rehearsal may count as supporting evidence for the existence of two separate and cooperating components of attachment system; appraisal component and behavioral selection component (Fraley & Shaver, 2000). According to Fraley and Shaver (2000), the former is responsible for the evaluation of current attachment-related goals, availability, or responsiveness of the attachment figures at a cognitive level whereas the latter is responsible for the management of attachment system at a behavioral level. Individual differences in the first component (anxiety) determine the extent of distress and attachment-related threat that people experience. Moreover, individual differences in the second component (avoidance) determine what kind of adaptive behaviors (proximity seeking versus denial of attachment needs -emotional/behavioral distancing from attachment figures) people engage in to deal with distress and attachment-related threat that they experience.

Narrative coherence was another important aspect of self-defining memories that was examined in relation to attachment style. However, contrary to expectations,

coherence of narratives (measured by *coherent story* item in AMQ) was not related to attachment anxiety or avoidance. Future studies may investigate this issue more deeply by specifically using narrative-based attachment measures or more elaborate coding schemes for narrative coherence.

#### Age-at-Event

As reported earlier, memory narratives were specific and nonintegrative in general and this trend did not change depending on memory type (pertaining to different relationship characteristics). Nonetheless, a serendipitous finding was that age-at-event changed significantly across memory types. Family member memories were earlier compared to close friend memories. Age-at-event for unfamiliar/nonclose and close friend memories did not differ from each other. Romantic partner memories were the most recent of all memory types. In fact, a similar finding was previously reported by McLean and Thorne (2003), with respect to the contrast between self-defining memories about family and peer relationships. In their study about, events in parent memories were significantly earlier compared to events in peer memories as well. However, it should be noted that peer memories consisted of both friendship and romantic themes according to McLean and Thorne's coding scheme. In this study, more refined age estimates were obtained by asking for close friend and romantic partner memories separately.

Thorne (2000) indicated that primary audiences of memory telling are family members and friends across the lifespan. Accordingly, it may also be possible to interpret the finding regarding age-at-event as follows; family members and friends are not only the audiences of memory telling but also the protagonists of these memories until 18 years of age (see also Pasupathi & Hoyt, 2009; Pasupathi,

McLean, & Weeks, 2009 on narrative identity and memory telling). Later on, shifting attachment needs from parents to peers and romantic partners may possibly result in more recent self-defining memories about romantic partners (Fraley & Davis, 1997). Naturally, this is not a firm conclusion. One needs to collect memories without specifying relationship categories and then examine whether family memories are more prevalent at an early age and romantic partner memories are more prevalent in young adulthood.

Interestingly, life script data from Turkish samples showed that estimated age-at-event for falling in love ranged between ages 13 and 17 (Erdoğan, Baran, Avlar, Taş, & Tekcan, 2008; Tekcan, Kaya-Kızılöz, & Odaman, 2012). However, participants in this study dated their self-defining memories about family members and close friends to this age period. Tekcan et al. (2012) showed that estimated age-at-event for first sex was around 18 years of age both for adolescents and young adults. This particular age coincides exactly with age-at-event for self-defining memories involving a romantic partner in this sample. Depending on this, one can speculate that the making and breaking of more intimate bonds earn romantic relationship memories a self-defining quality around age 18 among Turkish college students.

In a broad sense, it can be concluded that the age-at-event finding was consistent with the idea that relationship with family members may change during adolescence and young adulthood, since other developmentally significant relationships become more central to one's self and identity (Collins, Welsh, & Furman, 2009).

### Effects of Gender and Type of Memory on AMQ Items

In general, self-defining memories involving romantic partners were rated high on AMQ items including imagery (see, hear) and metacognitive judgments (back in time, actually remember). They were also rehearsed more frequently (talked about, thought about). This was not surprising given that on average, participants' ratings of significance, consequences, and centrality of event scores were highest for romantic partner memories. In a way, these memories represented turning points in participants' lives and affected their thoughts, feelings, and behaviors. High imagery ratings in different modalities may also be due to their recency compared to other memory types.

Significant gender differences were observed for *significance* and *consequences* items as well as *thought about*, *talked about*, and *in words* items.

Hence, females rehearsed their memories more compared to males. They also indicated that memories came to them in words. In fact, it may be the reason why female participants wrote longer narratives.

There were no effects of gender or type of memory on positive and negative emotions ratings. However, contrary to predictions, the analyses yielded a significant interaction between gender and type of memory such that females rated their self-defining memories about close friends as less positive and more negative compared to males. This is, however, consistent with previous findings. In a review by Rose and Rudolph (2006), it was underlined that gender differences in "relationship styles and responses to stress foster particular socioemotional consequences" (p. 123). Although females report more self-disclosure in peer relations, engage in more prosocial behaviors, care more about their peer relations, and value closeness and

dependency more compared to males by adolescence, they also more frequently worry about social approval, abandonment, and relationship losses than males (Rose & Rudolph, 2006). Thus, this finding seems to be a socioemotional consequence of the gender differences in the content and structure of peer behaviors. In other words, it seems that females not only make more emotional investment in their peer relations but they are also more sensitive to hardships. Although themes in close friend narratives were not coded in detail, at the first glance they seemed to focus mostly on interpersonal or group level problems (disagreements, quarrels, being offended etc.) which were rated as more negative events by females. Finally, another study also pointed out that females used more constructive strategies such as emotional expressivity, communication over time, and feedback with romantic partners than friends in times of conflict (Creasey, Kershaw, & Boston, 1999). Based on this, it can be concluded that females may go through hard times with their romantic partners, just like with their close friends. Yet, more constructive conflict management strategies may help them get over easily.

### Narrative Length

Females' narratives were longer than males' and this pattern did not change depending on memory type. This finding was in line with previous studies as well. For example, Bauer, Stennes, and Haight (2003) found gender differences in autobiographical memory narratives. In their study, females wrote longer and more detailed narratives compared to males. Additionally, from age 7 and onwards, females used more internal states terms in their narratives. Females also used more positive and negative emotion terms in general. In a similar vein, Fivush and Buckner (2003) indicated that gender differences in narrative may become apparent

during preschool years and stem from different socialization process of girls and boys.

#### Implications and Limitations

This study addressed how individual differences in attachment anxiety and avoidance can affect the way people retrieve personally significant relationship memories and how narrative characteristics as well as ratings about subjective experience can be influenced. The results showed that 1) attachment anxiety positively influences the degree of importance, consequentiality, and centrality attributed to personal experiences, 2) attachment anxiety is also positively associated with the degree of negative affective in these experiences, 3) people high on attachment anxiety more frequently think about their relationship experiences—since they also tend to worry about their close relationships more readily and more often, frequent covert rehearsal contributes to their ruminative vicious circle—and, 4) high levels of avoidance manifests itself as a tendency to communicate relationship experiences less.

