

Self-Defining Memories: Characteristics and the link with self-concept and goals

by

Cemile Ceren Sönmez

A Thesis Submitted to the Graduate School of Social Sciences in Partial Fulfillment of
the Requirements for the Degree of

Master of Arts

in

Developmental Psychology

Koç University

September 2009

Koc University
Graduate School of Social Sciences and Humanities

This is to certify that I have examined this copy of a master's thesis by

Cemile Ceren Sönmez

and have found that it is complete and satisfactory in all respects,
and that any and all revisions required by the final
examining committee have been made.

Committee Members:

Prof. Sami Gülgöz

Assoc. Prof. Aylin Küntay

Assoc. Prof. Nurhan Er

Date:

STATEMENT OF AUTHORSHIP

This thesis contains no material which has been accepted for any award or any other degree or diploma in any university or other institution. It is affirmed by the candidate that, to the best of her knowledge, the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signed

Ceren Sönmez

ABSTRACT

The aim of this study was to investigate the existence and the characteristics of self-defining memories, as well as their link with goals and with self. In this study, participants reported self-defining, non self-defining, affective and persistent, non affective and non persistent memories and they rated these memories first in terms of their phenomenological characteristics, second in terms of their relevance to participants' own goals, third in terms of their relevance to participants' self-concept. The results supported the claim that self-defining memories are vivid, affectively intense, repetitively recalled autobiographical memories which are linked to other similar memories and related to individuals' current issues and concerns. These memories were also found to be more relevant to one's self-concept and current goals than non self-defining memories. Besides, several memory characteristics were found to predict self-definition: the extent to which an autobiographical memory is important, the extent to which this memory is constructed in relation with other similar memories, first person perspective and visual imagery. This is the first study which compares self-defining memories to non self-defining memories and which is based on self-reports in investigating the link between self-defining memories and self-concept.

Keywords: Self-defining memories, autobiographical memory, goals, self-concept

ÖZET

Bu çalışmanın amacı, benlik tanımlayıcı anıların varlığını, özelliklerini, hedeflerle ve benlik kavramı ile ilişkisini incelemektir. Çalışmada katılımcılar benlik tanımlayıcı olan, benlik tanımlayıcı olmayan, duygu yüklü ve kalıcı olan, duygu yüklü de olmayan kalıcı da olmayan anılarını bildirdiler ve bu anıları ilk olarak anı özellikleri açısından, ikinci olarak kendi hedefleriyle ilişkileri açısından, üçüncü olarak benlik kavramları ile ilişkileri açısından değerlendirdiler. Sonuçlar, benlik tanımlayıcı anıların canlı, duygu yüklü, sık sık hatırlanan, diğer benzer anılarla ve kişilerin güncel meseleleri ile ilişkili anılar olduğu iddiasını destekler biçimdeydi. Bunun yanı sıra, sonuçlar benlik tanımlayıcı anıların, benlik tanımlayıcı olmayan anılara göre kişilerin benlik kavramı ile daha yüksek ilişki içinde olduğunu gösterdi. Ayrıca, anının kişi tarafından ne kadar önemli bulunduğu, anının diğer benzer anılarla ne kadar ilişki içinde olduğu, olayı birinci kişi gözünden hatırlama ve görsel canlandırma özelliklerinin, benlik tanımlayıcı olma özelliğini yordadığı görüldü. Bu çalışma, benlik tanımlayıcı olan anıların benlik tanımlayıcı olmayan anılarla karşılaştırılması, ve bunların benlikle ve hedeflerle olan ilişkilerini kişinin kendi raporu üzerinden incelemesi açısından diğer çalışmalardan farklılaşmaktadır.

Keywords: Benlik tanımlayıcı anılar, otobiyografik bellek hedefler, benlik kavramı

ACKNOWLEDGEMENT

Among a wide variety of decisions that I took in my life, a vast majority of them were quite reasonable. One of them was not. This was a decision I made by following my heart. I would like to thank to every single person in my life who helped me fulfill my dream of studying psychology.

I would like to thank Sami Gülgöz. My thesis advisor was also my life advisor. I have a realistic, humoristic and encouraging schema of him and it gives me guidance when I am stuck somewhere in the life. I am much thankful to Aylin Küntay and Nurhan Er for being so supportive and encouraging. Their patience, trust and contributions to this thesis were incredibly important. I have learned a lot from my graduate professors. I am proud of being their student. I would like to thank Nazan Aksan, Nazlı Baydar, Bilge Yağmurlu, Zeynep Aycan, and Çiğdem Kağıtçıbaşı.

My dearest supporters; I am deeply thankful for your unlimited love, care, understanding, and effort. Ayşe Beyza Ateş, Senay Cebioğlu, Hatice Pınar Arslan, and İrem Güroğlu, I hope you will always be with me in every stage of my life.

My father, and my mother. I would not be able to write this acknowledgement, if you hadn't decided to have a child many years ago. You are everything to me. Thank you very much.

At last, I want to express my appreciation to all 110 volunteer participants, especially Yasemin Başar and her team, for their genuine help and valuable contributions.

TABLE OF CONTENT

STATEMENT OF AUTHORSHIP	v
ABSTRACT.....	vi
ÖZET.....	vii
ACKNOWLEDGEMENT.....	iii
LIST OF TABLE	vii
CHAPTER 1: INTRODUCTION.....	1
1.1. Autobiographical memory.....	3
1.2. Autobiographical memory and the self	4
1.2.1. <i>The life story model of identity.....</i>	<i>5</i>
1.2.2. <i>The Self Memory System.....</i>	<i>7</i>
1.2.3. <i>Personal Event Memories.....</i>	<i>9</i>
1.2.4. <i>Self-Defining Memories.....</i>	<i>111</i>
1.2.5. <i>Commonalities of these theories</i>	<i>144</i>
1.2.5.1. <i>The role of the goals in the self and autobiographical memory link.....</i>	<i>14</i>
1.2.5.2. <i>The impact of a goal change on the autobiographical memory recall.....</i>	<i>20</i>
1.2.5.3. <i>The existence of self-defining memories.....</i>	<i>23</i>
1.3. The self.....	25
1.3.1. <i>Theories about the self.....</i>	<i>255</i>
1.4. Summary and the rationale for this study.....	30
1.5. Hypothesis and study design	33
CHAPTER 2: METHOD	37
2.1. Participants	37

2.2. Material	37
2.2.1. <i>Self-defining memory request</i>	37
2.2.2. <i>Non self-defining memory request</i>	38
2.2.3. <i>Request for affective and persistent memories</i>	38
2.2.4. <i>Request for non affective and non persistent memories</i>	39
2.2.5. <i>Measure of autobiographical memory characteristics</i>	39
2.2.6. <i>Goal rating sheet</i>	39
2.2.7. <i>Goal and memory relation sheet</i>	40
2.2.8. <i>Self-description measure</i>	40
2.2.9. <i>Self-description and memory relation sheet</i>	41
2.3. Procedure.....	41
CHAPTER 3: RESULTS	43
3.1. Data coding and manipulation.....	43
3.2. Descriptive Statistics.....	45
3.3. Testing the Hypotheses	46
3.3.1. <i>SDM Characteristics</i>	46
3.3.2. <i>APM Characteristics</i>	50
3.3.3. <i>SDM and current goals</i>	51
3.3.4. <i>SDMs, goals and the age of the participant when the event occurred</i>	53
3.3.5. <i>SDMs and self</i>	55
3.4. Further Analysis	58
3.4.1. <i>Factor Analysis</i>	58
3.4.2. <i>Linear Regression</i>	60
3.5. Memory type and the age of participant when the memory took place	61

3.6. Recategorizing Memories	62
3.6.1. <i>Descriptive Statistics</i>	63
3.6.2. <i>Testing the hypotheses with recategorized memories</i>	64
CHAPTER 4: DISCUSSION	70
4.1. The existence of self-defining memories	70
4.2. The characteristics of self-defining memories Hata! Yer işareti tanımlanmamış.	2
4.3. Revisiting theories	78
4.4. Developmental perspective: The impact of a goal change.....	79
4.5. Contributions of this study and suggestions for future research	80
REFERENCES	83
APPENDICES	87

LIST OF TABLES

3.1	The numbers of memories for each memory type	44
3.2	Sample sizes, mean scores and standard deviations of memory characteristics for different memory types	47
3.3	Frequencies and percentages of different event types depending on the memory types.....	48
3.4	Sample sizes, mean scores and standard deviations of self-definition for different memory types	50
3.5	Sample sizes, mean scores and standard deviations of memory related goal scores for different memory types	51
3.6	Frequencies of different memory types in terms of their relevance to goals.	53
3.7	Sample sizes, mean scores and standard deviations of memory related self-schema scores for different memory types.....	55
3.8	Factor structure for memory characteristics.....	57
3.9	Regression of importance, seeing, first person, and event type variables on self-definition	59
3.10	Sample sizes, mean scores and standard deviations of age when memory for different memory types	60
3.11	Distribution of autobiographical memories according to their new SDM and APM scores.....	62
3.12	Sample sizes, mean scores and standard deviations of memory related self-schema scores for recategorized memory types	63
3.13	Sample sizes, mean scores and standard deviations of self-definition for rAPMs and rNon-APMs.....	64

3.14	Sample sizes, mean scores and standard deviations of memory related goal importance scores for different memory types.....	65
3.15	Frequencies of different levels of rSDM variable in terms of their relevance to goals	66
3.16	Frequencies of different levels of rAPM variable in terms of their relevance to goals	66
3.17	Sample sizes, mean scores and standard deviations of memory related self-schema scores for rSDMs and rNon-SDMs	67

Chapter 1

INTRODUCTION

It is accepted that autobiographical memory and the self are two broad psychological constructs that interact, shape, delimit and reconstruct each other (e.g., Conway & Pleydell-Pearce, 2000; Conway, Singer, & Tagini, 2004; McAdams, 2001, 2004; Singer & Salovey, 1993). Autobiographical memories are investigated in several studies in terms of the information that they provide about the individual's self-understanding, identity, personality, traits, life goals, and personal needs.

The major question in this study is about the nature of the relationship between self and autobiographical memory. Developmental psychologists investigate whether it is the emergence of the self which onsets the formation of autobiographical memory or vice versa (Howe, Courage, & Edison, 2003; Reese, 2002). Social psychologists argue that the socio-cultural context shapes both the self and the autobiographical memory and they emphasize the role of the language and verbal interaction (Nelson & Fivush, 2004; Wang, 2004). Based on the relation between autobiographical memory and the self, cognitive psychologists look for a comprehensive system that explains several memory phenomena (Conway & Pleydell-Pearce, 2000).

Among these different perspectives, the focus in this study is on those which discuss the mechanisms underlying the reciprocal relationship between self and memory. All of these approaches emphasize that not all autobiographical memories contain

significant information about the self; only some of them are highly relevant to one's self-concept, long term goals, or motivational needs (McAdams, 2001; Singer & Salovey, 1993; Singer, 2004; Pillemer, 2001). The concept most relevant to the relationship between the self and autobiographical memory is the concept of self-defining memories, first proposed by Singer and Moffit (1991-1992). This concept found a general acceptance in the literature despite a lack of a systematic investigation substantiating this type of memory as well as its relation to self-concept and current goals.

The aim of this study is first, to understand whether there exists a subtype of autobiographical memory which defines one's self better than others, and which has different phenomenological characteristics than other autobiographical memories as Singer and his colleagues claim (Singer and Salovey, 1993). The second aim is to show the nature and the structure of the relationship between self-defining memories and the self. The difference of this study from previous studies is that it will compare self-defining autobiographical memories with those not categorized as self-defining memories. The comparison will be in terms of their relevance to one's goals and to one's self.

In the next section, some characteristics of autobiographical memories are introduced. Then, theories which explain the link between autobiographical memory and the self are discussed. After this general framework is explained, the common aspects of these theories, their approach to a specific subtype of autobiographical memories, and the role of the goal in the relationship between memory and self will be discussed. This will

be followed by the conceptualization of self that is adopted in this study. Finally, the rationale for this study and the study design are presented.

1.1. Autobiographical memory

Brewer (1996) defined autobiographical memory in its broadest sense; he claimed that autobiographical memory is a memory for information related to self. He made a distinction between phenomenally experienced autobiographical memories and factually known autobiographical memories. What usually referred in literature as an autobiographical memory is a phenomenally experienced, recollective memory. This type of memory has some characteristics such as the reliving of a past experience with a visual imagery, the belief that this is a record of the original event and a belief that this event is personally experienced (Rubin, 1996). Among the phenomenological characteristics of autobiographical memory, vividness, coherence, sensory detail, emotional valence and intensity, time and visual perspectives, distancing, accessibility, sharing are the most commonly studied aspects of autobiographical memory (Sutin & Robins, 2007).

Conway and Rubin (1993, cited in Conway, 1996) identified three types of autobiographical knowledge: a) lifetime periods which are the most general, abstract type of knowledge, b) general events which refer to more specific type of knowledge measured by months, weeks or days; and c) event specific knowledge referring to single events which took place within seconds, minutes or hours (Conway & Pleydell-Pearce, 2000). Conway (1996) have also argued that an autobiographical memory is not encoded, stored and retrieved as if it is an intact unit of long term memory. It is rather a temporary mental

representation which is constructed and reconstructed at retrieval through its narrative, imaginative and emotional components.

Different theorists conceptualize autobiographical memory in different ways but all would agree upon the idea that this recollection of a personally experienced event has an inherent relation with the self (Conway & Pleydell-Pearce, 2000). Autobiographical memories provide an extensive database of one's previous experiences, through which individuals understand themselves. Besides, if autobiographical memory is considered to be a reconstructive process, the self could be shaping and delimiting the autobiographical memory reconstruction during the encoding and recall processes. These ideas about the relation between self and autobiographical memory have been developed in different theories, which are discussed in the following section.

1.2. Autobiographical memory and the self

Both autobiographical memory and the self are very broad constructs that are conceptualized in different ways by different researchers and their relationship is investigated from different points of views. There are two major groups of approaches. First, there are theories which explain the mechanism underlying the relation between the self and autobiographical memory, namely, the life story identity model and the self memory system. Second, there are the propositions of a specific subtype of autobiographical memory which is more closely related to one's self-concept which are personal event memories and self-defining memories.

