# **Autobiographical Memory for Repeated Ordinary Events**

By

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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.

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**ABSTRACT** 

Repeated events were suggested to produce a general memory without specific

descriptions. However, one event cannot occur in exactly the same way for a second

time. Thus, every instance of repeated events will include specific details. The aim of

this study was to understand whether or not instances of a repeated event were

remembered with details. In this study, the differences in memory details between five

instances of a repeated event were examined. The sample of the present study

comprised of 91 adults, between 19 and 57 years old ( $M_{age}$ = 27.2, SD= 8.6; 31 male).

Vacation memories were used as the repeated event. Participants were asked to provide

their memories from their vacations in the following order: last vacation, first vacation,

random vacation, distinct vacation and typical vacation. They were also asked to

provide a memory which is unrelated to the vacation memories. After that, they

completed a memory questionnaire for all of these memories. Multivariate analysis of

variance showed that the distinct instance is not remembered with script-like details,

whereas, other instances include significantly more script-like details. Furthermore, the

distinct instance and the first instance were remembered with less memory details in

comparison to other instances. Planned contrasts revealed that repeated events are less

important, less vivid and less detailed in comparison to the control event. Theoretical

implications of the findings were discussed.

**Keywords**: autobiographical memory, repeated events, script

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#### ÖZET

Tekrarlanan olayların, spesifik ayrıntılar içermeyen genel anılar oluşturdukları öne sürülmüştür. Ancak, bir olay tam olarak aynı şekilde ikinci kez tekrarlanamaz. Bu nedenle, tekrarlanan olayların her bir durumu spesifik detaylar içerecektir. Bu çalışmada, tekrar tekrar yaşanan bir olayın beş durum örneği arasındaki farklılıklar incelenmiştir. Çalışmanın örneklemini 19 ve 57 yaş aralığındaki 91 yetişkin ( $M_{vas}$ = 27.2, SD= 8.6; 31 erkek) oluşturmaktadır. Tatil anıları tekrarlanan olay olarak ele alınmıştır. Katılımcılardan belirtilen sırada tatil anılarını anlatmaları istenmiştir: son tatil, ilk tatil, herhangi bir tatil, ilginç tatil ve tipik tatil. Bunlara ek olarak, tatil anılarıyla bağlantılı olmayan herhangi bir anı anlatmaları istenmiştir. Bundan sonra, katılımcılar anlatılan her bir anı için anı özellikleri anketini cevaplandırdılar. Çok değişkenli varyans analizinin sonuçlarına göre ilginç olayın senaryo benzeri ayrıntılarla hatırlanmadığı, oysa diğer olayların daha çok senaryo benzeri bilgiler içerdiği bulunmuştur. Ayrıca, ilginç olay ve ilk olay diğer olaylara kıyasla daha az detaylı hatırlandılar. Tekrarlanan olaylar kontrol olayla karşılaştırıldığında, tekrarlanan olayların daha az önemli, daha az canlı ve daha az detaylı oldukları bulunmuştur. Bulguların kuramsal etkileri tartışılmıştır.

Anahtar Sözcükler: Otobiyografik bellek, Tekrarlanan olaylar, Senaryo teorisi.

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#### **CHAPTER 1: INTRODUCTION**

Autobiographical memory is defined as the memory for personally experienced past events which are related to the self and which include information about specific situations (Bauer, 2007). It is considered as essential for being a person, since "a person without an autobiographical memory would have no self, no identity, no way of responding to the world emotionally" (Conway, 1996, p. 295).

Previous research on autobiographical memory has focused on its relation to the self (Conway & Peardell-Pearce, 2000); its relationship with neurological damage (Conway & Fthenaki, 2000); the factors which influenced its development (Nelson & Fivush, 2004), and its impacts on psychological disorders (Williams et al., 2007). However, autobiographical memory for repeated ordinary events, which constitutes most of our memory, has received little attention from researchers.

Phenomenological characteristics are important components of the autobiographical memory which have been used to examine the properties of memories in several studies (Talarico, Labar, & Rubin, 2004; Sutin & Robins, 2007; 2010). In order to understand autobiographical memory more comprehensively, phenomenological characteristics such as vividness, time perspective, valence, sharing, sensory details, emotional intensity and field/observer will be measured.

The impact of the age of the memory is another important factor in the study of autobiographical memory. Janssen, Rubin and Jacques (2011) have revealed that there are significant differences between the autobiographical memories of what happened in

the near past and those of the remote past. The recent ones were shown to be highly vivid and relieved. Hence, the age of the memory is a critical variable for the present study.

The theoretical background of the study of repeated events is primarily based on the script theory. According to the script theory, our memory for repeated events would include general features of the event instead of its specific details (Nelson, 1986) since the memory of repeated events has a tendency to be in the form of a general representation. Furthermore, this theory states that people tend to remember the memories better if the events include script inconsistent actions (Bower, Black & Turner, 1979). Based on the information gathered from the script theory, researchers investigated children's ability to remember specific instances of repeated events (Brubacher, Roberts & Powell, 2011; Fivush, Hudson, & Nelson, 1984; Roberts & Powell, 2001). The findings illustrated that memories for specific instances of a repeated event may be subject to interference from other instances of the same event. In addition, children's memories were found to be weaker for repeated events when compared to single time occurrence events. These studies (Connolly & Lindsay, 2001; Connolly & Price, 2006) are somewhat limited as they did not test children's memory for personal memories.

Previous literature examined only children's memory about repeated events. Despite the fact that events that are experienced repeatedly constitute an important amount of memory, none of the previous studies have investigated adults' performance on

remembering repeated ordinary events. Hence, the characteristics of repeated events in relation to specific personal memories have remained largely unexamined.

As it was highlighted by Linton (1982), there would be variations between different instances of a repeated event in terms of the details of the memory and the script-relatedness of the memory. Specifically, last, first and distinct instances were suggested to be considered as landmarks in one's autobiographical memory (Shum, 1998). Hence, examining the differences between different instances would provide a better insight for understanding the features of the memory for repeated events.

In the light of the previous findings, the present study aims to investigate adults' memory for repeated ordinary events. Specifically, the present study will examine the differences between memories of the last, first, random, distinct and typical instances of a repeated event.

#### **CHAPTER 2: LITERATURE REVIEW**

## 2.1. Autobiographical Memory

Nelson (1993) claimed that autobiographical memory is "specific, personal, long-lasting, and (usually) of significance to the self-system. Phenomenally, it forms one's personal life history" (p.8). Several researchers emphasized the relationship of autobiographical memory with self and personally important experiences (Brewer, 1988; Conway & Rubin, 1993). Furthermore, some researchers claim that autobiographical memory results from the interactions of self-reflection, self-agency, self-ownership and personal temporality (Klein, German, Cosmides, & Gabriel, 2004). A more recent definition of autobiographical memory proposed by Nelson and Fivush (2004) has defined it as "declarative, explicit memory for specific points in the past, recalled from [the] unique perspective of the self in relation to others" (p.488).

Conway and Pleydell-Pearce (2000) introduced the Self-Memory-System (SMS) in order to explain the relationship between autobiographical memory and self. According to this model, autobiographical memory consists of an autobiographical knowledge base and the working self. The knowledge base includes life time periods, general events and event specific knowledge. Lifetime periods are composed of the general knowledge about a themed time in an individual's life such as "the university life theme". On the

other hand, general events encompass single representations of repeated events or a sequence of related events. These events are grouped into clusters with a common theme, such as "vacation in X", among which the first times are remembered better. The detailed information about the individual events is stored in the event specific knowledge component. These specific details fade very quickly, though certain memories tend to endure longer, which are the originating events, turning points, anchoring events and analogous events. According to SMS, autobiographical memories are only formed when all these levels are available. Furthermore, Conway and Pleydell-Pearce (2000) have proposed that only the events that are relevant to our personal goals enter the autobiographical knowledge base. Therefore, people will not remember the events which are not related to their personal goals.

Previous studies about autobiographical memory focused on memory for events that are related to people's well-being and survival. These memories are those which are emotionally intense (Berntsen & Rubin, 2002; Talarico, LaBar, & Rubin, 2004) or traumatic (Brewin, 2007; Geraerts, Hauer, & Wessel, 2010). On the other hand, most of our autobiographical memory includes repeated experiences of ordinary events, which have received little attention from researchers. In this study, the characteristics of memories for repeated ordinary events will be examined. It is essential to study the autobiographical memory for repeated events to generate a better understanding of the events experienced in people's daily lives.

# 2.1.1. Phenomenology of Autobiographical Memory

Autobiographical memory includes phenomenological experiences which allow people to travel back in time and re-experience the original event (Tulving, 2002).

According to Tulving (2002), the memory of the event should be placed in time; context and the sensory experience should be recreated in order to experience the memory again. Researchers have shown that phenomenological characteristics such as intensity and vividness define those memories which are most important to us personally (Singer & Salovey, 1993).

Phenomenology consists of several dimensions such as personal importance, vividness, time perspective, sensory details, emotional intensity, valence, visual perspective, remember/know and sharing.

The perceived importance of an event is an important property of autobiographical memory, which influences other characteristics of the memory in general. For example, Conway and Bekerian (1986) illustrated that personally important memories are also the ones which are highly vivid. Hence, the subject's judgment about the personal importance will be included in the present study.

Vividness refers to the clarity of the particular memory: it is defined as the most important characteristic of autobiographical memory and even used as the defining feature of it (Greenberg & Rubin, 2003). According to Brewer (1986), vividness of a memory identifies the memories which are remembered in contrast to those which are known.

Another important component of the phenomenology is its time perspective, which refers to the perceived accuracy of when the event occurred. It is known that older memories have less effect on current self-view (Ross & Wilson, 2002).

In addition to vividness and time perspective, the intensity of re-experiencing sensory details of a memory is another important component of autobiographical memory. Sensory details include all of the senses except sight, which is measured in vividness (Sutin & Robins, 2007). Emotional intensity is another important dimension of the phenomenology: it measures the extent to which people feel the emotions at the time of encoding and retrieval. Beike and Wirth-Beaumont (2005) found that intensity of the emotion at retrieval plays an important role in determining the sense of closure in memories.

Valence is defined as the extent to which a memory is perceived as negative or positive. Lazarus (1991) highlighted the fact that positive valence is evoked by a situation which has advantageous consequences; whereas negative valence is evoked by a situation which has harmful consequences.

Another important component of the phenomenology is the visual perspective of the person, which is also known as the field/observer perspective. According to Nigro and Neisser (1983), people can remember an event either from a first person perspective or a third person perspective. In the first person perspective, the event is remembered as it was seen through the individual's own eyes; whereas in the third person perspective the event is remembered as it was seen through an observer's eyes. When compared to third person memories, first person memories were found to score higher on other

characteristics such as vividness, coherence, time perspective, sensory details and emotional intensity (Sutin & Robins, 2010).

The remember/know paradigm (Tulving, 1985) distinguishes between two forms of awareness of a memory. "Remember" refers to the retrieval of the event from episodic memory and "know" refers to the retrieval of the event from semantic memory.

According to this paradigm, a person "remembers" an event if he/she recollects it; on the other hand, a person "knows" an event if he/she is familiar with the event.

In addition to the remember/know paradigm, the extent to which people share their memories with others has a significant impact on autobiographical memory. It was shown that rehearsal increases the ability to remember the event specific knowledge about a memory (Conway & Pleydell-Pearce, 2000).

# 2.1.2. Autobiographical Memory and Memory Age

The amount of time that has passed since the event occurred, which is defined as memory age in this study, is an important variable in the study of autobiographical memory. Various differences have been illustrated when memories from early life and later life are compared to each other. First, Schooler, Shiffrin, and Raaijmakers (2001) suggested that as the age of the memory increases, the content of the memory becomes more semantic. Second, in a recent study, Janssen, Rubin and Jacques (2011) also found that recent events were rated higher in vividness and reliving in comparison to remote events. Third, recent memories were frequently more shared and reminisced (Kristo,

Janssen, & Murre, 2009). Fourth, greater details were found in the memories that happened in the recent past (Brewer, 1986). These findings support the importance of the amount of time that has passed after the event occurred.

Overall, autobiographical memory is integrated with broader events, repeated events and event specific knowledge, which are accessed during the retrieval of a particular autobiographical memory. In addition, studying its phenomenological characteristics provides broad information about autobiographical memory. The script theory is the most developed theory that can be used for explanation of instances of complex, repeated autobiographical memories. To generate a theoretical baseline for the memories of repeated ordinary events, literature based on schema and the script theory will be explained in the following section.

# 2.2. Schema and Script Theory

Schemas, first defined by Bartlett (1932), are general knowledge structures generated from people's previous experiences about the world, events, people and actions. In a slightly more general definition, Brewer (1999) identified schemas as the psychological constructs which account for all forms of human generic knowledge. For example, a schema for a room includes four walls, a ceiling, lighting and a window. When specific information about an instance is absent, it will be compensated by the default values of the schema.

People interpret and understand the situations by retrieving the related schema from long term memory into working memory. Schemas help us form expectations for certain events which are stored in long-term memory and quickly activated, depending on the context (Hastie, 1981). Furthermore, formation of schemas allows children to generate a system to cope with different real life situations (Hoy, 1991). Hence, schemas help us deal with an overwhelming amount of information in daily life.

According to Bartlett (1932), our schemas will determine what people remember from a specific story. In order to test this prediction, Bartlett (1932) presented stories from a different culture that might lead to a conflict between the previous knowledge of the various participants, who were Cambridge University students. The hypothesis was that people who read a story from a different culture will form an altered memory of it, making it more acceptable from their own point of view. The findings showed that participants actually remembered the story more like an English story. On the basis of this study, Bartlett (1932) proposed that memory for the specific instances decay over time whereas memory for the underlying schema does not.

Anderson and Pichert (1978) were interested in understanding the influences of schemas on encoding and retrieval processes. They asked participants to take the viewpoints of a burglar or a home buyer while reading a passage about the things two boys did in a house. Results revealed that people's previous knowledge influences the information they recall, as the burglars remembered the valuable properties of the house while the home buyers remembered the characteristics of the house. After this first experiment, researchers asked participants to recall the story for the second time;

however, this time half of the participants were asked to switch their view points. People who changed their viewpoints remembered more information related to their new viewpoints when compared to people who did not change their viewpoints. This study illustrated the importance of schemas in the retrieval process in addition to the encoding process.