This study also produced interesting results in relation to how females and males differed from each other in their subjective experiences about close relationships. Moreover, it showed that close relationship memories involving different attachment figures or social contacts can be differentiated from each other in meaningful ways in terms of phenomenological characteristics.

Since little work has been done directly on the relationship between attachment and self-defining memories, the current study may be an important first step considering its efforts to take the multifaceted relations among the study variables into account and its considerable sample size. Nevertheless, a potential shortcoming may be the adoption of an exclusively self-report methodology,

although valid measures were used and conventional procedures were followed.

Needless to say, these findings need both replication and extension. Future studies may use more extensive measures to examine narrative characteristics (specificity, integration, and narrative coherence).

Furthermore, since a number of studies suggested that remembering the past and imagining the future have the same underlying mechanism (e.g., D'Argembeau & van der Linden, 2006; Klein, Loftus, & Kihlstrom, 2002; Okuda et al., 2003; Williams et al., 1996), and that subjective experiences related to the remembered past and the imagined future are similarly affected by experimental manipulations and individual difference variables such as visual imagery capacity and emotion-regulation strategy (D'Argembeau & van der Linden, 2004; D'Argembeau and van der Linden, 2006), studying self-defining future projections (D'Argembeau, Lardi, & van der Linden, 2012) in relation to attachment may a fruitful area of research.

### **APPENDICES**

#### APPENDIX A

### Self-defining Memory Task

### Instructions – SDM involving a close friend

Şimdi sizden, sizin için kişisel bir anlam taşıdığına ve benliğinizi tanımladığına inandığınız bir anınızı hatırlamanızı istiyoruz.

Bu anı, yakın dostlarınızdan birine ya da birkaçına ilişkin önemli ve üzerinde sıkça düşündüğünüz bir tecrübenizi yansıtmalıdır.

Bu anının, <u>sizi siz yapan, kim olduğunuz hakkında ipuçları veren</u>, yakın ilişkilerinize dair <u>kişisel hislerinizi barındıran</u>, <u>olumlu ya da olumsuz</u> bir tecrübenizi içeren bir anı olması beklenmektedir.

Lütfen bu tanıma uyan bir anınızı mümkün olduğunca ayrıntılı bir biçimde yazınız.

#### Instructions – SDM involving an unfamiliar/nonclose other

Şimdi sizden, sizin için kişisel bir anlam taşıdığına ve benliğinizi tanımladığına inandığınız bir anınızı hatırlamanızı istiyoruz.

Bu anı, çevrenizde yakın ilişki içinde <u>bulunmadığınız</u> insanlara (örn., uzak akraba, iyi tanımadığınız bir kişi vs.) ilişkin önemli ve üzerinde <u>sıkça düşündüğünüz</u> bir tecrübenizi yansıtmalıdır.

Bu anının, <u>sizi siz yapan</u>, <u>kim olduğunuz hakkında ipuçları veren</u>, <u>olumlu ya da olumsuz</u> bir tecrübenizi içeren bir anı olması beklenmektedir.

Lütfen bu tanıma uyan bir anınızı mümkün olduğunca ayrıntılı bir biçimde yazınız.

#### Instructions – SDM involving a family member

Şimdi sizden, sizin için kişisel bir anlam taşıdığına ve benliğinizi tanımladığına inandığınız bir anınızı hatırlamanızı istiyoruz.

Bu anı, aile üyelerinizden birine (anne ya da baba) önemli ve üzerinde sıkça düşündüğünüz bir tecrübenizi yansıtmalıdır.

Bu anının, <u>sizi siz yapan</u>, <u>kim olduğunuz hakkında ipuçları veren</u>, yakın ilişkilerinize dair <u>kişisel hislerinizi barındıran</u>, <u>olumlu ya da olumsuz</u> bir tecrübenizi içeren bir anı olması beklenmektedir.

Lütfen bu tanıma uyan bir anınızı mümkün olduğunca ayrıntılı bir biçimde yazınız.

### Instructions – SDM involving a romantic partner

Şimdi sizden, sizin için kişisel bir anlam taşıdığına ve benliğinizi tanımladığına inandığınız bir anınızı hatırlamanızı istiyoruz.

Bu anı, geçmiş ya da süregelen bir romantik ilişkinizle alakalı önemli ve üzerinde sıkça düşündüğünüz bir tecrübenizi yansıtmalıdır.

Bu anının, <u>sizi siz yapan, kim olduğunuz hakkında ipuçları veren,</u> yakın ilişkilerinize dair <u>kişisel hislerinizi barındıran, olumlu ya da olumsuz</u> bir tecrübenizi içeren bir anı olması beklenmektedir.

Lütfen bu tanıma uyan bir anınızı mümkün olduğunca ayrıntılı bir biçimde yazınız.

### APPENDIX B

## Experiences in Close Relationships – Revised Scale

# YAKIN İLİŞKİLERDE YAŞANTILAR ENVANTERİ-II

1.	Birlikte	olduğum ki	işinin sevgi	sini kaybetr	nekten korl	karım.	
1 Hiç kat	; ılmıyoru	2	3	4	5	6	7 Tamamen katılıyorum
2.	Gerçekt ederim.	e ne hissett	iğimi birlik	te olduğum	kişiye göste	ermeme	yi tercih
1 Hiç kat	; ılmıyoru	2	3	4	5	6	7 Tamamen katılıyorum
3.		, birlikte ok na kapılırın	,	nin artık ber	nimle olmak	x isteme	yeceği
1 Hiç kat	; ılmıyoru	2	3	4	5	6	7 Tamamen katılıyorum
4.		ygu ve düşi ıda kendimi		oirlikte oldu ederim.	ğum kişiyle	e paylaş	mak
1 Hiç kat	; ılmıyoru	2	3	4	5	6	7 Tamamen katılıyorum
5.	Sıklıkla kapılırır		duğum kişiı	nin beni ger	çekten sevn	nediği d	luygusuna
1 Hiç	; ilmiyoru	2	3	4	5	6	7 Tamamen katılıyorum
6. Romantik ilişkide olduğum kişilere güvenip inanmak bana zor gelir.							
1 Hic		2	3	4	5	6	7

