

# **Imagining Infidelity: Gender Differences in Episodic Future Thinking**

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I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science in General Psychology.

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## ABSTRACT

Current research concentrated on gender differences in terms of the episodic future thinking by including infidelity which is a stressful experience, as a manipulator. In detail, current study focused on the question of how episodic future thinking of people would be affected when they were asked to imagine being cheated, and whether this effect would differ in terms of gender. Two facets of the episodic future thinking were analysed in detail; centrality of the event and phenomenological characteristics. There was insignificant difference in terms of infidelity between the ratings of male and female participants and no significant difference in answers to both sexual and emotional infidelity in CES results. This was also revealed that it was insignificant interaction between gender and two form of infidelity. We expected that women's score would be higher than men for both types of infidelities, but only for visual imagery, spatial imagery, and perspective significant differences were found among two groups. Moreover, results did not demonstrate a significant difference between sexual infidelity and emotional infidelity in terms of AMQ, plus insignificant interaction effect was found for gender and infidelity types on AMQ. In conclusion, current study revealed insignificant difference between men and women in terms of episodic future thinking.

**Keywords:** Infidelity, CES, AMQ, Gender, Episodic Future Thinking

## ÖZ

Bu arařtırmada, stresli bir deneyim olan aldatma manipölatör olarak alıřmaya dâhil edilip, katılımcıların epizodik gelecek düşünceleri açısından cinsiyet farklılıklarına odaklanılmıştır. Detaylı olarak bu alıřma, insanların aldatıldıklarını hayal ettiklerinde, epizodik gelecek düşüncelerinin nasıl etkileneceđi ve bu etkinin cinsiyetler arasında farklı olup olmadığı sorusuna odaklanılmıştır. Epizodik gelecek düşüncesinin iki yönü ayrıntılı olarak deđerlendirilmiştir; olayın merkeziliđi ve fenomenolojik özellikleri. Erkek ve kadın derecelendirmeleri arasında aldatma açısından anlamlı bir fark olmadığı ve CES sonuçlarında cinsel aldatma ve duygusal aldatmaya tepkilerde anlamlı bir fark olmadığı sonucuna varılmıştır. Ayrıca, cinsiyet ve aldatma türü arasında anlamlı bir etkileşim olmadığı bulunmuştur. Buna ek olarak, kadınların her iki tür aldatma için erkeklerden daha fazla puan alacağıının varsayıldığı bu alıřmada, sonuçlar, iki grup arasındaki farklılığın yalnızca görsel imgeleme, mekânsal imgeleme ve perspektif için anlamlı olduğunu göstermiştir. Sonuçlar, cinsel aldatma ve duygusal aldatma arasında, AMQ açısından, anlamlı bir fark olmadığını ayrıca cinsiyetin ve aldatma türlerinin AMQ üzerinde, etkileşim etkisinin olmadığını göstermiştir. Sonuç olarak, Bu alıřma, epizodik gelecek düşüncesi açısından erkekler ve kadınlar arasında anlamlı bir fark olmadığını ortaya koymuştur.

**Anahtar Kelimeler:** Aldatma CES, AMQ, Cinsiyet, Epizodik Gelecek Düşüncesi

To myself and my parents

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## LIST OF SYMBOLS AND ABBREVIATIONS

AMQ	Autobiographical Memory Questionnaire
ANOVA	Analysis of Variance
CES	Centrality of Event Scale
d	Cohens d
EAM	Episodic Autobiographical Memory
EFT	Episodic Future Thinking
F	F-ratio
M	Mean Score
MEQ	Memory Experiences Questionnaire
MSe	Mean of Standard Error
n	Sample Size
p	Probability
SD	Standard Deviation
t	Critical Value
$X^2$	Chi-Square Test
$\eta_p^2$	Eta-squared (a measure of the size of an effect)

# Chapter 1

## INTRODUCTION

### 1.1 Autobiographical Memory and Episodic Future Thinking

Autobiographical memory (ABM) is a person's remembering what happened in his/her past and it is a memory that continually improves during childhood and adolescent years based on the formation of a feeling of self (Cabeza & St Jacques, 2007). Mental time travel is a property of ABM and it is defined as the capacity to recall our previous experiences and plan our own selves in to the potential future occurrences resulting in episodic future thinking (Schacter, Addis & Buckner, 2009).

Generally, psychological research emphasizes on the retrospective parts of memory and memory studies are carried out in this logic (Suddendorf, 2010). Retrospective memory means remembering past events by traveling back in time (Suddendorf & Corballis, 2007). Therefore, recalling episodic memories, as mentioned earlier, is the conscious re-experiencing of past events, i.e. a kind of mental journey to the past (Tulving, 1983). Studies showed that mental time travel in episodic memory is not just about the past, but also about the future (D'Argembeau & Van der Linden, 2004).

Imagining and thinking about events that have not yet happened is an active process as thinking and remembering the past experienced events (D'Argembeau & Van der Linden, 2004). Studies show that there is a relationship between the past and future mental time travel. For example, Klein, Loftus, and Kihlstrom (2002) defined a case

of amnesia in which a person lost all ability to recall the personal history and visualize the personal future, however preserved the capacity to think non-personally about past and future. Positron emission tomography (PET) screening was used by Okuda, Fujii, Ohtake, Tsukiura, Tanji, Suzuki, and Yamadori (2003) to demonstrate that thinking of past and future elicits similar patterns of activity in the brain. Research supported that people think a lot about the future in their daily lives (Berntsen & Jacobsen, 2008). Previous research has shown that healthy adults, on average 60 times a day, are thinking about a particular event that has not yet occurred (D'Argembeau, Renaud, & Van der Linden, 2011).

Taking everything into consideration, these results shows that EFT is distinct form of mental time travel that is commonly used.

### **1.1.2 Definition of Episodic Future Thinking**

One of the human brain's unique characteristics is that it enables people to overcome their current conditions in order to imagine potential scenarios. That capability, mostly referred as episodic future thinking, is essential to many parts of human cognition and actions, including organizing and strategic thinking to self-management and self-identity (Atance & O'Neill, 2001). The subjective sense of "pre-experiencing" the potential future is a feature of episodic future thinking; people can visualize about what it might be like to be in such a specific future scenario, for instance by imagining the environment, people and behavior in their mind (D'Argembeau & Van der Linden, 2004). Such phenomenological features are essential since they possibly define one's perceptions on what may happen in the future, and in fact affect individual's choices and attitudes (D'Argembeau & Van der Linden, 2004).

Research in looking to the future from a cognitive viewpoint has its origins in Tulving's

pioneering findings (1985), who talked about an amnesic adult without any episodic memory who could not recall things from his life and experiences or imagine things that might occur in his future. Later on, Suddendorf and Corballis (2007) indicated that the ability to connect in mental time travel in to the personal past and future can be a particular human capacity, a hypothesis that is still widely discussed in the literature (Corballis, 2013; Suddendorf, 2013). Atance and O'Neill (2001) officially named the capacity to imagine potential personal events as episodic thinking of the future.

Episodic thinking of the future is only one of the ways of future thinking or prospecting (Gilbert, & Wilson, 2007). A newly suggested categorization identifies between four important forms of future thinking: visualization (development of a particular mental image of the future), prediction (prediction of the probability of a potential result), purpose (establishment of an objective), and preparation (organization of measures to achieve an aim) (Szpunar, Spreng, & Schacter, 2014). It is suggested that every type of future thinking differ by its conceptual nature on a continuum from episodic (particular autobiographical encounters that may occur in the future) to semantic (more generalized or theoretical world states which may happen in the future) (Schacter, Benoit, & Szpunar, 2017). Episodic future thought may theoretically apply to episodic simulation, estimation, purpose, or preparation (Schacter, Addis, & Buckner, 2008).

Nevertheless, in reality, research of episodic future thinking most often concentrate on episodic simulations; in addition, the terminology episodic future thinking and episodic simulation are often used correspondently (Szpunar, 2010). In this study, we are mainly focusing on the visualization of a future mental event by imagining the infidelity (emotional and sexual) scenario.

There are different methods which is usually used to assess episodic future thinking (Szpunar, & McDermott, 2008). In general, individuals are asked to create possible future scenarios mentally [e.g., “me and my close friends are having fun in a restaurant we all like”, Szpunar, & McDermott, 2008, p. 120] in answer to word clue (e.g., restaurant) or event clue as the technique used in our study to imagine infidelity (e.g., Christmas eve). Investigators clarify to participants that the simulations do not always have to be linked to the clues themselves in order to ensure that participants can generate comprehensive mental scenarios (Szpunar, & McDermott, 2008). After the creation of images, participants are required to score their mental images on a range of phenomenological features (e.g., vividness) (Szpunar, Watson, & McDermott, 2007).

### **1.1.3 Functions of Episodic Future Thinking**

Episodic future thoughts often arise in daily life and appear to be favorably biased (Barsics, Van der Linden & D’Argembeau, 2016). Early experimental and clinical researches presented initial proof that they represent a variety of functions such as decision making, regulating emotions, forming aim and organizing (Schacter, 2012).

An effect of episodic future thinking on decision-making has already been proven in inter-temporal option researches where participants choose about two rewards choices that vary in severity and delay before arrival, like a limited but more proximal or a bigger but more distal award (Schacter, Benoit, & Szpunar 2017). Future awards are usually depreciated in relation to the duration of the delay (i.e. temporarily discounted), frequently resulting to proximal decisions of the smaller award alternative (Schacter, Benoit, & Szpunar 2017). Nevertheless, once individuals simulate having the greater award, however, they become much more willing to endure and change to favor this farsighted decision (O’Donnell, 2017). These results have already been

generalized to the field of eating behavior, where involvement in episodic future thinking decreases calorie consumption for both female undergraduate students (Dassen, Jansen, Nederkoorn, & Houben, 2016) as well as in obese or overweight females, thereby distorting diet choices away from instant food awards and toward achieving longer-term health targets linked to losing weight (O'Neill, 2016).

Similar results have been reported on the intake of alcoholic beverages in people with alcohol-dependence issues (Snider, LaConte, & Bickel, 2016) and on the use of tobacco in smokers (Stein, Wilson, Koffarnus, Daniel, Epstein, & Bickel, 2016). Previous researches have demonstrated that these consequences of future episodic thinking are more apparent once the simulated case relates to the relevant choice (e.g. imagine the future time when you buy a laptop while making financial decisions) (O'Neill, 2016, pp, 70-71). The influence of episodic future thinking is based on the essence of the expected case, indicates that it does not automatically reflect a systematic shift in the future direction. (Schacter, Benoit, & Szpunar, 2017). In light of these results, making decisions is an important function of episodic future thinking, which is necessary at every moment of people's daily life.

Future episodic thinking was also related to emotional regulation, based on the decreased precision and vividness of future episodic thought in nervous individuals with regulation of emotion issues (Schacter, Benoit, & Szpunar, 2017). Jing and his colleagues (2016) said that people simulate potential solutions to individually worrying events in the future that have positive impacts on emotion regulation: individuals developed more proactive actions to fix a future troubling situation, were easier able to re-evaluate the incident and demonstrated progress in many personal well-being measurements. Nonetheless other research suggests that it may also be



effective to restrain simulations of situations that individuals worry may occur in their lives (Schacter, Benoit, & Szpunar, 2017): these repressions triggered the forgetting of the specifics information usually connected with the feared incidents, the capability to visualize situations eventually prevented, and significantly decreased anxiety as well. Individuals who have been especially effective at regulating their worries of the future through suppression were much less nervous, indicating that suppressing is a natural mechanism of coping (Schacter, Benoit, & Szpunar, 2017). Similar research demonstrates that vivid and specific episodic simulation of aid actions can promote empathy or prosocial actions towards the people who need help (Gaesser & Schacter, 2014). In brief, emotion regulations one of the functions of episodic future thinking helping people plan their lives and reduce the level of stress that is likely to occur.