1.2.1. The life story model of identity

McAdams' (McAdams, 2001; 2003; McAdams, Hoffman, Mansfield, & Day, 1996) life story model proposes a comprehensive definition of identity as a life story. In this model, identity is conceptualized as a constellation of different, conflicting but integrated social roles and relationships which determine a specific life. It is different than the "self" because it includes multiple selves (e.g., self as a mother and/or self as a daughter) and also it offers an appropriate ground on which these selves are integrated. In McAdams' terms, identity is the way people conceptualized their self, the flavoring or the quality of people's self-understanding. He argued that identity itself is an internalized life story; as a personal life story evolves, different self constructs are brought together in order to obtain a temporally well organized and meaningful self-narrative.

The identity includes not one but several life stories embedded in each other which are developed and continue to change during late adolescence and early adulthood. These life stories do not consist of a person's all autobiographical memories but some that are chosen by the individual. There are self-characterizations called imagoes in these life stories. The integration of multiple roles that a person plays in his or her life such as the loving daughter and the generous mother is provided by these imagoes. The integration of several life stories provides an integrated, continuous and coherent sense of identity which taps the past as well as the future.

McAdams has adopted a reconstructive view and argued that personal goals and concerns shape the encoding and the recollection processes of memories. Besides, he

claimed that distinct episodic memories which constitute a life story are selected and interpreted by individuals in order to formulate a future according to personal aspirations while maintaining a coherent life story with a unity and purpose.

Apart from the life story identity model, McAdams proposed a model of personality in which identity is located. He proposed three levels of personality; traits, motivational characteristics, and identity. The majority of the studies based on McAdams life story model of identity show strong relationships between life story narratives and traits (McAdams, Anyidoho, Brown, Huang, Kaplan, & Machado, 2004) and life story narratives and personal motives (McAdams, Hoffman, Mansfield & Day, 1996; Woike, Gershkovich, Piorkowski, & Polo, 1999). These studies provide evidence for the personality conceptualization of McAdams but they don't provide adequate evidence for a coherent and unified identity in the form of a life story.

McAdams et al. (2006) conducted a 3-year longitudinal study with emerging adults. Their hypotheses were based on the argument that identity is reconstructed over time while maintaining an overall sense of unity and purpose. They argued that if there is such a strong relation between the life story and identity, then some aspects of the life story should show stability in individual differences and also it should exhibit some developmental changes with age. As predicted, the results showed substantial continuity over time in the individual differences for narrative complexity, emotional tone and motivational themes. Besides, as an evidence for a life story narrative which develops over time similar to a developing identity, participants' emotional tone became more

positive over time, and they improved in terms of narrative complexity and motivation for personal growth.

This major result in this study for our purposes was that the changes in life story narratives corresponded to the changes predicted by theories of identity and personality development. It showed a relationship between the identity and life story narratives. Still, there is no clear indication in this study that one's self-narratives are successfully integrated in order to get a coherent sense of identity. Besides, the kind of identity that is constructed based on these life stories has not been investigated. Because identity and life story are two very broad and abstract constructs, empirical studies could only lend support indirectly to McAdams' life story model of identity.

1.2.2. The Self Memory System

Conway and Pleydell-Pearce (2000) considered autobiographical memory and the self as different but interrelated units of a Self Memory System (SMS). They explained the dynamics and the mechanism of this system based on a variety of studies from cognitive, clinical, personality, developmental and social psychology.

The SMS has two major components: the long term self and the episodic memory system. The long term self includes all the information about the self. It has two components, autobiographical knowledge base and conceptual self. The autobiographical knowledge base consists of the factual knowledge of one's experiences organized in a hierarchical way, life time periods, general events and event specific knowledge. The

conceptual self component of the long term self is composed by self-schemas and one's beliefs, values, attitudes that are shaped by sociocultural factors.

The second major component of the Self Memory System, the episodic memory system invokes the feeling of reliving of an event specific knowledge (Conway, Singer, & Tagini, 2004). The encoding process of an experience as well as the retrieval of an autobiographical knowledge from autobiographical knowledge base and the matching of this knowledge by the appropriate feeling from episodic memory system, is managed by the processes of the working self. The working self process consists of a hierarchy of goals and subgoals that are retrieved from the conceptual self. The working self needs these set of goals in order to satisfy SMS's basic needs.

There are two basic needs, or in other words conflicting rules, of this system according to which the working self has to operate in order to maintain the well-being of the organism: the need for correspondence and the need for coherence. These needs are contradictory, so the system has to find an optimum solution in order to satisfy both. The need for correspondence refers to accuracy; any experience has to be encoded and retrieved in such a way that the memory for this event has maximum correspondence to reality. The need for coherence refers to self-coherence; any memory has to be encoded and retrieved in such a way that the memory is consistent with the self's current goals and beliefs.

When there is a little discrepancy between the experience and the goals, according to the need for coherence, reality has to be distorted in order to make the memory

compatible with the self. When there is a consistent discrepancy (a large distortion is needed) then the goals are updated. This update is a very difficult process for the system. Long term self is conservative; it resists to changes of goals, because during these periods of goal change, the system is inefficient and vulnerable to detriments.

In order to establish equilibrium between reality and current goals, the working self may use two strategies: lowering the accessibility of contradictory memories and distorting the reality. An example to the lowered accessibility of memories contradicting the current goals is childhood amnesia. This period may not be remembered due to extensive goal changes that take place during this time. An example of reality distortion is the case of patients with PTSD; they may have some vivid but false memories in order to protect the self from major changes (Sutherland & Bryant, 2005; 2008).

1.2.3. Personal Event Memories

Pillemer (2001, 2003) tried to explain the reason and the function of recalling and re-experiencing some momentous life events and also the impact of this recall on individuals' lives. A personal event memory is the episodic memory of a specific event which has taken place in a particular time and place. It contains personal circumstances such as the location of the event, the activity, and the feelings of the person. It evokes some sensory imagery which creates the feeling of re-experiencing the event. The person who recalls the memory believes that this event has actually happened.

Pillemer argued that the reason why some specific episodic memories are vivid and have powerful impacts on individuals' lives is that they have some functions in terms of survival. He claimed that when an individual enters a new life situation for which there are no previously determined rules or scripts or routines, any particular event is attended carefully in order to obtain all possible information about this new life situation which could help survival. Later, when similar events are encountered by this individual, these events are thought, interpreted repeatedly and the first experience becomes more persistent in the memory.

These episodic events which persist in the memory for adaptive reasons provide individuals some life lessons or moral guidelines. These memories help to compose a personal belief system and they shape and remind individuals their long term goals and life paths. Based on their functions, Pillemer (2001) has categorized personal event memories into six groups: the memorable messages which contain explicit moral guidelines, the symbolic messages which contain an inferred life lesson or moral guideline, originating events which represent the emergence of a new life goal, turning points which suddenly change or shape a life plan, anchoring events which constitute the foundations of a belief system about the world, analogous events which provide good examples as to how to behave in future when a similar situation occurs.

Pillemer, through his categorization claimed that these momentous events are related to individual's long term goals and plans about their future by shaping or symbolizing them. People understand the world and their own aspirations, values and capacities through these vivid, long lasting and repetitively recalled events. These

representative events, are frequently remembered, as milestones, in order to shape the future choices and behaviors.

1.2.4. Self-Defining Memories

Singer and his colleagues (e.g., Singer & Moffit, 1991-1992; Singer & Salovey, 1993) were interested in the structural characteristics of some vivid and affectively intense memories which seem to have a strong impact on personality. He argued that individuals have their own collection of autobiographical memories through which they define themselves. He called these memories “self-defining memories (SDMs)”. He examined self-defining memories in relation to goals, emotions, and personality.

Singer defined a SDM as a vivid autobiographical memory which is affectively intense, linked to other similar memories, repetitively recalled, and relevant to one’s enduring concerns or conflicts (Singer & Moffit, 1991-1992; Singer, 1990; Singer & Salovey, 1993; Blagov & Singer, 2004). A SDM, among many other autobiographical memories, is the representative of a dense package of similar memories relevant to one’s interests, motives, and goals. A SDM is related to a series of similar memories, therefore this memory is easily recalled when one encounters appropriate external or internal cues. It evokes stronger emotions than other memories due to the intense information that it contains about the attainment or non attainment of a goal.

In a study, Singer and Moffitt (1991-1992) compared SDMs with ordinary autobiographical memories in terms of the generality, importance, emotionality and

vividness of these memories. They found that SDMs differ from autobiographical memories only in the generality and importance dimensions but not in the emotionality dimension. This lack of a significant difference between autobiographical memories and self-defining memories in terms of their emotionality and vividness may be due to a methodological problem. The researchers gave participants a self-defining memory request and an autobiographical memory request and they didn't control whether self-defining memories and autobiographical memories are significantly different in terms of the self-definition that they provide to individuals. If both types of memories were similarly self-defining, it could not be possible to capture any difference between them in terms of their phenomenological characteristics. In other words there is lack of independent evidence showing a category of autobiographical memories which are distinctly self-defining, but with a different methodology, a significant distinction may be captured.

There are several studies which provide evidence that self-defining memories are related with various personality dimensions, goals, and motives (e.g., Singer, 1990; Sutin & Robins, 2008). Blagov and Singer (2004) investigated how self-defining memory characteristics reflect aspects of personality. They proposed four dimensions of self-defining memories, specificity, meaning, content and affect and they identified three dimensions of personality: self-restraint, distress and repressive defensiveness. Self-restraint covered impulse control, suppression of aggression and responsibility. Distress was measured by trait anxiety, depression, low well-being and low self-esteem. Repressive defensiveness was defined as avoidance of negative affect and a positive self-presentation. They argued that individual differences in the four dimensions of self-

defining memories would be related to individual differences in self-restraint, distress, and defensiveness.

In their study, specificity was found to be inversely related with repressive defensiveness. This could mean that the tendency to repress negative emotions results in decreased imagery and detail in memory recollection. Besides, memory contents such as disrupted relationships or threat was found to be related with distress. These results reveal that self-defining memories reflect some aspects of personality and that memory accessibility and specificity change according to personality traits.

In addition, this study provides evidence for the fact that individuals use self-defining memories in order to define themselves: greater integrative memory meaning was linked to moderate self-restraint. Moderate self-restraint is considered to be a developmental achievement and a sign for emotional maturity and personal adjustment. This result implies that individuals with moderate self-restraint are more likely to use the past in order to form a sense of identity. They have a higher tendency to evaluate and interpret their memories and to make inferences about their self based on these memories. This result shows that individuals have a tendency to establish a sense of self through their self-defining memories and that this tendency may be related to a positive developmental outcome. Nevertheless, this study does not provide adequate support that there is a significant difference between self-defining memories and non self-defining memories in terms of the integrative meaning making.

Based on previous studies, it is possible to claim that there is a link between some autobiographical memories and some personality traits. Besides, making inferences based on self-defining memories may be related with adaptive personality traits. But there is not clear evidence showing that there exists a SDM construct which is a subtype of autobiographical memory with particular phenomenological characteristics and which has greater relevance to one's self-concept. There is a gap in the literature regarding the nature and the structure of the relationship between SDMs and the self-concept.

1.2.5. Commonalities of these theories

Based on these four theories or conceptualizations about the relationship between self and autobiographical memory, two common ideas could be proposed. First, the motivational feature of the self (including needs, motives, and goals) is an important factor which relates autobiographical memory to the self. Second, there are some memories which are more relevant to one's motives and goals and these memories are more important in terms of their guidance and the information that they provide about one's self. These two ideas are explained in detail referring to the previously explained four theories.

1.2.5.1. The role of the goals in the self and autobiographical memory link

The idea that memory is driven by goals dominates the field of psychology which investigates the relation between the self and autobiographical memory. Even if this idea

is not clearly mentioned in every theory, or the goals are not specifically emphasized, when the engine of the mechanism which relates memories to the self is questioned, the answer that is implicit in these four approaches is found to be the motivating function of goals.

For this reason, in the next section, the role of the goals in the self and autobiographical memory link is explained according to the different approaches. Then, the impact of a change in one's goals due to social, cognitive or developmental factors on the autobiographical memory recall is discussed.

In both the life story model of identity and the self memory system, a reconstructive view of autobiographical memory recollection is adopted. The reconstruction process, conceptualized in different ways in these two theories, has two needs: a) the need for a unique, coherent and continuous sense of self and b) the need to evaluate the present self in order to decrease any possible discrepancy between the present self and the goals by either changing the goal or changing the memory. Therefore, previous autobiographical memories have to be recalled in such a way that the past, present and future senses of self do not contradict. In other words, autobiographical memories do not only have to provide consistent past and present selves, but they also have to provide a way to predict a future self which is compatible with one's motives and goals.

From a behavioral perspective, goals are some reference points towards which individuals intend to move (Carver & Scheier, 2002). The organism aims to decrease the

discrepancy between these two states either by changing its position or by changing the reference point. In the SMS, goals are not conceptualized as reference points but they are conceptualized as processes which measure the distance between the reference point and the individual's current point. If there is a discrepancy, the working self either changes the reference point (i.e., goal) by changing the conceptual self or changes the current point (i.e. actual state) by distorting the information that is present in the autobiographical knowledge base. Therefore, according to SMS, the reconstructive process which either refers to the reconstruction of memories or to the reconstruction of the self is governed by the system's need for maintaining a coherent goal structure.

Based on this perspective, autobiographical memories are encoded, stored and retrieved based on their relevance to one's current goals. Moberly and McLeod's (2006) study provides evidence for this idea. They investigated whether there is a link between the relevance of autobiographical memories to current goals and the accessibility of these memories. They gave participants a list of goals and asked them to mark the ones that they pursued. Then, for each participant they selected three pursued and three non-pursued goals. Using a cued recall technique they asked participants to generate a memory for each of these selected goals and they measured the response latency which indicates the accessibility. The results have shown that the autobiographical memories related to currently pursued goals were retrieved more easily than autobiographical memories related to non-pursued goals.

In the life story identity account, reconstruction process refers to the reconstruction of a life story through selection and interpretation, rather than the

reconstruction of single memories during encoding and retrieval. The reconstruction of a life story is considered to be a conscious process in which individuals decide to give privileges to some memories while downgrading others (McAdams, 2001) in order to have a continuous sense of self. There is also a need for decreasing the discrepancy between the memories and goals, but this is mainly realized by the individual's choice rather than the distortion of the truth or a costly change in the goal system like in the SMS. Individuals, according to their goals, choose and interpret certain memories in order to include them in their life stories. This process of selecting and interpretation not only shapes and formulates a story that ends in the moment of retrieval, but it shapes an ongoing story that is oriented toward future goals.