	-	lduğum kişi inden endişe		oenim onla	rı önem	sediğim kadar	
1 Hiç Hiç katılmıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum	
8. Romanti	ik ilişkide o	lduğum kişi	ilere yakın o	olma konus	unda ço	ok rahatımdır.	
1 Hiç Hiç katılmıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum	
		luğum kişin Imasını iste		duğu hisler	rin beni	m ona duyduğum	
1 Hiç Hiç katılmıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum	
10. Romantik ilişkide olduğum kişilere açılma konusunda kendimi rahat hissetmem.							
1 Hiç katılmıyoru	2	3	4	5	6	7 Tamamen katılıyorum	
11. İlişkile	rimi kafam	a çok takarı	ım.				
1 Hiç katılmıyoru	2	3	4	5	6	7 Tamamen katılıyorum	
12. Roman	ntik ilişkide	olduğum k	ișilere fazla	yakın olma	amayı te	ercih ederim.	
1 Hiç katılmıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum	
13. Benden uzakta olduğunda, birlikte olduğum kişinin başka birine ilgi duyabileceği korkusuna kapılırım.							
1 Hiç Hiç katılmıyoru	2	3	4	5	6	7 Tamamen katılıyorum	

rahatsızlık duyarım.								
1 Hiç Hiç katılmıyorur	2	3	4	5	6	7 Tamamen katılıyorum		
			işilere duyg eğinden korl		sterdiğir	nde, onların benim		
1 Hiç katılmıyorur	2	3	4	5	6	7 Tamamen katılıyorum		
16. Birlikte	e olduğum l	kişiyle kola	yca yakınlaş	sabilirim.				
1 Hiç katılmıyorur	2 m	3	4	5	6	7 Tamamen katılıyorum		
17. Birlikte olduğum kişinin beni terk edeceğinden pek endişe duymam.								
1 Hiç Hiç katılmıyorur	2	3	4	5	6	7 Tamamen katılıyorum		
18. Birlikte	e olduğum l	kişiyle yakı	nlaşmak baı	na zor gelm	nez.			
1 Hiç Hiç katılmıyorur	2	3	4	5	6	7 Tamamen katılıyorum		
19. Roman	tik ilişkide	olduğum k	işi kendime	olan güven	nimi sar	sar.		
1 Hiç katılmıyorur	2	3	4	5	6	7 Tamamen katılıyorum		
20. Genelli	ikle, birlikt	e olduğum l	kişiyle soruı	ılarımı ve l	kaygılar	ımı tartışırım.		
1 Hiç Hiç katılmıyorur	2	3	4	5	6	7 Tamamen katılıyorum		

21.	Terk e	dilmekten p	ek korkmaı	m.			
1 Hiç katıl	mıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum
22.	Zor za iyi gel		ı, romantik	ilişkide oldu	ığum kişide	en yardı	m istemek bana
1 Hiç katıl	mıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum
23.	Birlikt düşüni	_	kişinin, ban	a istediğim	kadar yakıı	n olmad	ığını
1 Hiç katıl	mıyoru	2	3	4	5	6	7 Tamamen katılıyorum
24.	Birlikt	e olduğum	kişiye heme	en hemen he	r şeyi anlat	ırım.	
1 Hiç katıl	mıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum
25.		ntik ilişkide eğiştirirler.	olduğum k	işiler bazen	bana olan d	duygula	rını sebepsiz
1 Hiç katıl	mıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum
26.	Başım	dan geçenle	eri birlikte o	lduğum kişi	yle konuşu	rum.	
1 Hiç katıl	mıyoru	2	3	4	5	6	7 Tamamen katılıyorum
27.	Çok ya	akın olma a	rzum bazen	insanları ko	orkutup uza	klaştırıı	·.
1 Hiç katıl	mıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum

28. Birlikte olduğum kişiler benimle çok yakınlaştığında gergin hissederim.

1		2	3	4	5	6	7
Hiç katıl	mıyoru	m					Tamamen katılıyorum
29.		ntik ilişkide mayacağınd	_	ir kişi beni y n.	yakından ta	nıdıkça,	benden
1 Hiç katıl	mıyoru	2	3	4	5	6	7 Tamamen katılıyorum
30.	Romai	ntik ilişkide	olduğum k	işilere güve	nip inanma	konusu	nda rahatımdır.
1 Hiç katıl	mıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum
31.		e olduğum l fkelendirir.	kişiden ihtiy	yaç duyduğı	ım şefkat v	e desteğ	ģi görememek
1 Hiç katıl	mıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum
32.	Romai	ntik ilişkide	olduğum k	işiye güveni	ip inanmak	benim i	çin kolaydır.
1 Hiç katıl	mıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum
33.	Başka	insanlara de	enk olaman	naktan endiş	e duyarım.		
1 Hiç katıl	mıyoru	2 m	3	4	5	6	7 Tamamen katılıyorum
34. Birlikte olduğum kişiye şefkat göstermek benim için kolaydır.							
1 Hiç katıl	mıyoru	2	3	4	5	6	7 Tamamen katılıyorum

35. Birlikte olduğum kişi beni sadece kızgın olduğumda fark eder.

1		2		3		4		5	6		7		
Hiç											Tama	men	
katılı	mıyo	rum									katılı	yorun	n
36.	Birli	ikte ol	lduğu	m kişi	beni v	e ihtiya	çlarım	ı gerçe	ekten a	nlar.			
1 [ Hiç		2		3		4		5	6		7 Tama	men	
katılı	mıvo	rum									katılı	vorun	n

### APPENDIX C

## Autobiographical Memory Questionnaire

# Otobiyografik Anı Anketi

1)	) Olayı hatırladığımda, olayı yeniden yaşıyormuş gibi hissediyorum.							
1	2	3	4	5	6	7		
Hiç						Olay şu anda oluyormuş gibi		
2)	Olayı hatırladığımda, onu zihnimde görebiliyorum.							
1	2	3	4	5	6	7		
Hiç						Olay şu anda oluyormuş gibi		
3)	Olayı hatırladığımda, onu zihnimde duyabiliyorum.							
1	2	3	4	5	6	7		
Hiç						Olay şu anda oluyormuş gibi		
4)	Olayı hatırladığımda, olayın geçtiği mekanda kimin/neyin nerede durduğunu hatırlıyorum.							
1	2	3	4	5	6	7		
Hiç						Olay şu anda oluyormuş gibi		
5)	Olayı hatırladığ hissedebiliyoru		aman hissett	iğim duygu	ları şimdi	de		
1	2	3	4	5	6	7		
Hiç						Olay şu anda oluyormuş gibi		
6)	Bu olay gerçek	leştiğinder	n beri olay h	akkında dü	şündüm.			
1	2	3	4	5	6	7		
Hiç						Çok sık		
7)	Olayı hatırladığımda, olayın geçtiği mekanın neresi olduğunu hatırlayabiliyorum.							
1	2	3	4	5	6	7		
Hiç						Olay şu anda oluyormuş gibi		