Several researches have indicated that episodic future thought can improve prospective memory, which is, the capacity to recall a given goal at a future time (e.g. movement) (Schacter, Benoit, & Szpunar, 2017). Simulating a future goal increases the likelihood that that intention will eventually be performed (Altgassen, Rendell, Bernhard, Henry, Bailey, Phillips, & Kliegel, 2015). Such positive impacts have been of similar intensity in old and young individuals regardless of the presence of episodic future thought deficiencies in older people, however simulating a future goal have decreased on heavy social alcohol consumers, who also exhibit episodic simulation deficiencies (Platt, Kamboj, Italiano, Rendell, & Curran, 2016). Generally, these results also illustrate the practical value of episodic future thinking regarding prospective memory as well as indicate a connection between the two types of prospecting, which was already confirmed by a research that reported strong positive associations between episodic future thinking and prospective memory skills in young and old individuals (Schacter,

Benoit, & Szpunar, 2017).

Lastly, cognitive evidence indicates that episodic future thinking has an effect in forming the sense of individuality and identification of an individual (D'Argembeau, 2012). Cognitive and neuroimaging studies suggest a link among episodic future thought and different imaginative thinking (Roberts, Wiebels, Sumner, van Mulukom, Grady, Schacter, & Addis, 2017; Roberts, & Addis, 2018). Spatial mapping researches also demonstrates that episodic simulation contributes significantly to the preparation of roads and the achievement of navigational targets (Roberts, et.al., 2017).

To sum up briefly, episodic thinking of the future is the capability to visualize or imagine situations that may occur in the foreseeable term (Schacter, Benoit, & Szpunar 2017). The ability to predict events is facilitated by cognitive functions including the retrieval of information from previous experiences and the use of this knowledge to create new mental images which are transformed in to future (Schacter, Benoit, & Szpunar 2017). These functions are basically identified the factors where episodic future thinking provides performance productivity in daily lives, such as decision-making, emotional regulation (stress management), memory for the future possibilities (Schacter, Benoit, & Szpunar 2017).

#### **1.1.4 Individual Differences in Episodic Future Thinking**

Personal experience, and awareness of self-interests in general, has a major role in the development of episodic future thinking. Cultural and gender disparities exist between remembering of past life experience and imagining potential life events (Wang, Hou, Tang, & Wiprovnick, 2011). Euro-Americans have generated memories with more details about both the past and the future compared to Chinese; in addition, the same study shows that women say more detailed moments than men about both the future

and the past (Wang, Hou, Tang, & Wiprovnick, 2011). Differences in episodic thinking for gender and culture may arise from different storytelling activities to the children related to past talk by their parents (Wang, Hou, Tang, & Wiprovnick, 2011).

There is another issue where individual differences are present in the episodic future thinking; Age. It has been shown that social cognitive skills of children that are necessary for mental time travel, such storytelling skills, self-awareness, and time comprehension, tend to improve through middle childhood, which can promote episodic thinking for children (Wang, Hou, Tang, & Wiprovnick, 2011).

Developmental psychologists have started to realize that the appearance of the ability to imagine future personal experiences can correlate with the development of the capability to remember the past (Szpunar, & McDermott, 2008). The study showed that the ability to imagine a future event develops regularly at the age of 3 and 5 and the function of episodic memory starts to decrease with the aging (Szpunar, & McDermott, 2008). Levine, Svoboda, Hay, Winocur and Moscovitch (2002) have found that older people remember less episodic details from their previous experiences compared to younger people and this episodic weakness spreads to future mental projections.

## **1.2 Autobiographical Memory Phenomenology**

Autobiographical memories differ from each other in terms of phenomenology, i.e. they often contain different senses such as vision, hearing, smell, taste, touch or motion; and also in terms of emotion, time and content (Rubin, 2005). This deals with the phenomenology part of autobiographical memory because phenomenology focuses on the subjective experience and interpretation of events (Rubin, 2005). The

phenomenological experience aligned to recalling is a key characteristic of the autobiographical memory (Rubin, Schrauf, & Greenberg, 2003). So, phenomenology of memory has developed as such a significant part of autobiographical memory, (e.g., Rubin & Siegler, 2004). Phenomenology is a crucial element of autobiographical memory, and therefore potentially perform a similar moderating function among essential preferences and feature modifications (Rubin, Schrauf, & Greenberg, 2003).

The concept of recall and the perception that memories are two phenomenological features which are of fundamental functional and philosophical significance to autobiographical memory. There are factors which affect the phenomenology of autobiographical memory.

Maki, Janssen, Uemiya, and Naka, (2013) have looked at how the cue word influences the memory's phenomenological characteristics and they found that participants had a higher score for phenomenological features of autobiographical memory linked to emotional cue words compared to neutral cue words. D'Argembeau and Van der Linden (2007) suggested that motivations of self-improvement have a significant role in forming the autobiographical memory phenomenology. Moreover, they found that participants were recalling moments of pride with more specificity than shameful moments, and they were providing a better sense of mental reliving and a greater sense that the incidents were more real for proud memories. As the autobiographical memory, episodic future thinking also show differences in terms of phenomenology.

Phenomenology of episodic future thinking is important since they are likely to determine One's expectations on what may happen in the future and in consequence affects the choices and actions of a person (Szpunar & McDermott, 2008).

D'Argembeau and der Linden (2012) asked the participants to imagine a future event related to each word in detail after giving a list of words, so the word cue technique was used in this study. They found that different events have different characteristics, so it is very crucial to understand the specific phenomenological properties of episodic future thoughts that affect an event (D'Argembeau & der Linden, 2012). Episodic future thought's vividness is essentially based on the familiarity of the imagined situations' basic components (Arnold, McDermott, & Szpunar, 2011). The location familiarity of the imagined event and the familiarity of the person and objects are the two key indicators of the vividness of future episodic thoughts. Arnold, McDermott, and Szpunar (2011) showed the importance of place familiarity in the vividness of episodic future thinking by doing three different experiments about the temporal distance and location familiarity. In all experiments researchers used the Crovitz–Shiffman cuing technique and asked questions about the imagined event's details. These results demonstrate that the more place clarity observed in relatively close-future events (compared to events in the far future) can largely be explained by disparities in place familiarity. D'Argembeau and der Linden (2012) found that not only spatial familiarity, but also people and objects in the imagined event had a significant impact on vividness. As a conclusion, there are other factors where familiarity is important outside the location, for example, people and objects, and they play a big role in the formation of vividness (D'Argembeau & der Linden, 2012).

More precisely, the subjective emotional connection of the imagined future event, the feeling of experiencing it in advance, and the high likelihood of that event happening in the future are closely related to vividness (D'Argembeau & der Linden, 2012).

Cognitive sensations associated with episodic future thoughts are partly dependent on

sensory-perceptual characteristics (i.e., vividness and visual perception) and are more modulated with the personal value given to one's imagined event (D'Argembeau & der Linden, 2012).

Another essential sensory-perceptual characteristic of episodic future thinking is visual perspective and it was irrelevant to the envisioned factors' familiarity, but rather relied on the approximate temporal distance of the events (D'Argembeau & der Linden, 2012). Moreover, researchers have found that when people imagine events with their own perspectives, the feeling of pre experiencing events increases (D'Argembeau & der Linden, 2012). D'Argembeau and der Linden (2012), showed that cognitive emotions depend partly on the sensory-perceptive characteristics of individual's thoughts about the future. In summary, this research has demonstrated that the phenomenology of possible episodic thoughts is formed according to the features of the imagined event.

Another study showed that the increased difference in time also leads to decreases in the phenomenological characteristics of episodic memories (e.g. sensory images and specificity) as well as a rise in features correlated to future projection (e.g. significance, importance in life and personality) (Özbek, Bohn, & Berntsen, 2017). Özbek and her colleagues (2017) found that the ratings of participants were more optimistic, and participants were more willingly rehearsed, more essential, and the effects of events are more central in their life story for the episodic future projections.

De Brigard and Giovanello (2012) have demonstrated that the temporal distance of the incident is related to the vividness of the event; this is because people are closer to recent events and they can give details more clearly related to events which may

happen in near future. The influence of spatial distance is mainly determined by contextual familiarity in vividness of the episodic future thinking.

As a conclusion, when participants are asked to imagine a future event, it has been found that there is a significant effect of familiarity of the person, place and objects on the pre experiencing and vividness of the imagined future event. Moreover, visual perception and temporal distance of the possible future event affect the vividness of episodic future thought.

In this study, the purpose of using Autobiographical Memory Questionnaire was to look at the phenomenological characteristics of the participants in the episodic future thinking with 14 questions found in the survey. With these questions, it was looked at whether there were phenomenological differences between the genders. The phenomenological features in this survey, in which participants expressed their own personal views (on 7- Point-Likert scales) after the sexual vs. emotional infidelity they had imagined, are: ‘vividness, pre/living, visual imagery, auditory imagery, spatial imagery, emotional valence, emotional intensity, importance, perspective, voluntary rehearsal, involuntary rehearsal, ease of remembering/imagining, and specificity’.

### **1.3 Centrality of Event**

Event centrality indicates the “event forms a reference point for personal identity and for the attribution of meaning to other experiences in a person’s life” (Berntsen & Rubin, 2006, p. 219). Berntsen and Rubin created the Centrality of Event Scale (CES) to assess the centrality of traumatic or unpleasant incidents in the personal history of a person, and how it contributed to symptoms of PTSD (Berntsen & Rubin, 2006).

After its establishment, nevertheless, the CES was also used to investigate the

centrality of a broad variety of incidents, like experiences for occurrences not specifically linked to trauma or Post traumatic stress disorder, including experiences of embarrassing incidents (e.g., Matos & Pinto-Gouveia, 2010), good experiences (e.g., Janssen, Hearne, & Takarangi, 2015), memories of self-discrepancy (Mutlutürk & Tekcan, 2016).

The early theoretical motive for the CES (Berntsen & Rubin, 2006) highlighted the increased accessibility of painful or unpleasant memories compared to other experiences because of the traumatic experiences' emotionally evocating and different structure. But accessibility of a particular traumatic experience is influenced not just by conditions relevant to the recalled occurrence itself, but also from the individual's more generalized personality traits.

Berntsen & Rubin, (2008) has demonstrated that CES score of a particular stressful experience is positively associated with many other features of the same memory. Research shows that there is a positive correlation between the characteristics of memory and the CES score like emotional sensitivity, vividness (Berntsen & Rubin, 2006). Additionally, Boals (2010) showed that women are more likely to interpret a negative experience more central for their identity than men do, which is one reason why women have higher scores on scales that measure their mental and physical health scores. The reported differences between men and women in adult emotional experiences are likely the result of emotional experiences instructed to girls and boys so women have been encouraged to focus on emotional events from a very young age. (Boals, 2010). A possible response to the emotional events taught to women in indirect way since they are young children is that the emotional events they experience become the center of identity in their lives. That's why in this study, expecting difference



between the genders is that women feel more of the stress-causing incidents at the center of their lives and CES was used to measure how much women felt this centrality in their lives in order to identify differences between men and women in episodic future thinking.

#### **1.4 Gender Differences in EFT**

There are gender differences in autobiographical memory (Gryzman, & Fivush, 2016; Gryzman, & Hudson, 2013; Pillemer, Wink, DiDonato, & Sanborn, 2003; Schulster, 2013) and episodic future thinking (Wang, Hou, Tang, & Wiprovnick, 2011; Compère, Rari, Gallarda, Assens, Nys, Coussinoux, & Piolino, 2018).

According to Gryzman and Hudson (2013), autobiographical memories of females are more comprehensive, complex, interpersonal, and expressing feelings than males through a number of research and procedures. Research that mainly focused on gender differences in autobiographical memory styles agrees with the concept that the memories of females in interpersonal and behavioral events are better than males with regards to potential differences between genders (Pillemer, Wink, DiDonato, & Sanborn, 2003). Females performed significantly higher on an autobiographical memory measure that contained having a better memory of their past life, their wishes, and emotional experiences in general (Schulster, 2013). Tannen (1990) found that speech of females mostly contains individual experiences with many details, even though speech of males is broader and do not include too many personal information. Systematic analyses of self-report memories and qualities of remembered events are aligned to information regarding discrepancies in gender (Ross & Holmberg, 1992).

Furthermore, Gryzman, & Fivush (2016) demonstrated that feminine gender typicality

ratings significantly associated with Memory Experiences Questionnaire (MEQ) scores which focuses on autobiographical memory phenomenology, showing that higher approval for feminine gender typicality indicated better memory capacity as well as valence. Masculine gender typicality also linked to MEQ ratings, but the reliability was less between the correlations compared to females (Grysmann, & Fivush, 2016).