In McAdams' theory, goals are not considered to be at the center of the construction process as they are in the SMS. Still, their importance is emphasized in three aspects. First, the importance of goals comes from the intrinsic characteristic of a story; a story is considered to be about human intentionality (McAdams, 2001). Second, it is argued that life stories have some main characters such as imagoes which symbolize important motivational trends in the life story such as need for power, intimacy, or achievement. Third, life stories include not only the information that is present in the autobiographical knowledge base but they also include the individual's imagined future.

Woike, Gershkovich, Piorkowski, and Polo (1999) have conducted a study providing evidence for a relation between human motives and the cognitive style of life stories. As human motives, they measured agentic motivation and communal motivation. Agentic motivation refers to concerns about individual achievement, personal power and

distinction from others. Communal motivation refers to concerns about relationships and connection to others. They have found that people with agentic motivation use more differentiation in their life story narratives whereas people with communal motivation use more integration to structure their memories. These studies provide evidence that some characteristics of life stories are correlated with motives which constitute an important element of personality.

Goals have an important role in Pillemer's (2001) personal event memory concept. He discussed the evolutionary function of autobiographical memories and he emphasized the role of the most abstract goals, the needs which have survival value. He claimed that a personal event memory is more vivid and affectively more intense than other memories because it contains significant information about how to avoid dangerous situations and how to survive. In that sense, it is the survival value of the memories which determine their persistence. Therefore, these events which become persistent for evolutionary purposes, contain important life lessons as to which situation has to be avoided and why, how the world works, and what should be one's life plan or long term goals in order to succeed. Individuals who remember them frequently in similar situations realize their directive function and change their plan of action or their beliefs about the world accordingly. Therefore, similar with other theories, the impact of memories on individual's self is governed mainly first by their implicit and then by their explicit goals.

Singer (1995), in his explanation of self-defining memory, gave an important role to goals. The reason is that self is experienced in an affectively charged manner. For example, if someone has a self image as a father, it means that he has a powerful and

affectively charged feeling about this image. The affect itself, is the result of the attainment or nonattainment of goals. Therefore, he claimed that the self is experienced through goals, memories, and the affect. He argued that individuals consider a memory as self-defining if it is highly relevant to one's unresolved conflicts, current issues, and attained or nonattained goals. There are several studies supporting his claim.

Singer (1990) investigated the link between autobiographical memories and goal desirability. He asked participants to write four autobiographical memories. Then he asked participants to rate first, the desirability of 15 life goal sentences generated based on Murray's 20 needs (e.g., affiliation, dominance, achievement). Then, he also asked them to rate each autobiographical memory in terms of their relevance to the attainment or nonattainment of each of the life goals. He found that as the goal desirability increases, the relevance of a memory to the attainment or nonattainment of this goal increases. In other words, there are less autobiographical memories related to a non-desirable goal compared to a desirable goal.

Sutin and Robins (2008) investigated the relation between motivational and emotional aspects of self-defining memories and personal strivings. Participants were asked to generate three self-defining memories and to rate each memory based on the extent to which they had power, achievement, and intimacy motives during the experience described in the memory. Participants were also asked to generate 10 personal strivings which were then categorized by researchers based on two dimensions; approach versus avoidance and self-defeating versus not self-defeating. The researchers have found a relation between self-rated motivational content of self-defining memories and the two

dimensions of personal strivings and they argued that the motivational content of self-defining memories reflect some aspects of personal strivings. The significance of this study is their methodology. The motivational content of these memories are determined by participants, not by researchers. Therefore, the result of the study implies that individuals' own interpretation about the motivational content of their self-defining memories is related with their personal strivings.

A common idea present in all theories is that the aim of the organism is to decrease the discrepancy between his goals and the current state. Autobiographical memories have two functions, one is to reflect on the real past situations in order to make individuals take the right action based on their previous experiences and the second is to reflect on one's goals in order to maintain a coherent and healthy individual. A related issue that has to be discussed is what would happen if one's current goals change due to environmental or developmental factors. The goal changes and possible impacts of these changes on the autobiographical remembering are discussed next.

1.2.5.2. The impact of a goal change on the autobiographical memory recall

If a change in one's current goals occurs, the past self-concept which was compatible with old goals will not be compatible with new goals. In order to maintain the compatibility between the past self and the future, in order to be able to predict this new future based on the old past, one has to make some changes in the way that he or she

perceives the past. Otherwise, this aspired new future would seem impossible to achieve, or even if it is achieved, the past and the current self would not be coherently integrated.

Goal change is an important issue, because from a developmental point of view, the current goals of individuals are not stable; they change over time because of changing contexts and roles. As goals change, autobiographical memories or the life stories have to be reconstructed and updated (Conway & Pleydell-Pearce, 2000; McAdams, 2001). Even if past memories are not distorted or completely eliminated from the autobiographical memory base or life story, accessibility of these memories would be decreased or they would not be recollected with the same sense of reliving as they once were (Singer & Salovey, 1993; Pillemer, 2001).

Within the SMS, a goal change which would increase the discrepancy between the current state and the desired state is not promoted, but if the individual is consistently experiencing new life situations that are not compatible with current goals, the only solution is to change goals and to decrease the accessibility of previous memories. According to Conway and Pleydell-Pearce (2000), this is the case when children grow up and their basic motives for nurturance and dependence turns into more diverse and complicated life goals. Due to some social cognitive factors, an infant's self-concept and goals change significantly and the memories which were related with his or her goals are not accessible after this time.

The study by Conway and Holmes (2004) which investigates the role of the goals in the encoding and retrieval of autobiographical memories support the claim that

autobiographical memories coming from different ages were once encoded based on their relevance to that age's goals. In their study, they classified participant memories in terms of the psychosocial stages to which these memory contents corresponded. They found that the ages that are predicted by the psychosocial stages correspond to participant age at encoding. This means that memories coming from different ages were encoded based on their relevance to that age's goals. The similar pattern would be for self-defining memories. A self-defining memory which was encoded based on a previous goal and which became persistent in memory with time due to its repetitive recall, should be a memory from the age when the individual was pursuing this goal.

In summary, goals due to their motivational function are considered to be important in all of these theories. It is according to this motivational feature that these memories are encoded and retrieved (Conway & Pleydell-Pearce, 2000), selected and integrated (McAdams, 2001), recollected in a vivid and affectively intense manner (Pillemer, 2001 and Singer and Salovey, 1993). So, after a goal change, the affective charge of previous memories which are relevant to this goal has to be decreased and there has to be a relation between the age of encoding and that age's goals.

Not all memories are equally relevant for one's goals. Some are more relevant than others and these are considered to be the ones which define the self better than the rest. The existence of a self-defining memory is discussed in the following section.

1.2.5.3. The existence of self-defining memories

The existence of some privileged memories is claimed in several theories but their characteristics are only specified by Singer and Salovey (1993). They not only claimed the existence of some memories which define the self better than others, but they also argued that those which are self defining are also more relevant to one's goals, they are more affectively intense, more dense, and more important than other memories. In this section, Singer and his colleagues' argumentation about the characteristics of self-defining memories will be explained and the status of self-defining memories in other theories will be discussed.

Singer and Salovey (1993) claimed that there are several memories which are relevant to one's goal and a self-defining memory is the representative of all of these memories. Their greater relevance to goals and close relation with similar memories determine their phenomenological characteristics. First, due to the intense information that they contain about the attainment or nonattainment of goals, they are vivid and affectively charged. Second, due to their relation with similar memories, there are more cues that could make the individual remember them. Each time they are remembered they become more persistent in memory. One last characteristic is that individuals are aware of the link between these memories and their goals which makes those more central and more important for one's current issues and conflicts.

Conway, Singer, and Tagini (2004) included the term self-defining memory in the self-memory system. They defined SDMs as connectors which integrate the knowledge in

the conceptual self and the autobiographical memories. These powerful memories which are highly relevant to one's goals are considered to represent some other specific autobiographical memories' narrative sequences. Whenever these goals undergo a change, the self-defining memories that are relevant to them become highly accessible. These memories, because of their relevance to current goals, are affectively charged and they are related to other similar memories. When they become active, the attention is directed towards them and the new event which will be encoded or new memories which will be generated will be prone to distortion in order to fit these self-defining memories.

McAdams (2001), in the life story theory of identity, does not adopt the "self-defining memory" concept of Singer and Salovey (1993) but he indicates that there exists some self-defining narratives which are considered by individuals as a part of their life story narratives. Individuals' life stories do not include all of their autobiographical memories; people select, interpret and integrate some memories that they find relevant to their current issues and that they consider to be important in terms of their sense of self. They favor some memories while ignoring others.

Pillemer (2001) also does not refer to a self-defining memory concept per se, but the personal event memories that he proposed constitute a specific sub-type of autobiographical memories which are relevant to some goals having a survival value, being vivid, affectively intense and repetitively recalled. This is a broad category and it also includes self-defining memories. The only difference between the two is that individuals are aware of the impact of personal event memories but these memories do not provide them a way to know themselves better.

A general conclusion would be that some memories which define the self better than others, are more affectively intense, vivid, repetitively recalled and linked to other memories. Still, it is necessary to review possible conceptualizations of the self in order to understand the nature of the relation between the self and the memories which have these phenomenological and motivational characteristics.

1.3.The self

1.3.1. Theories about the self

In this section, different conceptualizations of the self are reviewed. First, the emergence of the self-concept in the psychology literature is introduced. Second the conceptualization of self that is adopted in this study is explained as well as its relevance to the self-defining memory concept.

The existence of a self-concept was first a philosophical issue. The contribution of James (1950) to this field was the distinction that he made between two central aspects of the self, the “I” self or the subjective self which is the knower, and the “me” self, the objective self, which is the known. The Me-self was the one that is called the self-concept and received the most attention. James has further developed the concept of Me-self and imposed a hierarchical structure. Me-self is defined as the total of all a person calls his or her own and it has three major sub-components: the material self, the social self and the spiritual self. He was also the first who claimed that one’s self-esteem is determined by the success to achieve personal aspirations and also by the centrality of these aspirations for the individual.

On the other hand, symbolic interactionists placed more emphasis on the social interactions which shape the self. Cooley (1902; cited in Harter, 1999) proposed a “looking glass self” concept claiming that what we internalize as self-concept is actually what we perceive as our significant others’ opinions of us as reflected from a social mirror.

Several hierarchical models of self have also been developed. Epstein (1973; cited in Harter, 1999) proposed that self-concept is actually a valid, internally consistent and testable self-theory which is developed based on personal experiences. He proposed that there is a global self-esteem under which particular domains are nested such as general competence, moral self-approval, power and love-worthiness. Coopersmith (1967; cited in Harter, 1999) proposed different but similar subdomains such as competence, virtue, power and significance.

Although these conceptualizations are helpful to understand the structure or the nature of the self, they do not provide an operational definition of the self. Therefore it is difficult to investigate self based on these theories. The information-processing approach of Markus (1977) because of its similarity with the concept of self-defining memory is more suitable for the purposes of the current research.

According to Markus (1977), individuals are active information processors; they try to organize or explain their behavior and their attempt results with the formation of self-schemas which are cognitive generalizations about the self. A schema is basically a central cognitive unit which is established as a result of the integration and organization

of previous information. It is highly accessible and used in order to encode and process any social cognitive stimuli that are related to it (Crane & Markus, 1982). A self-schema is sort of a cognitive unit which is used in order to process effectively the information that is relevant to self. These self-schemas are either derived from specific instances involving the self or are repeated categorization of similar events (Markus & Wurf, 1987).

There have been several studies providing evidence for the existence of self-schemas associated with different personality dimensions such as dependence, independence, or creativity (Markus, 1977; Markus, 1999). In one study, Cross and Markus (1994) investigated the relationship between college students' self-schemas associated with "being a good problem solver" and their reaction to a task requiring problem solving ability. The sample consisted of students with equivalent problem solving abilities. The students were asked to rate their problem solving ability and the importance of this ability for them. The ones who both rated themselves as very good on this ability and considered that this is an important ability for them were classified as schematic whereas the ones that rated themselves as moderately good and who rated the importance of this ability as moderate were classified as aschematics. The results revealed that although both groups performed equally well in a problem solving task, aschematic students did not enjoy the task and had negative possible selves about their problem solving ability. This result indicates that preexisting self-schemas influence one's appraisal of a new situation.

These self-schemas which are used to make quick and certain judgments about a new situation and to retrieve situation-relevant information are conceivably related to

memories about previous events. Based on this idea, Markus (1999) hypothesized that if one has a schema which is a reflection of a past behavior, then he or she should be able to recall specific behavioral evidence related to his or her schema. In order to test this hypothesis, he chose the independence versus dependence schemas of individuals. Participants who rated themselves as extremely individualist, independent and leader in an adjective checklist were classified as independent schematics. Individuals who rated themselves as extremely conformist, dependent and follower were classified as dependent schematics. Individuals who rated themselves in the middle range were called as aschematics. The results of the study indicated that schematic individuals were able to give more specific evidence about the dimension that they have a schema compared to aschematic individuals.

Research by Markus (1999) presented evidence for the role of previous experiences in the formation of self-schemas but the results do not show a systematic relationship between everyday autobiographical memories and self-schemas. Barclay and Subramaniam (1987) investigated whether schematic people evaluate their everyday autobiographical memories according to their schemas. They classified individuals as independent schematics or dependent schematics using the method of Markus (1999). They asked the participants to record their everyday experiences during three weeks and to rate each recorded memory on a 30-word adjective checklist which consisted of dependent and independent words. They compared dependent and independent participants' memory ratings and found that dependent participants reported more dependent events than independent events. Still, they couldn't find any difference between the number of dependent events and the number of independent events reported

by independent participants. They argued that the reason would be the high dependency scores of the sample; even within the independent group, the independence scores were not high.

The lack of significance would also be due to another reason. There may not be a significant relation between everyday autobiographical memories and self-schemas. It was argued in previous sections that not all autobiographical memories contain significant information about the self. Therefore, it is possible that the relationship between self-schemas and self-defining memories is stronger than the relationship between self-schemas and everyday autobiographical memories.

The self-defining memory concept of Singer and Salovey (1993) and the self-schema concept of Markus (1977) show some similarities. A schema is formed as a result of an integration and organization of self-relevant information that is consistently received. Similarly, memories of goal relevant events become integrated in time and form a dense package which is represented by a single self-defining memory. Therefore, a memory which represents many others and which is recalled frequently in order to encode and retrieve other memories could be considered as the autobiographical memory conjugate of a self-schema. In other words, if self is perceived by schemas, self-defining memories would be the reflection of these self schemas standing in the autobiographical memory. As self-schemas facilitate the processing of new self-relevant stimuli, self-defining memories would facilitate the encoding and retrieval of autobiographical memories.