	geçtiğini bilirler. Ben bu anıyı hatırlarken, olayın başımdan geçtiğini bilmekten öte onu gerçekten hatırlayabiliyorum.							
1	2	3	4	5	6	7		
Hiç						Tamamen		
9) O	layı hatırladı	ğımda, anı	m aklıma ke	lime kelime	e geliyor.			
1	2	3	4	5	6	7		
Hiç						Tamamen		
se	10) Olayı hatırladığımda, olayın olduğu ana geri döndüğümü ve olayı dışarıdan seyreden biri değil, olaya yeniden doğrudan katılan biri olduğumu hissediyorum.							
1	2	3	4	5	6	7		
Hiç						Tamamen		
11) Bazı anılarımızı hatırladığımızda olayı doğrudan kendi gözümüzden görürken, bazı anılarımı kendimizi de dışarıdan görebilecek şekilde gözlemci perspektifinden görürüz. Bu olaya dair anınızı hangi perspektiften görüyorsunuz?								
	1		2	2		3		
K	endi gözümden		Gözlen	nci gibi	]	Hem kendi gözümden, hem gözlemci gibi		
	layı yalnızca simler halind					kelimeler veya n.		
1	2	3	4	5	6	7		
Hiç						Tamamen		
	ı anı, önemli msil etmesi s				itik bir dön	üm noktasını		
1	2	3	4	5	6	7		
Hiç						Tamamen		
	14) Bu olayın gerçekten hatırladığım şekliyle gerçekleştiğine ve olmamış herhangi bir şeyi hayal etmediğime ya da kurmadığıma inanıyorum.							
1	2	3	4	5	6	7		
%100 Hayal Ürünü						%100 Gerçek		

8) İnsanlar bazen bir olayın bütün ayrıntılarını hatırlamasalar da, başlarından

15) Bu o	olay sizin	için ne ölçü	de olumlu d	luygular içe	riyor?			
1	2	3	4	5	6	7		
Hiç						Son derece		
16) Bu o	olay sizin	için ne ölçü	de olumsuz	duygular iç	eriyor?			
1	2	3	4	5	6	7		
Hiç						Son derece		
17) Bu olay gerçekleştiğinden beri olay hakkında konuştum.								
1	2	3	4	5	6	7		
Hiç						Çok sık		
		nışlarımı, dü vatım üzerin 3				kilde etkilemesi  7  Son derece		
19) Ola <sub>2</sub>	yı hatırlad	ığımda, olay	ın gün için	de ne zama	n olduğunı	ın farkındayım.		
1	2	3	4	5	6	7		
Hiç						Olay şu anda oluyormuş gibi		
20) Bu o	olayın sizi	n için önem	ini belirtiniz	Z.		, , , ,		
1	2	3	4	5	6	7		
Hiç önemli değil	i					Çok önemli		
21) Bu o	olay olduğ	u sırada kaç	yaşındayd	ınız?		yaşır	ıda	

## APPENDIX D

## $Centrality\ of\ Event\ Scale-Short\ Form$

1.	Bu olayın kimliğimin bir parçası haline geldiğini hissediyorum.						
Hiç k	1 atılmıyorum	2	3	4	5 Tamamen katılıyorum		
2.	Bu olay, kendi	mi ve dünyay	yı anlamamda	a bir referan	ns noktası haline geldi.		
Hiç k	1atılmıyorum	2	3	4	5 Tamamen katılıyorum		
3.	Bu olayın haya	nt hikayemin	merkezi bir p	parçası halir	ne geldiğini hissediyorum.		
Hiç k	1atılmıyorum	2	3	4	5 Tamamen katılıyorum		
4.	Bu olay, diğer	deneyimlerir	nle ilgili duy	gu ve düşür	ncelerimi etkiledi.		
Hiç k	1 atılmıyorum	2	3	4	5 Tamamen katılıyorum		
5.	Bu olay, hayat	ımı kalıcı bir	biçimde değ	iştirdi.			
Hiç k	1atılmıyorum	2	3	4	5 Tamamen katılıyorum		
6.	Sık sık bu olay	ın geleceğim	üzerindeki e	tkileri hakk	ında düşünürüm.		
Hiç k	1 atılmıyorum	2	3	4	5 Tamamen katılıyorum		
7.	Bu olay, hayat	ımda bir dön	üm noktası o	ldu.			
Hiç k	1atılmıyorum	2	3	4	5 Tamamen katılıyorum		

#### APPENDIX E

#### Consent Form

Bu çalışma, Boğaziçi Üniversitesi Psikoloji Bölümü'nde hazırlanan bir yüksek lisans tezi için yürütülmektedir.

Çalışmanın amacı, otobiyografik belleğin kişilik süreçleri ile yakından ilgili bir alt dalı olan benlik tanımlayıcı anıları incelemektir.

Katılımcılardan, geçmiş deneyimleriyle ilgili 4 adet benlik tanımlayıcı anı yazmaları ve sonrasında bu anılarla ilgili çeşitli soruları yanıtlamaları istenecektir.

Yaklaşık 1 saat sürecek olan bu çalışmaya katılımınız, tamamen isteğinize bağlıdır. Sizden ücret talep etmiyoruz ve size herhangi bir ödeme yapmayacağız. Katılımınız sonucunda 1 kredi alacaksınız. İsminiz ve bilgileriniz tamamen gizli tutulacaktır. Fakat bu çalışmanın sonucunda elde edilen bilgiler, gelecekte başka çalışmalar için de kullanılabilir. İstediğiniz zaman çalışmadan çekilmekte özgürsünüz. Bu durumda sizden alınmış olan bilgiler kullanılmayacaktır. Çalışmadan çekildiğiniz takdirde de krediniz verilecektir. Yapmak istediğimiz araştırmanın size risk getirmesi beklenmemektedir.

Bu formu imzalamadan önce, çalışmayla ilgili sorularınız varsa lütfen sorun. Daha sonra sorunuz olursa, deneyi yürüten Müge Özbek'e (muge.ozbek@boun.edu.tr) elektronik posta ile ulaşabilirsiniz. Araştırmayla ilgili haklarınız konusunda yerel etik kurullarına da danışabilirsiniz.