As expected, the effects of gender were not limited to autobiographical memories. Wang and her colleagues (2011) examined the role of cultural identity and gender in recalling personal events that occurred in the past and imagining personal events that may happen in the future by using event cueing technique. They reported that for past and future events women generated more detailed information for past as well as events in the future compared to men. This results showed that the difference between men and women has nothing to do with when the incident occurred or is going to happen. Wang et al. (2011) have shown that females display greater episodic specificity in activities related to past and future memories than males. Furthermore, for the past and future situations participants across all gender and cultural groups provided more detailed information than general information (Wang, Hou, Tang, & Wiprovnick, 2011). In brief, the differences in cultural and gender dimensions are apparent in recalling the past and in predicting the future for the episodic specificity. According to Wang and her colleagues (2011) women tend to give more details about the events that may happen in the future compared to men.

Compère and her colleagues (2018) aimed to expand the current literature on the effects of sex and gender identity on episodic autobiographical memory (EAMs). Using the semi-structured interview which is Temporally Extended-TEMPau, the

researchers evaluated the phenomenological details with the responses of the participants to past and imagined future events. They have shown that gender identification predicts more autobiographical memory disparities than sex. Feminine gender identity has emerged as a crucial variable in the specificity and emotional intensity of EAMs. They demonstrated that by episodic future thinking evaluation and episodic autobiographical memory, participants are more likely to implement stereotypic feminine characteristics, irrespective of their sex, the less precise when they are in the recall tasks of EAMs. Feminine gender identity had an impact on the specificity results of free recall, however not the overall specificity score. Curiously enough, in episodic future thought the influence of gender on emotional intensity reflected to that EAMs. In sum, the feminine gender identity was correlated with the increased intense emotion of the selected important item at the specific event and a reduced production of particular perceptive information in women.

As a conclusion, these studies revealed that females are more likely to show episodic specificity compared to males in episodic future thinking.

## **1.5 Infidelity**

Infidelity means that a person has a sexual or emotional relationship with someone other than their partner (Buss, Larsen, Westen, & Semmelroth, 1992). There are two types of infidelity; emotional versus sexual infidelity (Buss, Larsen, Westen, & Semmelroth, 1992; Shackelford & Buss, 1996). Emotional infidelity is defined as the individual being in love with someone other than his or her partner without having any sexual relations (Buss, 2000). On the other hand, sexual infidelity is defined as having sexual intercourse with someone other than individual's own partner without emotional attachment (Buss, 2000). The person who faces any kind of infidelity from

their romantic partner is more likely to go into negative emotions like depression, anger, self-disappointment as well as jealousy (Buss, 2000). Betzig (1989) claimed that betrayal of the spouse is by far the most frequently reported reason for divorce between 160 cultures, and one famous way to resolve the issue of infidelity in marriage is terminating the union.

In infidelity, man and woman are more likely to look on different issues and their answers have been reported to be different from sexual infidelity and emotional infidelity (Miller & Maner, 2009). Males (in comparison with females) are more likely to experience significantly more discomfort in the case of sexual unfaithfulness, while females (in comparison with males) are more likely to experience significantly more discomfort in the case of emotional unfaithfulness (Buss, Larsen, Westen, & Semmelroth, 1992). So we can understand from here that previous studies have shown gender differences between men and women, and studies have been conducted to clearly demonstrate these differences.

Buss, Larsen, Westen, and Semmelroth (1992) conducted research concentrating on the disparities between males and females based on the type of infidelity that would cause more unhappiness. 202 undergraduate students took part and the participants were given two dilemmas to evaluate their response (i.e. forgiving or end the relationship). Researchers reported that 60% of male partners would be more upset with the sexual infidelity of their mates, but the rate for females was 17. This reveals that 83% of females are going to be more upset with the emotional infidelity of their mates.

Shackelford, Buss, & Bennett (2002) used 6 dilemmas of forced choice and

concentrated the choice (breaking up vs. forgiveness) on the infidelity (sexually or emotionally) of their partner. The researchers found that 61.9% of males are less likely to forgive their partner if they face sexual infidelity, while only 22% of females are less likely to forgive if their partner had sexual infidelity. Men displayed significant discomfort with regard to sexual infidelity compared to women while women displayed greater distress with regard to emotional infidelity. (Miller & Maner, 2009).

As a result, these studies have shown that there are already gender differences in infidelity and there are two reasons to use infidelity as manipulation tool in this study. First, the literature shows that there is significant difference between gender on forgiving the infidelity (Buss, Larsen, Westen, & Semmelroth, 1992) and the other reason; previous study shows that emotional and sexual infidelity has negative effects for both sexes in people's lives as traumatic (Buss, 2000). To summarize, in this respect the subject of infidelity has been used as a means of manipulation to trigger gender differences in episodic future thinking to introduce a new method to study gender differences. In other words, the biggest contribution of this study is methodological rather than theoretical.

## **1.6 Present Study**

This study focused on gender differences on episodic future thinking by using a stressful event as a manipulator since the number of previous studies which focuses on the relationship between episodic future thinking and gender differences were limited in the literature. Therefore, the present research aims to extend these findings to episodic future thinking by using different types of infidelity as a manipulation tool. The present study focused on the question of how episodic future thoughts are affected when people imagine they are being cheated, and whether this effect is different

between the genders. Two aspects of episodic future thinking will be assessed in detail; centrality of event and phenomenological properties.

This study has six hypotheses in total. It is expected that;

1. There will be a main effect of gender for The Centrality of Events Scale; women will give significantly higher ratings than men for both types of infidelity.
2. There will be a main effect of event type, emotional infidelity will be rated more central than sexual infidelity by all participants.
3. There will be an interaction between gender and event type: female will rate emotional infidelity and male will rate sexual infidelity as more central.
4. There will be a main effect of gender for Autobiographical Memory Questionnaire; women will give significantly higher ratings than men for for both types of infidelity.
5. There will be a main effect of event type, emotional infidelity will be rated higher for phenomenological features of AMQ than sexual infidelity by all participants.
6. There will be an interaction between gender and event type for the phenomenological features of Autobiographical Memory Questionnaire: female will rate higher for emotional infidelity and male will rate higher for sexual infidelity.

## Chapter 2

### METHOD

#### 2.1 Participants

One hundred and sixty people as the target number for the participants were identified by using G\*Power 3.1 version (Faul, Erdfelder, Buchner, & Lang, 2009). In this study, data from a total of 384 people was collected (200 people who first dreamed of emotional infidelity after sexual infidelity, 184 people who dreamed of emotional and then sexual infidelity). Then, those who did not meet the inclusion criteria and did not write their imagination were removed (Women-sexual/emotional = 66, women-emotional/sexual = 60, men-sexual/emotional = 60, men-emotional/sexual = 50). To fit the group with the least number of people which is 50 people were selected by random selection for each group of the remaining participants. These groups are 50 women who participated in the study with the sexual-emotional order, 50 men who participated in the sexual-emotional order, and 50 women emotional-sexual order, and finally 50 men who participated in the emotional-sexual order to the study. Snowballing technique used to reach the sample.

The age of the participants varied from 19 to 44 years ( $M = 27$ ,  $SD = 5.16$ ). The language of the study was Turkish, so only participants whose native language are Turkish was recruited.

## **2.2 Materials**

### **2.2.1 Demographic Questionnaire**

There are 7 questions in the demographic questionnaire to see if the participants are eligible for the study. This questionnaire includes questions about the participant's gender, year of birth, education status, native language, whether or not there has been infidelity in their relationships before, and their current relationship status (see Appendix B).

### **2.2.2 Episodic Future Thinking Task**

There are some methods often used in episodic future thought studies, and one of them is event cueing. Participants are often asked to imagine certain future situations, with word cueing or event cueing. In this study, participants were asked to imagine the infidelity using word cueing technique. In this way, participants write the first event in their minds and answer other questions more realistically because they imagine (Szpunar, & McDermott, 2008). In this study we asked participants to imagine the learning moment of infidelity (emotional vs. sexual) and to describe the event in detail (see Appendix C).

### **2.2.3 The Centrality of Events Scale (Berntsen and Rubin, 2006)**

The short version of The Centrality of Events Scale (see Appendix D) was given to participants. Berntsen and Rubin (2006) established the Centrality of Events Scale and evaluated the extent to which individuals incorporate actions through their own personalities. There were seven elements in the scale (Cronbach's  $\alpha = .88$ ). The scale contained elements such as “This event has become a reference point for the way I understand myself and the world”. Items were scored on a Likert-type scale of 7 points (1 not at all to 7 totally). In this research paper, we used the Turkish translation of the Centrality of Event Scale which is adapted according to future events and it will be



provided in Appendix D (Boyacıoğlu & Aktaş, 2018). Boyacıoğlu and Aktaş (2018) showed that on both positive and negative memories, the shorter version had a Cronbach alpha of .89 and .82.

#### **2.2.4 Autobiographical Memory Questionnaire (Rubin, Schrauf, and Greenberg, 2003)**

The other questionnaire which used in this study was Autobiographic Memory Questionnaire (see Appendix E) which measure to phenomenological part of imagined infidelity of episodic memory. In this analysis, the Turkish translation used in Özbek, Bohn, Bentsen (2017) was used. This version was an adapted version for future thinking of the original Autobiographical Memory Questionnaire and its original belonged to Rubin, Schrauf, and Greenberg (2003). There were 14 items with 7-Likert Scale which were focused on vividness, pre/living, visual imagery, auditory imagery, spatial imagery, emotional valence, emotional intensity, importance, perspective, voluntary rehearsal, involuntary rehearsal, ease of remembering/imagining, and specificity. Reliabilities for all of these variables were high, ranging from .84 to .96, as indexed by Cronbach's alpha.

### **2.3 Procedure and Design**

At the beginning of the study, participants were given informed consent, then they filled demographic questionnaire. After that, half of the participants were asked to first imagine the sexual infidelity event and write it with details as the episodic future thinking task. After this episodic future thinking task, participants were first asked to fill out the Centrality of Event Scale and then Autobiographical Memory Scale. Participants were then asked to imagine emotional infidelity and write what they imagine in detail as episodic future thinking task. As they had previously filled, they first filled out the Centrality of Event Scale and then Autobiographical Memory

Questionnaire. The order of the instructions according to infidelity type was counterbalanced. Half of the participants first imagined the emotional infidelity, then sexual infidelity, and the other half imagined the sexual infidelity and then emotional infidelity. When the participants finished the study, they were informed about the study and thanked. All participants were recruited online. The questionnaires were online and shared on social media. This study was approved by the Research Ethics Committee of Eastern Mediterranean University.

## Chapter 3

### RESULTS

#### 3.1 Analysis Plan

The research was a cross-sectional design consisting of two categorical variable gender and infidelity (emotional vs. sexual), while the dependent variables were CES scores (calculated by summing up all items) and the phenomenological characteristics of autobiographical memory (vividness, pre/living, visual imagery, auditory imagery, spatial imagery, emotional valence, emotional intensity, importance, perspective, voluntary rehearsal, involuntary rehearsal, ease of remembering/imagining, and specificity). Additionally, relationship status used as control variable in this study. 2x2x2 Design ANOVA was carried out to compare the effects of gender, infidelity type and infidelity experience on the CES and AMQ for sexual infidelity and emotional infidelity imagination. In this study, order of infidelity type and word count were controlled (all  $p$ s < .089). The results showed that there is no effect of order and word count that's why the data was combined and analysed.

A chi-square test was conducted to analyse the relationship between experienced infidelity by their partner and gender. The association between variables was not significant,  $X^2(2, N = 200) = 5.22, p = .073$ . Another a chi-square test of independence demonstrated that there was no significant relationship between cheating on their partner and gender,  $X^2(2, N = 200) = 4.24, p = .120$ . Additionally, table 1 demonstrates the numbers of infidelity experiences according to gender.