After the initial experiments, researchers started to apply the schema concept to naturalistic situations. Brewer and Treyens (1981) asked participants to wait in a room which was decorated like a graduate student's office. Participants stayed in the office, which included both typical and atypical objects, for 35 seconds. When they were asked to recall objects in the room, participants reported more atypical objects. On the other hand, the majority of the participants reported that there were books in the office, which actually were not there. In another study, Pezdek, Whetstone, Reynolds, Askari and Dougherty (1989) used a similar methodology; however, they examined the memory of the participants both immediately and after a 1 day delay. They replicated Brewer and Treyens's (1981) study and showed that people still remember schema inconsistent objects after a 1-day delay. Similarly, Lampinen, Copeland and Neuschatz (2001) conducted a study using a graduate student's office under intentional or incidental learning conditions and tested their memory after 48 hours. They illustrated that the number of falsely reported objects increased significantly after 48 hours.

Schema is a broad concept including subtypes; namely, self-schema, which contains information about one's own personality; person schema, which focuses on the traits of people; role schema, which is about people's behavior in certain situations; and event

schema, or script, which is about the sequence of events (Taylor, Cronin, & Hansen, 1991).

Script is a kind of schema that shows the sequences of actions, causal connections and actions in events (Schank, 1982; Schank & Abelson, 1977). The script theory claims that a cognitive representation of typical occurrences is formed with repeated experience (Nelson, 1986). In other words, as time passes, our memory becomes more script-like (Myles-Worsley, Cromer, & Dodd, 1986).

# 2.2. Script Theory Research Findings

Generally, research on the impact of scripts has shown two main results (Lampinen, Copeland, & Neuschatz, 2001). First, people tend to remember script-inconsistent details better than details which are script-consistent. Second, people falsely recognize the script consistent information which is actually not there in the original event. For example, Bower, Black and Turner (1979) conducted a study where participants read 6 stories that included both script-consistent and inconsistent actions and were asked to recall them after 10 minutes. The findings of this study revealed two important results. Participants tended to recall script inconsistent actions better and they falsely recalled script consistent actions that were not stated in the text.

Hudson (1988) further made a distinction between the atypical actions, arguing that atypical actions which are unimportant to the event and atypical actions which are relevant to the action have different implications on recall of the event. Moreover,

Hudson (1988) confirmed this prediction by showing that recall is better for the disruptions that are related to the actual event.

Two models have been constructed to explain how script-inconsistent data is better recalled. These models are the schema pointer plus tag model and the dynamic memory model. The schema pointer plus tag model (Graesser, Gordon, & Sawyer, 1979) suggests that the probability of recalling the episodic content of a memory depends on its typicality. Actions which are typical are not explicitly stored, since people can rely on their scripts at the time of retrieval. However, atypical actions are explicitly stored, due to the fact that memories for these actions cannot be retrieved based on the scripts. Nakamura, Gresser, Zimmerman and Riha (1985) supported the script pointer plus tag model in a naturalistic lecture situation. Participants saw schema related and unrelated actions of the lecturer in an experimental psychology class. It was found that participants remembered more schema unrelated actions of the lecturer. Moreover, it was shown that memories for atypical scripts included more vivid details (Lampinen, Faries, Neuschatz, & Toglia, 2000) and they were more accurate (Neuschatz, Lampinen, Preston, Hawkins, & Toglia, 2002).

In his dynamic memory model, Schank (1982) proposed that new experiences are encoded in the memory in relation to how expectations generated by our knowledge structures are violated. Since the expectation failures play a major part in organizing the memory, it is easier to access the schema inconsistent information in our memory. Hence, this model also predicts that schema-inconsistent information should be retrieved more vividly and in greater detail.

Script theory generates a cognitive representation of the typical actions that occur in events that lead to expectations about what might occur in a similar event in the future.

This general representation can be used to explain the phenomenon that specific details in memories of repeated events are harder to access.

## 2.3. Repeated Events

Memories include both single time events and repeated events (Barsalou, 1988). When people experience similar events several times, a generic recollective memory is formed (Brewer, 1997). This generic memory does not represent a unique event from one's life but includes a generic visual imagery of the event. A neglected topic in the empirical study of autobiographical memory is the study of these events which are ordinary and repeated. Since most of our autobiographical memory includes repeated experiences of ordinary events, there is a clear need for examining the role of repeated ordinary events in our memory.

Marigold Linton conducted a singular memory experiment in order to find answers to the following questions: "What are the long run consequences of repetition?" and "What kinds of events will be remembered best?" Linton (1982) recorded at least two events from her own life every day for six years. Once a month, she chose items from the event pool randomly and estimated the chronological order of the events, then after six years, she emphasized the fact that she could not describe details of most of the events, except the first ones, and the last ones if they were recent (Linton, 1982).

Furthermore, she distinguished between two difficulties in remembering the repeated events: the failure to distinguish an event from others and the failure to recall the event (Linton, 1982). An important limitation of Linton's findings was that they were based on data that she collected from herself (1982). Based on this, in the current study, it was hypothesized that the last instance of a repeated event would be remembered with better details in comparison to other instances of a repeated event with the exception of the distinct instance.

Researchers revealed in their studies with children that repetition of an event results in stronger memory (Brainerd & Ornstein, 1991; Davies, 1991). These studies were conducted in laboratory settings and involved presenting the same stimuli repeatedly; however, in the real world, for most of the time, events are not experienced exactly the same way each time (Brewer, 1997). Repeated events include two types of details: fixed and variable (Price & Connolly, 2008). Fixed details are constant across several occurrences of a repeated event; whereas variable details change across each instance. Brewer (1997) indicated that "in the real world, repetition typically means repetition with variation" (p.457). Hence, in the current study it was hypothesized that people who experienced a repeated event with higher frequency would be more confused about the details of the specific instance.

The hypothesis about the frequency of the experience was also supported by other theories. To illustrate, according to the script theory (Schank, 1982), memory for fixed details is good, since they are represented in scripts. On the other hand, the script theory suggests that variable details are not encoded as associated with any one instance; they

are represented as list-like sets of experienced options (Fivush, 1984). Hence, people will confuse the details across instances when recalling the variable details that occurred in a specific instance of a repeated event.

In addition to the difficulty of remembering the details, choosing a particular occurrence among these events brings some challenges (Powell & Thomson, 1996). Since experiencing the same information several times enhances memory (Hudson, 1990), recall of the fixed details of a memory will be strengthened but the same is not true for variable events. Hintzman (1984; 1988) proposed a trace theory that suggests that regardless of event frequency, each particular event receives its own memory trace. In the process of recalling an event, similar traces are activated concurrently, based on their relevance to the retrieval cue. In the same way, when accessing an instance of a repeated event, all similar instances will be activated, which might lead to confusion about which instance of the event is retrieved.

The dual-process theory of repetition (Brewer, 1986) proposed that repetition of an event results in an increase of the schematic information, while it decreases the episodic information of the event. Furthermore, Brewer (1988) showed that event and location frequency were the best predictors for event memory. According to the findings of this study, memory is better for the events that occur rarely; however, for repeated events our memory becomes less clear. One exception for this conclusion could be the first instance among the repeated instances. Both Shum (1998) and Talarico (2009) underlined the important role of first time experiences in autobiographical memory. Moreover, Linton (1982) suggested that the first time experiences have a distinctive

place among repeated events. In this study, it was also expected for the first instance to be more specific than other instances.

Other than the first instance of a repeated event, a distinct instance was also claimed to differ from other instances. Von Restroff effect (1933), which is also known as the isolation effect, predicts that when there are similar items, people tend to recall the distinct item among them better. Based on this effect, it was predicted that autobiographical memory of a distinct instance among other instances would be recalled better.

Overall, the literature on the memory of repeated events suggests that the details of specific instances of a repeated event are not easily accessible. Nevertheless, one can also suggest on the basis of the literature that the first, last and distinct instances might include more specific details that others.

There are a number of studies focusing on the development of event memory in children which included an examination of memory for repeated events. Studies examining children's memory for repeated events showed that their memories for single experiences and repeated experiences are different from each other (Roberts & Powell, 2001). Fivush, Hudson and Nelson (1984) showed that children described "what usually happens" more easily when compared to the memory of the last experience of the same event.

Connolly and Price (2006) found that the accuracy of the details reported in single experiences and repeated experiences was not the same. They illustrated that children recalled less accurate details when describing repeated events, since there is more

interference from other experiences. This confusion between instances while describing it is called 'internal intrusion errors'. Several researchers found consistently that children recall their memories of a single event accurately but made internal intrusion errors when recalling a specific instance of a repeated event (Connolly & Lindsay, 2001; Powell & Roberts, 2002; Price & Connolly, 2004).

Studies examining age differences in memory for repeated events concurred that the number of reported activities of a specific occurrence increases as age increases (Farrar & Goodman, 1992; Hudson & Nelson, 1986). On the other hand, there are contradictory findings about the relationship between age and the ability to discriminate between repeated events. Farrar and Goodman (1992) examined the differences between 4 and 7 year old children by using a novel event created in a lab setting. Participants engaged in animal games in their lab visits that included both typical actions and deviations from those actions. The results of this study showed that 4-year-olds were confused about what event instantiations occurred during standard and deviation visits of the lab; hence, their general memory knowledge was still developing. On the other hand, 7-year-olds were able to separate two visits. Nevertheless, Hudson (1990) could not find any differences between 3- and 5-year-old children in their ability to distinguish between repeated events using a similar methodology.

The present data on repeated events provides little insight into the memories of adults for ordinary repeated events. The present study aims to fill this gap in the literature.

# 2.4. Overview of the Present Study and Hypotheses

Review of the literature reveals a gap regarding the autobiographical memory of repeated ordinary events. Script-pointer plus tag model (Graesser, Gordon, & Sawyer, 1979) as well as Brewer (1997) claimed that it is very uncommon for events to be repeated in exactly the same way. Linton (1982) also demonstrated the differences between instances of repeated events based on her own life. The aim of the present study is to understand whether repeated events form a general representation in terms of autobiographical memory. Another aim is to investigate the differences between adults' autobiographical memories of different instances of a repeated event. The repeated event that will be used in this study will be vacations. We expect that there will be several vacations in people's personal histories and these vacations will have a sufficient level of commonality although they are not comepletely identical. Hypotheses of the study are as follows.

#### Hypothesis 1

Research on the life-span distribution of autobiographical memories suggested that recent events are more vivid and relieved when compared to memories from early life experiences (Rubin & Schulkind, 1997). Furthermore, Ebbinghaus's (1913) forgetting curve demonstrated that most of the forgetting occurs soon after learning, tapering off in time, in his studies spanning a few days. Linton (1982) also emphasized the importance of the last instance among the repeated events for recall. Based on this information, this study predicts that the last instance among the vacation memories will

be recalled better. In other words, it is hypothesized that adults will remember more details about their last memory when compared to details of the first memory, random memory and typical memory. Moreover, the phenomenological characteristics of the last memory, i.e., vividness, rehearsal, and emotional intensity, will be rated as higher when compared to the first memory, the random memory and the typical memory. The distinct example of the repeated event will not be any different than the last memory. In congruence with the idea of forgetting curve, the time since the last example of the repeated event is expected to influence the level of detail and the phenomenological characteristics of remembering.

#### Hypothesis 2

Shum (1998) identified first personal experiences as special periods of life that are not easily forgotten. The second hypothesis of the study is that memory for the first experience of vacations will be less consistent with the script details than other vacation instances except the distinct instance. The reason is that the first experience of vacation is experienced before there is a formation of a vacation script based on experiences and therefore the event details will not have been generalized and they will not have been transferred into semantic memory. Donaldson (1996) also argued that participants would remember their first experience in contrast to knowing about them as the signal detection theory would support the expectation that stronger autobiographical memories would be remembered. Therefore, we hypothesized that memories for the first experience among vacations will be remembered rather than known and in addition, they will display recall from the field perspective as these will be significant

experiences by virtue of being the first and according to Nigro and Neisser (1983), significant experiences would be remembered from the field perspective.

#### Hypothesis 3

It is known that people remember distinct information better due to their salience (von Restroff, 1933). This phenomenon of increased memory for distinct items is called the von Restroff effect or the isolation effect. This is a robust effect, shown by several researchers using different methodologies (for a review, see Hunt, 1995). However, none of the previous studies applied the von Restroff effect to personal memories. In this study, it is expected that the von Restroff effect in relation to people's event memories will be observed. Furthermore, Kishiyama and Yonelinas (2003) showed that both the reliving and the familiarity of an item increased for the item that has distinct properties from the rest. Based on this literature, it is hypothesized that the event with distinct characteristics will be remembered with more memory details and less script-consistent details when compared to other instances. Moreover, we expect that the participants would rate the phenomenological characteristics of this memory higher. In this study, distinct instance is predicted to be more detailed and less script-consistent than the last instance due to the fact that previous literature showed distinctiveness to have a more significant impact on memory strength than recency (Linton, 1982).

## Hypothesis 4

Bartlett (1932) argued that people tend to remember the typical event with more script-consistent information. In this study, it is also hypothesized that adults will report the most script-consistent information while describing their typical vacation memory.

In addition, the phenomenological characteristics of this memory will be rated as the lowest among all of the other memories due to a lack of distinction from other vacations.

# Hypothesis 5

Powell and Thompson (1996) examined the impact of event repetition on memory retrieval. Their findings illustrated that repetition of an event reduced the accuracy of the information, as there were more intrusions from other occurrences. Furthermore, the Fuzzy-trace theory (Brainerd & Reyna, 1990) asserts that two memory traces are formed in an event: a verbatim trace and a gist trace. The verbatim trace includes details or surface structure whereas the gist trace contains the general meaning of an event.

Repetition of identical information across multiple experiences will strengthen the gist and increase its chance of retrieval. Hence, after repetitions, memory for the details of a specific instance of a repeated event will be more difficult to retrieve, since there will be more intrusions from other instances. Hence, it is hypothesized that people who have experienced a higher frequency of vacations will be more confused about the details of the events and report less specific memory details of the instances.

## **CHAPTER 3: METHOD**

# 3.1. Participants

The sample of the present study consisted of 91 adults, their ages between 19 and 57 years old. Participants were predominantly female (N = 60), and had a mean age of 27.23 (SD = 8.6). They were randomly selected from the Introduction to Psychology subject pool of Koç University. Snowball sampling was also used to recruit more participants.

The majority of the participants were high school graduates (N=53). The rest of the participants were composed of people who were university graduates (N=19) and who had Master's degrees (N=16). Furthermore, most of the participants were single (N=66). Of the remainder, there were 23 participants (25.3%) who were married and 2 (2.2%) who were divorced.