In summary, the concepts of self-defining memory and self-schema are highly related. If there is a link between autobiographical memory and the self, it would be easier to capture it by investigating the relationship between self-defining memory and self-schema. So, in this study it will be assumed that the self is perceived by individuals as self-schemas and its relation with self-defining memories will be investigated based on Markus's (1977) theory.

1.4. Summary and the rationale for this study

The self-defining memory concept is present in several theories which explain the link between the self and autobiographical memory. Singer and Salovey (1993) claimed that self-defining memories contain important and intense information about the self-concept and argued that self-defining memory conceptualization is a useful tool in investigating the link between autobiographical memories and certain dimensions of the self. Indeed, based on this suggestion, several researchers requested them from participants, not in order to investigate specifically the characteristics of self-defining memories, but in order to capture a stronger relation between autobiographical memories and the dimension of the self of interest to the researcher (e.g., Sutin & Robins, 2008; Sutherland & Briant, 2005).

To date, there was only one study by Singer and Moffit (1991-1992) which investigated self-defining memories in comparison to other autobiographical memories. The aim of this study was to test whether self-defining memories are more general, affectively more intense and more important than other autobiographical memories. Still,

their methodology was not appropriate in two ways. First, in their memory request, they informed their participants about the predetermined characteristics of self-defining memories such as vividness, affective intensity, self-relevance, and repetitive recall and asked participants to generate memories based on this information. With this methodology, it is not possible to test whether the memories which are highly self-relevant have some characteristics which distinguish them from others. The reason is that, the authors assumed that self-defining memories have these characteristics inherently and therefore they requested not only self-defining memories but memories that are both self-defining and having the predetermined characteristics. A gap in the literature is a study which directly questions the existence of self-defining memories as a distinct category of autobiographical memories that is distinguished by some phenomenological characteristics. Second, as discussed in previous sections, their study did not include a delineation of whether self-defining memories and autobiographical memories are significantly different in terms of the self-definition that they provide to individuals.

Besides the phenomenological characteristics, the link between self-defining memories, the self and the goals has not been investigated. There are some studies showing that self-defining memories are related with some aspects of personality (Blagov & Singer, 2004) and with some motivational features of the self (Sutin & Robins, 2008). These studies attempted to show that some characteristics of self-defining memories, (e.g., motivational characteristics, specificity, or affect) reflect some personality dimensions (e.g., repressive defensiveness) or some characteristics of personal strivings (e.g., approach orientation). Still, these studies are not sufficient to conclude that a) self-

defining memories are related to the self-concept and current goals and b) they are more related to self-concept and goals than other autobiographical memories.

There are three reasons for this lack of certainty. One of the reasons is that, in previous studies, the idea that self-defining memories are related to self-concept and goal was an assumption. The major aim of these studies was not to investigate whether there is a link between self-defining memories and the self. The major aim was to show those characteristics of self-defining memories that are linked to certain personality dimensions and to certain types of motives. The second reason is that, in these studies there was not an explicit request to the individuals to establish a link between their self-defining memories and their self. This is important because, it is only when individuals consciously confirm that there is a link between their self-concept and some autobiographical memories that we can assume these memories to become part of a self-concept (Singer & Salovey, 1993). The third reason is the absence of a comparison between self-defining memories and other autobiographical memories which are not self-defining.

As a conclusion, this study aims to fill these gaps by investigating the existence of self-defining memory in three ways; first by comparing its phenomenological characteristics to non self-defining memories, second by asking participants to relate both their self-defining memories and their non self-defining memories to their current goals as well as previous goals, third by asking participants to relate both their self-defining memories as well as their non self-defining memories to their self-concept.

1.5. Hypothesis and study design

In this study, the relationship between self and autobiographical memory were investigated using the self-defining memory concept. The existence of the self-defining memory concept was investigated as well as the phenomenological characteristics of self-defining memories, their relationship with current goals and previous goals and their relationship to the self-concept.

The first hypothesis was that the self-defining memories would show a set of characteristics which set these memories apart: a) they would be recalled more affectively, b) they would be recalled more vividly, c) they would have been recalled more frequently, d) they would be related to other memories and, e) they would be considered to be more important than non self-defining variables. This hypothesis was formulated on the basis of Singer and Salovey's (1993) description of self defining memories and the SMS of Conway and Pleydell-Pearce (2000). A prior study which tested whether the phenomenological characteristics of self-defining memories and other autobiographical memories were different or not, had failed to find a significant difference, possibly due to methodological issues indicated before. We expect the current methodology to be more sensitive to these differences. (Singer & Moffit, 1991-1992).

The second hypothesis was a reversal of the first hypothesis; memories which are affectively more intense, more vivid, more repetitively recalled and more related with other memories, would have a higher rating for self-definition than memories which are

not specifically characterized by their affective intensity, vividness, frequency of recall or importance for the individual.

The third hypothesis was that self-defining memories would be related to the individual's current goals, needs and aspirations. This hypothesis was based on the common arguments in the SMS model, the life story model of identity, and the concept of personal event memory. This hypothesis is in line with other studies which supported such a relationship between autobiographical memories and motives (Woike, 1995; Woike & Gershkovich, 1999; Woike, McLeod, & Goggin, 2003; Singer, 1990; Moberly & McLeod, 2006), and more specifically between self-defining memories and goals (Sutin & Robins, 2008).

The fourth hypothesis was that self-defining memories that were related to previous goals would be less powerfully re-experienced than memories related to the current goals. Singer and Salovey (1993) and Conway and Pleydell-Pearce (2000) argued that memories related with currently non pursued goals lose their affective intensity. Studies which show a strong relation between autobiographical memory retrieval, affect and goal desirability support this hypothesis (e.g., Singer, 1990).

The fifth hypothesis was that self-defining memories which were not related to current goals, but which were related to previous goals would be more likely to come from the periods where these goals were pursued. Singer and Salovey's (1993) self-defining memory account is in accordance with this hypothesis and Conway and Holmes (2004) study provides evidence as well.

The sixth hypothesis was that self-defining memories would be related with individual's self-schemas. This idea is in direct relationship with Singer and Moffitt's (1991-1992) self-defining memory concept and Markus's (1977) self-schema concept. The studies that relate self-defining memories to some personality dimensions (e.g., Blagov & Singer, 2004) and the study of Markus (1999) which shows a relation between self-schemas and specific event memories have shown results in agreement with this hypothesis.

Two types of autobiographical memories were requested from participants in order to test the first hypothesis: self-defining memories and non self-defining memories. In order to test the second hypothesis, two other types of memories were requested: affective, vivid, frequently recalled, and important memories, and not affective, not vivid, not frequently recalled and not important memories. The phenomenological properties of these memories were rated by the participants. Participants were also asked to rate the extent to which these memories were self-defining.

In order to test the third hypothesis, the current goals of the participants and the relationship of these goals to previously requested four types of memories were provided by the participants. The test of the fourth and the fifth hypotheses required a comparison between one's self-defining memories which corresponded to current goals and those which corresponded to previous goals. Therefore it was necessary to capture a significant goal change in the participant's life. In previous studies it has been shown that, it is in the middle and late adolescence that the self-concept and identity development occurs (e.g., McAdams, 2001) which implies that the major goal changes take place during this period.

Therefore, participants who have completed adolescence were requested to fill another goal rating sheet and to rate each goal in terms of their importance during their adolescence. Self-defining memories which were considered to be related with current goals and those which were considered to be related with previous goals were compared in terms of their phenomenological characteristics and the participant's age when the event occurred.

In order to test the sixth hypothesis, participants' self-schemas and the relation of these schemas with previously requested four types of memories were provided. Self-defining memories and non self-defining memories were compared in terms of their relevance to the participants' self-schemas.

Chapter 2

METHOD

2.1. Participants

There were 112 participants whose ages were between 19 and 61. The sample consisted of 40 undergraduate students recruited from introductory psychology subject pool of Koç University and 72 adults who had at least a high school diploma. Non student participants were recruited from the community by snowball sampling.

2.2. Material

2.2.1. Self-defining memory request

A self-defining memory request was adapted from the request that was used by Singer and Moffit (1991-1992). The authors, in their study, gave a definition of a self-defining memory which includes its phenomenological characteristics and asked participants to report their self-defining memories based on this definition. In the current study, the aim was to test whether self-defining memories have these predicted phenomenological characteristics or not, therefore not all the characteristics of a self-defining memory were given in the self-defining memory request. Besides, in the original self-defining memory request, self-defining memory was described as a memory which the participant would tell someone that the participant likes very much. The statement

“someone you like very much” was changed to “a very close friend” in order to avoid social desirability effect. Three self-defining memories were requested from each participant. The Turkish version of the self-defining memory request is in Appendix A.

2.2.2. Non self-defining memory request

The non self-defining memory was defined as a memory which doesn't have much relevance to the participants' self-concept. The difference between a self-defining memory and a non self defining memory was explained by claiming that the non self-defining memory does not convey important information about one's perception of himself. Three non self-defining memories were requested from each participant. The Turkish version of the non self-defining autobiographical memory request is in Appendix A.

2.2.3. Request for affective and persistent memories

Singer and Moffit (1991-1992) defined a self-defining memory as vivid, affectively intense, repetitively recalled, and related to current issues and conflicts. Based on their definition, three autobiographical memories having these characteristics were requested from each participant. The Turkish version of this request can be found in Appendix A.

2.2.4. Request for non affective and non persistent memories

As the opposite of affective and persistent memories, the participants were asked for memories which are not vivid, not very intense affectively, not recalled frequently and not related to one's concerns and conflicts. Three memories were requested from each participant. The Turkish version could be found in Appendix A.

2.2.5. Measure of autobiographical memory characteristics

A questionnaire which measures both general phenomenological characteristics of autobiographical memories and Singer and Moffit's (1991-1992) self-defining memory characteristics was given to participants for each memory. The 16-item questionnaire (Gülgöz & Rubin, 2001) was added two more items, one asking the frequency of memory recall and the other asking the extent to which the memory is self-defining. Items like "I have a visual image in my mind when I remember the event" were rated in a 5-point Likert scale ranging from 1 (Not at all) to 5 (As if it happens now). The Turkish version of the autobiographical memory characteristics questionnaire is in Appendix B.

2.2.6. Goal rating sheet

A goal list was formed based on the taxonomy of Chulef, Read, & Walsh (2001). This list was given to participants and they were asked to rate each goal on a 5 point Likert scale ranging from 1 (This is not one of my current goals at all) to 5 (this is

definitively one of my current goals). The Turkish version of this measure can be found in Appendix C.

2.2.7. Goal and memory relation sheet

In this sheet, the same goal list was given to participants. For each memory that they gave, the participants were asked to write the number (code) of the goals of which they thought to be related with that memory. They were also asked to rate each memory, to the extent to which the memory is relevant for this goal.

2.2.8. Self-description measure

In this study, the self-schema concept of Markus (1977) was accepted as the operational definition of the self. Similar to other studies which measure self-schema (e.g., Markus & Wurf, 1987; Markus & Kitayama, 1999), an adjective-based measure was decided to be the most appropriate way of measuring self-schemas. Therefore, in this study the Turkish version of The National Character Survey (NCS) (Terraciano et al., 2005) was used. The NCS was designed based on the NEO-PI-R, and translated into 27 languages in order to measure people's beliefs about personality characteristics of individuals from diverse cultures. This short questionnaire consists of 30 five-point bipolar scales. Each scale corresponds to one of the 30 facets assessed by the NEO-PI-R with six items for each of the five major dimensions of personality traits. Each scale includes two or three adjectives or phrases at each pole (e.g., anxious, nervous, and worrying versus at ease, calm, and relaxed). The content of the survey remained the same,

but the instructions were modified for the purposes of this study. Instead of asking about the typical member of a culture as it is in the original study, the participants were asked about their own self-perception. Internal consistency and factor analysis of the NCS indicated that the scales adequately define the dimensions of the Five Factor Model and they have acceptable psychometric properties. The Turkish version of this measure can be found in Appendix D.

2.2.9. Self-description and memory relation sheet

In this sheet, the same self-description list was given to participants and the participants were asked to rate each memory for each self-description to the extent to which the memory was relevant for this description.

2.3. Procedure

The data collection procedure consisted of five steps. First, the self-defining memory request, non self-defining memory request, the affective and persistent memory request and the non affective, non persistent memory request were given to participants and the participants were asked to give three autobiographical memories for each memory type. Second, after they had written all memories, the memory characteristics questionnaire was given. Third, all participants were requested to fill the goal rating sheet and the self-description measure. Participants who were older than 35 years old were requested to fill another goal rating sheet. The content of the goal list remained the same but the instructions were different. These older participants were requested to rate each

goal in terms of its importance during their adolescence. Fourth, after all participants rated their goals and traits, they were asked to match several goals and traits with each memory that they had given. They had to choose up to five goals from the goal rating sheet and five traits from the self-description measure. Fifth, they were asked to rate the degree of relatedness between memories and goals and between memories and traits.

The majority of the data was collected by meeting each participant separately in a silent place. There was not a time limitation; participants took their time and gave breaks when they needed. The duration of the whole procedure changed between 45 and 100 minutes.

Chapter 3

RESULTS

3.1. Data coding and manipulation

In the present data, the memory characteristics of each memory were treated as between subject variables, as if each memory were an independent observation.

Based on the memory requests, in order to group 12 autobiographical memories requested from each participant, a categorical variable was generated; memory type. The memory type had four levels: self-defining memory (SDM), non self-defining memory (Non-SDM), affective and persistent memory (APM), and non affective and persistent memory (Non-APM).

Every item in the memory characteristics questionnaire generated a variable. All of the variables, except the last variable which was a categorical variable, were measured on an interval scale:

1. Affective intensity perceived by the participant when the event occurred (affective intensity at event).
2. Affective intensity perceived by the participant when the event is recalled (affective intensity at recall).
3. Participant's feeling of reliving at recall (Reliving).
4. Auditory sensation experienced by the participant at recall (Hearing).

5. Visual sensation experienced by the participant at recall (Seeing).
6. The extent to which participant has an episodic memory rather than a semantic memory (Episodic memory).
7. The extent to which the memory reflects the participants' self (self-definition).
8. The extent to which the event is an important one because it gives a message to the participant or it represents an important period in the participant's life (importance).
9. The extent to which the participant believes that he/or she had really experienced this event (certainty of reality).
10. The extent to which the participant remembers the event from the first person's perspective rather than the third person perspective (first person perspective).
11. The extent to which the participant remembers the event from the third person's perspective rather than the first person perspective (third person perspective).
12. The frequency by which the participant had recalled the event deliberately since it has happened (frequency of recalling).
13. The frequency by which the participant remembered the event unconsciously since it has happened (frequency of remembering).
14. The frequency by which the participant shared the event with someone since it has happened (frequency of sharing).
15. The generality of the event (event type). In other words, the extent to which the event is related to other similar events. This variable was assessed on a nominal scale having three levels; a) an event occurred once, b) an event constructed by the association of several events, and c) an event which lasted more than one day.