Table 1: Numbers of Infidelity Experiences According to Gender

Variables	Participants who experienced infidelity by their partner		Participants who cheat on their partner	
	Yes	No	Yes	No
Female	48	49	25	75
Male	33	65	18	79
Total	81	114	43	154

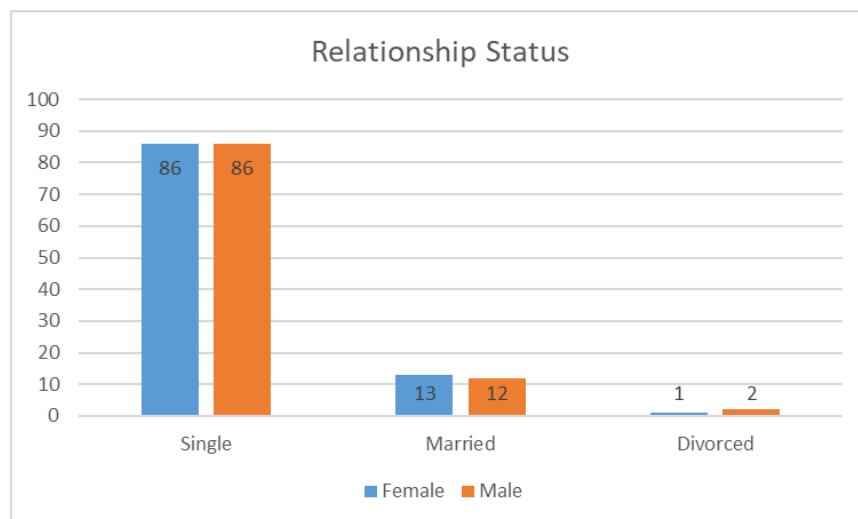


Figure 1: Relationship Status of Participants

An independent-samples t-test was conducted to compare age for men and women. There was a significant difference in the scores for men ( $M_{men} = 27.94$ ,  $SD_{men} = 5.20$ ) and women ( $M_{women} = 26.10$ ,  $SD_{women} = 4.98$ );  $t(194) = 2.53$ ,  $p = .012$ ,  $d = .36$ . Additionally, figure 1 shows the relationship status of participants according to gender.

### 3.2 t Test Analyses

Between subjects t-test were conducted to the effect on infidelity experience on CES and AMQ scores. Results revealed that participants who experienced infidelity in CES for emotional infidelity scored higher than participants who didn't experience

infidelity,  $t(193) = 2.67, p = .008, d = .39$ . Additionally, participants who experienced infidelity for emotional infidelity rated higher than participants who didn't experience infidelity in vividness,  $t(193) = 4.143, p < .001, d = .60$ . Furthermore, individuals who were cheated on emotionally in reliving had higher score than individuals who were not cheated on,  $t(193) = 2.80, p = .006, d = .407$ .

In addition, participants who have experienced infidelity in visual imagery for emotional infidelity determine higher number than participants who have not experienced infidelity,  $t(193) = 3.79, p < .001, d = .90$ . Also, people who lived emotional infidelity in their previous relationship had higher score than people who didn't live emotional infidelity for auditory imagery,  $t(193) = 4.09, p < .001, d = .59$ .

At the same time, participants who experienced emotional infidelity in the past rated higher than participants who didn't experience infidelity for spatial imagery,  $t(193) = 2.93, p = .004, d = .39$ . Additionally, participants who individuals who were cheated on emotionally in importance scored higher than participants weren't cheated on,  $t(193) = 2.45, p = .015, d = .35$ .

Moreover, individuals who had emotional infidelity in their relationships determine higher score than individuals who didn't have infidelity in their relationships in voluntary rehearsal,  $t(193) = 3.44, p = .001, d = .50$ . As well as, people who experienced infidelity in involuntary rehearsal for emotional infidelity rated higher than people who didn't experience infidelity,  $t(193) = 2.76, p = .006, d = .39$ . In addition, participants who had emotional infidelity in their past relationships determine higher number than participants who didn't experience infidelity in ease of remembering,  $t(193) = 3.30, p = .001, d = .47$ . Also, individuals who didn't experience

infidelity in ease of remembering for sexual infidelity had higher score than individuals who experienced infidelity,  $t(193) = -2.42, p = .016, d = .35$ .

Additionally, emotionally cheated on people scored higher than people who didn't experience infidelity in specificity,  $t(193) = 2.30, p = .023, d = .33$ . Lastly, participants who lived sexual infidelity in their previous relationship had higher number than participants who didn't experience infidelity in specificity,  $t(193) = 2.63, p = .009, d = .38$ .

There is no significant effect of previous infidelity experience for imagining sexual infidelity which are for CES, vividness, pre/living, visual imagery, auditory imagery, spatial imagery, importance, voluntary rehearsal, involuntary rehearsal (all  $ps < .050$ ). You can see means and SDs related to previous infidelity experience in Table 2.

Table 2: t Test Results for Participants Who Experienced Infidelity by

Participants who experienced infidelity by their partner				
	Mean	SD	<i>t</i>	<i>p</i>
CES Emotional	29.91	10.12	2.67	.008
CES Sexual	30.38	12.79	.31	.757
Vividness Emotional	5.19	1.81	4.14	.000
Vividness Sexual	5.12	1.95	1.90	.059
Pre/Living Emotional	4.32	2.05	1.69	.006
Pre/Living Sexual	4.53	2.09	2.80	.092

Table 2 (Continued)

Visual Imagery				
Emotional	5.12	1.76	3.79	.000
Visual Imagery Sexual	4.79	2.08	1.22	.223
Auditory Imagery				
Emotional	4.93	1.88	4.09	.000
Auditory Imagery				
Sexual	4.77	2.18	1.69	.092
Spatial Imagery				
Emotional	4.46	2.15	2.93	.004
Spatial Imagery Sexual	4.54	2.25	1.40	.163
Emotional Valence				
Emotional	1.96	1.41	-.61	.545
Emotional Valence				
Sexual	2.11	1.59	1.90	.059
Emotional Intensity				
Emotional	5.25	1.84	1.97	.050
Emotional Intensity				
Sexual	5.25	1.76	.32	.748
Importance Emotional	4.70	1.86	2.45	.015
Importance Sexual	4.59	2.03	-.50	.619

Table 2 (Continued)

Perspective Emotional	3.15	2.01	-.50	.620
Perspective Sexual	2.96	1.82	-1.60	.112
Voluntary Rehearsal Emotional	4.07	1.87	3.44	.001
Voluntary Rehearsal Sexual	3.93	2.07	.21	.835
Involuntary Rehearsal Emotional	3.80	1.93	2.76	.006
Involuntary Rehearsal Sexual	3.70	2.17	.16	.876
Ease of Imagining Emotional	4.32	1.75	3.30	.001
Ease of Imagining Sexual	3.40	2.16	-2.42	.016
Specificity Emotional	4.36	1.69	2.30	.023
Specificity Sexual	4.44	1.78	2.63	.009

### 3.3 Effects of Gender, Infidelity Experience and Infidelity Type On Centrality of Event Scale

The 2x2x2 Design ANOVA was conducted to see the effect of gender, infidelity experience and infidelity type on CES scores regarding to 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> hypotheses. The results showed that there was no main effect of gender ( $M_{women} = 29.35$ ,  $SD_{women} =$



2.01;  $M_{men} = 25.73$ ,  $SD_{men} = 2.42$ ) on CES scores,  $F(1,198) = 1.32$ ,  $p = .253$ ,  $MSe = 96.876$ ,  $\eta_p^2 = .007$ . Additionally, there was no significant main effect of infidelity type ( $M_{sexual} = 28.49$ ,  $SD_{sexual} = 2.04$ ,  $M_{emotional} = 26.59$ ,  $SD_{emotional} = 1.75$ ) on CES scores,  $F(1,198) = .78$ ,  $p = .379$ ,  $MSe = 96.876$ ,  $\eta_p^2 = .004$ . There was no main effect of infidelity experience ( $M_{yes} = 30.13$ ,  $SD_{yes} = 1.11$ ,  $M_{no} = 27.74$ ,  $SD_{no} = .93$ ) on CES scores,  $F(1,198) = 1.75$ ,  $p = .177$ ,  $MSe = 96.876$ ,  $\eta_p^2 = .018$ . Also, there was an insignificant interaction between gender and infidelity type on CES scores,  $F(1,198) = .245$ ,  $p = .621$ ,  $MSe = 96.876$ ,  $\eta_p^2 = .001$ . Also, it was insignificant interaction between gender and infidelity experience on CES scores,  $F(1,198) = .645$ ,  $p = .526$ ,  $MSe = 96.876$ ,  $\eta_p^2 = .007$ . It was insignificant interaction between infidelity experience and infidelity type on CES scores,  $F(1,198) = 1.32$ ,  $p = .271$ ,  $MSe = 96.876$ ,  $\eta_p^2 = .013$ . Lastly, it was insignificant interaction among gender, infidelity experience and infidelity type for CES scores,  $F(1,198) = .244$ ,  $p = .784$ ,  $MSe = 90.053$ ,  $\eta_p^2 = .003$ . In summary, these results suggest that gender, infidelity type, and infidelity experience had no main effect on CES score of participants. Additionally, gender and infidelity type had no interaction with each other on CES score. Therefore, the results rejected hypothesis 1, 2 and 3.

### **3.4 Results for Autobiographical Memory Questionnaire**

2x2x2 Design ANOVA' were carried out to examine the effect of gender, infidelity experience and infidelity type on AMQ scores regarding to 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> hypotheses. The findings demonstrated that there was no main effect of gender ( $M_{women} = 4.23$ ,  $SD_{women} = .32$ ;  $M_{men} = 3.78$ ,  $SD_{men} = .39$ ) on vividness ratings,  $F(1,198) = .832$ ,  $p = .363$ ,  $MSe = 2.456$ ,  $\eta_p^2 = .004$ . Moreover, we found no significant main effect of infidelity type ( $M_{sexual} = 4.22$ ,  $SD_{sexual} = .30$ ,  $M_{emotional} = 3.79$ ,  $SD_{emotional} = .30$ ) on vividness scores,  $F(1,198) = 1.68$ ,  $p = .196$ ,  $MSe = 2.456$ ,  $\eta_p^2 = .009$ . It was found that main effect of

infidelity experience on vividness ratings was significant,  $F(1,198) = 10.53, p < 0.001, MSe = 2.456, \eta_p^2 = .098$ . It was revealed that regardless of gender and type of infidelity, people who have experienced infidelity in their previous relationships scored higher ( $M_{yes} = 5.16, SD_{yes} = .18$ ) compared to participants who haven't experienced infidelity ( $M_{no} = 4.36, SD_{no} = .15$ ) on vividness. Additionally, the significant interaction was not found between gender and infidelity type on vividness scores,  $F(1,198) = .406, p = .525, MSe = 2.456, \eta_p^2 = .002$ . There was insignificant interaction among gender and infidelity experience on vividness scores,  $F(1,198) = .543, p = .582, MSe = 2.456, \eta_p^2 = .006$ . The insignificant interaction was found between infidelity experience and infidelity type on vividness scores,  $F(1,198) = 1.762, p = .174, MSe = 2.456, \eta_p^2 = .018$ . There was an insignificant interaction among gender, infidelity experience and infidelity type on vividness scores,  $F(1,198) = .516, p = .598, MSe = 2.456, \eta_p^2 = .005$ .

In addition, results revealed that there was no main effect of gender ( $M_{women} = 3.80, SD_{women} = .35; M_{men} = 3.51, SD_{men} = .42$ ) on reliving scores,  $F(1,198) = .28, p = .595, MSe = 2.907, \eta_p^2 = .001$ . There was no significant main effect of infidelity type ( $M_{sexual} = 3.88, SD_{sexual} = .34, M_{emotional} = 3.44, SD_{emotional} = .33$ ) on reliving scores,  $F(1,198) = 1.33, p = .249, MSe = 2.907, \eta_p^2 = .007$ . Moreover, main effect of infidelity experience on reliving scores was significant,  $F(1,198) = 4.57, p = .011, MSe = 2.456, \eta_p^2 = .045$ . It was found that regardless of gender and infidelity type, participants who experienced infidelity rated higher ( $M_{yes} = 4.40, SD_{yes} = .19$ ) than participants who didn't experience infidelity ( $M_{no} = 3.74, SD_{no} = .16$ ) on reliving. The insignificant interaction was found between gender and type of infidelity on reliving scores,  $F(1,198) = .207, p = .650, MSe = 2.907, \eta_p^2 = .001$ . There was an insignificant interaction between gender and infidelity experience on reliving scores,  $F(1,198) = .265, p = .767, MSe = 2.907, \eta_p^2 =$

.003. What is more, there was not an insignificant interaction among infidelity experience and type of infidelity on reliving scores,  $F(1,198) = .383, p = .682, MSe = 2.907, \eta_p^2 = .004$ . An insignificant interaction was found between gender, infidelity experience and infidelity type on reliving scores,  $F(1,198) = .80, p = .452, MSe = 2.456, \eta_p^2 = .008$ .