#### 3.2. Materials

# 3.2.1. Demographic Questions

The demographic questionnaire comprised questions about the date of birth, education level, gender, marital status and occupation of the participants. Three additional questions were included in the questionnaire to measure participants' frequency of going on vacation: how many times a year do you go on vacation generally; how many times have you gone on vacation within the last 5 years; and which one of the following options best describes the frequency of your vacations (1=never, 2=seldom, 3=sometimes, 4=frequently, 5=very frequently).

## 3.2.2. Memory Questionnaire

Autobiographical memory of repeated events was operationally defined as the memory of vacations. The reasons for choosing "vacations" as the measure were twofold. First, "vacations" was suggested in a study as a repeated event that includes previously formed scripts and happens yearly (Brubacher, Roberts and Powell, 2011). Second, it is preferred due to the fact that it is experienced by most of the people. Hence, the questionnaire was based on different instances of vacation memories.

The phenomenology of the remembering and event characteristics was measured with a memory questionnaire. The questionnaire begins with an open-ended question

that prompted participants to describe their memories. An example of this question is as follows: "Can you please explain the last vacation you went on?" This questionnaire included 12 items from the Turkish version of *Autobiographical Memory Questionnaire* (Gülgöz & Rubin, 2001), which measured the phenomenology of remembering, such as vividness, rehearsal, and importance of the event, the degree to which the memory is recalled from the field or observer perspective and whether the event is remembered or just known. Most of these items were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) with the exception of the field/observer perspective and the remember/know measures, which were dichotomous. Since it might be hard to understand the remember/know question, a broader explanation was added to the question. In addition to these questions, 10 more items were included in the questionnaire, such as the level of distinctiveness of the memory from other instances and the perceived detail level of the memory. The questionnaire also included an openended item asking them to identify the specific factors about the memory that made it important to participants.

The same questionnaire was used as a measure in five instances of the repeated event, which were: the last vacation, the first one, a random one, a distinctive one, and a typical one. Before the typical instance, an open-ended question was used to explore participants' scripts about vacations. This question provided a brief description about scripts and asked participants to explain their opinions related to their vacation script.

The last part of the questionnaire was used to measure the remembering of a control event that was any other memory of participant's choice. There were no restrictions for

participants; hence, they could talk about whatever event came to their minds. There were slight differences in the questionnaire for any other memory in comparison to vacation memories (See Appendix A). This questionnaire included two additional yes/no questions to measure whether or not participants had experienced a similar event before or after the memory they provided. Furthermore, this form of the questionnaire did not include the item that measured the level of script-relatedness of the memory.

# 3.3. Coding Scheme

Items in the memory questionnaire represented the variables of the study. These variables were:

- Belief in date accuracy: The extent to which the participant is accurate about the date of the vacation.
- Importance: The extent to which the vacation was important for the participant.
- Detail: The extent to which the participant recalls the details of the vacation.
- Valence: The extent of the participant's feeling about the emotional positivity or negativity of the vacation.
- Field/Observer: Participant's perspective of the vacation while recalling it.

  This variable was assessed on a nominal scale at two levels: a) from the first person's perspective (field), b) from the third person's perspective (observer).

- Affective intensity at recall: The affective intensity the participant perceived during the recall of the vacation.
- Reliving: Participant's feeling of reliving the event while recalling the vacation.
- Perceived distinctiveness of the memory: The extent to which the vacation
  has distinctive characteristics in comparison to other vacations.
- Remember/Know: Participant's retrieval of that particular vacation from the
  episodic or semantic memory. This variable was assessed on a nominal scale
  at two levels: a) from episodic memory (remember), b) from semantic
  memory (know).
- Belief in accuracy: The extent to which the participant believes that he/she experienced the vacation in the way it actually occurred.

In addition to these variables, several variables were computed after the data collection in order to make further analyses:

- Memory age: This refers to the amount of time that passed since the event occurred. In order to calculate this variable, the age at the time of the event was subtracted from the age of recall.
- Vividness: The mean score of two separate ratings on the two types of imagery in recollection, which are "hearing" and "seeing".

- Rehearsal: The mean score of two separate ratings for rehearsal, the
   frequency of recalling the event and the frequency of sharing the event with
   others.
- Frequency: The frequency with which the participant goes on vacation. This variable was measured with a 5-point Likert scale ranging from 1 (never) to 5 (often).
  - Two separate coding schemes were developed to code memory detail and script consistency variables.

## 3.3.1. Memory detail

This variable represented the participant's level of detail in recall of memories. It was coded for the last, first, random, distinct and typical vacation memories. Five steps were followed in coding this variable. First, the audiotaped answer was transcribed. After transcription, the material was carefully read and reread, in order to achieve immersion in the data. As a third step, each individual transcription was analyzed to generate short, focused codes. After that, the most common and significant codes that could explain larger components of the memories were identified. These codes were as follows: transportation, accommodation, beach, food tasting, going out with friends, visiting historical landmarks, and specific personal events. After these codes had been identified, every individual memory was rated according to the presence or absence of these components in that code category as 1 for the presence and 0 for the absence.

Overall, memories were given a total score on the basis of how many of these components were included with a maximum value of 7. This procedure was repeated for every memory.

## 3.3.2. Script consistency

The level of consistency between each vacation memory and the script for vacations was calculated in this variable. In order to make this calculation, the participants' definition of their own vacation script was coded using the same procedure with the

memory detail variable. All of the five steps were used during this coding process. The most common and significant codes for scripts were identified as follows: being with the family, going to the beach, visiting relatives, spending time with friends, going to a hotel, being relaxed, having fun, seeing new places, learning new things, doing a new activity, reading a book, watching a film and having less responsibility. After the determination of these codes, all memories were rated 1 for each code they included. Overall, the score for script consistency ranged between 0 and 13.

# 3.3.3. Reliability of memory detail and script consistency

In addition to experimenter, two research assistants coded the data for memory detail and script consistency variables. The inter-rater reliability between the coders was 84% for memory detail and 89% for script consistency.

#### 3.4. Procedure

Each participant was interviewed individually by the researcher. First, participants were asked to sign the consent form. The experimenter then explained the procedure of the study to the participants. They were also informed that their voice would be audiotaped during the interview. After that, the experimenter asked the participants to provide a memory from their vacations in the following order: last vacation, first vacation, random vacation and distinct vacation. After that, they were asked to provide

their script for their vacations and a vacation memory that is typical of their script. Last, the participants reported a memory that was not related to their vacation memories.

There are different rationales for choosing this specific sequence. The last instance was asked in the first order since it would be easier for participants to access their last experience. Furthermore, the typical instance needed to follow the description of script, therefore, it was asked at the end of the interview. First instance followed the last instance since it was essential for this study to retrieve the first experience with fewer intrusions from other instances.

When the interview was completed, participants answered the questionnaire for all of their memories in the same order. All of the participants were interviewed by the same experimenter.

# **CHAPTER 4: RESULTS**

# 4.1. Descriptive Statistics

In this study, 543 autobiographical memories were collected from 91 participants.

The number of memories for each memory type is illustrated in Table 4.1.

Table 4.1 The number of memories for each memory type

Memory Type	Number
Last Memory	91
First Memory	91
Random Memory	91
Distinct Memory	89
Typical Memory	90
Any Memory	91

Table 4.2 summarizes the means and standard deviations of the participant's age when the memory occurred. The memories for first vacation came from a younger age (M=11.54, SD=8.80) and memories for last vacation came from an older age (M=26.25, SD=8.30). Participants remembered memories from similar ages for random memory

(M=21.7, SD=8.50), distinct memory (M=21.26, SD=7.40) and typical memory (M=22.9, SD=8.10).

Table 4.2 Means and Standard Deviations of the Age of the Participant at Event

Type of Memory	М	SD
Last Memory	26.25	8.30
First Memory	11.54	8.80
Random Memory	21.70	8.50
Distinct Memory	21.26	7.40
Typical Memory	22.90	8.10
Any Memory	21.59	9.40

Table 4.3 demonstrates the means and standard deviations of the variables, which are reliving, importance, detail, valence, rehearsal, vividness, belief in accuracy, affective intensity at recall, distinctiveness of the memory, script consistency, and memory detail in the five instances of the repeated event.

Table 4.3 Descriptives for Repeated Events and Measure Variables

	Last M	emory	First M	emory	Random	Memory	Distinct I	Memory	Typical N	Memory
Variables	M	SD	M	SD	М	SD	М	SD	М	SD
Reliving	3.91 <sup>a</sup>	0.64	2.70 <sup>b</sup>	0.94	3.60 <sup>a</sup>	1.04	3.12 <sup>c</sup>	1.62	3.61 <sup>a</sup>	0.89
Importance	4.14 <sup>a</sup>	0.68	3.74 <sup>a</sup>	1.01	3.94 <sup>a</sup>	1.11	3.38 <sup>b</sup>	1.77	3.97 <sup>a</sup>	0.91
Detail	4.39 <sup>a</sup>	0.92	2.81 <sup>b</sup>	1.10	3.82 <sup>c</sup>	1.10	3.39 <sup>d</sup>	1.77	3.92 <sup>c</sup>	1.04
Valence	4.18 <sup>a</sup>	0.78	3.91 <sup>a</sup>	0.84	4.00 <sup>a</sup>	1.14	3.31 <sup>b</sup>	1.81	4.22 <sup>a</sup>	0.83
Rehearsal	3.20 <sup>a</sup>	0.81	2.50 <sup>b</sup>	1.01	3.15 <sup>a</sup>	1.14	2.68 <sup>b</sup>	1.50	3.09 <sup>a</sup>	0.99
Vividness	3.54 <sup>a</sup>	0.72	2.41 <sup>b</sup>	0.83	3.23 <sup>a</sup>	1.04	2.83 <sup>c</sup>	1.53	3.28 <sup>a</sup>	0.92
Belief in accuracy	4.60 <sup>a</sup>	0.54	3.65 <sup>b</sup>	0.99	4.16 <sup>c</sup>	0.99	3.64 <sup>b</sup>	1.82	4.20 <sup>a</sup>	0.89
Affective Intensity at Recall	3.52 <sup>a</sup>	0.81	2.64 <sup>b</sup>	1.12	3.27 <sup>a</sup>	1.11	2.89 <sup>c</sup>	1.54	3.36 <sup>a</sup>	1.02
Distinctiveness	4.50 <sup>a</sup>	0.72	3.42 <sup>b</sup>	1.15	4.07 <sup>a</sup>	1.12	3.69 <sup>c</sup>	1.90	4.04 <sup>a</sup>	0.97
Date Accuracy	4.65 <sup>a</sup>	0.69	3.30 <sup>b</sup>	1.09	3.91 <sup>c</sup>	1.20	3.45 <sup>b</sup>	1.90	4.03 <sup>c</sup>	1.18
Script Consistency	3.53 <sup>a</sup>	1.13	3.20 <sup>a</sup>	1.19	3.43 <sup>a</sup>	1.41	2.60 <sup>b</sup>	1.70	3.33°	1.20
Memory Details	2.86ª	1.20	2.51 <sup>b</sup>	0.98	2.95 <sup>a</sup>	1.30	2.18 <sup>c</sup>	1.60	2.81 <sup>a</sup>	1.13

a,b,c= indicates the significant differences

## 4.2. Testing the Hypotheses

A MANOVA was conducted to explore the effect of memory types on script consistency, memory details and phenomenological variables. Memory type was taken as independent variable and the dependent variables were reliving, importance, detail, valence, rehearsal, vividness, belief in accuracy, affective intensity at recall, distinctiveness of the memory, script consistency, and memory detail.

Significant differences were found among memory of the five events on the dependent measures, Wilks' Lambda= .63, F(4, 86)= 4.49, MSE= 0.63, p<.001. The univariate F tests showed that there was a significant difference between memory types for the following variables: reliving(F(4,86)= 17.7, MSE= 6.01, p<.001,  $\eta_p^2$ = 0.39), importance (F(4, 86)= 5.70, MSE= 3.83, p<.001,  $\eta_p^2$ = 0.23), detail (F(4,86)= 21.60, MSE= 7.20, p<.001,  $\eta_p^2$ = 0.43), valence (F(4,86)= 9.10, MSE= 2.61, p<.001,  $\eta_p^2$ = 0.28), rehearsal (F(4,86)= 7.2, MSE= 3.37, p<.001,  $\eta_p^2$ = 0.25), vividness (F(4,86)= 16.4, MSE= 5.64, p<.001,  $\eta_p^2$ = 0.38), belief in accuracy (F(4,86)= 11.20, MSE= 6.56, p<.001,  $\eta_p^2$ = 0.32), affective intensity at recall (F(4,86)= 9.1, MSE= 2.01, p<.001,  $\eta_p^2$ = 0.28), distinctness (F(4,86)= 9.70, MSE= 1.07, p<.001,  $\eta_p^2$ = 0.29), date accuracy (F(4,86)= 16.70, MSE= 4.31, p<.001,  $\eta_p^2$ = 0.38), memory details (F(4,86)= 5.80, MSE= 0.43, p<.001,  $\eta_p^2$ = 0.23) and script consistency (F(4,86)= 7.60, p<.001, MSE= 2.06,  $\eta_p^2$ = 0.28). Results are depicted in Table 4.4

Table 4.4 MANOVA Results

IV	DV	df	Mean Square	F
Memory Type	Reliving	4	20.55	17.76**
	Importance	4	7.56	5.76**
	Detail	4	31.99	21.60**
	Valence	4	11.84	9.04**
	Rehearsal	4	8.99	7.27**
	Vividness	4	17.83	16.42**
	Belief in accuracy	4	14.13	11.19**
	Affective Intensity at Recall	4	11.85	9.05**
	Distinctiveness	4	14.44	9.73**
	Date Accuracy	4	26.42	16.70**
	Script Consistency	4	13.40	7.67**
	Memory Details	4	8.92	5.85**

<sup>\*\*</sup>p<.001

Findings of Tukey's HSD test revealed that when compared to first event, memory of the last event was rated as significantly higher in reliving (M=3.90, SD=0.60), importance (M=4.10, SD=0.70), detail (M=4.40, SD=0.90), rehearsal (M=3.20, SD=0.80), vividness (M=3.50, SD=0.70), belief in accuracy (M=4.60, SD=0.50), affective intensity at recall (M=3.50, SD=0.80), distinctiveness (M=4.50, SD=0.70), and belief in date accuracy (M=4.60, SD=0.70).