In addition to these variables, hypotheses testing and further analyses necessitated the computation of several new variables:

1. The current age of the participant (Current age).
2. The age of the participant when the event occurred (Age at event).
3. The amount of time passed since the event (Age of memory).
4. The mean score of “reliving”, “hearing” and “seeing” variables (Vividness).
5. The mean score of “frequency of recalling” and “frequency of remembering” variables (Frequency of recollection).
6. The relevance of the memory to current goals or to previous goals (Memory relevance to current or previous goals). This variable was assessed on a nominal scale. It had four levels; only current, only previous, both, and neither.

3.2. Descriptive Statistics

1309 autobiographical memories were collected from 110 participants. Table 1 summarizes the numbers of memories for each memory type.

Table 3.1

The numbers of memories for each memory type

Memory Type	Number
Self-Defining Memory	330
Non Self-Defining Memory	324
Affective and Persistent Memory	330
Non Affective and Persistent Memory	325

3.3. Testing the Hypotheses

3.3.1. SDM Characteristics

The first hypothesis was that the memories considered by individuals as self-defining would show a set of characteristics which set these memories apart: a) they would be recalled with more intense emotion, b) they would be recalled more vividly, c) they would have been recalled more frequently, d) they would be considered as more important than others, and e) they would be more related to other memories (more general) than non self-defining memories.

First, the a, b, c, and d were tested. For each dependent variable, a separate one-way ANOVA was conducted. The dependent variables were affective intensity at the event, vividness, frequency of recollection, and importance. The between subject variable was the memory type. Descriptive statistics are shown in Table 2.

The results revealed a significant main effect of memory type on affective intensity at event, ($F(3, 1305) = 104.09, p < .001, MSE = 1.38$), affective intensity at recall ($F(3, 1304) = 108.04, p < .001, MSE = 1.53$), vividness, ($F(3, 1294) = 93.89, p < .001, MSE = 0.89$), frequency of recollection, ($F(3, 1301) = 115.82, p < .001, MSE = 1.08$), and importance ($F(3, 1304) = 152.51, p < .001, MSE = 1.62$).

Multiple comparisons between different memory types were made using Tukey's HSD test with alpha level set at 0.05. The results supported the first hypothesis, SDMs had higher ratings for these characteristics than Non-SDMs. Multiple comparisons for affective intensity at event, affective intensity at recall, importance, vividness, and frequency of recall revealed the same pattern: The ratings for APMs were significantly higher than those of SDMs, the ratings for SDMs were significantly higher than those of Non-SDMs and the ratings for Non-SDMs were significantly higher than those of Non-APMs.

Table 3.2

Sample Sizes, Mean Scores and Standard Deviations of Memory Characteristics for Different Memory Types

	AI at event			AI at recall			Vividness			Recall Frequency			Importance		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD
SDM	330	3.82	1.2	329	3.07	1.27	324	3.75	0.90	329	3.15	1.02	329	3.65	1.26
N-SDM	324	3.49	1.35	324	2.60	1.33	323	3.36	1.03	323	2.67	1.14	324	2.57	1.41
APM	330	4.69	0.63	330	3.74	1.22	326	4.15	0.83	330	3.67	1.03	330	4.05	1.18
N-APM	325	3.16	1.36	325	2.07	1.11	325	2.97	0.99	323	2.25	0.96	325	2.22	1.22

AI: Affective Intensity

When testing whether self-defining memories are more general than non self-defining memories, the event type variable was the dependent variable. Event type was a categorical variable having three levels; an event which occurred once, an event constructed based on the association of several events, and an event which takes more than one day. In order to test whether the event type is affected by memory type, a chi-square analysis was conducted. A significant dependence of the event type on memory type was found ($\chi^2(6, 1219) = 15.83, p < 0.05$). Table 3 summarizes the frequencies of different memory types, depending on the different event types.

Table 3.3

Frequencies and percentages of different event types depending on the memory type

	Once		Several times		Period		Total
	N	%	N	%	N	%	N
SDM	181	59	48	16	76	25	305
Non-SDM	208	69	41	16	54	18	303
APM	213	69	34	11	61	20	308
Non-APM	220	72	26	9	58	19	304
Total	822	67	149	12	249	21	1220

In order to better understand the relation, several chi-square analyses were conducted with reduced memory type levels. When the memory type category included only SDMs and Non-SDMs, and when it included only SDMs and APMs a significant dependence of event type on memory type was found ($\chi^2(2, 607) = 6.14, p < 0.05$), ($\chi^2(2, 612) = 6.62, p < 0.05$), respectively. In contrast, when the analysis was repeated with the

memory type variable including only APMs and Non-APMs; the effect was not significant.

In summary, SDMs were considered to be more important, recalled more affectively, more vividly, more frequently than Non-SDMs and Non-APMs. Still, these memories were considered to be less important, recalled less affectively, less vividly, less frequently than APMs. In contrast SDMs were found to be the memories were more general than all other memory categories.

3.3.2. APM Characteristics

The second hypothesis was that memories which are affectively more intense, more vivid, more frequently recalled and more related with other memories are described as more self-defining than memories which are not specifically characterized by their affective intensity, vividness, frequency of recall or importance for the individual. It was expected that APMs would be more self-defining than Non-APMs. In order to test this, a one-way ANOVA was conducted. The between subject variable was memory type with its four levels, and the dependent variable was the level of self-definition. The descriptive statistics are shown in Table 4.

The results revealed a significant memory type effect on self-definition variable, $F(3, 1300) = 133.210, p < .001, MSE = 1.613$. Multiple comparisons using Tukey's test revealed that first, the results supported the second hypothesis; APMs were more self-defining than Non-APMs. Second, the self-definition scores of SDMs were higher than

those of Non-SDMs, APMs, Non-APMs, all differences were significant at 0.001 level. Third, the self-definition ratings of APMs were significantly higher than those of Non-SDMs and Non-APMs. Third, there was not a significant difference between the ratings of Non-SDMs and Non-APMs.

Table 3.4

Sample Sizes, Mean Scores and Standard Deviations of Self-Definition for Different Memory Types

	N	M	SD
SDM	328	3.72	1.18
Non-SDM	324	2.06	1.25
APM	329	3.12	1.38
Non-APM	323	2.10	1.26

3.3.3. SDM and current goals

The third hypothesis was that SDMs are related to individuals' current goals. In order to test this hypothesis, for each autobiographical memory, the following variables were computed.

1. The current average importance rating of the goals which were considered to be related with this memory (Average goal importance).
2. Among all the goals which were considered to be related with this memory, the number of those having an importance rating greater than three (number of

important goals). The possible maximum number of the goals related with one memory was five.

3. The weighted average goal importance rating of the memory (Weighted average goal importance). The weighted average was generated by multiplying the current importance ratings of the goals, which were considered to be related with this memory, with the ratings showing the strength of the relation between goal and memory.

In order to test whether self-defining memories are more likely to be related with current goals, three one-way ANOVAs were computed for each dependent variable; average goal importance, number of important goals, and weighted average goal importance. The between subject variable was the memory type with its four levels. The descriptive statistics are shown in Table 5.

Table 3.5

Sample Sizes, Mean Scores and Standard Deviations of Memory Related Goal Scores for Different Memory Types

	Average goal importance			Number of important goals			Weighted Average Goal Importance		
	N	M	SD	N	M	SD	N	M	SD
SDM	312	4.32	0.58	330	2.64	1.41	131	3.55	0.80
Non-SDM	297	4.16	0.78	330	2.04	1.47	99	2.86	1.02
APM	313	4.26	0.66	330	2.45	1.45	123	3.35	0.93
Non-APM	295	4.22	0.73	330	1.99	1.38	85	2.82	0.97

The results revealed a significant memory type effect on the average goal importance rating, $F(3, 1213) = 3.045, p < .05, MSE = 0.478$. Multiple comparisons revealed a significant difference between SDMs and Non-SDMs only, $p < 0.05$.

A significant memory type effect on the number of important goals was found, $F(3, 1316) = 15.937, p < .001, MSE = 2.047$. Multiple comparisons revealed that the number of important goals considered as related with SDMs is greater than those of the Non-SDMs, $p < 0.001$ and Non-APMs, $p < 0.001$. In contrast, there was not a significant difference between SDMs and APMs. Similar to SDMs, the number of important goals considered as related with APMs were significantly higher than those of the Non-APMs, $p < 0.001$ and those of the Non-SDMs, $p < 0.005$.

A significant memory type effect on the weighted average goal importance rating was found, $F(3, 414) = 16.429, p < .001, MSE = 0.858$. Multiple comparisons revealed the same patterns with the number of important goals such that SDMs and APMs did not differ from each other and were rated higher than Non-SDMs and Non-APMs which did not differ from each other.

3.3.4. SDMs, goals and the age of the participant when the event occurred

The fourth and the fifth hypotheses were both about the characteristics of the memories which are not related to current goals, but related to previous goals. The fourth hypothesis was the self-defining memories which are only related to previous goals, will be less powerfully re-experienced than memories related to current goals. The fifth

hypothesis was that these memories are more likely to come from the periods where the goals that they are related were pursued.

In order to test these hypotheses, only the data of the participants who were older than 25 were included in the data set. Both hypotheses were about memories related to previous goals only. In other words, memories in question were the ones which were both a) linked to 3, 4, or 5 important goals between ages 15-25 and b) linked to 0, 1 or 2 currently important goals.

Due to limited number of the memories assuring “only previous” condition, the fourth and the fifth hypothesis could not be tested. In order to test whether memory relevance to current or previous goals is affected by memory type, a chi-square analysis was conducted. Table 6 summarizes the frequencies of different memory types depending on the memories’ relation with current or previous goals. A significant dependence of the memory relevance to current or previous goals on memory type was found ($\chi^2 (9, 829) = 30.85, p < 0.001$). When a chi-square analysis was conducted between SDMs and Non-SDMs, it has been found that whether a memory is self defining or not influences its relevance to current or previous goals ($\chi^2 (3, 413) = 12.916, p < 0.005$). A similar dependence was not found between SDMs and APMs.

Table 3.6

Frequencies of different memory types in terms of their relevance to goals.

	Only current	Only previous	Both	Neither	Total
SDM	24	6	97	83	210
Non-SDM	20	4	64	116	204
APM	23	15	82	90	210
Non-APM	12	7	69	118	206
Total	79	32	312	407	830

3.3.5. SDMs and self

The sixth hypothesis was that self-defining memories are related with individual's self-schemas. The items of the self-schema scale were bipolar, and as the participant rated himself close to one pole, it meant that he or she is schematic in terms of this aspect of the self. Therefore, the scores 1 and 2 of the self ratings were transformed to 5 and 4. The rest remained the same. In order to test this hypothesis, for each autobiographical memory, the following variables were computed.

1. The average ratings of aspects of the self which were considered to be related with this memory (Average of self rating score).
2. The number of the aspects of the self which were both considered to be related to this memory and received a rating of 4 or 5 in the self rating scale (Number of schematic aspects).

3. The weighted average self schema rating of the memory (Weighted average self rating score). The weighted average was generated by multiplying the ratings of the aspects of the self, which were considered to be related with this memory, with the ratings showing the strength of the relation between this aspect and the memory.

For this hypothesis, three one-way ANOVAs were computed for each dependent variable, the average self rating score, number of schematic aspects, and the weighted average self rating score. The between subject variable was the memory type with its four levels. The descriptive statistics are shown in Table 7.

Table 3.7

Sample Sizes, Mean Scores and Standard Deviations of Memory Related Self-schema Scores for Different Memory Types

	Average self rating			Number of schematic			Weighted average		
	score			aspects			self rating score		
	N	M	SD	N	M	SD	N	M	SD
SDM	309	4.18	0.51	330	2.37	1.50	76	3.22	0.81
Non-SDM	290	4.09	0.54	330	1.92	1.50	71	2.85	0.77
APM	294	4.11	0.51	330	2.20	1.57	94	3.11	0.75
Non-APM	280	4.12	0.55	330	1.95	1.56	73	2.78	0.86

There was not any effect of memory type on the average ratings of the aspects of the self selected as related to each memory.

There was a significant memory type effect on the number of schematic self descriptions related to each memory, $F(3, 1316) = 6.54, p < .001, MSE = 2.345$. Multiple comparisons revealed that SDMs were related to a higher number of schematic self descriptions than Non-SDMs and Non-APMs, $p < 0.005$. The number of the schematic descriptions for APMs was not significantly different than any other memory type.

The effect of memory type on weighted average of self ratings score was significant, $F(3, 310) = 5.224, p < .005, MSE = 0.637$. Multiple comparisons revealed that the scores of SDMs were significantly higher than those of Non-SDMs, $p < 0.05$, and Non-APMs, $p < 0.01$. The scores of APMs were not significantly different than any other memory type.

In summary, as the sixth hypothesis predicts, the scores showing the relation between the self and the SDMs were higher than those showing the relation between the self and the Non-SDMs and Non-APMs. Besides, the SDMs were not significantly different than APMs which in turn, were not significantly different than Non-SDMs and Non-APMS.

3.4. Further Analysis

3.4.1. Factor Analysis

The first and the second hypothesis were mainly tested by making some comparisons between different memory categories. Another way to test whether self-definition and some memory characteristics such as affective intensity at event, vividness, frequency of recollection, importance, and association with similar memories are some aspects of autobiographical memories which move together or not is to conduct a factor analysis.

Table 8 shows the factor structure after a Varimax Rotation. The results reveal a 3 factor structure. The first factor which includes the affective intensity at event, affective intensity at recall, self-definition, importance, frequency of recalling, frequency of remembering, frequency of sharing, reliving, were the characteristics of a self-defining memory as defined by Singer and Moffit (1991-1992). Therefore, this factor is named as the self-definition factor. Although reliving variable was loaded under this factor, it was also loaded under the second factor with a similar load. The second factor which included reliving, seeing, and hearing, episodic memory, certainty of reality variables was called as the reality factor. The third factor which included the first person perspective and the third person perspective variables was named as the perspective factor.