Another analysis found out that main effect of gender on visual imagery ratings was significant,  $F(1,198) = 3.77, p = .054, MSe = 2.420, \eta_p^2 = .019$ . It was found that regardless of infidelity type and infidelity experience, women rated higher ( $M_{women} = 4.51, SD_{women} = .32$ ) than men ( $M_{men} = 3.55, SD_{men} = .38$ ) on visual imagery. In addition, there was no significant main effect of infidelity type ( $M_{sexual} = 3.88, SD_{sexual} = .32, M_{emotional} = 4.19, SD_{emotional} = .29$ ) on visual imagery scores,  $F(1,198) = .77, p = .380, MSe = 2.420, \eta_p^2 = .004$ . Moreover, the results revealed a significant main effect of infidelity experience on visual imagery scores,  $F(1,198) = 5.83, p = .003, MSe = 2.420, \eta_p^2 = .057$ . It was found that regardless of gender and infidelity type, participants who experienced infidelity scored higher ( $M_{yes} = 4.88, SD_{yes} = .18$ ) than participants who didn't experience infidelity ( $M_{no} = 4.30, SD_{no} = .15$ ) on reliving. There was an insignificant interaction between gender and infidelity type on visual imagery scores,  $F(1,198) = .866, p = .353, MSe = 2.420, \eta_p^2 = .004$ . The insignificant interaction was found between gender and infidelity experience on visual imagery scores,  $F(1,198) = 1.106, p = .333, MSe = 2.420, \eta_p^2 = .011$ . The insignificant interaction was found between infidelity experience and infidelity type on visual imagery scores,  $F(1,198) = 2.241, p = .109, MSe = 2.420, \eta_p^2 = .023$ . What is more, interaction between gender, infidelity experience and infidelity type on visual imagery scores was insignificant,  $F(1,198) = 1.02, p = .362, MSe = 2.420, \eta_p^2 = .010$ .

The analysis result demonstrated that there was no main effect of gender ( $M_{women} = 4.12$ ,  $SD_{women} = .33$ ;  $M_{men} = 3.46$ ,  $SD_{men} = .40$ ) on auditory imagery scores,  $F(1,198) = 1.67$ ,  $p = .198$ ,  $MSe = 2.614$ ,  $\eta_p^2 = .009$ . There was no significant main effect of infidelity type ( $M_{sexual} = 3.97$ ,  $SD_{sexual} = .33$ ,  $M_{emotional} = 3.61$ ,  $SD_{emotional} = .30$ ) on auditory imagery scores,  $F(1,198) = .95$ ,  $p = .332$ ,  $MSe = 2.614$ ,  $\eta_p^2 = .005$ . Moreover, main effect of infidelity experience on auditory imagery scores was significant,  $F(1,198) = 7.62$ ,  $p = .001$ ,  $MSe = 2.614$ ,  $\eta_p^2 = .073$ . It was found that regardless of gender and infidelity type, participants who experienced infidelity got higher ( $M_{yes} = 4.77$ ,  $SD_{yes} = .18$ ) than participants who didn't experience infidelity ( $M_{no} = 4.02$ ,  $SD_{no} = .15$ ) on auditory imagery. In addition, there was an insignificant interaction between gender and infidelity type on auditory imagery scores,  $F(1,198) = .158$ ,  $p = .692$ ,  $MSe = 2.614$ ,  $\eta_p^2 = .001$ . There was an insignificant interaction between gender and infidelity experience on auditory imagery scores,  $F(1,198) = 1.913$ ,  $p = .150$ ,  $MSe = 2.614$ ,  $\eta_p^2 = .019$ . The insignificant interaction was found between infidelity experience and infidelity type on auditory imagery scores,  $F(1,198) = 1.664$ ,  $p = .192$ ,  $MSe = 2.614$ ,  $\eta_p^2 = .017$ . There was an insignificant interaction between gender, infidelity experience and infidelity type on auditory imagery scores,  $F(1,198) = 1.84$ ,  $p = .162$ ,  $MSe = 2.614$ ,  $\eta_p^2 = .019$ .

In addition, the results showed that there was a significant main effect of gender on spatial imagery scores,  $F(1,198) = 3.93$ ,  $p = .049$ ,  $MSe = 2.901$ ,  $\eta_p^2 = .020$ . It was found that regardless of infidelity type and infidelity experience, women had higher ratings ( $M_{women} = 4.24$ ,  $SD_{women} = .35$ ) than men ( $M_{men} = 3.18$ ,  $SD_{men} = .42$ ) on spatial imagery. There was no significant main effect of infidelity type ( $M_{sexual} = 3.80$ ,  $SD_{sexual} = .35$ ,  $M_{emotional} = 3.65$ ,  $SD_{emotional} = .32$ ) on spatial imagery scores,  $F(1,198) = .15$ ,  $p = .379$ ,

$MSe= 2.901$ ,  $\eta_p^2=.001$ . Moreover, there was a significant main effect of infidelity experience on spatial imagery scores,  $F(1,198) = 3.29$ ,  $p = .039$ ,  $MSe= 2.901$ ,  $\eta_p^2 = .033$ . It was found that regardless of gender and infidelity type, participants who experienced infidelity had higher ratings ( $M_{yes} = 4.39$ ,  $SD_{yes} = .19$ ) than participants who didn't experience infidelity ( $M_{no} = 3.86$ ,  $SD_{no} = .16$ ) on spatial imagery. What is more, there was an insignificant interaction between gender and infidelity type on spatial imagery scores,  $F(1,198) = .138$ ,  $p = .711$ ,  $MSe= 2.901$ ,  $\eta_p^2 = .001$ . There was no significant interaction between gender and infidelity experience on spatial imagery scores,  $F(1,198) = 2.477$ ,  $p = .087$ ,  $MSe= 2.901$ ,  $\eta_p^2 = .025$ . There was an insignificant interaction between infidelity experience and infidelity type on spatial imagery scores,  $F(1,198) = .665$ ,  $p = .515$ ,  $MSe= 2.901$ ,  $\eta_p^2 = .007$ . In addition, the insignificant interaction was found between gender, infidelity experience and infidelity type on spatial imagery scores,  $F(1,198) = .015$ ,  $p = .985$ ,  $MSe= 2.901$ ,  $\eta_p^2 = .001$ .

Furthermore, the results showed that there was no significant main effect of gender ( $M_{women} = 1.87$ ,  $SD_{women} = .23$ ;  $M_{men} = 1.96$ ,  $SD_{men} = .30$ ) on emotional valence scores,  $F(1,198) = .05$ ,  $p = .823$ ,  $MSe= 1.478$ ,  $\eta_p^2 = .001$ . Moreover, there was no significant main effect of infidelity type ( $M_{sexual} = 1.84$ ,  $SD_{sexual} = .23$ ,  $M_{emotional} = 2.00$ ,  $SD_{emotional} = .24$ ) on emotional valence scores,  $F(1,198) = .325$ ,  $p = .57$ ,  $MSe= 1.478$ ,  $\eta_p^2 = .002$ . Main effect of infidelity experience was not found ( $M_{yes} = 2.06$ ,  $SD_{yes} = .14$ ,  $M_{no} = 1.94$ ,  $SD_{no} = .12$ ) on emotional valence scores,  $F(1,198) = .33$ ,  $p = .721$ ,  $MSe= 1.478$ ,  $\eta_p^2 = .003$ . In addition to that there was an insignificant interaction between gender and infidelity type on emotional valence scores,  $F(1,198) = .026$ ,  $p = .873$ ,  $MSe= 1.478$ ,  $\eta_p^2 = .001$ . In addition, the insignificant interaction was found between gender and infidelity experience on emotional valence scores,  $F(1,198) = 2.542$ ,  $p = .081$ ,  $MSe=$

1.478,  $\eta_p^2 = .026$ . There was an insignificant interaction between infidelity experience and infidelity type on emotional valence scores,  $F(1,198) = 2.335, p = .100, MSe = 1.478, \eta_p^2 = .024$ . There was an insignificant interaction between gender, infidelity experience and infidelity type on emotional valence scores.,  $F(1,198) = .604, p = .547, MSe = 1.478, \eta_p^2 = .006$ .

Another the findings demonstrated that there was no significant main effect of gender ( $M_{women} = 4.98, SD_{women} = .31; M_{men} = 4.53, SD_{men} = .37$ ) on emotional intensity scores,  $F(1,198) = .91, p = .340, MSe = 2.252, \eta_p^2 = .005$ . There was no significant main effect of infidelity type ( $M_{sexual} = 4.84, SD_{sexual} = .30, M_{emotional} = 4.67, SD_{emotional} = .29$ ) on emotional intensity scores,  $F(1,198) = .26, p = .613, MSe = 2.252, \eta_p^2 = .001$ . Moreover, there was no main effect of infidelity experience ( $M_{yes} = 5.19, SD = .17, M_{no} = 4.94, SD = .14$ ) on emotional intensity scores,  $F(1,198) = 1.53, p = .220, MSe = 2.252, \eta_p^2 = .015$ . The insignificant interaction was found between infidelity type and gender on emotional intensity scores,  $F(1,198) = .281, p = .596, MSe = 2.252, \eta_p^2 = .001$ . In addition to that there was an insignificant interaction between gender and infidelity experience on emotional intensity scores,  $F(1,198) = .736, p = .480, MSe = 2.252, \eta_p^2 = .008$ . Furthermore, there was an insignificant interaction between infidelity experience and infidelity type on emotional intensity scores,  $F(1,198) = .829, p = .438, MSe = 2.252, \eta_p^2 = .008$ . There was an insignificant interaction between gender, infidelity experience and infidelity type on emotional intensity scores,  $F(1,198) = .075, p = .928, MSe = 2.252, \eta_p^2 = .001$ .

Additionally, the results revealed that there was no significant main effect of gender ( $M_{women} = 4.21, SD_{women} = .33; M_{men} = 3.95, SD_{men} = .40$ ) on importance scores,  $F(1,198) = .26, p = .612, MSe = 2.590, \eta_p^2 = .001$  Moreover, there was no significant main

effect of infidelity type ( $M_{sexual} = 4.22$ ,  $SD_{sexual} = .33$ ,  $M_{emotional} = 3.94$ ,  $SD_{emotional} = .29$ ) importance scores,  $F(1,198) = .62$ ,  $p = .432$ ,  $MSe = 2.590$ ,  $\eta_p^2 = .003$ . There was no main effect of infidelity experience ( $M_{yes} = 4.65$ ,  $SD_{yes} = .18$ ,  $M_{no} = 4.39$ ,  $SD_{no} = .14$ ) on importance scores,  $F(1,198) = 2.12$ ,  $p = .123$ ,  $MSe = 2.590$ ,  $\eta_p^2 = .021$ . Furthermore, there was an insignificant interaction between gender and infidelity type on importance scores,  $F(1,198) = .086$ ,  $p = .770$ ,  $MSe = 2.590$ ,  $\eta_p^2 = .001$ . There was an insignificant interaction between gender and infidelity experience on importance scores,  $F(1,198) = .232$ ,  $p = .793$ ,  $MSe = 2.590$ ,  $\eta_p^2 = .030$ . In addition to that the significant interaction was found between infidelity experience and type of infidelity on importance scores,  $F(1,198) = 2.962$ ,  $p = .054$ ,  $MSe = 2.590$ ,  $\eta_p^2 = .030$ . There was an insignificant interaction among gender, infidelity experience and infidelity type on importance scores,  $F(1,198) = .026$ ,  $p = .975$ ,  $MSe = 2.590$ ,  $\eta_p^2 = .001$ .