In addition, people rated the memory of the first event lower in terms of several variables such as reliving (M=2.70, SD=0.91), importance (M=3.80 SD=0.90), detail (M=2.80, SD=1.10), rehearsal (M=2.50, SD=0.98), vividness (M=2.40, SD=0.79), belief in accuracy (M=3.70, SD=0.92), affective intensity at recall (M=2.70, SD=1.10), distinctiveness (M=3.50, SD=1.10) and date accuracy (M=3.30, SD=1.10).

Furthermore, memory for the distinct event (M=2.50, SD=1.70) is the one with the least consistency regarding people's scripts. Distinct event (M=1.50, SD=1.60) and typical event (M=1.30, SD=1.70) included significantly higher memory details when compared to other memory types. Memory for the distinct event was rated as higher in terms of reliving (M=3.70, SD=0.78), detail (M=4.10, SD=0.80) and vividness (M=3.40, SD=0.80) in comparison to first and typical event. Lastly, typical and random event were rated as lower in nearly all of the variables.

## 4.2.1. First Hypothesis

The first hypothesis of this study was twofold. First, it was hypothesized that participants will remember the last instance of the repeated event with more details when compared to the first instance, the random instance and the typical instance. Second, participants would provide higher ratings for vividness, rehearsal, and emotional intensity for the last instance in comparison to the first instance, random instance and typical instance.

A MANOVA was conducted to explore the differences between different instances of the repeated event in terms of memory details, vividness, rehearsal and emotional intensity. Memory type was taken as independent variable and the dependent variables were rehearsal, vividness, affective intensity at recall, and memory detail.

The Multivariate F test revealed that the effect of different instances of the repeated event was significant, Wilks' Lambda= 0.84, F(4, 86)= 5.13, MSE= 1.06, p<.001. The univariate F tests revealed significant differences on rehearsal, (F(4,86)= 7.20, MSE= 2.64, p<.001,  $\eta_p^2$ = 0.25), vividness, (F(4,86)= 16.40, MSE= 5.64, p<.001,  $\eta_p^2$ = 0.38), affective intensity at recall, (F(4,86)= 9.10, MSE= 6.81, p<.001,  $\eta_p^2$ = 0.28), and memory details, (F(4,86)= 5.80, MSE= 1.93, p<.001,  $\eta_p^2$ = 0.23).

Tukey's HSD comparisons indicated that memory detail of the last instance of the repeated event (M=2.86, SD=1.15) was significantly higher than the first instance of the repeated event (M=2.51, SD=0.98). Furthermore, memory for the last instance of the repeated event (M=3.19, SD=0.81), was rated significantly higher than the first instance (M=2.49, SD=1.01) in terms of rehearsal. In addition, it was (M=3.54, SD=0.72) rated as more vivid in comparison to the memory of first instance (M=2.41, SD=0.83). Lastly, affective intensity at recall was significantly higher in the last instance (M=3.52, SD=0.81) in comparison to both random instance (M=3.24, SD=1.12) and first instance (M=2.64, SD=1.12).

Overall, findings of the analyses revealed partial support for our hypotheses. In terms of memory detail, last instance was expected to be higher than first, random and typical instance, whereas, analyses only supported the difference between last instance and first instance. The same pattern was also evident in rehearsal and vividness variables. Differently, last instance was higher in terms of affective intensity at recall in comparison to both random and first instance.

# 4.2.2. Second Hypothesis

The second hypothesis of this study was that people would narrate the memory of the first instance of the repeated event with less script consistent details in comparison to typical instance and random instance. Furthermore, first memories would be remembered more from the first person perspective (field) and participants will have more autonoetic consciousness for their first experience.

In order to examine this hypothesis, a one-way ANOVA was conducted. The between subject variable was the memory type with its five levels, and the dependent variable was the script consistency. The results revealed a significant main effect of autobiographical memory type on script consistency of the memory,  $(F(4,86)=7.6, p<0.001, MSE=3.01, \eta_p^2=0.28)$ . Multiple comparisons with Tukey's HSD test with alpha level set at 0.05 revealed that memory of the first instance (M=3.19, SD=1.19), included significantly higher script consistent details in comparison to the memory of the distinct instance (M=2.49, SD=1.68). However, the memory for the first instance did not significantly differ from the memory of random instance or typical instance.

Chi-square analyses were conducted to test the effect of first memory on field/observer and remember/know variables. Table 4.5 summarizes the frequencies of

field/observer and remember/know variables for first vacation and other vacations. There was a significant association between the first memory and field/observer variable,  $\chi 2$  (1) = 33.97, p<.001. In addition, there was a significant association between the first memory and remember/know variable,  $\chi 2$  (1) = 85.89, p<.001.

Table 4.5 Frequencies and percentages of field/observer and remember/know variables for first memory

	Field		Obse	Observer		Remember		ow
	N	%	N	%	N	%	N	%
First Memory	56	62	34	38	45	50	45	50
Other Memories	301	84	40	16	311	87	29	13

As it can be seen from the Table 4.5, although the general tendency was a higher number of memories recalled from the field perspective, in comparison to other memories, there was a higher ratio of first instance memories recalled from the observer perspective. When the ratio of memories that are remembered was compared with those that were only known to have occurred, the vast majority of other memories were remembered while the first instances of vacation memories comprised of an equal number of remembered and known events.

To summarize, first instance of the repeated event was significantly lower in terms of script-consistency of the memory when compared to last, random and typical instance, whereas, it was higher when compared to distinct instance. This finding

supported the first part of our hypothesis. Furthermore, participants were morelikely to remember for the observer perspective when compared with the other memories. First memories were more likely to be known than remembered, which is not surprising when the age of memory factor is considered.

## 4.2.3. Third Hypothesis

The third hypothesis was that memory for the distinct vacation will be remembered with more details and less script consistent details than all of the other instances. Furthermore, phenomenological features, which are vividness, rehearsal, affective intensity at recall and importance, of distinct memory will be rated higher by participants in comparison to other instances of vacations.

A MANOVA was conducted with memory detail and script consistency as dependent variables and memory type as the independent variable. Significant differences were found among different instances of the repeated event in terms of memory details and script consistency, Wilks' Lambda= 0.92, F(4, 86)= 5.10, MSE= 0.89, p<.001. Univariate F tests revealed that the effect of the repeated events on memory details, F(4, 86)= 5.80, MSE= 2.81, p<.001,  $\eta_p^2$ = 0.23, and script consistency, (F(4,86)= 7.60, p<.001, MSE= 3.01,  $\eta_p^2$ = 0.28), was statistically significant. Tukey's HSD test indicated that memory for the distinct instance (M= 2.13, SD= 1.58) included significantly lower details in comparison to typical (M= 2.78, SD= 1.16), last (M= 2.86, SD= 1.15) and random instance (M= 2.94, SD= 1.26). Moreover, the distinct instance

(M=2.49, SD=1.67) was remembered with significantly less script consistent details when compared to all other instances.

A second MANOVA was conducted to examine the variation in the instances of the repeated event in terms of vividness, rehearsal, affective intensity at recall and importance. Findings revealed a significant difference between the five instances, Wilks' Lambda= 0.81, F(4, 86)= 6.13, MSE= 2.41, p<.001. Univariate ANOVAs revealed that there is a significant impact of the five instances on importance, F(4, 86)= 5.70, MSE = 2.61, p < .001,  $\eta_p^2 = 0.23$ , rehearsal, F(4.86) = 7.2, MSE = 2.53, p < .001,  $\eta_p^2 = 0.23$ 0.25, vividness, F(4.86) = 16.40, MSE = 2.37, p < .001,  $\eta_p^2 = 0.38$ , affective intensity at recall, F(4,86) = 9.10, MSE = 2.61, p < .001,  $\eta_p^2 = 0.28$ ). As Tukey's HSD comparisons showed, the distinct instance (M=2.68, SD=1.49) was rated as lower in terms of rehearsal when compared the random instance (M=3.14, SD=1.14), typical instance (M=3.09, SD=0.99), and last instance (M=3.19, SD=0.81). Furthermore, participants rated the memory of distinct event (M=2.83, SD=1.52) as higher in vividness in comparison to first event (M=2.41, SD=0.82); on the other hand, their ratings were lower when compared to random (M=3.23, SD=1.04), typical (M=3.28, SD=0.91) and last event (M=3.54, SD=0.72). For the importance variable, the distinct instance (M=3.38, SD=1.77) was rated as significantly lower than other instances. Lastly, the distinct instance (M=2.89, SD=1.54) was rated as lower in affective intensity at recall in comparison to the random (M=3.27, SD=1.11), typical (M=3.36, SD=1.02) and last instances (M= 3.51, SD= 0.81).

To summarize, our hypothesis regarding the distinct instance was not supported on most of the components. Findings revealed that participants actually remembered their distinct instance with less memory details, less rehearsal, less vividness, less importance, and less affective intensity at recall in comparison to other instances. The only supported part of the hypothesis was about the script consistency variable. Findings showed that participants remembered their distinct instance with less script-like details which was in accordance with our expectations

# 4.2.4. Fourth Hypothesis

The fourth hypothesis was that memory of the typical vacation will include more script consistent information than other memories. Furthermore, it was hypothesized that participants would rate phenomenological characteristics of the typical vacation lower when compared to other memories.

A one-way ANOVA was conducted to examine the differences between the instances of the repeated event in relation to script consistency. Results indicated a significant difference between the different instances (F(4,86)=7.60, p<.001, MSE=3.03,  $\eta_p^2=0.28$ ). Tukey's HSD test showed that the typical instance (M=3.37, SD=1.27) was narrated with higher script consistent details in comparison to the distinct instance (M=2.49, SD=1.67); on the other hand, the level of script consistent details was not significantly different than the other instances.

In order to test the second part of the hypothesis, MANOVA was conducted with the instances of the repeated event as independent variable and the phenomenological features, which are valence, vividness, affective intensity at recall, rehearsal, reliving, and importance, as dependent variables. Significant differences were found among memory of the five events on the dependent measures, Wilks' Lambda= 0.72, F(4, 86)= 6.30, MSE= 0.64, p<.001. Univariate ANOVAs revealed a significant difference on all of the dependent variables, which are reliving, F(4,86)= 17.70, MSE= 2.45, p<.001,  $\eta_p^2$ = 0.39, importance, F(4, 86)= 5.70, MSE= 2.61, p<.001,  $\eta_p^2$ = 0.23, valence, F(4,86)= 9.10, MSE= 2.61, p<.001,  $\eta_p^2$ = 0.28, rehearsal, F(4,86)= 7.20, MSE= 2.54, p<.001,  $\eta_p^2$ = 0.25, vividness, F(4,86)= 16.40, MSE= 2.37, p<.001,  $\eta_p^2$ = 0.38, and affective intensity at recall, F(4,86)= 9.10, MSE= 2.61, p<.001,  $\eta_p^2$ = 0.28.

Tukey's HSD comparisons revealed that the typical instance (M= 3.09, SD= 0.99) of the repeated events received significantly higher ratings than the distinct event (M= 2.68, SD= 1.49) and the first event (M= 2.49, SD= 1.01) in terms of rehearsal. The same pattern was also evident in vividness of the memory. Typical instance (M= 3.28, SD= 0.91) was given higher ratings when compared to distinct instance (M= 2.83, SD= 1.52) and first instance (M= 2.41, SD= 0.83). For the importance variable, typical instance (M= 3.97, SD= 0.91) was rated significantly higher than the distinct instance (M= 3.38, SD= 1.77). Moreover, participants rated the typical instance (M= 3.36, SD= 1.02) higher on affective intensity at recall than the distinct instance (M= 2.89, SD= 1.59) and the first instance (M= 2.64, SD= 1.12). The reliving ratings were also significantly higher in the typical instance (M= 3.61, SD= 0.88) when compared to the distinct instance (M=

3.12, SD= 1.62) and first instance (M= 2.70, SD= 0.95). Lastly, the valence of the typical instance was shown to be positive (M= 4.22, SD= 0.83).

To summarize, the hypotheses regarding the typical instance revealed mixed results. It included more script-consistent details only in comparison to the distinct instance. On the contrary to the expectations of this study, typical instance was remembered with significantly higher ratings on valence, vividness, affective intensity at recall, rehearsal, reliving and importance when compared to other instances. In conclusion, this study showed support only for the script consistency level of the typical instance.

# 4.2.5. Fifth Hypothesis

The fifth hypothesis was that people who have higher frequency of going to vacations would report fewer memory details. First, a correlation analysis was conducted with frequency of vacations and the level of memory detail. Table 4.6 summarizes the correlation between frequency of going to vacations and memory details. Findings of the analysis revealed that frequency of the vacation was positively related to details of the memory, r(91) = 0.10, p < 0.05, although this correlation was quite weak.

Second, the data was divided into two groups on the basis of vacation frequency. The participants who scored below the median (2.00) were included in the low frequency group, and the people who scored above the median were included in the high frequency group.

One-way ANOVA was conducted to investigate whether or not there is a difference between people who have high frequency or low frequency of going to vacations in terms of the memory details they provided. Results showed that memory details differed significantly across the frequency levels, F(1, 89) = 7.38, MSE = 2.05 p < .05. According to this finding, participants who have high frequency of going to vacations (M = 2.56, SD = 0.72) reported more details for their memory when compared to people who have low frequency of going to vacations (M = 2.09, SD = 0.76).

To sum up, a positive relationship was found between the frequency of going to vacations and the level of memory details. However, the coefficients indicating this relationship was quite small. Nevertheless, this relationship was in the opposite direction than predicted.

#### 4.3. Further analyses

#### 4.3.1. The impact of the age of the memory

In order to see the impact of the age of the memory, MANCOVA was conducted where the age of memory was used as a covariate and script consistency, memory details, reliving, importance, detail, valence, rehearsal, vividness, belief in accuracy, affective intensity at recall and distinctiveness of the memory were the dependent variables. Descriptive statistics are illustrated in Table 4. 7.