Adres ve telefon numaranız değişirse, deneyi yürüten kişiye haber vermenizi rica ederiz.
Bana anlatılanları ve yukarıda yazılanları anladım. Bu formun bir kopyasını aldım. Çalışmaya katılmayı kabul ediyorum.
Katılımcının adı, soyadı ve imzası:
Varsa katılımcının vasisinin adı, soyadı ve imzası:
Tarih:

### APPENDIX F

## Demographic Form

Cinsiyetiniz:	Erkek	Kadın	<del>_</del>
Bölümünüz:			
Doğum Tarihiniz (gün, ay,	yıl olarak):		
Annenizin en son bitirdiği o	okul:		
İlkokul Ortaokul	Lise	Üniversite	Lisansüstü
Annenizin mesleği:			
Babanızın en son bitirdiği o	kul:		
İlkokul Ortaokul	Lise	Üniversite	Lisansüstü
Babanızın mesleği:			
Türkiye genelinde değerlen görüyorsunuz?	dirdiğinizde k	endi ekonomik durur	nunuzu nasıl
Üst gelir düzeyi			
Orta-üst gelir düzeyi			
Orta gelir düzeyi			
Düşük-orta gelir düzeyi	_		
Düşük gelir düzeyi			
Ailenizin toplam aylık gelir	i yaklaşık ne k	xadardır?	=TL
Bu gelir toplam kaç kişinin	geçimini sağla	amaktadır?	kişi
Hayatınızın en büyük bölün olarak belirtiniz.)	nünü hangi şel	nirde geçirdiniz? (Kö	sy, kasaba, ilçe, şehir

#### APPENDIX G

### Coding Examples for Different Memory Types

Male, 19, SDM involving a romantic partner, Memory coded as specific and nonintegrative:

"Eski bir kız arkadaşımla aynı semtte otururduk. Okuldan ve okul servisinden tanışmıştık ve oralarda birbirimizi sevmiş hissetmiş, her şeyimizi paylaşmıştık. Onunla gittiğimiz bir pastane sahnesi var aklımda. Neden bilmiyorum ama onunla geçirdiğim ve seneler geçmesine rağmen hala hatırladığım ve belki de özlediğim bir an o an. Her bir derdimizi, sevdiğimiz, hoşlandığımız şeyleri paylaşmak bize mutluluk veren dayanaklarımızdı."

Female, 20, SDM involving a family member, Memory coded as nonspecific and nonintegrative:

"5 sene önce bir ilişki yaşıyordum ve bunu ailem bilmiyordu. Onaylamayacaklarını düşündüğüm için söylemek istemiyordum ve sakladım. Fakat bir gün gelen mesajı görmeleri üzerine durumu öğrendiler ve kızdılar. Uzun bir tatsızlıktan sonra onlara rağmen görüşüyordum erkek arkadaşımla. Fakat bir süre sonra annemle babamın bana söylediği gibi onun bana uygun olmadığını anladım ve arkadaşımdan ayrıldım."

Female, 21, SDM involving an unfamiliar/nonclose other, Memory coded as specific and integrative:

"En büyük hayallerimden biri, piyano çalmaya başladığımda bir topluluk önünde çalmak ve insanların benim çabamı beğenip takdir etmesiydi. Çünkü bazı derslerde başarısız oluyordum ve iyi olduğum bir konuyu da insanların görmesini çok isterdim. Bir sene sonu aktivitesinde, kursa katılan arkadaşlar için bir üniversitenin konferans salonunda bir gece düzenlendi ve ben orada piyano çaldım. İnsanların gösteri sonrasında (tanımadığım pek çok insanın) gelip beni takdir etmesi ve başarılarımın devamını dilemesi beni çok mutlu etmişti. Kendimi insanların gözünde değerli hissetmiştim, pek çok şeyi başarabileceğimi ve çalışırsam da her şeyi yapabilirim diye düşünerek epey bir özgüven kazandım."

Male, 22, SDM involving a close friend, Memory coded as nonspecific and nonintegrative:

"Lise arkadaşlarım lise yıllarında her gün birlikte zaman geçirirdik. Her yere beraber gider, beraber eğlenir beraber gezer, beraber çalışırdık. Üniversite sınavından sonra İstanbul'a gelmiştim. Telefonla konuşmayı çok seven birisi değilimdir. Annemle bile haftada 1-2 kez görüşürüz. Bu sebeple İstanbul'dayken onları pek sık aramadım. Ancak bu onları unuttuğum için değildi. Bu benim yapımdan kaynaklanıyordu. Tekrar memleketime döndüğümde yine aynısı olur gibi düşünüyordum. Ancak bana tavır almışlardı."

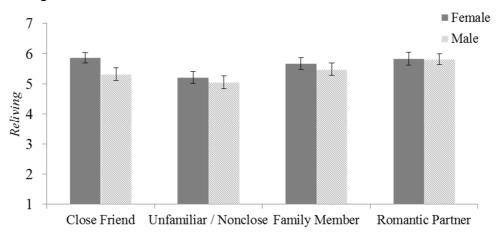
Male, 26, SDM involving an unfamiliar/nonclose other, Memory coded as nonspecific and integrative:

Askerlik – 24 yaşında belki hayatının baharındayken mecburi görev olarak gitmek zorundaydım. Birliğe ilk katıldığımda o anda orada neler olacağını tahmin etmek çok zordu. Yaklaşık 500 kişi ortalıkta geziniyor fakat kimse tam olarak ne olacağını bilmiyor. Herkeste şüpheli ve karamsar bir surat ifadesi. Hep söylenir, askerlik mantığın bittiği yerdir. Bunu oraya gittiğinizde gerçekten anlıyorsunuz. Her şey emir ile yapılıyor, kendi başınıza hareket edemiyorsunuz. Onlar isterseler dinlenebilir, istemezseler dinlenemezsiniz. Keza yemek için de aynı. Kısacası aslında sizin sabrınızı geliştiriyor bütün bunlar. Böylece askerden geldikten sonra insanlara artık "adam" oldun deniyor. Bu tecrübe benim için gerçekten çok eğitici ve kimliğimin gelişmesinde yardımcı olmuştur.

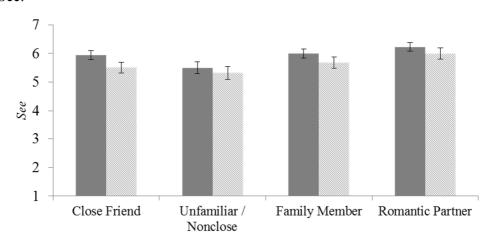
### APPENDIX H

### AMQ Ratings for Different Types of Memories

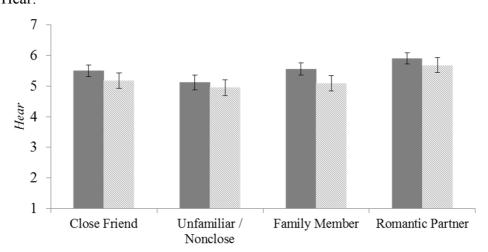
## Reliving:



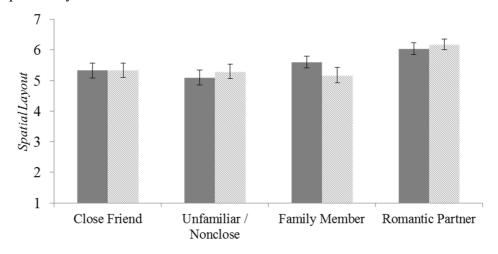
## See:



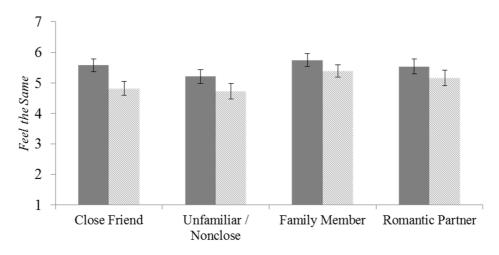
## Hear:



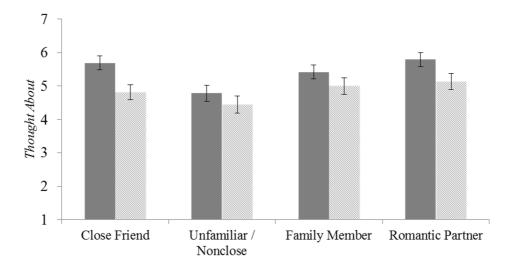
## Spatial Layout:



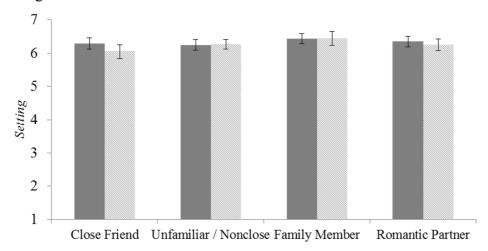
## Feel the Same:



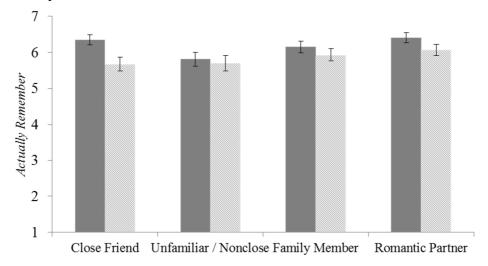
## Thought About:



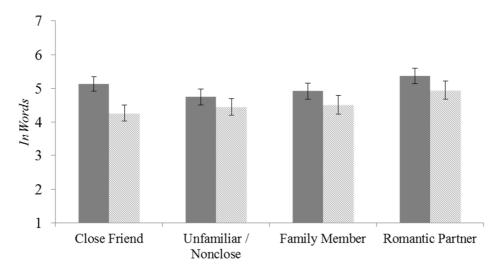
## Setting:



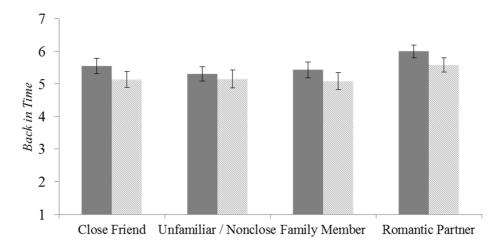
## Actually Remember:



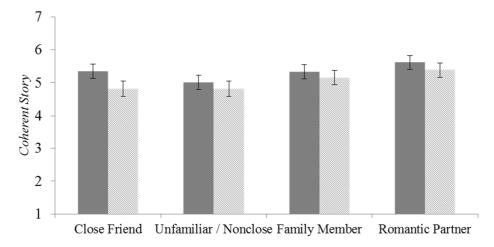
### In Words:



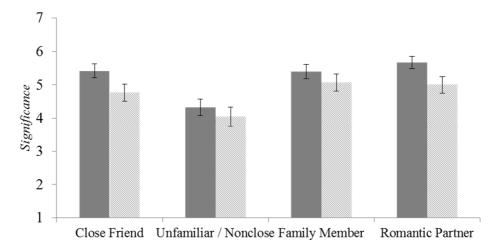
## Back in Time:



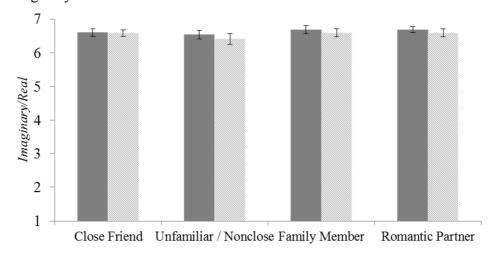
# Coherent Story:



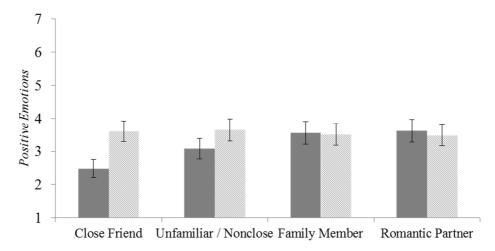
# Significance:



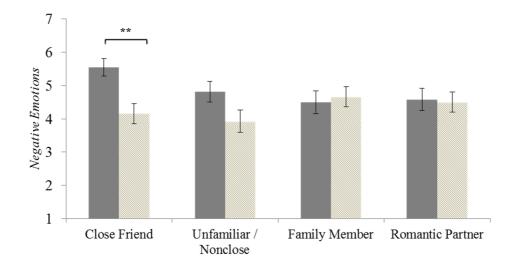
## Imaginary/Real:



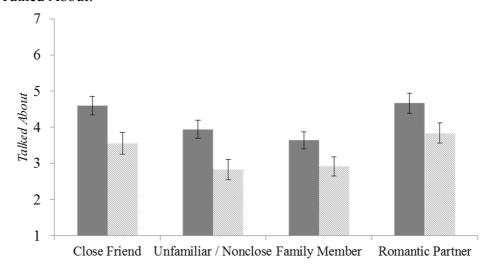
### Positive Emotions:



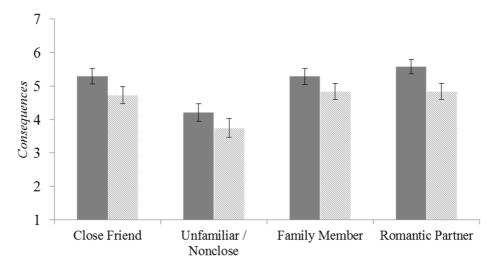
## Negative Emotions:



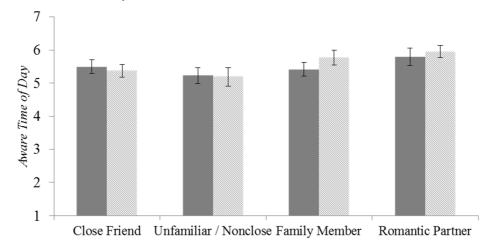
### Talked About:



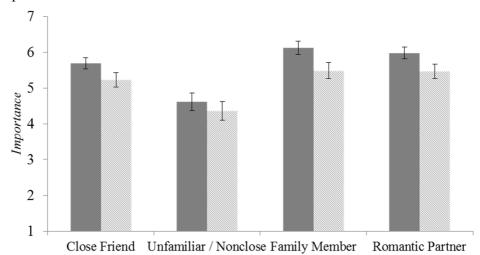
### Consequences:



## Aware Time of Day:



# Importance:



#### REFERENCES

- Alea, N., & Vick, S. C. (2010). The first sight of love: Relationship-defining memories and marital satisfaction across adulthood. *Memory*, 18 (7), 730-742.
- Baldwin, M. W. (1995). Relational schemas and cognition in close relationships. *Journal of Social and Personal Relationships*, 12 (4), 547-552.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of four category model. *Journal of Personality and Social Psychology*, 61 (2), 226-244.
- Bauer, P., Stennes, L., & Haight, J. (2003). Representation of the inner self in autobiography: Women's and men's use of internal states language in personal narratives. *Memory*, 11 (1), 27-42.
- Berntsen, D., & Rubin, D. C. (2006). The centrality of event scale: A measure of integrating a trauma into one's identity and its relation to post-traumatic stress disorder symptoms. *Behaviour Research and Therapy*, 44, 219-231.
- Blagov, P. S., & Singer, J. A. (2004). Four dimensions of self-defining memories (specificity, meaning, content, and affect) and their relationships to self-restraint, distress, and repressive defensiveness. *Journal of Personality*, 72 (3), 481-511.
- Bluck, S. (2003). Autobiographical memory: Exploring its functions in everyday life. *Memory*, 11 (2), 113-123.
- Bluck, S., & Habermas, T. (2001). Extending the study of autobiographical memory: Thinking back about life across the life span. *Review of General Psychology*, 5 (2), 135-147.
- Boals, A. (2010). Events that have become central to identity: Gender differences in the centrality of events scale for positive and negative events. *Applied Cognitive Psychology*, 24, 107-121.
- Boyacıoğlu, İ., & Sümer, N. (2011). Bağlanma boyutları, otobiyografik bellek ve geçmişi kabul etme. *Türk Psikoloji Dergisi*, 26 (67), 105-118.

- Brewer, W. F. (1986). What is autobiographical memory? In D. C. Rubin (Ed.), *Autobiographical memory* (pp. 25-49). New York: Cambridge University Press.
- Cassidy, J., & Kobak, R. R. (1988). Avoidance and its relationship with other defensive processes. In J. Belsky & T. Nezworski (Eds.), *Clinical implications of attachment* (pp. 300-323). Hillsdale, NJ: Erlbaum.
- Conway, M. A. (2005). Memory and the self. *Journal of memory and language*, 53, 594-628.
- Conway, M. A., & Holmes, A. (2004). Psychosocial stages and the accessibility of autobiographical memories across the life cycle. *Journal of Personality*, 72 (3), 461-480.
- Conway, M. A., & Pleydell-Pearce C. W. (2000). The construction of autobiographical memories in the self-memory system. *Psychological Review*, 107, 261-288.
- Conway, M. A., Singer, J. A., & Tagini, A. (2004). The self and autobiographical memory: Correspondence and coherence. *Social Cognition*, 22 (5), 491-529.
- Collins, W. A., Welsh, D. P., & Furman, W. (2009). Adolescent romantic relationships. *Annual Review of Psychology*, 60, 631-652.
- Creasey, G., Kershaw, K., & Boston, A. (1999). Conflict management with friends and romantic partners: The role of attachment and negative mood regulation expectancies. *Journal of Youth and Adolescence*, 28 (5), 523-543.
- D'Argembeau, A., & Van der Linden, M. (2004). Phenomenal characteristics associated with projecting oneself back into the past and forward into the future: Influence of valence and temporal distance. *Consciousness and Cognition*, 13, 844-858.
- D'Argembeau, A., & Van der Linden, M. (2006). Individual differences in the phenomenology of mental time travel: The effect of vivid visual imagery and emotion regulation strategies. *Consciousness and Cognition*, 15, 342-350.

- D'Argembeau, A., Lardi, C., & Van der Linden, M. (2012). Self-defining future projections: Exploring the identity function of thinking about the future. *Memory*, 20 (2), 110-120.
- Davis, P. J. (1987). Repression and the inaccessibility of affective memories. *Journal of Personality and Social Psychology*, 53 (3), 585-593.
- Davis, P. J., & Schwartz, G. E. (1987). Repression and the inaccessibility of affective memories. *Journal of Personality and Social Psychology*, *52* (1), 155-162.
- Debeer, E., Raes, F., Williams, J. M. G., & Hermans, D. (2011). Context-dependent activation of reduced autobiographical memory specificity as an avoidant coping style. *Emotion*, 11 (6), 1500-1506.
- Edelstein, R. S. (2006). Attachment and emotional memory: Investigating the source and extent of avoidant memory impairments. *Emotion*, 6 (2), 340-345.
- Erdoğan, A., Baran, B., Avlar, B., Taş, A. Ç., & Tekcan, A. İ. (2008). On the persistence of positive life events in life scripts. *Applied Cognitive Psychology*, 22, 95-111.
- Feeney, B. C., Cassidy, J., & Ramos-Marcuse, F. (2008). The generalization of attachment representations to new social situations: Predicting behavior during initial interactions with strangers. *Journal of Personality and Social Psychology*, 95 (6), 1481-1498.
- Fitzgerald, J. M., & Broadbridge, C. L. (2012). Latent constructs of the autobiographical memory questionnaire: A recollection-belief model of autobiographical experience. *Memory*, doi: 10.1080/09658211.2012.725736
- Fivush, R., & Buckner, R. (2003). Creating gender and identity through autobiographical narratives. In R. Fivush & C. A. Hayden (Eds.), *Autobiographical memory and the construction of a narrative self* (pp. 149-167). Lawrence Erlbaum Associates.
- Fraley, R. C., & Davis, K. E. (1997). Attachment formation and transfer in young adults' close relationships and romantic relationships. *Personal Relationships*, *4*, 131-144.

- Fraley, R. C., Garner, J. P., & Shaver, P. R. (2000). Adult attachment and the defensive regulation of attention and memory: Examining the role of preemptive and postemptive defensive processes. *Journal of Personality and Social Psychology*, 79 (5), 816-826.
- Fraley, R. C., & Shaver, P. R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology*, *4*, 132-154.
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78 (2), 350-365.
- Freelon, D. G. (2010). ReCal: Intercoder reliability calculation as a web service. *International Journal of Internet Science*, 5 (1), 20-33.
- Geraerts, E., Dritschel, B., Kreplin, U., Miyagawa, L., & Waddington, J. (2012). Reduced specificity of negative autobiographical memories in repressive coping. *Journal of Behavior Therapy and Experimental Psychiatry*, 43, S32-S36.
- Hansen, R. D., & Hansen, C. H. (1988). Repression of emotionally tagged memories: The architecture of less complex emotions. *Journal of Personality and Social Psychology*, 55 (8), 811-818.
- Harris, C. B., Rasmussen, A. S., & Berntsen, D. (2013). The functions of autobiographical memory: An integrative approach. *Memory*, doi: 10.1080/09658211.2013.806555.
- Hermans, D., Defranc, A., Raes, F., Williams, J. M. G., & Eelen, P. (2005). Reduced autobiographical memory specificity as an avoidant coping style. *British Journal of Clinical Psychology*, 44, 583-589.
- Klein, S. B., Loftus, J., & Kihlstrom, J. F. (2002). Memory and temporal experience: The effects of episodic memory loss on an amnesic patient's ability to remember the past and to imagine the future. *Social Cognition*, 20, 353-379.
- Lardi, C., Ghisletta, P., & Van der Linden, M. (2012). What is the nature of the self-defining memories of repression-prone individuals? *Self and Identity*, *11* (4), 492-515.