Another analysis' results showed that there was no significant main effect of gender ( $M_{women} = 3.23$ ,  $SD_{women} = .32$ ;  $M_{men} = 2.71$ ,  $SD_{men} = .39$ ) on perspective scores,  $F(1,198) = 1.08$ ,  $p = .301$ ,  $MSe = 2.491$ ,  $\eta_p^2 = .006$ . What is more, there was a significant main effect of infidelity type on perspective scores,  $F(1,198) = 8.73$ ,  $p < .001$ ,  $MSe = 2.491$ ,  $\eta_p^2 = .025$ . It was found that regardless of gender and infidelity experience, participants scored higher on sexual infidelity ( $M_{sexual} = 3.00$ ,  $SD_{sexual} = .32$ ) than emotional infidelity ( $M_{emotional} = 2.94$ ,  $SD_{emotional} = .31$ ). There was no main effect of infidelity experience ( $M_{yes} = 3.07$ ,  $SD_{yes} = .18$ ,  $M_{no} = 3.38$ ,  $SD_{yes} = .15$ ) on perspective scores,  $F(1,198) = 1.50$ ,  $p = .227$ ,  $MSe = 2.491$ ,  $\eta_p^2 = .015$ . There was an insignificant interaction between gender and infidelity type on perspective scores,  $F(1,198) = .010$ ,  $p = .922$ ,  $MSe = 2.491$ ,  $\eta_p^2 = .001$ . Moreover, there was an insignificant interaction between gender and infidelity experience on perspective scores,  $F(1,198) = .923$ ,  $p =$

.399,  $MSe= 2.491$ ,  $\eta_p^2 = .009$ . There was an insignificant interaction between infidelity experience and infidelity type on perspective scores,  $F(1,198) = .233$ ,  $p = .792$ ,  $MSe= 2.491$ ,  $\eta_p^2 = .002$ . In addition to that there was an insignificant interaction between gender, infidelity experience and infidelity type on perspective scores,  $F(1,198) = .67$ ,  $p = .516$ ,  $MSe= 2.491$ ,  $\eta_p^2 = .007$ .

In addition, the findings demonstrated that there was no significant main effect of gender ( $M_{women} = 3.71$ ,  $SD_{women} = .31$ ;  $M_{men} = 2.94$ ,  $SD_{men} = .37$ ) on voluntary rehearsal scores,  $F(1,198) = 2.60$ ,  $p = .109$ ,  $MSe= 2.236$ ,  $\eta_p^2 = .013$ . Furthermore, there was an insignificant main effect of infidelity type ( $M_{sexual} = 3.52$ ,  $SD_{sexual} = .31$ ,  $M_{emotional} = 3.13$ ,  $SD_{emotional} = .27$ ) on voluntary rehearsal scores,  $F(1,198) = 1.28$ ,  $p = .259$ ,  $MSe= 2.236$ ,  $\eta_p^2 = .007$ . Moreover, main effect of infidelity experience was not found ( $M_{yes} = 3.92$ ,  $SD_{yes} = .17$ ,  $M_{no} = 3.56$ ,  $SD_{no} = .14$ ) on voluntary rehearsal scores,  $F(1,198) = 2.85$ ,  $p = .060$ ,  $MSe= 2.236$ ,  $\eta_p^2 = .029$ . There was an insignificant interaction between gender and infidelity type on voluntary rehearsal scores,  $F(1,198) = .033$ ,  $p = .856$ ,  $MSe= 2.236$ ,  $\eta_p^2 = .001$ . There was an insignificant interaction among infidelity experience and gender on voluntary rehearsal scores,  $F(1,198) = .629$ ,  $p = .534$ ,  $MSe= 2.236$ ,  $\eta_p^2 = .006$ . In addition to that there was a significant interaction between infidelity experience and infidelity type on voluntary rehearsal scores,  $F(1,198) = 3.030$ ,  $p = .051$ ,  $MSe= 2.236$ ,  $\eta_p^2 = .030$ . There was an insignificant interaction between gender, infidelity experience and infidelity type on voluntary rehearsal scores,  $F(1,198) = 1.24$ ,  $p = .293$ ,  $MSe= 2.236$ ,  $\eta_p^2 = .013$ .

Additionally, the results showed that there was no significant main effect of gender ( $M_{women} = 3.18$ ,  $SD_{women} = .33$ ;  $M_{men} = 2.93$ ,  $SD_{men} = .40$ ) on involuntary rehearsal scores,  $F(1,198) = .23$ ,  $p = .631$ ,  $MSe= 2.571$ ,  $\eta_p^2 = .001$ . Moreover, there was no



significant main effect of infidelity type ( $M_{sexual} = 3.15$ ,  $SD_{sexual} = .32$ ,  $M_{emotional} = 2.96$ ,  $SD_{emotional} = .28$ ) involuntary rehearsal scores,  $F(1,198) = .35$ ,  $p = .553$ ,  $MSe = 2.571$ ,  $\eta_p^2 = .002$ . There was no main effect of infidelity experience ( $M_{yes} = 3.70$ ,  $SD_{yes} = .18$ ,  $M_{no} = 3.37$ ,  $SD_{no} = .15$ ) on involuntary rehearsal scores,  $F(1,198) = 2.81$ ,  $p = .063$ ,  $MSe = 2.571$ ,  $\eta_p^2 = .028$ . There was an insignificant interaction between gender and infidelity type on involuntary rehearsal scores,  $F(1,198) = .157$ ,  $p = .692$ ,  $MSe = 2.571$ ,  $\eta_p^2 = .001$ . There was an insignificant interaction between gender and infidelity experience on involuntary rehearsal scores,  $F(1,198) = .774$ ,  $p = .463$ ,  $MSe = 2.571$ ,  $\eta_p^2 = .008$ . There was an insignificant interaction between infidelity experience and infidelity type on involuntary rehearsal scores,  $F(1,198) = 2.064$ ,  $p = .130$ ,  $MSe = 2.571$ ,  $\eta_p^2 = .021$ . Furthermore, there was an insignificant interaction between gender, infidelity experience and infidelity type on involuntary rehearsal scores,  $F(1,198) = 1.78$ ,  $p = .171$ ,  $MSe = 2.571$ ,  $\eta_p^2 = .018$ .

Moreover, the results revealed that there was no significant main effect of gender ( $M_{women} = 3.73$ ,  $SD_{women} = .24$ ;  $M_{men} = 3.61$ ,  $SD_{men} = .29$ ) on ease of remembering scores,  $F(1,198) = .93$ ,  $p = .761$ ,  $MSe = 1.389$ ,  $\eta_p^2 = .001$ . There was no significant main effect of infidelity type ( $M_{sexual} = 3.80$ ,  $SD_{sexual} = .34$ ,  $M_{emotional} = 3.54$ ,  $SD_{emotional} = .26$ ) on ease of remembering scores,  $F(1,198) = .31$ ,  $p = .576$ ,  $MSe = 1.389$ ,  $\eta_p^2 = .002$ . Furthermore, there was no main effect of infidelity experience ( $M_{yes} = 3.86$ ,  $SD_{yes} = .13$ ,  $M_{no} = 3.82$ ,  $SD_{no} = .11$ ) on ease of remembering scores,  $F(1,198) = .45$ ,  $p = .636$ ,  $MSe = 1.389$ ,  $\eta_p^2 = .005$ . There was an insignificant interaction between gender and infidelity type on ease of remembering scores,  $F(1,198) = 2.864$ ,  $p = .092$ ,  $MSe = 1.389$ ,  $\eta_p^2 = .015$ . In addition to that there was an insignificant interaction between gender and infidelity experience on ease of remembering scores,  $F(1,198) = .579$ ,  $p =$

.562,  $MSe= 1.389$ ,  $\eta_p^2 = .006$ . There was a significant interaction between infidelity experience and infidelity type on ease of remembering scores,  $F(1,198) = 4.817$ ,  $p = .009$ ,  $MSe= 1.389$ ,  $\eta_p^2 = .047$ . Furthermore, there was an insignificant interaction between gender, infidelity experience and infidelity type on ease of remembering scores,  $F(1,198) = .41$ ,  $p = .666$ ,  $MSe= 1.389$ ,  $\eta_p^2 = .004$ .

Lastly, the analysis results showed that there was no significant main effect of gender ( $M_{women} = 4.18$ ,  $SD_{women} = .37$ ;  $M_{men} = 3.39$ ,  $SD_{men} = .37$ ) on specificity scores,  $F(1,198) = 2.29$ ,  $p = .132$ ,  $MSe= 2.276$ ,  $\eta_p^2 = .014$ . Furthermore, there was no significant main effect of infidelity type ( $M_{sexual} = 3.78$ ,  $SD_{sexual} = .33$ ,  $M_{emotional} = 3.79$ ,  $SD_{emotional} = .30$ ) on specificity scores,  $F(1,198) = .01$ ,  $p = .988$ ,  $MSe= 2.276$ ,  $\eta_p^2 = .001$ . There was a significant main effect of infidelity experience on specificity scores,  $F(1,198) = 3.68$ ,  $p = .027$ ,  $MSe= 2.276$ ,  $\eta_p^2 = .044$ . It was found that regardless of gender and infidelity type, participants who experienced infidelity scored higher ( $M_{yes} = 4.36$ ,  $SD_{no} = .18$ ) than participants who didn't experience infidelity ( $M_{no} = 3.75$ ,  $SD_{yes} = .16$ ) on specificity. There was an insignificant interaction between gender and infidelity type on specificity scores,  $F(1,198) = .969$ ,  $p = .326$ ,  $MSe= 2.276$ ,  $\eta_p^2 = .006$ . There was an insignificant interaction between gender and infidelity experience on specificity scores,  $F(1,198) = 1.211$ ,  $p = .301$ ,  $MSe= 2.276$ ,  $\eta_p^2 = .015$ . There was an insignificant interaction between infidelity experience and infidelity type on specificity scores,  $F(1,198) = .152$ ,  $p = .859$ ,  $MSe= 2.276$ ,  $\eta_p^2 = .002$ . Furthermore, there was an insignificant interaction between gender, infidelity experience and infidelity type on specificity scores,  $F(1,198) = .49$ ,  $p = .612$ ,  $MSe= 2.276$ ,  $\eta_p^2 = .006$ .

Overall, these results indicate that the 4<sup>th</sup> hypothesis was accepted partially for visual imagery, spatial imagery and perspective and 5<sup>th</sup> and 6<sup>th</sup> hypotheses were rejected for AMQ.

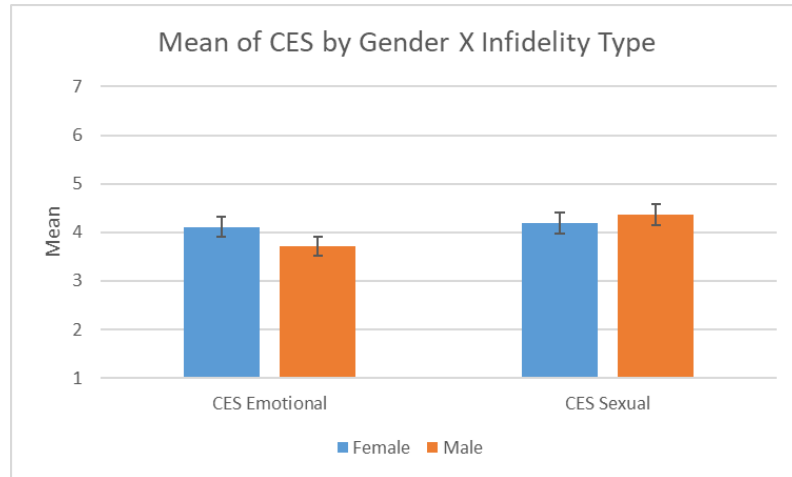


Figure 2: Mean of Centrality of Event Scale by Gender X Infidelity Type

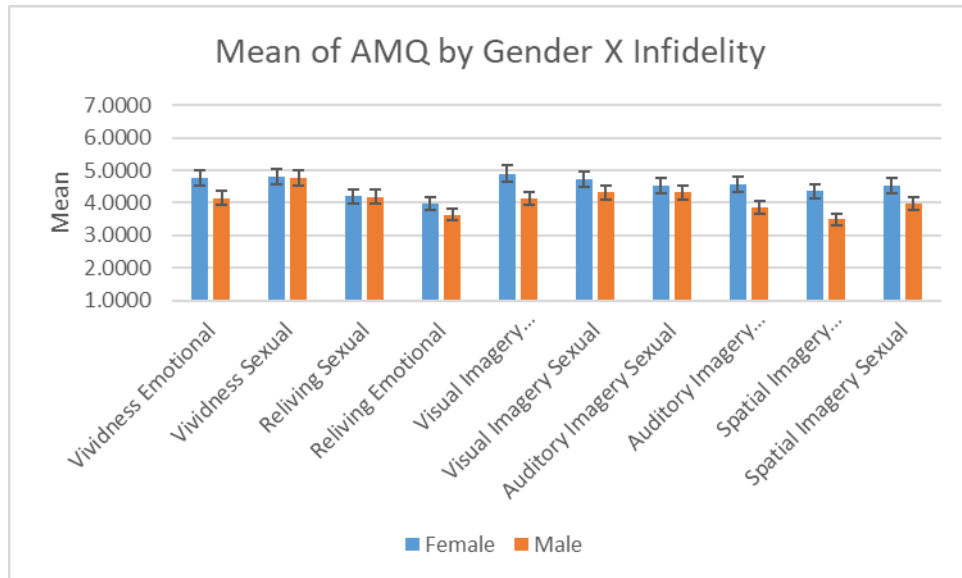


Figure 3: Mean of Autobiographical Memory Questionnaire by Gender X Infidelity Type