Table 4.6 Descriptives for Repeated Events and Measure Variables for MANCOVA

	Last Me	emory	First M	emory	Random	Memory	Distinct	Memory	Typical I	Memory
Variables	М	SD	М	SD	М	SD	M	SD	M	SD
Reliving	3.91 <sup>a</sup>	0.64	2.70 <sup>b</sup>	0.94	3.60°	1.04	3.12 <sup>a</sup>	1.62	3.61 <sup>a</sup>	0.89
Importance	4.14	0.68	3.74	1.01	3.94	1.11	3.38	1.77	3.97	0.91
Detail	4.39 <sup>a</sup>	0.92	2.81 <sup>b</sup>	1.10	3.82 <sup>a</sup>	1.10	3.39 <sup>a</sup>	1.77	3.92 <sup>a</sup>	1.04
Valence	4.18	0.78	3.91	0.84	4.00	1.14	3.31	1.81	4.22	0.83
Rehearsal	3.20	0.81	2.50	1.01	3.15	1.14	2.68	1.50	3.09	0.99
Vividness	3.54 <sup>a</sup>	0.72	2.41 <sup>b</sup>	0.83	3.23 <sup>a</sup>	1.04	2.83 <sup>a</sup>	1.53	3.28	0.92
Belief in accuracy	4.60 <sup>a</sup>	0.54	3.65 <sup>b</sup>	0.99	4.16 <sup>a</sup>	0.99	3.64 <sup>a</sup>	1.82	4.20	0.89
Affective Intensity at Recall	3.52	0.81	2.64	1.12	3.27	1.11	2.89	1.54	3.36	1.02
Distinctiveness	4.50 <sup>a</sup>	0.72	3.42 <sup>b</sup>	1.15	4.07 <sup>a</sup>	1.12	3.69 <sup>a</sup>	1.90	4.04	0.97
Date Accuracy	4.65 <sup>a</sup>	0.69	3.30	1.09	3.91	1.20	3.45	1.90	4.03 <sup>b</sup>	1.18
Script Consistency	3.53	1.13	3.20	1.19	3.43	1.41	2.60	1.70	3.33	1.20
Memory Details	2.86	1.20	2.51 <sup>a</sup>	0.98	2.95 <sup>b</sup>	1.30	2.18	1.60	2.81	1.13

The covariate, memory age, was significantly related to dependent variables, Wilks' Lambda= 0.87, F(1, 86)= 5.22, MSE= 2.35, p<.001. There was also a significant effect of memory types on dependent variables even after controlling for the effect of age of the memory, Wilks' Lambda= 0.83, F(4, 86)= 1.70, MSE= 0.53, p<.05. Findings of univariate analysis are shown in Table 4. 8.

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Table 4.7 MANCOVA Results

IV	DV	df	Mean Square	F
Memory age	Reliving	1	8.78	14.50**
	Importance	1	0.90	1.40
	Detail	1	19.69	23.98**
	Valence	1	0.89	1.32
	Rehearsal	1	11.97	14.37**
	Vividness	1	16.30	26.21**
	Belief in accuracy	1	3.99	7.81*
	Affective Intensity at Recall	1	12.64	14.99**
	Distinctiveness	1	7.10	9.62*
	Date Accuracy	1	29.19	33.43**
	Script Consistency	1	1.90	1.34
	Memory Details	1	2.81	2.20

<sup>\*\*</sup>p<.001, \*p<.05

Chapter 4: Results

Table 4.8 MANCOVA Results cont.

IV	DV	df	Mean Square	F
Memory Type	Reliving	4	4.70	7.69**
	Importance	4	0.49	0.73
	Detail	4	5.50	6.67**
	Valence	4	0.59	0.87
	Rehearsal	4	1.78	2.14
	Vividness	4	2.54	4.10*
	Belief in accuracy	4	2.49	4.88*
	Affective Intensity at Recall	4	1.59	1.88
	Distinctiveness	4	4.42	6.02**
	Date Accuracy	4	2.43	2.78*
	Script Consistency	4	3.49	2.45*
	Memory Details	4	4.12	3.19*

<sup>\*\*</sup>p<.001, \*p<.05

According to the results of analyses, the main effect of memory age is significant in the effect of memory age on reliving (F(1, 86) = 14.50, MSE = 2.99, p < .001,  $\eta_p^2 = 0.18$ ), perceived detail level (F(1, 86) = 23.98, MSE = 4.05, p < .001,  $\eta_p^2 = 0.05$ ), rehearsal (F(1, 86) = 14.37, MSE = 4.12, p < .001,  $\eta_p^2 = 0.05$ ), vividness (F(1, 86) = 26.21, MSE = 3.07, p < .001,  $\eta_p^2 = 0.06$ ), belief in accuracy (F(1, 86) = 7.81, MSE = 2.52, p < .05,  $\eta_p^2 = 0.02$ ), affective intensity at recall (F(1, 86) = 14.99, MSE = 4.17, p < .001,  $\eta_p^2 = 0.05$ ), belief in date accuracy (F(1, 86) = 33.43, MSE = 4.31 p < .001,  $\eta_p^2 = 0.05$ ), perceived distinctiveness (F(1, 86) = 9.62, MSE = 3.62, p < .05,  $\eta_p^2 = 0.05$ ), and date accuracy (F(1, 86) = 33.43, MSE = 4.31, p < .001,  $\eta_p^2 = 0.05$ ), which shows the importance of the age of memory on these variables. Nevertheless, the main effect of memory age is not significant on importance of the memory (F(1, 86) = 0.84, p = .36) and valence of the memory (F(1, 86) = 0.30, p = .59).

When the impact of the memory age was controlled, the significant difference between memory types in terms of memory detail and script consistency variables became non-significant. On the other hand, the difference between memory types in affective intensity at recall scores became significant when the memory age was used as the covariate. Difference between the memory types remained the same for the rest of the variables both when the impact of memory age was controlled and was not controlled.

# 4.3.2. The impact of participants' age

A correlation analysis was conducted with script consistency scores of memory types and age in order to see how script consistency of the memory types changes in relation to age. Table 4.9 summarizes the correlation between script consistency of memory types and age.

Table 4.8 Correlations Matrix for Script Consistency and Age

Variables	2	3	4	5	6
1. Age	.22*	.42**	.23*	05	.23*
2.Script Consistency for Last Memory		.37**	.45**	.38**	.5**
3. Script Consistency for First Memory			.38**	.17	.52**
4. Script Consistency for Random Memory				.3**	.44**
5. Script Consistency for Distinct Memory					.39**
6. Script Consistency for Typical Memory					

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

Findings of the analysis revealed that there is a significant positive correlation between script consistency and age for the memory of last vacation, r(91) = 0.22, p<.05, first vacation r(91) = 0.42, p<.001, random vacation r(91) = 0.23, p<.05, and typical vacation, r(91) = 0.23, p<.05. Hence, as the age increases script consistency of first, last, random and typical vacation also increases. Results did not differ when the impact of the general frequency of going to vacations was controlled for.

# 4.3.3. Comparisons with Random Memory

Paired samples t-tests were conducted to examine the differences between the repeated event and the control event. Findings revealed that repeated events were significantly less relieved (t(90) = -5.16, p<.001), p<.001), less detailed (t(90) = -5.89, p<.001), more positive (t(90) = 5.41, p<.001), less rehearsed (t(90) = -6.02, t<.001), less vivid (t(90) = -5.80, t<.001), less affectively intense at recall (t(90) = -4.43, t<.001) and less accurate (t(90) = -4.89, t<.001) when compared to the control event. It was found that 30 of the participants had experienced a similar event to the event they explained in the control event before or after the event. On the other hand, 61 of the participants reported a unique event as their control event.

#### **CHAPTER 5: DISCUSSION**

## **5.1. Summary of the Hypotheses**

The aim of this study was to examine the characteristics of autobiographical memory for repeated ordinary events. Two major questions were investigated: a) whether the details of autobiographical memories of the repeated ordinary event become script-like, and b) whether there are phenomenological differences between instances of the repeated event. Five hypotheses were tested to investigate these major questions. In the first hypothesis, the memory for the last instance of the repeated event was expected to be more detailed in comparison to the first instance, random instance, and typical instance. Moreover, the last instance would be rated higher in vividness, rehearsal, and emotional intensity. The second hypothesis focused on the script-related details of the first instance of the repeated event. It was hypothesized that participants would describe the first instance with less script-consistent details. This memory would also be remembered from the field perspective and remembered with autonoetic consciousness. The third hypothesis was that the distinct instance would include more details in comparison to the other instances. The phenomenological characteristics of the memory for the distinct instance would be given higher scores when compared to the other instances. The fourth hypothesis was that the typical instance would be

remembered with the most script-consistent details. On the other hand, it would receive lower scores on the phenomenological characteristics. Lastly, as the frequency of going on vacation increased, the details of the events would be less detailed.

# **5.2. Discussion of the Findings**

## **5.2.1.** Last Instance of the Repeated Event

The last instance among the repeated events was expected to be remembered in more detail. Furthermore, the memory was expected to be highly vivid, affectively intense and highly rehearsed.

A MANOVA was conducted to test this hypothesis. Although there were significant differences between the instances of the repeated event, the memory detail of the last event was only higher than the first instance. In terms of the details of the memory, the last instance was not different from the typical, random, and distinct instance.

Furthermore, the last instance was found to be significantly higher in vividness and rehearsal when compared to the first instance. Regarding the affective intensity at recall scores, it was shown to be higher than both first instance and random instance. Hence, the hypothesis was partially supported. These findings highlighted the significant differences between the first and last instance of the repeated event. It was suggested from these results that the details and phenomenological features of the instances do not differ from each other, except the first experience.

In an early study, Hudson and Nelson (1986) examined 3- and 5-year old children's ability to recall episodes from a repeated event. They showed that children had troubles in recalling specific episodes if the event is recent and routine. Also, reminiscence bump literature suggests that people tend to remember more memories from a specific time period which is 10- to 30-years (Rubin, Wetzler, & Nebes, 1986). These memories tend to be more detailed and vivid (Conway & Haque, 1999). The findings of the present study might be on the same lines with these studies. There were not any significant differences between last, typical, random and distinct instance since the dates of these events were quite closer to each other. The significant difference was only found between first and last instance since these memories tend to be from distant periods of the lifetime.

According to the Self-Memory System (SMS) (Conway & Pleydell-Pearce, 2000), the recent memories are likely to be forgotten if they are not related to other long-term memory depictions. The reason for our findings might be explained with the suggestions of the SMS theory. The recent incident of the repeated event might include lower amount of details and phenomenological features since it was not stored in the long-term memory properly. This explanation might be considered as possibly correct due to the fact that the memory of the vacation might not be associated with long-term goals.

## **5.2.2.** First Instance of the Repeated Event

The second hypothesis of this study was that adults would describe their first experience among the repeated events with fewer script consistent details, from a field perspective and with autoneotic consciousness.

One-way ANOVA and chi-square analyses were conducted to investigate the hypothesis. The results showed that adults reported significantly higher script-related details in comparison to the distinct instance. On the other hand, there were no significant differences between the first instance and the other instances. Chi-square analyses showed that adults remembered the first instance more from the first person perspective in comparison to other instances. Nevertheless, the number of the adults who remembered the first instance with autoneotic consciousness and noetic consciousness were equal.

Shum (1998) suggested that the first experiences are a temporal landmark in the autobiographical memory which would differentiate the first experiences from other experiences. We expected the first instance to have a distinctive role in adults' autobiographical memory due to its temporal landmark role. However, the results of this study revealed that the first experience is not remembered with specific characteristics. In the same line with the script theory (Schank, 1982), the results suggested that as time passes the autobiographical memory is mainly formed by scripts. Friedman (1993) also proposed that each aspect of the memory decays over time or interferes with a following event. The decrease of the specific details of the first

instance suggests the superiority of the impact of age of the memory over being the temporal landmark.

Research also suggests that memories from earlier life are remembered from the third-person perspective (Nigro & Neisser, 1983). In contrast to this line of research, our study found that the first experience was remembered from the first person perspective. Nigro and Neisser (1983) proposed that personal events are remembered from a field perspective. If the event is remembered from a field perspective, this event is expected to be more detailed and vivid (Robinson & Swanson, 1993). Since the results of the study found fewer details and less vividness in the first instance, the field perspective finding should be considered with caution. For instance, there might be a response bias on field-observer judgments of the participants. Participants might have had a tendency to choose field option over observer option.

Moreover, the literature shows that earlier memories are remembered with noetic consciousness (Pillemer, 1998). The results of the current study have revealed that there are no differences between autoneotic and noetic consciousness in the first instance of the repeated event. Tulving (1985) suggested that autoneotic and noetic consciousness reflect episodic and semantic memories. Hence, it might be argued that autobiographical memory for the first instance of repeated event comprises both the semantic and episodic details.

## **5.2.3.** Distinct Instance of the Repeated Event

The third hypothesis of the study was that people will remember the distinct instance among their vacation memories with more specific details and phenomenological characteristics of this instance will be rated as higher by participants. In contrast to the expectations, the findings of the study revealed that participants remembered the distinct instance in less detail in comparison to the last instance, typical instance and the random instance. Moreover, there were no significant differences between the first and distinct instances in terms of memory details. On the other hand, the number of script-consistent details of the distinct event was the lowest in supporting this third hypothesis. Furthermore, the distinct instance was rated as lower in comparison to the typical, random, and last instance in terms of rehearsal and affective intensity at recall. Adults also provided lower scores for the importance of the distinct instance in comparison to other instances. On the other hand, the distinct instance was more vivid in comparison to the first instance.

Findings of the study were in contrast to the previous literature. Both script theory literature (Schank, 1982) and the von Restroff effect literature (von Restroff, 1933) claimed that the event with distinct information has an important place in people's memory. Previous studies found that people tend to provide a detailed and vivid description for a memory with distinct characteristics (Shapiro & Fox, 2002). Even over lengthy delays, it was shown that the distinct event is well remembered by both children and adults (Howe, 1997). However, in the previous literature, researchers

focused on quite distinctive events of people's lives. This study focused on the distinctive instance of an ordinary repeated event. From these results, it might be argued that the distinct instance of a repeated event is not in the same category as a distinct life event.

## **5.2.4.** Typical Instance of the Repeated Event

The fourth hypothesis of the study was that the typical instance of the repeated event would be remembered with more script-like details in comparison to other instances, and furthermore, that the phenomenological characteristics of this memory would be rated lower by participants. The findings showed that typical instance included more script-like details when compared to distinct instance of vacation memories. There were no variations between the typical instance and the random, last and first instance. Moreover, the findings of MANOVA showed that the typical instance received higher scores in terms of rehearsal, affective intensity at recall and vividness when compared to the first and the distinct event. Lastly, typical instance was rated as more important than the distinct event.

Some of the findings were in relation to the previous literature, whereas others were not. A typical event is known to be remembered with script-like details (Graesser, 1981). Nevertheless, the fact that it was more important than the distinct event was an unexpected result. Usually, people tend to rate an event with distinctive components as more important (Barsalou, 1988). Furthermore, a typical event is considered less

important. An explanation for this finding can be that the distinct events which were remembered by the participants can be unpleasant occasions. It was also shown that the typical instance was more rehearsed and vivid, which probably reflected the importance of the event.