Table 3.8

Factor Structure for Memory Characteristics

	Varimax - Rotated Component		
	Self-definition	Reality	Perspective
Affective intensity at event	0.614	0.312	0.092
Affective intensity at recall	0.643	0.379	0.283
Self-Definition	0.575	0.161	0.056
Importance	0.771	0.194	0.079
Frequency of remembering	0.787	0.232	0.145
Frequency of recalling	0.826	0.191	0.087
Frequency of sharing	0.642	0.141	0.037
Reliving	0.582	0.584	0.273
Hearing	0.414	0.716	0.200
Seeing	0.352	0.776	0.118
Episodic memory	0.229	0.776	0.039
Certainty of reality	0.064	0.627	-0.042
First person perspective	0.332	0.285	0.777
Third person perspective	-0.008	0.056	-0.924
Percent of Variance	29.74	21.072	12.271

3.4.2. Linear Regression

Factor analyses revealed that affective intensity at event, affective intensity at recall, importance, frequency of recalling, frequency of remembering, frequency of sharing, and reliving were some memory characteristics which change with self-definition.

In order to have a more specific result about the factors which predicts self-definition, a multiple regression analysis was conducted using the stepwise method. The affective intensity at event, affective intensity at recall, seeing, reliving, hearing, episodic memory, importance, certainty of reality, first person perspective, third person perspective, frequency of recalling, frequency of remembering, frequency of sharing, and event type variables were included in the model to predict the self-definition variable.

The importance, seeing, and the first person variables were included in the models respectively. In the last model, the event type variable was also added and the model was found to be significant ($F(4, 1192) = 133.86, p < .001$). The adjusted R^2 was 0.31 and the R^2 change was 0.01. The standardized beta coefficients and the R^2 of each variable are shown in the Table 9.

Table 3.9

Regression of importance, seeing, first person, and event type variables on self-definition

Variable	Beta	R ²
Importance	0.44**	0.28
Seeing	0.11**	0.29
First Person	0.10**	0.30
Event type	0.08*	0.31

* $p < .005$, ** $p < .001$

3.5. Memory type and the age of participant when the memory took place

In order to see whether the age of the participant when the event occurred is affected by the memory type, a one way ANOVA was conducted. The dependent variable was the age at event and the between subject variable was the memory type.

The descriptive statistics are shown in Table 10. A significant memory type effect was found $F(3, 1268) = 9.369, p < .001, MSE = 86.072$. Multiple comparisons revealed that first, the age when self-defining memories were first experienced was significantly lower than any other memory type, at a $p < 0.001$ level. Second, there was not a significant difference between the age of the participant when Non-SDMs, APMs and Non-APMs occurred.

Table 3.10

Sample Sizes, Mean Scores and Standard Deviations of Age when Memory for Different Memory Types

	N	M	SD
SDM	326	18.64	8.50
Non-SDM	311	20.79	9.48
APM	320	21.43	8.76
Non-APM	315	22.37	10.29

3.6. Recategorizing Memories

Categorizing memories as SDM, Non-SDM, APM, and Non-APM on the basis of experimental instructions was disadvantageous for two reasons. First, with this method, each memory could only take place in one category. Memories which are told in the self-defining memory request may be rated highly on affective intensity at event or recall, frequency of recollection, frequency of sharing, and vividness but they would only be treated as self-defining memories. Second, participants may not be able to find a correct example to a memory request every time. Among the 330 memories recalled after a self-defining memory request, only 211 of them received a self-definition score of 4 or 5 out of 5. Among the 330 memories recalled after a non affective and non persistent memory request, 134 of them received an affective intensity score of 4 or 5 out of 5. Therefore, a re- categorization based on ratings which could eliminate these problems was made.

The re-categorization of memories consisted of computing two binary variables: rating-based self-defining memory (called rSDM in this section) and rating-based affective and persistent memory (called rAPM in this section), based on the ratings of the participants. The computation process of this new SDM was as follows: If the memory received a self-definition rating of 4 or 5 out of five, this memory was coded as a self-defining memory; if the memory was rated as 1 or 2, this memory was coded as a non self-defining memory. If the rating was 3, this memory was excluded from the analyses.

The computation of the rAPM variable included different steps; first the event type variable was transformed from a 3 point scale to a 5 point scale. Then, the average score of affective intensity at event, affective intensity at recall, relieving, hearing, seeing, episodic memory, certainty of reality, importance, frequency of remembering, frequency of recall, frequency of sharing and the 5 point scale event type variables was computed for each memory. Finally, the rAPM variable was computed as follows: If this average score was between 1 and 2,5 out of 5, this memory was coded as an non affective and persistent memory, if the score of this memory was between 3,5 and 5, this memory was coded as an affective and persistent memory. If the score of this memory higher than 2,5 and lower than 3,5 this memory was excluded from the analyses.

3.6.1. Descriptive Statistics

Table 11 shows the classification of 660 autobiographical memories which were included in the analyses according to the criteria.

Table 3.11

Distribution of autobiographical memories according to their new SDM and APM scores

	rAPM	rNon-APM	Total
rSDM	288	22	310
rNon-SDM	149	201	350
Total	437	223	660

3.6.2. Testing the hypotheses with recategorized memories

In order to test the first hypothesis, for each dependent variable, except summary variable, a one-way ANOVA was conducted. The SDM variable was the between subject variable with its two levels, SDM and Non-SDM. The dependent variables were affective intensity at event, vividness, frequency of recollection, and importance.

The effects of SDM on affective intensity at event, vividness, frequency of recollection, and importance variables were significant, $F(1, 1057) = 101.83, p < .001, MSE = 1.66$; $F(1, 1046) = 173.18, p < .001, MSE = 0.96$; $F(1, 1053) = 199.43, p < .001, MSE = 1.20$; $F(1, 1056) = 402.91, p < .001, MSE = 1.65$, respectively. In other words, SDMs were affectively more intense, more vivid, frequently more recalled, and considered to be more important than Non-SDMs. Descriptive statistics are in Table 12.

Table 3.12

Sample Sizes, Mean Scores and Standard Deviations of Memory Related Self-schema Scores for Recategorized Memory Types

	AI at event			AI at recall			Vividness			Recall frequency			Importance		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD
rSDM	447	4.20	1.12	446	3.48	1.26	445	3.99	0.82	446	3.50	1.03	446	4.02	1.18
rN-SDM	612	3.39	1.40	612	2.39	1.30	603	3.19	1.08	409	2.54	1.14	612	2.41	1.36

AI: Affective Intensity

The second hypothesis was tested by conducting a one way ANOVA. The dependent variable was the self-definition, and the between subject variable was the rAPM with its two levels, rNon-APM and rAPM. The effect of rAPM on self-definition was significant, $F(1, 1056) = 402.91, p < .001, MSE = 1.65$, meaning that rAPMs were more self-defining than rNon-APMs. Table 13 shows descriptive statistics.

Table 3.13

Sample Sizes, Mean Scores and Standard Deviations of Self-Definition for rAPMs and rNon-APM Categories

	N	M	SD
APM	544	3.42	1.39
Non-APM	256	1.73	1.068

In order to test the third hypothesis, three one way ANOVAs were conducted. The dependent variables were the average goal importance, the number of important goals, and the weighted average goal importance. The between subject variable was the SDM. The effects of SDM on all dependent variables were significant, $F(1, 986) = 11.10, p < .005, MSE = 0.48, F(1, 1057) = 51.45, p < .001, MSE = 1.99, F(1, 370) = 65.33, p < .001, MSE = 0.83$, respectively. The ratings for SDMs were higher than Non-SDMs in all of these three dependent variables. Descriptives of rSDMs rNon-SDMs and are shown in Table 14.

Table 3.14

Sample Sizes, Mean Scores and Standard Deviations of Memory Related Goal Importance Scores for Different Memory Types

	Average goal importance			Number of important goals			Weighted Average Goal Importance		
	N	M	SD	N	M	SD	N	M	SD
rSDM	420	4.31	0.62	447	2.70	1.41	184	3.54	0.83
rNon-SDM	560	4.16	0.74	612	2.07	1.40	188	2.78	0.99

The fourth and the fifth hypotheses were not tested because of the insufficient amount of memories which are linked to previous goals rather than current goals. In order to test whether memory relevance to current or previous goals is affected by new memory categorization type, a chi-square analysis was conducted for each variable. A significant dependence of the memory relevance to current or previous goals on memory type was found for both rSDM and rAPM, $\chi^2(3, 1058) = 53.323, p < 0.001$, $\chi^2(3, 801) = 59.00, p < 0.001$, respectively. Table 15 and 16 summarize the frequencies of different memory types depending on the memories' relation with current or previous goals.

Table 3.15

Frequencies of different levels of rSDM variable in terms of their relevance to goals.

	Only current	Only previous	Both	Neither	Total
Rsdm	40	16	148	118	332
rNon-SDM	28	11	112	192	343
Total	68	27	260	310	665

Table 3.16

Frequencies of different levels of rAPM variable in terms of their relevance to goals.

	Only current	Only previous	Both	Neither	Total
rAPM	49	18	180	150	397
rNon-APM	8	6	30	78	122
Total	57	24	210	228	519

The sixth hypothesis was tested by conducting three one way ANOVAs. The dependent variables were the average self rating score, the number of schematic aspects, and the weighted average self rating. The main effect of rSDM on the average self rating score, number of self schematic aspects and the weighted average self rating variables were significant, $F(1, 957) = 13.00, p < .001, MSE = 0.28$, $F(1, 1057) = 17.85, p < .001, MSE = 2.34$, $F(1, 265) = 39.57, p < .001, MSE = 0.59$. Descriptive statistics for rSDMs and rNon-SDMs are shown in Table 17.

Table 3.17

Sample Sizes, Mean Scores and Standard Deviations of Memory Related Self-schema Scores for rSDM and rNon-SDM Categories

	Average self rating			Number of schematic			Weighted average		
	score			aspects			self rating score		
	N	M	SD	N	M	SD	N	M	SD
rSDM	405	4.21	0.49	447	2.43	1.52	117	3.35	0.73
rNon-SDM	554	4.09	0.55	612	2.03	1.54	150	2.75	0.79

In summary, the analyses conducted with this second categorization revealed similar results with those of the first categorization. Memory characteristics ratings, self-definition ratings, the relevance to self and the relevance to goals ratings of self-defining memories were higher than non self-defining memories. The same pattern was true for affective and persistent memories and non affective and persistent memories.

Chapter 4

DISCUSSION

4.1. The existence of self-defining memories

The first two hypotheses addressed mainly the existence of self-defining memories as a specific autobiographical memory sub-type with some specific phenomenological characteristics.

The analyses were replicated with two different categorizations, and the results in both cases supported the first hypothesis; self-defining memories, when compared to non self-defining memories were found to be affectively more intense, more vivid, more important, more frequently recalled, and more linked to similar memories. The second hypothesis was also supported by the results in both cases; memories which were affectively more intense, more vivid, considered to be more important, more frequently recalled, in a higher relation with similar memories were found to be more self-defining compared to those who don't have these characteristics.

The third and the sixth hypotheses were also supported by the results; the relationship between self-defining memories and the goals was stronger compared to the relationship between non self-defining memories and the goals. Similarly, the relationship between affective and persistent memories and the goals was stronger compared to the relationship between non affective and persistent memories and the goals. The

relationship between self-defining memories and the self was stronger compared to the relationship between non self-defining memories and the self. In contrast, affective and persistent memories were not significantly different than non affective and persistent memories in terms of their relationship with the self-concept.

These results about the link between APMs and goals support the results of a study conducted by Singer (1990). In this study, he investigated the link between autobiographical memories, goal desirability and affective intensity. He used a similar methodology with this current study; he gave participants 15 life goal sentences and asked participants to rate their desirability. Then, he asked them to recall an autobiographical memory for each life goal and to rate the relevance of the memory to the attainment or nonattainment of these goals. He found that the memories cued by desirable goals were more goal-relevant and they were affectively more intense. So, in the light of previous studies and the current study, it is possible to say that what makes an autobiographical memory affective, vivid, important, persistent and self-defining can be its link with the individual's current goals.

The fact that self-defining memories have strong relationships with goals and with self-concept supports the claims of Conway and Pleydel-Pearce's (2000) Self and Memory System, MacAdams' (2001, 2003) life story account and Pillemer's (2001, 2003) concept of momentous events. In all of these theories, the importance of the goals in the autobiographical memory and the self relation were emphasized.

These results indicate the existence of a specific autobiographical memory sub-type, and support the self-defining memory concept of Singer and Moffit (1991-1992). In every comparison, SDMs were found to be significantly different than Non-SDMs. It means that there exist some memories in individuals' autobiographical knowledge base which define one's self better than others and which have different phenomenological characteristics than others.

4.2. The characteristics of self-defining memories

Although it is possible to conclude, based on these results, that SDMs constitute a specific sub-type of autobiographical memories, there may be a gap in the definition of this type of memory. A self-defining memory was defined by Singer and Moffit as a memory which is affectively intense, vivid, repetitively recalled, important, and linked with other similar memories. So, based on this claim, memories having these characteristics would be expected to be the ones which are the most self-defining and the memories which are self defining are expected to be the ones which have these phenomenological characteristics the most. But the results of the current study do not reveal such an exact correspondence between self-definition and the characteristics defined by Singer and Moffit (1991-1992).

There are two reasons of claiming the lack of an exact correspondence. First, comparisons between SDMs and APMs reveals that the phenomenological characteristics like affective intensity, vividness, repetitive recall, and importance are stronger in APMs compared to SDMs. Similarly, SDMs are considered by the participants to be more self-

defining than APMs. This comparison reveals that every SDM is not an APM, and certainly every APM is not an SDM. In other words, affective intensity, vividness, importance, and recall frequency are necessary characteristics for a memory to be self-defining, but they are not sufficient.

Second, affective and persistent memories were not significantly different than non affective and persistent memories in terms of their relationship with the self-concept. This means that when an affective and persistent memory is requested from participant, the memory which comes to mind is an ordinary memory in terms of its relation with the self. So, the characteristics of affective and persistent memories are not sufficient to establish a link between the memory and the self.

In the light of these two results, it is possible to say that there should be some other factors which makes a memory self-defining. Further analyses were conducted in order to clarify the factors which are necessary for a memory to be self-defining.

Factor analyses revealed that memories which are self-defining are likely to be affectively intense, important, frequently recalled, remembered, shared and they provide strong feelings of reliving the event. This result provides strong evidence to Singer and Moffit's (1991-1992) claim about the characteristics of self-defining memories but it does not provide another factor which makes an APM to be at the same time an SDM. In order to figure out the factors which predicts the extent to which a memory is self-defining, all memory characteristics were entered into a regression analyses.