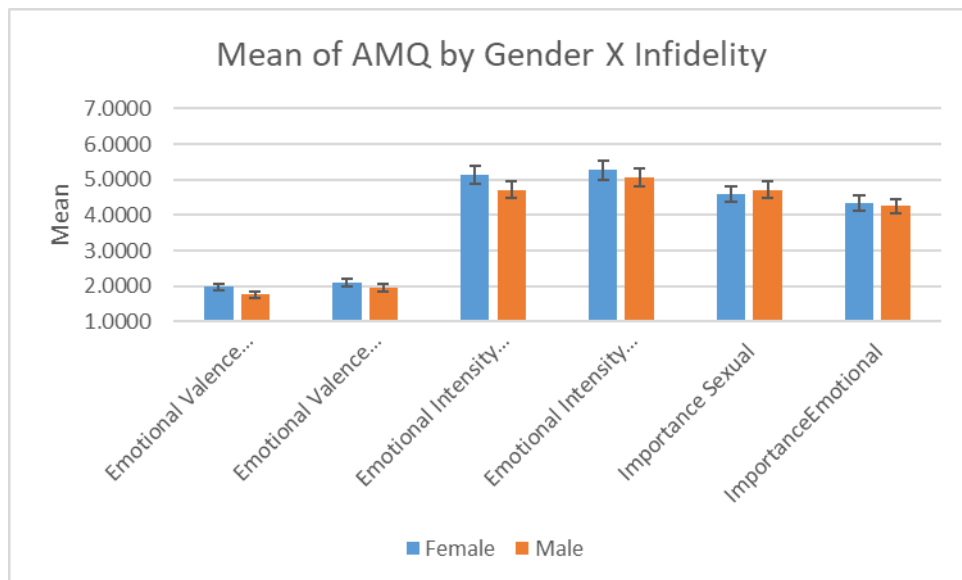


Figure 4: Mean of Autobiographical Memory Questionnaire by Gender X Infidelity Type

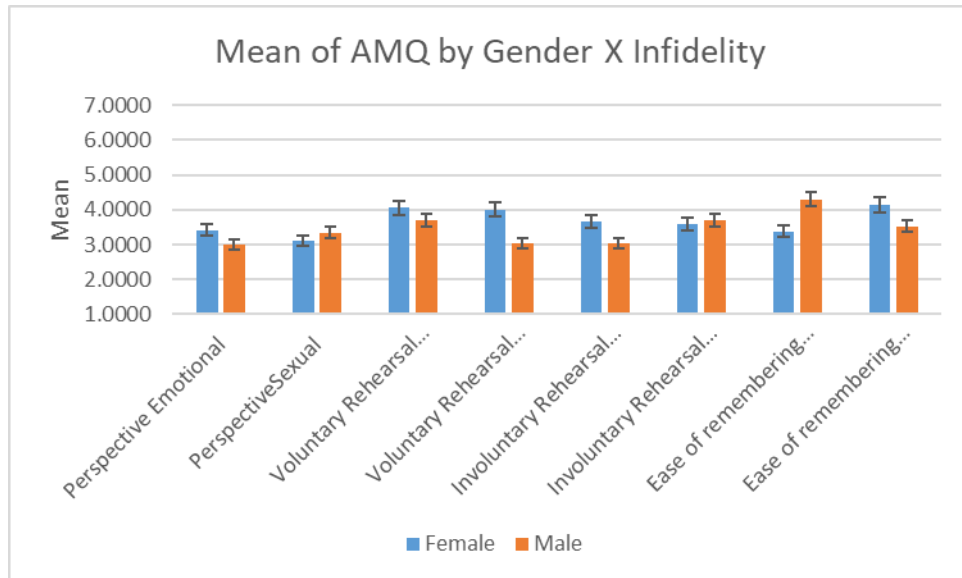


Figure 5: Mean of Autobiographical Memory Questionnaire by Gender X Infidelity Type

Table 3: Summary of the Results for CES and AMQ Phenomenology Characteristics

	Infidelity Type	Gender	<i>ITxG interaction</i>	<i>Infidelity experience</i>	<i>IExIT interaction</i>	<i>IEXG interaction</i>	<i>IEXITXG interaction</i>
CES	0.379	0.253	0.621	0.177	0.271	0.526	0.784
Vividness	0.196	0.363	0.525	0.001	0.174	0.582	0.598
Pre/Living	0.249	0.595	0.65	0.011	0.682	0.767	0.798
Visual Imagery	0.38	0.054	0.353	0.003	0.109	0.333	0.362
Auditory Imagery	0.332	0.198	0.692	0.001	0.192	0.15	0.162
Spatial Imagery	0.379	0.049	0.711	0.039	0.515	0.087	0.985
Emotional Valence	0.57	0.823	0.873	0.721	0.1	0.081	0.547
Emotional Intensity	0.613	0.34	0.596	0.22	0.438	0.48	0.928
Importance	0.432	0.612	0.77	0.123	0.054	0.793	0.975
Perspective	1.076	0.001	0.922	0.227	0.792	0.399	0.516
Voluntary Rehearsal	0.259	0.109	0.856	0.06	0.051	0.534	0.293
Involuntary Rehearsal	0.553	0.631	0.692	0.063	0.13	0.463	0.171
Ease of Imagining	0.576	0.761	0.092	0.636	0.009	0.562	0.666
Specificity	0.988	0.132	0.326	0.027	0.859	0.301	0.612

## Chapter 4

### DISCUSSION

This study aims to examine the gender differences in episodic future thinking (centrality of event and phenomenological properties) via using infidelity (sexual vs. emotional) as a manipulation tool. For Centrality of Events scale, women were expected to score higher than men regardless of infidelity type. Moreover, an effect of infidelity was expected: ratings for emotional infidelity more were expected to be higher than ratings of sexual infidelity people. Additionally, it is hypothesized there will be interaction among event type and gender on centrality of event scores; women will give significantly higher ratings than men for sexual infidelity and emotional infidelity. Furthermore, an effect of gender on AMQ is predicted. Women were expected give primarily higher scoring than men for both types of infidelity. Additionally, we expected that there will be main effect of infidelity types on AMQ as participants will score emotional infidelity higher compared to sexual infidelity regardless of gender of participants. Eventually an interaction was expected between event type and gender in regarding of phenomenological characteristics of Autobiographical Memory Questionnaire and women will rate higher for the emotional infidelity compared to the sexual infidelity than men. However, the results of the analysis showed that the hypotheses were rejected.

With respect of 1st hypothesis, regarding to the Centrality of Events scale it was found that gender has no significant influence. However, Boals, (2010) showed that women

allocate personal negative events more than men at the center of their lives, and women have a higher score in Centrality of Event Scale. Boals (2010) claimed that for personal negative events, females have stronger potential to perceive previous negative experiences as more central to their own identities. Boals (2010) also suggested that one of the reasons of why women feel negative events more in the centers of their lives than men is that women having more detailed memories for emotional events than men. However, In the Boals study (2010), the researcher gave the questionnaire to the participants for past events but in this study, the participants only imagined of the personal future negative event. This difference may be a reason for the lack of gender differences in this research. The main issue may be that the emergence of differences in past memories disappear when thinking about the future. Therefore, the same results may not be obtained because there may be different mechanisms behind the two conditions. Future studies should examine gender differences in past and future negative events to have a better understanding regarding these results.

Second hypothesis assumed that event type will have a significant effect and emotional infidelity will be scored more central than sexual infidelity by all participants regardless of gender. The current study found no significant difference in terms of different infidelity types. Shackelford, LeBlanc, and Drass (2000) researched on discrepancies in emotional responses to the sexual infidelity and emotional infidelity of a partner by using 15 emotional components and they found that participants' sexual infidelity scores were higher than emotional infidelity for hostile/vengeful, shocked, nauseated/repulsed, humiliated, sexually aroused, and homicidal/suicidal. Additionally, participants' emotional infidelity scores were higher than sexual infidelity for undesirable/insecure, depressed, helpless/abandoned, blameworthy,



tired, and forgiving (Shackelford, LeBlanc, & Drass, 2000). In other words, the participants reacted differently to both kinds of infidelity (emotional vs. sexual) Even though both forms of infidelity are undoubtedly saddening, the discomfort reported after emotional infidelity was stronger for people who accepted idealized concepts of relationships more intensely and who thought sexual intercourse is not used solely as a form of individual satisfaction (Cann, Mangum, & Wells, 2001).

Contradicting the 3rd hypothesis, results of this research demonstrated that there was an insignificant interaction among gender and types of infidelity. Women did not score higher for emotional infidelity and men did not score higher for sexual infidelity. Studies have brought some evidence of gender differences once people are being forced pick which of the alternative types of infidelity might be more distressing. Buss and his colleagues (Buss, Larsen, & Westen, 1996) identified clear disparities between men and women in the discomfort expected once faced by imagined physical as in comparison to emotional infidelity. Males end up choosing sexual infidelity as something more upsetting, whereas females select emotional infidelity. Previous studies have looked at forgiveness of the infidelity and distressing variables of infidelity and found a difference between genders. However, in our study we have looked at the interaction between gender and infidelity type on CES, Therefore, infidelity type maybe affects those variables but not variables of CES. Additionally, Buss and his colleagues (1996) have demonstrated that men are more distressed with respect to sexual infidelity, while women are more distressed with their partner's emotional infidelity. There are several reasons explaining these differences. Biological factors can be a reason behind these gender disparities in relationship behaviors and reactions to relationship problems, according to the evolutionary model (Cann,

Mangum, & Wells, 2001). Depending on an evolutionary psychology (Buss, Larsen, Westen, & Semmelroth, 1992) it was suggested that men might be more disturbed by their partners' sexual infidelity as they can't feel entirely sure regarding the paternity of children from a partnership. Women, on the other hand, would be more disturbed about emotional infidelity that could signify the men's loss of devotion to the relationship's long-term success, as well as any children (Buss, Larsen, Westen, & Semmelroth, 1992). Hence based on the results obtained in this study, there is no interaction between the sexes and the type of infidelity, that is, regardless of gender, people did not see the infidelity as a part of their own identity and did not make the deception a reference point that they and the world did not understand. In addition, they did not see the infidelity as a turning point in their lives. As a result, we can see that, unlike previous studies, the infidelity type did not differ between men and women, permanently changing their lives.