# **5.2.5.** Impact of Frequency

The last hypothesis was that the higher the frequency of the repeated event, the lower the details provided about the memory. The correlation analysis revealed that there was a significant positive correlation between frequency and details of the memory. In other words, as the frequency of going on vacation increases, memory details also increase. The results from the one-way ANOVA also supported this finding.

The results supported the schema literature (Graesser, 1981), which underlines the strength of schemas in people's memory. As a person experiences a new similar event, he/she will incorporate the information about this memory into their existing schemata, which will automatically increase the detailed information. In the present study, the people who provided more details could be the ones who generated a wider description of their vacation schemata. Hence, this finding can be in association with the level of details a person has in his/her mind regarding the script of going on a vacation.

## 5.3. Discussion of the Additional Findings

## **5.3.1.** The impact of the age of the memory

The impact of memory age on the relationship between the variables used in the study and the repeated events was investigated. The findings of MANCOVA revealed that the age of the memory has an overall significant influence on the relationship between repeated event and memory details, script consistency and phenomenological variables. Specifically, the age of the memory had a significant impact on reliving, perceived detail level, rehearsal, vividness, belief in accuracy, affective intensity at recall, perceived distinctiveness of the memory and date accuracy of the memory. On the other hand, memory age did not have a significant impact on the relationship between repeated events and the following variables: importance, valence, script consistency and memory detail.

The significant impact of memory age supports the previous literature which shows that the time that has passed after an event is a determining factor for a variety of dimensions in remembering (Shapiro & Fox, 2002). Specifically, the schema-pointer plus tag model (Graesser, 1981) suggests that although the atypical part of an event is recalled more at the beginning, typical parts of the event will intrude more as the age of the memory increases. As shown in the present study, the age of the memory impacts on many variables except for the importance, script consistency, memory detail, and valence. The importance and valence of an event have been shown before as being

independent from the age of the memory (Howe, Courage & Edison, 2003). As opposed to previous literature, this present study did not find an impact of the age of memory on the level of script consistency and memory detail of the events.

## 5.3.2. The Impact of Participants' Age

A correlation analysis was conducted to understand the pattern between the age of the participant and script consistency level of the instances of a repeated event. It was shown that there is a significant positive relationship between age and script-related details reported in the memory for the first, last, random and typical instance. However, for the distinct instance of a repeated event, there is not a significant relationship between the age of the participant and the script-related detail of the memory.

In line with the previous literature, the present study has shown that older people tend to provide more details about an event which usually represents the script-related characteristics of the event (Jacques & Levine, 2007). This pattern is also evident in the literature regarding age differences between episodic memory and semantic memory. It is known that older people provide more information related to semantic memory in comparison to younger people, whereas they tend to provide less information regarding episodic details of the memory (Piolino, Desgranges, Benali, & Eustache, 2002).

Nevertheless, the results of the present study results differentiated the distinct event from others in terms of the impact of the age of the participants.

## **5.3.3.** Comparisons with Any Other Event

Comparisons with the control event revealed that the repeated event received lower scores on many dimensions such as importance, reliving, rehearsal, detail, vividness, affective intensity at recall and accuracy. However, repeated events were rated as more positive. Findings were in the same direction with the previous literature which suggested that unique events are more vivid and important (Thompson, 1982). The difference between repeated events and the unique event was also highlighted in a study which examined children's memory (Connolly & Price, 2006). They showed that children tend to provide fewer details for the repeated event. Furthermore, these details tend to be less accurate since children tend to confuse the event with the other instances. The present study revealed the same conclusion with adults.

## **5.4.** Contributions of the Study

The literature on autobiographical memory and repeated events has not so far examined the characteristics of the memory for repeated ordinary events. This study thus contributes to the literature by showing the differences and similarities between different instances of a repeated event. Furthermore, this study highlights the fact that the levels of memory details and script-relatedness vary between different instances of the repeated events. As opposed to what was shown before in the memory literature (Linton, 1982; Nelson, 1986), it might not be concluded that all of the autobiographical

memory for a repeated event is formed by scripts. It is pointed out in this study that adults might differentiate between the instances and they can provide more than just script-related details for at least one of the instances.

In Self Memory System (SMS), Conway and Pleydell-Pearce (2000) suggested that the first experiences among repeated events will be more important and detailed than other instances. However, the present study emphasized that the first instance might not be that important for adults in terms of autobiographical memory of a repeated event. According to the findings of the present study, rather than being the first experience, recency effect played a more important role in determining the level of memory details.

## 5.5. Limitations of the Study

Since the aim of this study was to distinguish between types of instances of a repeated event, participants were expected to talk about several events. Basically, just talking about six events might have an influence on the level of details provided for each event. This might decrease people's tendency to describe their memories broadly. Another limitation of the study was that the length of the questionnaire was quite long, which might have had a negative impact on the participants' involvement while they were filling in the questionnaire. Furthermore, the distribution of age in this study mainly represented young adults. The number of middle-aged adults was relatively low, which probably influenced the level of detail and script consistency variable. As

mentioned previously, older adults tend to have wider scripts for events, due to their high number of experiences and better knowledge.

### 5.6. Conclusions

To conclude, adults can differentiate between instances of an ordinary repeated event. The most significant difference in terms of details of the memory was between the last instance and the distinct instance. Being the last experience was the most important determinative factor for the clearity of the memory. Although adults could remember specific details about every five instance of the repeated event, these details were quite low. In addition, the age of the event impacted the phenomenological characteristic of the memory. Furthermore, in comparison to the unique event, the memory for repeated events was less detailed and less important.

There are essential future directions for the study of repeated events. First, researchers could examine the differences between young, middle-aged and older adults in terms of the details of the memory for repeated events. Second, the level of self-relatedness of each instance might play a significant role on the characteristics of the memory for the repeated event. Hence, a research motive for future research could be to understand if the memory details differ in relation to the level of self-relatedness of the specific instance. Last, this study should be replicated with using other repeated ordinary events such as leisure time.

Overall, studying the autobiographical memory of repeated ordinary events would bring a new perspective into the study of autobiographical memory. Generating a better acknowledgement about the features of repeated events would be an important asset in understanding people's ways of remembering the events which constitute most of their memory.

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# Appendix

# Memory Questionnaire

		i anlatır mısınız			
					•••••
•••					
1.			Lütfen ay ve yıl belirtin claşık bir tarih belirtin).	. (Eğer net olara	k
2.	Bu tarihten r	ne kadar eminsi	niz?		
	1	2	3	4	5
مامة	hiç emin ğilim	emin değilim	ne eminim ne değilim	eminim	çok eminim
ue	Riiiiii	degiiiii	degiiiii		
3.	Bu tatil sizin	ı için ne kadar ö	inemliydi?		
	1	2	3	4	5
de	hiç önemli ğil	önemli değil	ne önemli ne önemsiz	önemli	çok önemli

4 D 4 4'1' 1 1 1 4 1 1 4 1	
4. Bu tatili ne kadar detaylı hatırlıyo	rsunuz?

hatırladım

	1	2	3	4	5	
	hiç detaylı	detaylı	ne detaylı ne	detaylı	çok detaylı	
h	atırlamıyorum	hatırlamıyoru	m detaysız	hatırlıyorum	hatırlıyorum	
5.	5. Bu tatili hatırladığınızda hissettiğiniz duygular ne derecede olumlu veya olumsuzdu?					
	1	2	3	4	5	
	hiç olumlu	olumlu	ne olumlu ne	olumlu	çok olumlu	
de	ğil	değil	olumsuz			
6.	Bu tatili ne sı	ıklıkta düşündün	üz?			
	1	2	3	4	5	
	hiç	nadiren	ara sıra	sık	çok sık	
dü	şünmedim	düşündüm	düşündüm	düşündüm	düşündüm	
7.	Bu tatil olduk	ktan sonra bu tati	li hiç anlattınız mı?			
	1	2	3	4	5	
	hiç	nadiren	ara sıra anlattım	çok kez	sürekli	
anl	latmadım	anlattım		anlattım	anlattım	
8.	8. Bu tatili hatırlarken  1 2					
	Kendimi olayır	n bir parçası olarak	Kendir	ni olayı dışardan	izleyen biri olarak	
göı	rüyorum		görüyorun	n.		
9.	Bu tatili anla	tırken o gün hiss	ettiklerinizi ne kadar l	hissettiniz?		
	1	2	3	4	5	
	– hiç	çok az	biraz hissettim	yoğun bir	Şimdi	
his	setmedim	hissettim		biçimde	yaşıyormuşum	
				hissettim	gibi hissettim	
10.	<b>10.</b> Bazı olayları hatırlarken insan o olayları yeniden yaşıyor gibi olur. Bazı olayların ise olmuş olduğunu hatırlar ama hatırası pek canlı değildir. Bu tatil sizin için ne denli canlıydı?					
	1	2	3	4	5	
	Sadece	Olayları çok	Olayların birazını	Olayları	Olayları	
	yle bir olayın	az hatırlıyorum	canlı hatırlıyorum	oldukça net	hatırlarken	
old	luğunu			hatırlıyorum	yeniden yaşıyor	

11. Tatili hatırlarken ne derece gözünüzün önünde canlandı?

gibiyim

<b>1</b> hiç canlanmadı	<b>2</b> çok az canlandı	<b>3</b> biraz canlandı	<b>4</b> net bir biçimde canlandı	<b>5</b> tekrar yaşamışım gibi canlandı				
12. Bu tatilin ay	12. Bu tatilin ayrıntılarını ne derece diğer tatillerinizle karıştırmadan hatırlıyorsunuz?							
	_			_				
<b>1</b> hiç net değil, çok karışıyor	<b>2</b> pek net sayılmaz	<b>3</b> kararsızım	<b>4</b> net sayılır	<b>5</b> çok net, hiç karışmıyor				
	13. Bu tatili hatırlarken tatil esnasındaki sesleri (örn. çevredeki sesleri veya insanların dediklerini) ne derece duyar gibi oluyorsunuz?							
1	2	3	4	5				
hiç duyar	çok az	biraz duyar gibi	çok net	hatırlarken				
gibi olmuyorum,	duyar gibi	oluyorum	bir biçimde	herşeyi yeniden				
sadece hatırlıyorum	oluyorum		duyar gibiyim	yaşar gibi duyuyorum				
14. Bu tatilden f	fotoğraflarınız va	r mı?						
	1		2					
	Evet		Hayır					
15. Eğer varsa,	bu fotoğraflara ne	e sıklıkla baktınız?						
1	2	3	4	5				
hiç	nadiren	ara sıra baktım	sık baktım	çok sık				
bakmadım	baktım			baktım				
16. İnsanlar bazen bir olayın bütün ayrıntılarını hatırlamasalar da başlarından geçtiğini bilirler. Akıllarında olayın kendisinden ziyade böyle bir olayın olmuş olduğu bilgisi vardır. Siz bu tatili hatırlarken bu tatili tam olarak hatırlamayıp sadece böyle bir tatilin olduğunu mu biliyorsunuz yoksa bilmenin ötesinde kendisini mi hatırlıyorsunuz?								
	1		2					
Net olarak hatırlamıyorum ama biliyorum Bu tatili bilmekten öte hatırlıyorum 17. Bu tatili doğru hatırlıyor olduğunuzdan ne kadar eminsiniz?								

<b>1</b> hiç emin değilim	<b>2</b> emin değilim	<b>3</b> ne eminim ne değilim	<b>4</b> eminim	<b>5</b> çok eminim
18. Bu tatil için o	düşüncenizi en	iyi ifade eden seçenek a	şağıdakilerden l	hangisidir?
<b>1</b> çok kötü bir tatildi	<b>2</b> kötü bir tatildi	<b>3</b> ortalama bir tatildi	<b>4</b> güzel bir tatildi	<b>5</b> çok güzel bir tatildi
19. O güne geri o	dönme imkanır	ıız olsaydı bu tatile tekra	ır gider miydiniz	z?
	<b>1</b> Evet		<b>2</b> Hayır	
20. Sizce bu tatil	liniz tipik tatil t	anımınıza ne kadar uyu	yor?	
<b>1</b> hiç uymuyor	<b>2</b> çok az uyuyor	<b>3</b> biraz uyuyor	<b>4</b> oldukça uyuyor	<b>5</b> tamamen uyuyor
		llerinizden farklı kılan ö atili hatırlamanıza sebep		mı? (Başka bir
	<b>1</b> evet		<b>2</b> hayır	
_	_	n diğerlerinden farklı kı	_	

İlk tatilinizi anlatır mısınız?