- Long, J. S., & Freese, J. (2006). *Regression models for categorical dependent variables using Stata*. Stata Press Books, StataCorp LP.
- McLean, K. C. (2005). Late adolescent identity development: Narrative meaning making and memory telling. *Developmental Psychology*, 41 (4), 683-691.
- McLean, K. C., & Thorne, A. (2003). Late adolescents' self-defining memories about relationships. *Developmental Psychology*, *39* (4), 635-645.
- Mikulincer, M. (1998). Adult attachment style and individual differences in functional versus dysfunctional experiences of anger. *Journal of Personality and Social Psychology*, 74, 513-524.
- Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 143-165). New York: Guilford.
- Mikulincer, M., & Orbach, I. (1995). Attachment styles and repressive defensiveness: The accessibility and architecture of affective memories. *Journal of Personality and Social Psychology*, 68(5), 917-925.
- Mikulincer, M., & Shaver, P. R. (2005). Attachment theory and emotions in close relationships: Exploring the attachment-related dynamics of emotional reactions to relational events. *Personal Relationships*, 12, 149-168.
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion*, 27 (2), 77-102.
- Newman, L. S., & Hedberg, D. A. (1999). Repressive coping and the inaccessibility of negative autobiographical memories: Converging evidence. *Personality and Individual Differences*, 27, 45-53.
- Okuda, J., Fujii, T., Ohtake, H., Tsukiura, T., Tanji, K., Suzuki, K., Kawashima, R., Fukuda, H., Itoh, M., & Yamadori, A. (2003). Thinking of the future and past: The roles of the temporal pole and the medial temporal lobes. *NeuroImage*, *19*, 1369-1380.

- Pasupathi, M. (2001). The social construction of the personal past and its implications for adult development. *Psychological Bulletin*, 127, 651-672.
- Pasupathi, M., & Hoyt, T. (2009). The development of narrative identity in late adolescence and emergent adulthood: The continued importance of listeners. *Development Psychology*, 45 (2), 558-574.
- Pasupathi, M., McLean, K. C., & Weeks, T. (2009). To tell or not to tell: Disclosure and the narrative self. *Journal of Personality*, 77 (1), 89-124.
- Pietromonaco, P. R., & Feldman Barrett, L. (1997). Working models of attachment and daily social interactions. *Journal of Personality and Social Psychology*, 73 (6), 1409-1423.
- Pietromonaco, P. R., & Feldman Barrett, L. (2000). The internal working models concept: What do we really know about the self in relation to others? *Review of General Psychology*, 4 (2), 155-175.
- Rose, A. J., & Rudolph, K. D. (2006). A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin*, *132* (1), 98-131.
- Rubin, D. C., Schrauf, R. W., & Greenberg, D. L. (2003). Belief and recollection of autobiographical memories. *Memory & Cognition*, 31, 887-901.
- Selcuk, E., Zayas, V., Günaydin, G., Hazan, C., & Kross, E. (2012). Mental representations of attachment figures facilitate recovery following upsetting autobiographical memory recall. *Journal of Personality and Social Psychology*, 103 (2), 362-378.
- Selçuk, E., Günaydın, G., Sümer, N., & Uysal, A. (2005). Yetişkin bağlanma boyutları için yeni bir ölçüm: Yakın ilişkilerde yaşantılar-II'nin Türk örnekleminde psikometrik açıdan değerlendirilmesi. *Türk Psikoloji Yayınları*, 8 (16), 1-11.
- Shaver, P. R., & Mikulincer, M. (2005). Attachment theory and research: Resurrection of the psychodynamic approach to personality. *Journal of Research in Personality*, 39, 22-45.

- Sibley, C. G., & Liu, J. H. (2006). Working models of romantic attachment and the subjective quality of social interactions across relational contexts. *Personal Relationships*, 13, 243-259.
- Singer, J. A., & Blagov, P.S. (2000, June). *Classification system and scoring manual for self-defining autobiographical memories*. Paper presented at the meeting of the Society for Applied Research on Memory and Cognition, Miami Beach, FL.
- Singer, J. A., Blagov, P., Berry, M., & Oost, K. M. (2013). Self-defining memories, scripts, and the life story: Narrative identity in personality and psychotherapy. *Journal of Personality*, doi: 10.1111/jopy.12005
- Singer, J., Rexhaj, B., & Baddeley, J. (2007). Older, wiser, and happier? Comparing older adults' and college students self-defining memories. *Memory*, 15, 886-898.
- Singer, J. A., & Salovey, P. (1993). *The remembered self: Emotion and memory in personality*. New York: Free Press.
- Sutin, A. R., & Gillath, O. (2009). Autobiographical memory phenomenology and content mediate attachment style and psychological distress. *Journal of Counseling Psychology*, *56* (3), 351-364.
- Tekcan, A. İ., Kaya-Kızılöz, B., & Odaman, H. (2012). Life scripts across age groups: A comparison of adolescents, young adults, and older adults. *Memory*, 20 (8), 836-847.
- Thorne, A. (2000). Personal memory telling and personality development. *Personality and Social Psychology Review*, 4 (1), 45-56.
- Vetere, A., & Myers, L. B. (2002). Repressive coping style and adult romantic attachment style: Is there a relationship? *Personality and Individual Differences*, *32*, 799-807.
- Williams, J. M. G. (1996). Depression and the specificity of autobiographical memory. In D. C. Rubin (Ed.), *Remembering our past: Studies in autobiographical memory* (pp. 244–267). Cambridge, NY: Cambridge University Press.

- Williams, J. M. G., Ellis, N. C., Tyers, C., Healy, H., Rose, G., & MacLeod, A. K. (1996). The specificity and autobiographical memory and imageability of the future. *Memory & Cognition*, *24*, 116-125.
- Wood, W., & Conway, M. (2006). Subjective impact, meaning making, and current and recalled emotions for self-defining memories. *Journal of Personality*, 74 (3), 811-846.