In the memory characteristics survey, apart from the characteristics defined by Singer and Moffit (1991-1992), several other factors were added like the extent to which participant has an episodic memory rather than a semantic memory, the extent to which the participant believes he/she has really experienced this event, the extent to which the participant remembers the event from the first person perspective rather than the third person perspective. All of these variables were added to the regression analysis. Among them, the variable which best predicted self-definition variable was found to be the importance rating of the memory. The second was the visual sensation experienced by the participant at recall, the third was the extent to which the participant remembers the event from the first person perspective and the fourth was the generality of the event.

This result may be important in two ways, first, it points to the “first person perspective” factor which has not been claimed in the literature before as a characteristic of self-defining memories. When remembering the event, whether the person experience a recollection from the first person perspective as if he/she is the one who has the experience, or from the third person perspective as if he/she is the observer is found to be a factor which predicts self-definition. Furthermore, this factor was more predictive than factors like affective intensity, vividness, repetitive recall and link with similar memory.

This supports the findings of Libby and Eibach (2002). In a study that they investigated whether self-concept change affects visual perspective in autobiographical memory, they asked participants to think and write for five minutes about the aspect of themselves that had changed the most (or changed the last) since high school. Then, they were asked to retrieve five memories from high school that were related to the aspect of

themselves that they had just thought about. They found that, memories cued with the aspects of self that had changed the most were visualized from a third person perspective, whereas memories cued with the aspects of self that had changed the least were visualized from a first person perspective. The study of Libby and Eibach (2002), and the current study indicate that visualizing a memory from a first person perspective may be a characteristic of a self-defining memory.

The second reason for the significance of these results is that they reveal, among all the memory characteristics which have been assigned to self-defining memories until now, affective intensity at event, affective intensity at recall and recall frequency may be secondary factors, whereas importance, visual imagination and generality factors are primary factors.

This result would be compared with the results of Singer and Moffit's (1991-1992) study in which they have compared self-defining memories with ordinary autobiographical memories in terms of the generality, importance, emotionality and vividness factors. They have found that SDMs are significantly more important and more general than other autobiographical memories but they have not found any difference in terms of the vividness or emotionality.

Their result seems to contradict with the results of the current study in one way: they did not find any difference in terms of vividness and emotionality between self-defining memories and autobiographical memories, whereas in the current study such differences between self-defining memories and non self-defining memories were

present. In fact, this is not a contradiction; the reason of the lack of significance in Singer and Moffit's (1991-1992) study should be due to the fact that they compared self defining memories with ordinary autobiographical memories; whether these autobiographical memories are self-defining or not was not controlled in their study.

From another point of view, the results of current study are similar to those of Singer and Moffit's (1991-1992) study. Even though they didn't control whether autobiographical memories that they requested were self-defining or not, they were able to capture two differences: self-defining memories were more important and they were more general than autobiographical memories. These were the two variables which predicted self-definition in the current study. In other words, although in the current study, importance, vividness, recall frequency, generality, and affective intensity seems to change together with self-definition, only two of them predicted self-definition and these were the same variables as Singer and Moffit (1991-1992) has found. Therefore, these two studies reveal that importance and generality of an autobiographical memory are two substantive characteristics which make a memory self-defining.

The fact that generality and the importance factors are found to predict the self-definition variable could explain the structure of self-defining memories. In order to understand the meaning of generality factor, it is necessary to address Markus and Wurf's (1987) claim: A self-schema is constructed based on repeated categorization of similar events. Similarly, repeated categorization of similar autobiographical memories could lead to the construction of a self-defining memory. Therefore, it is plausible to understand why self-defining memories are more general than others; it is because several similar

autobiographical memories are categorized under a self-defining memory. In other words, similar autobiographical memories form a dense package of memories and a self-defining memory is the representative of this package. At that point, it would be important to find out the factors which make an autobiographical memory (specific or general) become the representative of this self-relevant memory package. As the results of these studies reveal, the importance variable could be one of these factors.

The importance variable in this current study was measuring, not the historical or sociological importance of an event, but the extent to which the event gives an important message, represents a critical life period or a turning point in the individuals' life. From this perspective, one speculation would be that among many autobiographical memories which give similar information about one's self, the ones which were considered to be more important than others become more accessible and used as a cognitive unit in order to encode and retrieve other autobiographical memories.

In summary, analyses revealed that self-defining memories are significantly different than non self-defining memories in several aspects. Besides, self-definition, affective intensity, frequency of recall, importance, frequency of sharing, and reliving characteristics of an autobiographical memory, change together. Among the factors which determines whether an autobiographical memory will be self-defining or not, the most important one is the importance factor. Vividness, first person perspective and the generality of a memory are also found to be predictive.

4.3. Revisiting theories

The results of this study mainly support previous literature, first in terms of the existence of self-defining memories and second in terms of their main characteristics. Still, some of the results could make a contribution to both Self-Defining Memory concept and Self and Memory System.

First, a contribution to self-defining memory concept would be that affective intensity at recall and repetitive recollection may not be obligatory characteristics of a self-defining memory. Indeed, it is a possibility that some memories which are very important for the individual's life, which gives important messages, which represents an important life period, which contain a strong visual sensation, and which are remembered from a first person perspective could be considered by individuals as self-defining memories, although they are not affectively intense.

Second, some of the results challenge the role of the goals in maintaining the link between autobiographical memories and the self-concept as claimed in Self and Memory System of Conway and Pleydell-Pearce (2000). There are two reasons. The first reason is that affective and persistent memories were found to have stronger relations with goals than non affective and persistent memories. Besides, the strength of this relation was not significantly different than self-defining memories. Still, the strength of the relation between affective and persistent memories and the self-concept was not significantly different than non affective and non persistent memories. In summary, those memories which were related to goals were not related to self-concept. The second reason is the

high number of self-defining memories which are linked to very few numbers of current and previous goals. If being related to goals were essential for defining the self, we would have observed a tighter link between the current and previous goals and the self-defining memories. The presence of goal-related memories which are not related to self and the fact that being relevant to goals is not an essential characteristic of self-defining memories questions the role of the goals in establishing and maintaining the link between autobiographical memory and the self. Another possibility is to conceptualize a goal as a factor which determines the emotional intensity and vividness of a memory but not the extent to which this memory defines the self.

4.4. Developmental perspective: The impact of a goal change

The fourth and the fifth hypotheses could not be tested because of the limited number of memories which assure the conditions. Although memories which are neither related with current goals nor previous goals and the memories which are related to both goals are well remembered, memories which were related to only current or only previous goals were not remembered well.

The limited number of memories which were once related to goals but which have lost their link with those goals with time could provide evidence to the Self Memory System, (SMS). In SMS, any discrepancy between the goals and the memories is not desirable so goal changes are discouraged. Still, if the goal change is unavoidable, (e.g., due to systematic changes in the environment or due to age related factors) individuals decrease the discrepancy by distorting or discarding the memories which are related with

previous goals. Therefore, based on this model, it is possible to explain why participants didn't remember the memories which were related with their goals once, but not related with their current goals now. Still, this model does not explain a) the limited number of memories which were not related with previous goals but which were related to current goals and b) the increased number of memories which are neither related with previous nor current goals.

As a general summary, the results reveal that it may be possible to consider self-defining memories as a specific sub-type of autobiographical memories which are characterized by their affective intensity, vividness, importance, frequency of recall, link with similar memories. It has also been found that the extent to which one memory is important for the individual's life, and the extent to which this memory is a composite memory constructed in relation with other similar memories, are predictors of this memories' capacity to reflect one's self. Besides, first person perspective and specifically visual sensation came out as supplementary factors.

4.5. Contributions of this study and suggestions for future research

Many researchers who, through self-narratives, investigated individuals' personality characteristics or individuals' tendency to develop some psychological disorders, used self-defining memory requests. Still, a systematic investigation of the characteristics of self-defining memories, and their link with the two important components of personality; goals, and self-concept has not been done.

The predictive value of affective intensity experienced by the individual during the recollection of a memory is questioned based on the results of this study. In contrast, the roles of importance, visual sensation, and experiencing the event from the first person perspective are brought forth.

One recommendation for further studies would be to investigate other possible characteristics of self-defining memories. The same methodology could be replicated while including first person perspective and imagery as factors in the affective and persistent memory request sheet in order to examine the possibility of a correspondence between self-defining memories and affective and persistent memories. Besides, an analysis including structural equation modeling could be employed in delineating the structure of the relationship between different characteristics that differentiate a self-defining memory.

The effect of goal change on the link between autobiographical memories and the self could not be detected in this study. In order to capture it, it is necessary to conduct a longitudinal study in which participants' current goals and self-concept are measured, and their self-defining memories are requested with intervals. With this method, self-defining memories which were discarded or added with time could be detected. The goal changes and self-concept changes, as well as the changes in the relationship between self-defining memories, goals and self-concept could be investigated.

Another suggestion, for clinical purposes, would be to investigate the link between some psychological disorders and self-defining memory characteristics using methods

like self-report or content analysis. It would also be helpful in clinical terms, to investigate the specific effect of negative emotion on self-evaluation through self-defining memories.

REFERENCES

- Barclay, C. R., & Subramaniam, G. (1987). Autobiographical memories and self-schemata. *Applied Cognitive Psychology, 1*(3), 169-182.
- 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.
- Brewer, W. F. (1996). What is recollective memory? In D. C. Rubin (Ed.), *Remembering our past: Studies in autobiographical memory* (pp. 19-66). Cambridge: Cambridge University Press.
- Carver, C. S., Scheier, M. F. (2002). Control processes and self-organization as complementary principles underlying behavior. *Personality and Social Psychology Review, 6*(4), 304-315.
- Chulef, A. S., Read, S. J., & Walsh, D. A. (2001). A hierarchical taxonomy of human goals. *Motivation and Emotion, 25*, 191-232.
- Crane, M., & Markus, H. (1982). Gender identity: the benefits of a self-schema approach. *Journal of Personality and Social Psychology, 43*(6), 1195-1197.
- Cross, S. E., & Markus, H. R. (1994). Self schemas, possible selves, and competent performance. *Journal of Educational Psychology, 86*(3), 423-438.
- Conway, M. A. (1996). Autobiographical memories and autobiographical knowledge. In D. C. Rubin (Ed.), *Remembering our past: Studies in autobiographical memory* (pp. 19-66). Cambridge: Cambridge University Press.
- Conway, M. A. (2005). Memory and the self. *Journal of Memory and Language, 53*(4), 594-628.
- Conway, M. A., & Holmes, A. (2004). Psychosocial stages and the availability of autobiographical memories. *Journal of Personality, 72*, 461-480.
- Conway, M. A., & Pleydell-Pearce, C. W. (2000). The construction of autobiographical memories in the self-memory system. *Psychological Review, 107*(2), 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.
- Gülgöz, S., & Rubin, D. C. (2001). Kişisel anıların hatırlanması: bir betimleme çalışması [Recalling personal memories: A descriptive study]. *Türk Psikoloji Dergisi, 16*, 37-55.

Harter, S. (1996). Historical roots of contemporary issues involving self-concept. In B. A. Bracken (Ed.), *Handbook of self-concept: Developmental, social, and clinical considerations* (pp. 1-37). New York: Wiley.

Howe, M. L., Courage, M. L., & Edison, S. C. (2003). When autobiographical memory begins. *Developmental Review, 23*(4), 471-494.

James, W., (1950). *The principles of psychology: Volume 1*. New York: Dover Publications.

Libby, L. K., Eibach, R. P. (2002). Looking back in time: Self-concept change affects visual perspective in autobiographical memory. *Journal of Personality and Social Psychology, 82*, 2, 167-179.

Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology, 35*, 63-78.

Markus, H. (1999). Self-schemata and processing information about the self. In R. F. Baumeister (Ed.), *The self in social psychology* (pp. 123-138). Philadelphia, PA: Psychology Press.

Markus, H., & Wurf, E. (1987). The dynamic self-concept: a social psychological perspective. *Annual Review of Psychology, 38*, 299-337.

McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology, 5*(2), 100-122.

McAdams, D. P. (2003). Identity and the life story. In Fivush, R. and Haden, C. A. (Eds.) *Autobiographical memory and the construction of a narrative self: Developmental and cultural perspectives* (pp. 187-207). Mahwah NJ, US: Lawrence Erlbaum Associates Publishers.

McAdams, D. P., Anyidoho, N. A., Brown, C., Huang, Y. T., Kaplan, B., & Machado, M. A. (2004). Traits and stories: Links between dispositional and narrative features of personality. *Journal of Personality, 72*(4), 761-784.

McAdams, D. P., Bauer, J. J., Sakaeda, A. R., Anyidoho, N. A., Machado, M. A., Magrino-Failla, K., et al. (2006). Continuity and change in the life story: A longitudinal study of autobiographical memories in emerging adulthood. *Journal of Personality, 74*(5), 1371-1400.

McAdams, D. P., Hoffman, B. J., Mansfield, E. D., & Day, R. (1996). Themes of agency and communion in significant autobiographical scenes. *Journal of Personality, 64*(2), 339-377.

Moberly, N. J., & MacLeod, A. K. (2006). Goal pursuit, goal self-concordance, and the accessibility of autobiographical knowledge. *Memory, 14*(7), 901-915.

Nelson, K. D., & Fivush, R. (2004). The emergence of autobiographical memory: A social cultural developmental theory. *Psychological Review, 111*(2), 486-511.