••••					
••••					
1.			Lütfen ay ve yıl bel aşık bir tarih belirti	, -	rak
2.	Bu tarihten n	e kadar eminsin	iz?		
	1	2	3	4	5
de	hiç emin ğilim	emin değilim	ne eminim ne değilim	eminim	çok eminim
3.	Bu tatil sizin	için ne kadar ör	nemliydi?		
	1	2	3	4	5
de	hiç önemli ğil	önemli değil	ne önemli ne önemsiz	önemli	çok önemli
4.	Bu tatili ne k	adar detaylı hatı	ırlıyorsunuz?		
	1	2	3	4	5
h	hiç detaylı ıatırlamıyorum	detaylı hatırlamıyor	ne detaylı ne um detaysız	•	çok detaylı hatırlıyorum
5.	Bu tatili hatır olumsuzdu?	ladığınızda hiss	settiğiniz duygular ı	ne derecede olumlu	ı veya
	1	2	3	4	5
	hiç olumlu	olumlu	ne olumlu ne	olumlu	çok olumlu
de	ğil	değil	olumsuz		
6.		klıkta düşündür	_		-
	1 bic	2 nadiron	3 2r2 cir2	<b>4</b>	5 cok sik
dü	hiç şünmedim	nadiren düşündüm	ara sıra düşündüm	sık düşündüm	çok sık düşündüm
			tili hiç anlattınız m	•	uuşunuum

	1	2	3	4	5		
anl	hiç atmadım	nadiren anlattım	ara sıra anlattım	çok kez anlattım	sürekli anlattım		
aiii	atmaum	amattiiii		amattiiii	amattiiii		
8.	8. Bu tatili hatırlarken						
	4		2				
	1 Kendimi olavin	bir parçası olarak	2 Kendin	ni olavi disardan i	zleyen biri olarak		
gör	rüyorum	on parçasi olarak	görüyorum		zicych bir olarak		
	•		- ,				
9.		rken o gün hissettik	_	_	-		
	1 hiç	<b>2</b> çok az	<b>3</b> biraz hissettim	<b>4</b> yoğun bir	<b>5</b> Şimdi		
his	setmedim	hissettim	birdz missettim	biçimde	yaşıyormuşum		
				hissettim	gibi hissettim		
10	Daw alawlaw b	actual cultura in come o o	lavlam vomidan vo	سرداد نااند سدردد	Dom alaylamı		
10.		natırlarken insan o o ığunu hatırlar ama h					
	denli canlıydı	_	admust pek edilli d	legnan. Da tatii	Siziii içiii iic		
	J						
					_		
	<b>1</b> Sadece	<b>2</b> Olayları çok	<b>3</b> Olayların birazını	<b>4</b> Olayları	<b>5</b> Olayları		
böy			ılı hatırlıyorum	oldukça net	hatırlarken		
old	uğunu	·	•	hatırlıyorum	yeniden yaşıyor		
hat	ırladım				gibiyim		
11.	Tatili hatırlark	en ne derece gözün	üzün önünde canl	andı?			
	1	2	3	4	5		
	hiç	çok az	biraz canlandı	net bir	tekrar		
car	nlanmadı	canlandı		biçimde	yaşamışım gibi		
				canlandı	canlandı		

12. Bu tatilin ayrıntılarını ne derece diğer tatillerinizle karıştırmadan hatırlıyorsunuz?

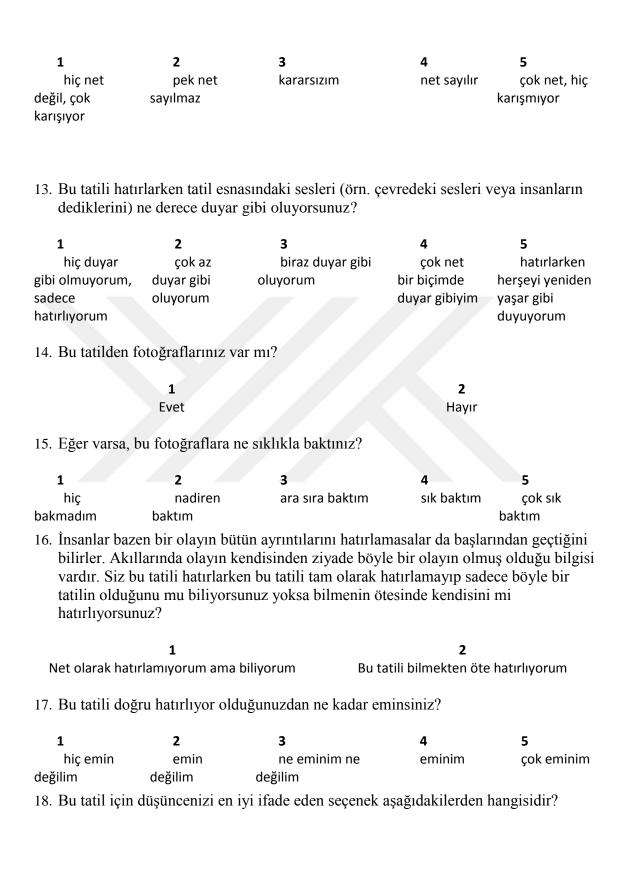
<b>1</b> hiç net değil, çok karışıyor	<b>2</b> pek net sayılmaz	<b>3</b> kararsızım	<b>4</b> net sayılır	<b>5</b> çok net, hiç karışmıyor			
	13. Bu tatili hatırlarken olay esnasındaki sesleri (örn. çevredeki sesleri veya insanların dediklerini) ne derece duyar gibi oluyorsunuz?						
1 hiç duyar gibi olmuyorum, sadece hatırlıyorum	<b>2</b> çok az duyar gibi oluyorum	<b>3</b> biraz duyar gibi oluyorum	<b>4</b> çok net bir biçimde duyar gibiyim	<b>5</b> hatırlarken herşeyi yeniden yaşar gibi duyuyorum			
14. Bu tatilden f	otoğraflarınız va	r mı?					
	<b>1</b> Evet		<b>2</b> Hayır				
15. Eğer varsa, b	ou fotoğraflara ne	e sıklıkla baktınız?					
<b>1</b> hiç bakmadım	<b>2</b> nadiren baktım	<b>3</b> ara sıra baktım	<b>4</b> sık baktım	<b>5</b> çok sık baktım			
16. İnsanlar bazen bir olayın bütün ayrıntılarını hatırlamasalar da başlarından geçtiğini bilirler. Akıllarında olayın kendisinden ziyade böyle bir olayın olmuş olduğu bilgisi vardır. Siz bu tatili hatırlarken bu tatili tam olarak hatırlamayıp sadece böyle bir tatilin olduğunu mu biliyorsunuz yoksa bilmenin ötesinde kendisini mi hatırlıyorsunuz?							
<b>1</b> Net olarak hatırlamıyorum ama biliyorum  Bu tatili bilmekten öte hatırlıyorum							
17. Bu tatili doğru hatırlıyor olduğunuzdan ne kadar eminsiniz?							
<b>1</b> hiç emin değilim	<b>2</b> emin değilim	<b>3</b> ne eminim ne değilim	<b>4</b> eminim	<b>5</b> çok eminim			
18. Bu tatil için düşüncenizi en iyi ifade eden seçenek aşağıdakilerden hangisidir?							

<b>1</b> çok kötü bir tatildi	<b>2</b> kötü bir tatildi	<b>3</b> ortalama bir tatildi	<b>4</b> güzel bir tatildi	<b>5</b> çok güzel biı tatildi
19. O güne geri	dönme imkanını	z olsaydı bu tatile tek	rar gider miydin	iz?
	<b>1</b> Evet		<b>2</b> Hayır	
20. Sizce bu tati	liniz tipik tatil ta	ınımınıza ne kadar uy	uyor?	
<b>1</b> hiç uymuyor	<b>2</b> çok az uyuyor	<b>3</b> biraz uyuyor	<b>4</b> oldukça uyuyor	<b>5</b> tamamen uyuyor
		lerinizden farklı kılan tili hatırlamanıza seb	-	r mı? (Başka bir
	<b>1</b> evet		<b>2</b> hayır	
_		n diğerlerinden farklı		

İlk ve son tatiliniz dışında hatırladığınız herhangi bir tatilinizi anlatır mısınız?

••••		•••••			•••••
• • • • •					
• • • •		•••••			
••••					
1.		,	2 2	rtin. (Eğer net olara	k
	hatırlamıyors	anız lütfen yakla	ışık bir tarih belirti	n).	
	_				
2.	Bu tarihten no	e kadar eminsini 2	z? <b>3</b>	4	5
	hiç emin	emin	ne eminim ne	eminim	çok eminim
de	ģilim	değilim	değilim		
3.	Bu tatil sizin	için ne kadar öne	emliydi?		
	1	2	3	4	5
deĝ	hiç önemli Fil	önemli değil	ne önemli ne önemsiz	önemli	çok önemli
		_			
4.	Bu tatili ne ka	adar detaylı hatır	·lıyorsunuz?		
	1	2	3	4	5
h	hiç detaylı	detaylı	ne detaylı ne	•	çok detaylı
n	atırlamıyorum	hatırlamıyoru	m detaysız	hatırlıyorum	hatırlıyorum
_	D				
5.	Bu tatili hatir olumsuzdu?	ladığınızda hisse	ettiğiniz düygülar n	e derecede olumlu	veya
	1	2	3	4	5
de	hiç olumlu Kı	olumlu değil	ne olumlu ne olumsuz	olumlu	çok olumlu
uce	o''	чевіі	Olulliguz		
	Du tatili	1.1.1.4. da .a. 4	::_0		
6.	Bu tatili ne si	klıkta düşündüni <b>2</b>	uz? <b>3</b>	4	5

hiç düşünmedim	nadiren düşündüm	ara sıra düşündüm	sık düşündüm	çok sık düşündüm	
7. Bu tatil olduk 1 hiç anlatmadım	ktan sonra bu tati <b>2</b> nadiren anlattım	li hiç anlattınız mı?  3  ara sıra anlattım	<b>4</b> çok kez anlattım	<b>5</b> sürekli anlattım	
8. Bu tatili hatır <b>1</b> Kendimi olay görüyorum	'larken yın bir parçası olar	<b>2</b> ak Kendin olarak göri	ni olayı dışardan üyorum.	izleyen biri	
9. Bu tatili anla	9. Bu tatili anlatırken o gün hissettiklerinizi ne kadar hissettiniz?				
ise olmuş old	uğunu hatırlar ar	<b>3</b> biraz hissettim n o olayları yeniden ya na hatırası pek canlı d			
denli canlıyd  1  Sadece böyle bir olayın	1? <b>2</b> Olayları çok az hatırlıyorum	<b>3</b> Olayların birazını canlı hatırlıyorum	<b>4</b> Olayları oldukça net	<b>5</b> Olayları hatırlarken	
olduğunu hatırladım			hatırlıyorum	yeniden yaşıyor gibiyim	
11. Tatili hatırlarken ne derece gözünüzün önünde canlandı?					
<b>1</b> hiç canlanmadı	<b>2</b> çok az canlandı	<b>3</b> biraz canlandı	<b>4</b> net bir biçimde canlandı	<b>5</b> tekrar yaşamışım gibi canlandı	
12. Bu tatilin ayrıntılarını ne derece diğer tatillerinizle karıştırmadan hatırlıyorsunuz?					



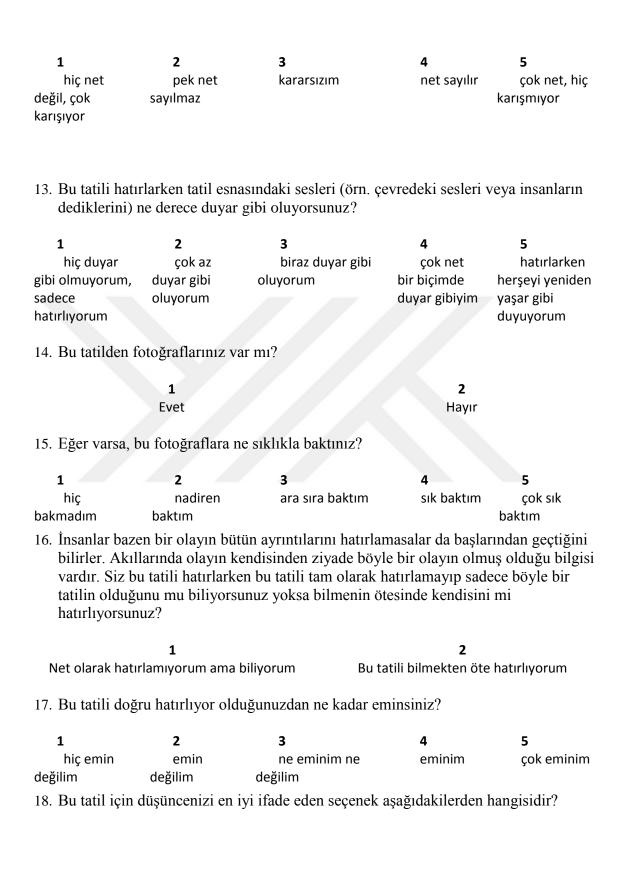
1	2	3	4	5
çok kötü bir	kötü bir	ortalama bir	güzel bir	çok güzel bi
tatildi	tatildi	tatildi	tatildi	tatildi
19. O güne geri	dönme imkanın	ız olsaydı bu tatile tek	krar gider miydini	iz?
	1		2	
	Evet		Hayır	
20. Sizce bu tati	liniz tipik tatil t	anımınıza ne kadar uy	vuyor?	
1	2	3	4	5
hiç	çok az	biraz uyuyor	oldukça	tamamen
uymuyor	uyuyor		uyuyor	uyuyor
<ul> <li>21. Bu tatili sizin için diğer tatillerinizden farklı kılan özel sebepler var mı? (Ba tatili değil de, özellikle bu tatili hatırlamanıza sebep olan)</li> <li>1 evet</li> <li>2 hayır</li> </ul>				
•		n diğerlerinden farklı	•	

Diğer tatillerinize hiç benzemeyen değişik bir tatiliniz var mı? Varsa anlatır mısınız?

••••	••••••	•••••		••••••	•••••••••••
••••		••••••	••••••	•••••••	
1.		,	Lütfen ay ve yıl belirt laşık bir tarih belirtin)	` •	ak
2	Du tomilator n	a Iradan aminais	nia?		
۷.	1	e kadar eminsii	3	Δ	5
	hiç emin	emin	ne eminim ne	eminim	çok eminim
de	ģilim	değilim	değilim		<b>3011 0</b>
	,				
3.	Bu tatil sizin	için ne kadar ö	nemliydi?		
	1	2	3	4	5
	hiç önemli	önemli	ne önemli ne	önemli	çok önemli
değ	ģil	değil	önemsiz		
4.	Bu tatili ne ka	adar detaylı hat	arlıyorsunuz?		
	1	2	3	4	5
	hiç detaylı	detaylı	ne detaylı ne	detaylı	çok detaylı
h	atırlamıyorum	-	•	hatırlıyorum	hatırlıyorum
5.	Bu tatili hatır olumsuzdu?	ladığınızda his	settiğiniz duygular ne	derecede olumlu	veya
	1	2	3	4	5
	hiç olumlu	olumlu	ne olumlu ne	olumlu	çok olumlu
değ	ģil	değil	olumsuz		
	<b></b>				
6.		klıkta düşündü	_	_	_
	1	2	3	4	5
düa	hiç	nadiren	ara sıra	Sık	çok sık
uuş	ünmedim	düşündüm	düşündüm	düşündüm	düşündüm
7	Bu tatil olduk	rtan sonra hu ta	ıtili hiç anlattınız mı?		
•	1	2	3	4	5
		_	-	-	<del>-</del>

hiç anlatmadım	nadiren anlattım	ara sıra anlattım	çok kez anlattım	sürekli anlattım		
görüyorum	rlarken yın bir parçası olarak tırken o gün hissettil	olarak göri		zleyen biri		
<b>1</b> hiç hissetmedim	<b>2</b> çok az hissettim	<b>3</b> biraz hissettim	<b>4</b> yoğun bir biçimde hissettim	<b>5</b> Şimdi yaşıyormuşum gibi hissettim		
10. Bazı olayları hatırlarken insan o olayları yeniden yaşıyor gibi olur. Bazı olayların ise olmuş olduğunu hatırlar ama hatırası pek canlı değildir. Bu tatil sizin için ne denli canlıydı?						
1 Sadece böyle bir olayın olduğunu hatırladım	<b>2</b> Olayları çok az hatırlıyorum ca	<b>3</b> Olayların birazını nlı hatırlıyorum	<b>4</b> Olayları oldukça net hatırlıyorum	5 Olayları hatırlarken yeniden yaşıyor gibiyim		
11. Tatili hatırlarken ne derece gözünüzün önünde canlandı?						
<b>1</b> hiç canlanmadı	<b>2</b> çok az canlandı	<b>3</b> biraz canlandı	4 net bir biçimde canlandı	<b>5</b> tekrar yaşamışım gibi canlandı		

12. Bu tatilin ayrıntılarını ne derece diğer tatillerinizle karıştırmadan hatırlıyorsunuz?



1	2	3	4	5
çok kötü bir	kötü bir	ortalama bir	güzel bir	çok güzel bi
tatildi	tatildi	tatildi	tatildi	tatildi
19. O güne geri o	dönme imkanın	ız olsaydı bu tatile tek	rar gider miydin	iz?
	1		2	
	Evet		Hayır	
20. Sizce bu tatil	iniz tipik tatil ta	anımınıza ne kadar uy	uyor?	
1	2	3	4	5
hiç	çok az	biraz uyuyor	oldukça	tamamen
uymuyor	uyuyor		uyuyor	uyuyor
		lerinizden farklı kılan ıtili hatırlamanıza sebo		r mi? (Başka dir
	evet		hayır	
		n diğerlerinden farklı		
	• • • • • • • • • • • • • • • • • • • •			
	•••••	•••••		

	Az önce yapmış olduğunuz tipik tatil tanımına en çok uyan bir tatilinizi anlatır					
mı	sınız?					
••••						
••••						
1.			Lütfen ay ve yıl belirtin aşık bir tarih belirtin).	n. (Eğer net olara	k	
2	Ru tarihten n	e kadar eminsin	iz?			
۷.	1	<b>2</b>	3	4	5	
deĝ	hiç emin ğilim	emin değilim	ne eminim ne değilim	eminim	çok eminim	
3.	Bu tatil sizin	için ne kadar ör	nemliydi?	4	5	
de	hiç önemli	önemli değil	ne önemli ne önemsiz	önemli	çok önemli	
4.	Bu tatili ne ka	adar detaylı hatı	rlıyorsunuz?			
	1 hiç detaylı atırlamıyorum Bu tatili hatır olumsuzdu?	<b>2</b> detaylı hatırlamıyorı ladığınızda hiss	<b>3</b> ne detaylı ne um detaysız ettiğiniz duygular ne d	<b>4</b> detaylı hatırlıyorum lerecede olumlu v	<b>5</b> çok detaylı hatırlıyorum veya	
deĝ	<b>1</b> hiç olumlu	<b>2</b> olumlu değil	<b>3</b> ne olumlu ne olumsuz	<b>4</b> olumlu	<b>5</b> çok olumlu	

6. Bu tatili ne i	sıklıkta düşündün <b>2</b> nadiren	üz? <b>3</b> ara sıra	<b>4</b> sık	<b>5</b> çok sık		
düşünmedim	düşündüm	düşündüm	düşündüm	düşündüm		
7. Bu tatil oldu 1 hiç anlatmadım	uktan sonra bu tati <b>2</b> nadiren anlattım	ili hiç anlattınız mı? <b>3</b> ara sıra anlattım	<b>4</b> çok kez anlattım	<b>5</b> sürekli anlattım		
8. Bu tatili hatırlarken  1 2  Kendimi olayın bir parçası olarak Kendimi olayı dışardan izleyen biri olarak görüyorum görüyorum.  9. Bu tatili anlatırken o gün hissettiklerinizi ne kadar hissettiniz?						
<b>1</b> hiç hissetmedim	<b>2</b> çok az hissettim	<b>3</b> biraz hissettim	<b>4</b> yoğun bir biçimde hissettim	<b>5</b> Şimdi yaşıyormuşum gibi hissettim		
_	lduğunu hatırlar aı	n o olayları yeniden ya ma hatırası pek canlı o		-		
1 Sadece böyle bir olayın olduğunu hatırladım	<b>2</b> Olayları çok az hatırlıyorum	<b>3</b> Olayların birazını canlı hatırlıyorum	<b>4</b> Olayları oldukça net hatırlıyorum	<b>5</b> Olayları hatırlarken yeniden yaşıyor gibiyim		
11. Tatili hatırlarken ne derece gözünüzün önünde canlandı?						
<b>1</b> hiç canlanmadı	<b>2</b> çok az canlandı	<b>3</b> biraz canlandı	4 net bir biçimde canlandı	<b>5</b> tekrar yaşamışım gibi canlandı		

12. Bu ta	atilin ayrıntı	ılarını ne d	lerece di	ğer tatıl	lerınızle	karıştırmad	lan hatır	lıyorsunuz'?
	•			_		,		•

1	2	3	4	5
hiç net	pek net	kararsızım	net sayılır	çok net, hiç
değil, çok	sayılmaz			karışmıyor
karışıyor				

13. Bu tatili hatırlarken tatil esnasındaki sesleri (örn. çevredeki sesleri veya insanların dediklerini) ne derece duyar gibi oluyorsunuz?

1	2	3	4	5
hiç duyar	çok az	biraz duyar gibi	çok net	hatırlarken
gibi olmuyorum, sadece hatırlıyorum	duyar gibi oluyorum	oluyorum	bir biçimde duyar gibiyim	herşeyi yeniden yaşar gibi duyuyorum

14. Bu tatilden fotoğraflarınız var mı?

**1 2** Evet Hayır

15. Eğer varsa, bu fotoğraflara ne sıklıkla baktınız?

1	2	3	4	5
hiç	nadiren	ara sıra baktım	sık baktım	çok sık
bakmadım	baktım			baktım

16. İnsanlar bazen bir olayın bütün ayrıntılarını hatırlamasalar da başlarından geçtiğini bilirler. Akıllarında olayın kendisinden ziyade böyle bir olayın olmuş olduğu bilgisi vardır. Siz bu tatili hatırlarken bu tatili tam olarak hatırlamayıp sadece böyle bir tatilin olduğunu mu biliyorsunuz yoksa bilmenin ötesinde kendisini mi hatırlıyorsunuz?

1 2
Net olarak hatırlamıyorum ama biliyorum Bu tatili bilmekten öte hatırlıyorum

17. Bu tatili doğru hatırlıyor olduğunuzdan ne kadar eminsiniz?

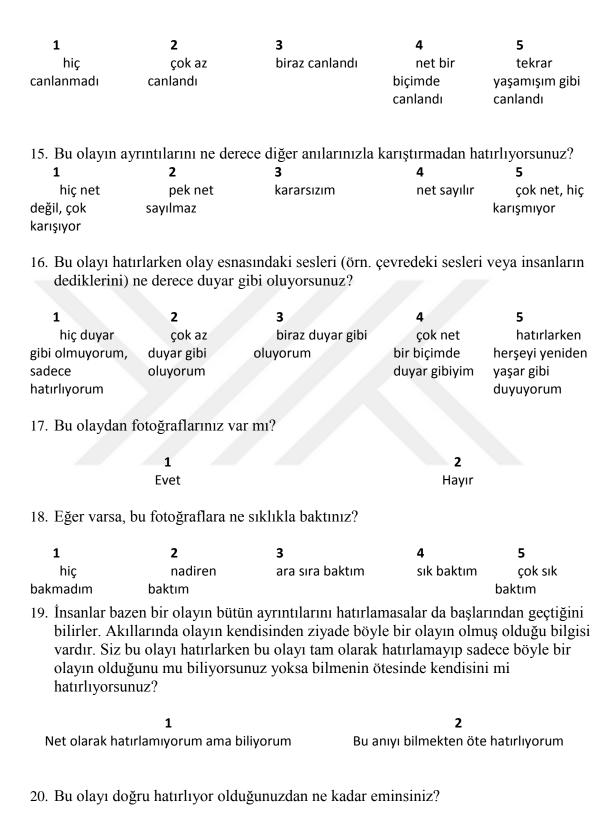
<b>1</b> hiç emin	<b>2</b> emin	<b>3</b> ne eminim ne	<b>4</b> eminim	<b>5</b> çok eminim
değilim	değilim	değilim		
18. Bu tatil için	düşüncenizi en	iyi ifade eden seçenek a	nşağıdakilerden	hangisidir?
	•	•		_
<b>1</b> çok kötü bir	<b>2</b> kötü bir	<b>3</b> ortalama bir	<b>4</b> güzel bir	<b>5</b> çok güzel bir
tatildi	tatildi	tatildi	tatildi	tatildi
	dönme imkanın	ız olsaydı bu tatile tekra	ar gider mivdini	z?
19. 6 game gen		nz oisayar oa tame tom	ar graer innyann	
	1		2	
	Evet		Hayır	
20. Sizce bu tati	liniz tinik tatil t	anımınıza ne kadar uyu	vor?	
20. Sizee ou tati	iiiiz tipik tatii t	amminiza ne kadar uyu	yor!	
1	2	3	4	5
hiç	çok az	biraz uyuyor	oldukça	tamamen
uymuyor	uyuyor		uyuyor	uyuyor
		llerinizden farklı kılan ö atili hatırlamanıza sebep		r mı? (Başka bir
	1		2	
	evet		hayır	
	CVCt		nayn	
22. Eğer varsa, l	ou tatili sizin içi	n diğerlerinden farklı k	ılan sebepleri kı	saca belirtiniz.
		•••••		

Tatil anınız olmayan, aklınıza gelen herhangi bir olayı anlatır mısınız?

			•••••			
	•••••					
1.	1. Bu olay ne zaman olmuştu? Lütfen ay ve yıl belirtin. (Eğer net olarak hatırlamıyorsanız lütfen yaklaşık bir tarih belirtin).					
	-		77			
2.	Bu tarihten n	e kadar eminsii			_	
	1 his amin	2 omin	ne eminim ne	<b>4</b> eminim	<b>5</b> çok eminim	
dab	hiç emin gilim	emin değilim	değilim	eminim	çok eminim	
uce	5,,,,,,	асышп	асынн			
3.	Bu olaydan ö	once, bu olaya b	enzer bir olay yaşadınız	mı?		
		1	, ,	2		
		Evet		Hayır		
1	Du olovdon s	onro bu olovo	hanzar hir alaw wagadini	z m19		
4.	Bu Olayuali S	1	benzer bir olay yaşadınız	<b>2</b> IIII ?		
		-		_		
		Evet		Hayır		
5.	Bu olay sizir	ı için ne kadar ö	nemliydi?			
6.	_	_	_	_	_	
	1	<b>2</b>	3	<b>4</b>	5	
değ	hiç önemli	önemli değil	ne önemli ne önemsiz	önemli	çok önemli	
uee	311	uegii	OHEITISIZ			
7.	Bu olayı ne l	kadar detaylı ha	tırlıyorsunuz?			

1	2	3	4	5					
hiç detaylı	detaylı	ne detaylı ne	detaylı	çok detaylı					
hatırlamıyorum	hatırlamıyorum	-	hatırlıyorum	hatırlıyorum					
•									
olumsuzdu?									
1	2	3	4	5					
hiç olumlu	olumlu	ne olumlu ne	olumlu	çok olumlu					
değil	değil	olumsuz		•					
· ·	J								
9. Bu olayı ne s	ıklıkta düşündünü	z?							
1	2	3	4	5					
hiç	nadiren	ara sıra	sık	çok sık					
düşünmedim	düşündüm	düşündüm	düşündüm	düşündüm					
	•								
10. Bu olay oldu	ktan sonra bu anıy	n hiç anlattınız mı?							
1	2	3	4	5					
hiç	nadiren	ara sıra anlattım	çok kez	sürekli					
anlatmadım	anlattım		anlattım	anlattım					
11. Bu olayı hatı	rlarken								
1		2							
Kendimi olay	ın bir parçası olara	k Kendin	ni olayı dışardan	izleyen biri					
görüyorum		olarak göri							
12. Bu olayı anlatırken o gün hissettiklerinizi ne kadar hissettiniz?									
J	J								
1	2	3	4	5					
hiç	çok az	biraz hissettim	yoğun bir	Şimdi					
hissetmedim	hissettim		biçimde	yaşıyormuşum					
			hissettim	gibi hissettim					
13. Bazı olayları hatırlarken insan o olayları yeniden yaşıyor gibi olur. Bazı olayların									
ise olmuş olduğunu hatırlar ama hatırası pek canlı değildir. Bu olay sizin için ne									
denli canlıydı?									
1	2	3	4	5					
Sadece	Olayları çok	Olayların birazını	Olayları	Olayları					
böyle bir olayın		canlı hatırlıyorum	oldukça net	hatırlarken					
olduğunu		•	hatırlıyorum	yeniden yaşıyor					
hatırladım			•	gibiyim					

14. Olayı hatırlarken ne derece gözünüzün önünde canlandı?



<b>1</b> hiç emin değilim	<b>2</b> emin değilim	<b>3</b> ne eminim ne değilim	<b>4</b> eminim	<b>5</b> çok eminim	
	•	iyi ifade eden seçenek	aşağıdakilerden l	nangisidir?	
<b>1</b> çok kötü bir anıydı 22. O güne geri	<b>2</b> kötü bir anıydı dönme imkanın	<b>3</b> ortalama bir anıydı ız olsaydı bu olayı tekra	<b>4</b> güzel bir anıydı ar yaşamak ister	<b>5</b> çok güzel bir anıydı miydiniz?	
	<b>1</b> Evet		<b>2</b> Hayır		
		larınızdan farklı kılan ö olayı hatırlamanıza sebe		mı? (Başka bir	
<b>1</b> evet			<b>2</b> hayır		
		iğerlerinden farklı kılan			

Genellikle ne sıklıkta tatile gidersiniz? (Yılda kaç defa?)

Appendix				106
Son 5 yılda ne s	ıklıkla tatile gittin	iz?		
Aşağıdakilerder	n hangisi tatile gidi	ış sıklığınızı tanın	nlar?	
1	2	3	4	5
Hiç	Nadiren	Bazen	Sık sık	Çok sık
oğum Tarihiniz: (	GünAyY	ıl		
insiyetiniz: Kadın	Erkek			
ledeni Haliniz: Be	ekar <u>E</u> vli <u>B</u>	oşanmışDul_		
ğitim Durumunuz	: İlkokulOrtaol	kulLiseÜr	iversiteYükse	k Lisans
oktora				
lesleğiniz:				