- Pillemer, D. B. (2001). Momentous events and the life story. *Review of General Psychology, 5*, 123-134.
- Pillemer, D. B. (2003). Directive functions of autobiographical memory: The guiding power of the specific episode. *Memory, 11*(2), 193-202.
- Reese, E. (2002). Social factors in the development of autobiographical memory: The state of the art. [Review]. *Social Development, 11*(1), 124-142.
- Rubin, D. (1996). Introduction. In D. Rubin (Ed.), *Remembering our past: Studies in autobiographical memory* (pp. 1-15). Cambridge: Cambridge University Press
- Singer, J. A. (1990). Affective responses to autobiographical memories and their relationship to long term goal. *Journal of Personality, 58*(3), 535-563.
- Singer, J. A. (1995). Seeing one's self: locating narrative memory in a framework of personality. *Journal of Personality, 63*(3), 429-45.
- Singer, J. A. (2004). Narrative identity and meaning making across the adult lifespan: An introduction. *Journal of Personality, 72*(3), 437-459.
- Singer, J. A., & Moffitt, K. H. (1991-92). An experimental investigation of specificity and generality in memory narratives. *Imagination, Cognition, and Personality, 11*, 233-257.
- Singer, J. A. & Salovey, P. (1993). *The remembered self: Emotion and memory in personality*. New York: The Free Press.
- Sutherland, K., & Bryant, R. A. (2005). Self-defining memories in post-traumatic stress disorder. *British Journal of Clinical Psychology, 44*, 591-598.
- Sutherland, K., & Bryant, R. A. (2008). Autobiographical memory and the self-memory system in posttraumatic stress disorder. *Journal of Anxiety Disorders, 22*(3), 555-560.
- Sutin, A. R., & Robins, R. W. (2007). Phenomenology of autobiographical memories: The memory experiences questionnaire. *Memory, 15*(4), 390-411.
- Sutin, A. R., & Robins, R. W. (2008). Going forward by drawing from the past: Personal strivings, personally meaningful memories, and personality traits. *Journal of Personality, 76*(3), 631-663.
- Terraciano, A., Abdel-Khalek, A. M., Adám, N., Adamovová, L., Ahn, C.-K., Ahn, H.-N., Alansari, B. M., Alcalay, L., Allik, J., Angleitner, A., Avia, M. D., Ayearst, L. E., Barbaranelli, C., Beer, A., Borg-Cunen, M. A., Bratko, D., Brunner-Sciara, M., Budzinski, L., Camart, N., Dahourou, D., De Fruyt, F., de Lima, M. P., del Pilar, G. E. H., Diener E., Falzon, R., Fernando, K., Ficková, E., Fischer, R., Flores-Mendoza, C., Ghayur, M. A., Gülgöz, S., Hagberg, B., Halberstadt, J., Halim, M. S., Hřebíková, M., Humrichouse, J., Jensen, H. H., Jovic, D. D., Jónsson, F. H., Houry, B., Klinkosz, W.,

Knezevic, G., Lauri, M. A., Leibovich, N., Martin, T. A., Marusic, I., Mastor, K. A., Matsumoto, D., McRorie, M., Meshcheriakov, B., Mortensen, E. L., Munyae, M., Nagy, J., Nakazato, K., Nansubuga, F., Oishi, S., Ojedokun, A. O., Ostendorf, F., Paulhus, D. L., Pelevin, S., Petot, J.-M., Podobnik, N., Porrata, J. L., Pramila, V. S., Prentice, G., Realo, A., Reátegui, N., Rolland, J.-P., Rossier, J., Ruch, W., Rus., V. S., Sánchez-Bernardos, M. L., Schmidt, V., Sciculna-Calleja, S., Sekowski, A., Shakespeare-Finch, J., Shimonaka, Y., Simonetti, F., Sineshaw, T., Siuta, J., Smith, P. B., Trapnell, P. D., Trobst, K. K., Wang, L., Yik, M., Zupancic, A., McCrae, R. R. (2005). National Character Does Not Reflect Mean Personality Trait Levels in 49 Cultures. *Science*, *310*, 96-100.

Wang, Q. (2004). The emergence of cultural self-constructs: Autobiographical memory and self-description in European American and Chinese children. *Developmental Psychology*, *40*(1), 3-15.

Woike, B. (1995). Most-memorable experiences: Evidence for a link between implicit and explicit motives and social cognitive processes in everyday life. *Journal of Personality and Social Psychology*, *68*, 1081-1091.

Woike, B., Gershkovich, R., Piorkowski, R., & Polo, M. (1999). The role of motives in the content and structure of autobiographical memory. *Journal of Personality and Social Psychology*, *76*(4), 600-612.

Woike, B., McLeod, S., & Goggin, M. (2003). Implicit and explicit motives influence accessibility to different autobiographical knowledge. *Personality and Social Psychology Bulletin*, *29*(8), 1046-1055.

APPENDICES

Appendix A

Autobiographical Memory Requests

Sizi Tanımlayan Anılar

“Sizi tanımlayan anılar, nasıl biri olduğunuzu dair güçlü ve yoğun bilgiler içerdiğini düşündüğünüz anılardır. Bu anılar, **sizin** kendinizi tanımlamanıza yardımcı olurlar, kendinizi nasıl gördüğünüzü diğer anılarınızdan daha iyi anlatırlar. Çok yakın hissettiğiniz bir dostunuza, sizi daha iyi ve doğru tanıması için anlatabileceğiniz geçmişten örneklerdir.

Sizi Tanımlamayan Anılar

“Sizi tanımlamayan anılar, şu anda nasıl bir birey olduğunuzu anlamanız konusunda size herhangi bir biçimde yardımcı olmayan, sizin kendinizi nasıl gördüğünüze ya da görmediğinize dair herhangi bir bilgi de içermeyen anılardır. Bu anılar sizin nasıl biri olduğunuzdan bağımsız olarak yaşadığımız olaylardır.”

Duygu Yüklü Ve Kalıcı Olan Anılar

“Duygu yüklü ve kalıcı anılar, çok net hatırladığınız ve hatırladığınızda sanki o anı yeniden yaşıyormuş gibi hissettiğiniz anılardır. Bu anılar sizde yoğun ve güçlü duygular uyandıran, sizin için önemli olan, sık sık hatırladığınız ve aklınıza gelen anılardır.”

Duygu Yüklü De Olmayan, Kalıcı Da Olmayan Anılar

“Duygu yüklü ve kalıcı olmayan anılar, çok net hatırlamadığınız veya hatırladığınızda sizde pek bir duygu uyandırmayan anılardır. Bu anılar, sizin için çok da önemli olmayan, ender olarak aklınıza gelen anılardır.”

Appendix B

Memory Characteristics Questionnaire

Araştırmamızın bu kısmında, her bir anınızın bazı özelliklerini öğrenmeyi amaçlıyoruz. Bu kitapçıkta, her anınız için ayrı bir anı özellikleri ölçeği bulacaksınız. Lütfen anınızı düşünerek, aşağıdaki her ifadeye ne kadar katıldığınızı, 1'den 5'e kadar size en uygun olan sayıyı işaretleyerek değerlendiriniz.

1	2	3	4	5
Hiç değil		Orta düzeyde		Çok yüksek düzeyde

		1	2	3	4	5
1	Olay sırasında çok yoğun duygular hissetmişim.					
2	Olay sırasında hissettiğim duyguları şimdi de aynı yoğunlukta hissediyorum.					
3	Olayı hatırlarken, olayı yeniden yaşıyormuş gibi hissediyorum.					
4	Olayı hatırlarken, onu zihnimde duyabiliyorum .					
5	Olayı hatırlarken, onu zihnimde görebiliyorum .					
6	İnsanlar bazı olayları, hatırlamasalar da başlarından geçtiğini bilirler. Ben anımı hatırlarken, bu olayın başımdan geçtiğini bilmekten öte onu gerçekten hatırlayabiliyorum .					
7	Bu olay benim kim olduğumu tanımlayan bir olaydır.					
8	Bu olay bana bir mesaj verdiği için ya da yaşamımda kritik bir zamanı veya dönüm noktasını simgelediği için benim için önemli bir anıdır.					
9	Bu olayın gerçekten hatırladığım şekilde gerçekleştiğine ve olmamış bir şeyi hayal etmediğime inanıyorum.					
10	Olayı anımsarken, olayı dışardan seyreden biri değil, ona yeniden katılan biri olduğumu hissediyorum.					
11	Olayı anımsarken, olaya yeniden katılan biri gibi değil, dışardan seyreden biri olduğumu hissediyorum.					

1	2	3	4	5
Hiç değil		Orta sıklıkta		Çok sık

		1	2	3	4	5
12	Olduğundan beri, bu olay sık sık aklıma gelir .					
13	Olduğundan beri, bu olay hakkında düşündüm					
14	Olduğundan beri, bu olay hakkında konuştum .					

15. Bildiğiniz kadarıyla, bu anı, belli bir zaman ve yerde **bir kere** gerçekleşmiş bir olayın mı, birçok benzer ya da ilişkili olayın **birleşiminin** mi ya da bir günden fazla bir süreye **yayılmış** bir olayın mı hatırlanmasıdır?

1	2	3
Bir kerede gerçekleşmiş bir olay	Birkaç olayın birleşimi	Bir günden fazla bir süreye yayılmış bir olay

16. Lütfen olayın **tarihini** (gün / ay / yıl) olabildiğince doğru bir şekilde hatırlamaya çalışın. *Tahmin etmeniz gerekse bile lütfen bir gün, ay ve yıl yazın.* _____ / _____ / _____

Appendix C

Current Goals

Araştırmamızın bu kısmında, şimdiki hedeflerinizin neler olduğunu öğrenmek istiyoruz. Yanıtlarınız gizli ve isimsiz tutulacaktır. Lütfen, tabloda yer alan 25 hedefin sizin **bugünkü** hedeflerinizin arasında yer alıp almadığını düşünün ve her bir maddenin sizin için ne kadar önemli olduğunu 1 ile 5 arasında bir puan vererek değerlendirin.

1	2	3	4	5
Hiç önemli değil		Orta düzeyde önemli		Çok önemli

No	HEDEFLER	1	2	3	4	5
1	Karşılıklı bağlılık içeren romantik bir ilişki yaşamak					
2	İyi bir evlat, çocuklarıma iyi ebeveyn olmak					
3	Aileme sadık olmak					
4	Anne ve babamın istek ve ihtiyaçlarına uygun davranmak					
5	Geleneklerimizi ve varolan toplum düzenini korumak					
6	Güvenli ve tutarlı bir hayata sahip olmak					
7	Hayatın getirdiklerini kabullenmek					
8	Dinin kurallarını yerine getirmek					
9	Kendi özgür seçimlerini yapabilmek					
10	Sağlıklı, temiz ve zinde olmak					
11	Hayatımda bana yol gösterecek, güvенеbileceğim insanların olması					
12	Toplumda tanınan, saygı duyulan biri olmak					
13	Toplumda sözü geçen biri olmak					
14	Reddedilmekten ve eleştiriden kaçınmak					
15	Stres, suçluluk ve hata yapmaktan kaçınmak					
16	Topluma faydalı davaları savunmak					
17	Akılcı ve gerçekçi olmak					
18	Zor işlerin üstesinden gelen biri olmak					
19	İşimde güç ve sorumluluk sahibi olmak					
20	Hobilerime zaman ayırmak					
21	Hayattan tat almak					
22	Heyecanlı bir yaşantı sahibi olmak					
23	Hayatımı anlamlı kılmak					
24	İç huzuruna sahip olmak					
25	Kendime saygı duymak					

Appendix D

Self Characteristics Questionnaire

Araştırmamızın bu kısmında, kendinizi nasıl tanımladığınızı öğrenmek istiyoruz. Yanıtlarınız gizli ve isimsiz tutulacaktır. Lütfen, aşağıda verilen 30 özelliği kendiniz hakkındaki düşünceleriniz açısından değerlendirin. Her satırın iki ucunda bir özellik yazılıdır. Yapmanız gereken, kendinizi tanımlamak için bu satırda yer alan çizgilerden birini işaretlemektir.

Örneğin, kendinizi kısa boylu birisi olarak görüyorsanız, ölçeği şu şekilde işaretlersiniz:

Kısa

X _____

Uzun

Kendinizi ne kısa, ne de uzun boylu olarak tanımlamıyorsanız, ölçeği şu şekilde işaretlersiniz:

Kısa

_____ X _____

Uzun

Benlik Envanteri

1. Endişeli, sinirli, kaygılı	_____	Sakin, rahat, gevşek
2. Arkadaş canlısı, sıcak, yakın	_____	Soğuk, mesafeli, ilgisiz
3. Hayalperest, hayalgücü kuvvetli	_____	Pratik, gerçekçi, ayakları yere basan
4. Güvenen, kolay aldanan, saf	_____	Şüpheli, kuşkuyla yaklaşan, güvenmez
5. Maharetli, becerikli, usta	_____	Beceriksiz, hazırlıksız
6. Güç sinirlenen, sakin, huzurlu	_____	Çabuk kızan, alıngan, öfkeli
7. Yalnız, utangaç, kalabalıktan kaçan	_____	Girişken, topluluğu seven, sosyal
8. Sanata ilgisiz, güzelliğe kayıtsız	_____	Sanata ve güzelliğe duyarlı
9. İçten pazarlıklı, kurnaz, dalavereci	_____	Açık ve doğru sözlü, içten
10. Düzensiz, dikkatsiz, dağınık	_____	Düzenli, sistemli, temiz
11. Üzgün, hüznü, kötümser	_____	Halinden memnun, tatmin, iyimser
12. Baskın, kendini ortaya koyan, lider	_____	İtaatkâr, arka planda kalan
13. Duygulara duyarlı, tutkulu	_____	Duygusuz, anlayırsız
14. Cömert, verici, düşünceli	_____	Bencil, cimri, açgözlü
15. Görevine bağlı, ilkeli, sorumlu	_____	Güvenilmez, sorumsuz
16. Başkalarıyla rahat, kendinden emin	_____	Utangaç, güvensiz, sıkılgan
17. Ağırkanlı, uyuşuk, enerjik olmayan	_____	Aktif, enerjik, dinç
18. Alışkanlıklara bağlı, rutini seven	_____	Çeşitlilik seven, yenilikçi
19. Saldırgan, rekabetçi, inatçı	_____	Uysal, işbirliğini seven, yumuşak başlı
20. Tembel, amaçsız, hırssız	_____	Hırslı, işkolik
21. İsteklerini kontrol edemeyen, dürtülerine esir olan	_____	Kontrollü, kendini tutan
22. Maceracı, risk alan, eğlenceyi seven	_____	Heyecandan uzak duran, risk almayan
23. Entelektüel açıdan meraklı, açık fikirli	_____	Fikirlerden sıkılan, ilgi alanları kısıtlı
24. Alçak gönüllü, yalın, sade	_____	Kibirli, kendini beğenmiş, küstah
25. Disiplinli, kararlı, iradeli	_____	Erteleyen, pes eden, güçsüz
26. Kriz durumlarıyla başa çıkabilen, esnek	_____	Dayanıksız, kırılğan, çaresiz
27. Ciddi, durgun, ağırbaşlı	_____	Mutlu, neşeli, şen şakrak
28. Tutucu, gelenekçi, dogmatik	_____	Geniş görüşlü, özgür düşünceli
29. Merhametsiz, duygularına yenilmeyen, sert	_____	Karşısındakinin duygularını anlayan, insancıl, merhametli
30. Sabırsız, aklına eseni yapan, enikonu düşünmeyen	_____	Temkinli, dikkatli, ayrıntılı düşünen