With respect to 4th hypothesis it was assumed that for phenomenology of Autobiographical Memory Questionnaire there will be main effect of gender so it was expected that the ratings of women for both type of infidelity will be higher than men's ratings. The present study found partially significant influences on the results for this hypothesis; significant differences were found for the visual imagery, spatial imagery and perspective. Previous studies (Wang, Hou, Tang, & Wiprovnick, 2011; Compère, Rari, Gallarda, Assens, Nys, Coussinoux, & Piolino, 2018) found similar results in favor of women; autobiographical memories of women are more detailed, complicated, interpersonal and sharing emotions compared to men. The study of Pillemer, Smile, DiDonato, and Sanborn (2003) primarily based on gender disparities in autobiographical memory confirms with the idea that women memories in relational

and behavioral situations are higher than men in terms of perceived gender discrepancies. Another study supported the findings as females scored significantly higher on a scale of autobiographical memory that generally included a stronger memory of their old memories, expectations and emotional interactions (Schulster, 2013). Therefore, there can be different reasons why there is limited phenomenological differences between genders in terms of episodic future thinking. In addition, in the previous episodic future thinking and gender study, similar results with the autobiographical memory studies were found. Wang and her colleagues (2011) found that women have more episodic specificity for an episodic future event than men. Various features of the phenomenology of future episodic thoughts are (partially) determined by different characteristics of incidents like the vividness of episodic thoughts of the future relied to a great extent on the familiarity of the elements of the imagined incidents (Berntsen & Bohn, 2010). In our study, both people who were experienced infidelity and those who were never experienced infidelity participated and the results may be insignificant because it is not a homogeneous sample therefore, future studies should consider it. Finally, this can be a reason for our insignificant findings and the study showed that this event does not have an extremely important and vivid place in people's lives regardless of gender. It means that people do not perceive infidelity as a major event that affects their life. The current research found slightly significant effects on the Autobiographical Memory Questionnaire; women reported higher scores on visual imagery, spatial imagery, and perspective for the two forms of infidelity.

It has been suggested that emotional infidelity will be rated higher for Autobiographical Memory Questionnaire phenomenological characteristics than

sexual infidelity by all participants. However, the results of this current research did not find any significant effect of infidelity type on phenomenology of Autobiographical Memory Questionnaire. The study of Maki and her colleagues (2012) analyzed how various types of cue words are being used to evoke the memories by using same questionnaire, and whether the nature of cue word (neutral, emotional, and emotion-provoking) influences the phenomenological features of the memory. Findings demonstrated that the autobiographical memories' phenomenological characteristics that were cued with emotion-provoking as well as emotional terms were scored greater compared to memories that were cued by no sense words. This means that whichever type of infidelity the participants perceive more emotionally; they are expected to have higher score for that kind of infidelity. The reason behind of this non-significant result could be religion and culture stereotype influences toward infidelity in society and how people perceive infidelity. In this study, cultural stereotypes were not controlled, people were not asked what they think about infidelity, and this may have caused problems.

Finally, in regarding to 6th hypothesis, the study expected to find an interaction between gender and infidelity form for the phenomenological properties of Autobiographical Memory Questionnaire: men will score higher for sexual infidelity and women will score higher for emotional infidelity. This assumption was not supported with this current study. The insignificant interaction in this study means that when they imagined the infidelity among participants, regardless of gender, they did not feel that they were living the infidelity now (i.e. reliving) and did not see it as a vivid event. D'Argembeau and Van der Linden (2012) claimed that cognitive emotions accompanying the episodic thoughts of the future relied partly on sensory-perceptual

attributes (i.e., visual perspective and vividness) and were also controlled by individual attention related to the expected events. More precisely, the sense of pre-experiencing an imaginary occurrence, its personal intimacy and the expectation of this occurrence in the future were enhanced with the vividness of episodic future thought (D'Argembeau & Van der Linden, 2004). This means that one of the reasons for insignificant consequences may be that people did not get enough attention of the expected event and did not see the event as vivid enough. In future studies, while the participants are dreaming of the infidelity, the dialogues that the partners may have with others can be presented, such as chat messages, thus it may increase the attention and the vividness of the event.

Additionally, in contrast to our study, previous infidelity studies have found that men are often more affected once they experience sexual infidelity but also women are often more annoyed once they experience emotional infidelity (Schutzwohl, 2005). Additionally, Fisher (2013) found that men displayed high recall for sexual infidelity, while women exhibited higher recall for emotional infidelity. As a conclusion, for the phenomenological features of Autobiographical Memory Questionnaire, interaction between gender and infidelity was not found so women did not score higher for emotional infidelity as well as men did not score higher for sexual infidelity.

## **4.1 Limitations & Future Directions**

There are some possible limitations in the current study. The first major limitation is the participants used in this study consist of those who have a relationship, no relationship, married or divorced so it was viewed relationship status from a broadest framework. therefore, in the part of participants dreaming about the infidelity in the relationship, everyone may have dreamed differently depending on the relationship status and this relationship status has not been controlled. In other words, all participants took part in the study without controlling the relationship status. In future studies researchers can control the relationship status by including only people who do not have an ongoing romantic relationship, or only people who have romantic relationship by controlling duration of the relationship or a study consisting of only married participants. Thus a different result can be obtained based on the participants' commitments to the relationship.

In addition, another weak point in this study was that the participants were asked whether or not there has been any type of infidelity in their previous romantic relationships, but they were not asked what kind of infidelity they experienced. different results can be obtained depending on the type of experienced infidelity by taking this control in the next studies.

Moreover, in this study, the participants first imagined the first type of infidelity, then solved the CES and AMQ questions, then imagined the other form of infidelity and answered the CES and AMQ questions in the same order. Imagining of the first infidelity and solving the questions may have affected their imagination of the second

infidelity. In future studies, two types of infidelity can be imagined first and then questionnaires can be given separately.

Furthermore, we took people who had cheated on others in their previous relationships and did not check it out. We also gave the questions in the questionnaire after each imagination part, that is, those who completed the first task and solved the questions solved the same questions in the second task, so they may have been affected by seeing the questions. For example, D'Argembeau and Van der Linden (2004) found that past experiences have a significant impact on imagining an event that may occur in the future and they used Memory Characteristics Questionnaire (MCQ). However, in our study we couldn't eliminate people who have experienced infidelity in their previous relationships. For the future studies, a more homogeneous data can be collected by excluding people who had experience infidelity, and thus different results can be obtained.

Lastly, the relationship status of people was not controlled in our study. People were only asked what their marital status was, but they were not checked in the analysis or a particular group of participants (e.g., people who are single) were not excluded from the study because of their relationship status of. In the future studies, relationship status should be controlled to check the effects of relationship status in imagination task of EFT.

## **4.2 Implications**

The present research analyzed the gender differences in episodic future thought (event centrality and phenomenological characteristics) through the use of infidelity (emotional vs. sexual) as a manipulating instrument. Although gender differences in

autobiographical memory has been studied for 20 years, studies on gender differences in episodic future thinking have started in the last 10 years and as far as we know, there are very limited resources in this area. There are two researches which has worked on gender differences and episodic future thinking, one study focused on the effect of culture (Wang, Hou, Tang, & Wiprovnick, 2011) and the other study looked at the difference between gender identity and sex on future thinking and autobiographical memory (Compère, Rari, Gallarda, Assens, Nys, Coussinoux, & Piolino, 2018). In other words, the number of studies in this field focusing on gender differences of episodic future thinking is rare. In addition to, this is the first study conducted in Turkey and Northern Cyprus. Understanding gender differences by infidelity is important for EFT.

The number of studies on episodic future thought has expanded considerably over the last decade. Researching on episodic future thinking is essential, since episodic future thought plays a variety of functions, including decision-making through spatial navigation (Schacter, Benoit, & Szpunar, 2017). Imagining the action of an expected event increases the likelihood that such a purpose will eventually be executed (Szpunar, 2010). Furthermore, cognitive indicators point to a position for episodic future thought in forming a person's sense of identity (Schacter, Benoit, & Szpunar, 2017), including cognitive and neuroscience evidence suggests a correlation among episodic future thought and divergent analytical thinking, and research of spatial navigation indicate that episodic simulation allows a significant functional contributor to route planning (Schacter, Addis, & Buckner, 2008). The rate of studies on episodic future thought has increased significantly over the past years, extending a development which started almost one decade ago. Remarkable progress has been made in



describing the processes that help episodic future thought, and in defining roles that represent episodic future thoughts. Hence, people can make more logical decisions about the infidelity situation by imagining the event that has not happened yet, and prepare themselves for that event psychologically. The other side of the present study focused is gender differences.

The findings of increasing studies indicate that there are significant differences in the cognitive and neurobiological structures of men and women beyond physical features (Wang, Hou, Tang, & Wiprovnick, 2011). Several researches have demonstrated that men are more advantageous in spatial processing, and that women are more advantageous in verbal tasks, but gender-related cognition differences seem to expand beyond this contrast, particularly in the memory area (Compère, Rari, Gallarda, Assens, Nys, Coussinoux, & Piolino, 2018). To be a man or woman, an essential component of who we really are or who we will be in that gender; it offers the legion with autobiographic and basic knowledge and perceptions regarding the actions, attitudes and societal norms (Wang, Hou, Tang, & Wiprovnick, 2011). Research conducted on the topic of gender enable people to overcome differences related to genders in various social contexts by offering a shared definition of gender identification and relations (Buss, Larsen, Westen, & Semmelroth, 1992). It explores how females and males seem to be the same, as well as how they vary. Gender studies allow an insight into the needs for every gender and the overall contribution that every gender tends to make to community. Gender studies explore many life aspects, like house environment and family, job, religious organizations, media, school environment, and policy. Research on gender studies often examines the origin of gender, and thus allows society and people to develop healthy beliefs and role models

relevant to gender (Buss, Larsen, Westen, & Semmelroth, 1992).

Research of gender differences in episodic future thought have shown that women are more advantageous, not only in terms of the amount of remembered details or the number of speeds or connotations, but also in terms of evaluating the autobiographical content of personal memories (Wang, Hou, Tang, & Wiprovnick, 2011). Women report that in a limited test time, particularly emotional women recall more detailed memories compared to men also recall events more quickly in response to the clues (Compère, Rari, Gallarda, Assens, Nys, Coussinoux, & Piolino, 2018). Furthermore, as previous studies findings clearly show discrepancies in the intensity of emotional memories and valence in individuals with the feminine gender identity (Compère, Rari, Gallarda, Assens, Nys, Coussinoux, & Piolino, 2018). This supports the argument of affect intensity which women recall memories more when it is emotionally intense, as well as the argument of socialization which teaches girls to concentrate on their feelings in the autobiographical stories (Compère, Rari, Gallarda, Assens, Nys, Coussinoux, & Piolino, 2018). The current study's results may be a new aspect for these arguments in episodic future thinking and gender studies. The fact that the results are insignificant may be a new point of view, so that men give the same answers on average as women do, contradicting the affect intensity argument. In addition to that the significant results were found between age and gender. The future studies should consider this significant difference to obtain clear results.

As a conclusion, in Northern Cyprus and Turkey focusing on gender differences and episodic future thinking study is unpublished. This current study has planned to increase the generalizability of the results of gender differences in episodic future thinking and recommends more new studies to be carried out in this field. Studying

gender differences on episodic future thinking is an important issue for both memory studies in cognitive psychology and gender differences in social psychology. This current study we have done aimed to shed some light on both areas and bring a new result.

## **Chapter 5**

### **CONCLUSION**

In this study, the gender differences in EFT were examined by imagining the infidelity and this was measured by using CES and AMQ. It was concluded that there was no significant difference in infidelity between men and women ratings, and there was also no significant difference in responses to sexual infidelity and emotional infidelity for CES results. Based on our sample the interaction among the types of infidelity and gender was insignificant. In addition to we assumed that women will have more scores for both types of infidelity than men. But the study result showed that partially significant results were found for visual imagery, spatial imagery and perspective.

Moreover, this study did not find an effective difference between sexual and emotional infidelity in terms of AMQ. Finally, the interaction assumed between the gender differences and infidelity types that were assumed was rejected for AMQ. Furthermore, the duration of relationship and infidelity experience can be controlled to obtain more clear result. At the end, this study revealed that there are no considerable significant differences between women and men in terms of episodic future thinking by using infidelity as a manipulation tool.

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## **APPENDICES**



# Appendix A: Informed Consent

Psikoloji Bölümü  
Doğu Akdeniz Üniversitesi  
Gazimağusa, Kuzey Kıbrıs Türk Cumhuriyeti  
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## Aldatmayı Hayal Etme: Episodik Düşünme ve Cinsiyet

Değerli katılımcı,

Araştırmaya katılmayı kabul etmeden önce, lütfen araştırma ile ilgili aşağıda bulunan bilgileri dikkatlice okumak için birkaç dakikanızı ayırınız. **Araştırma ile ilgili herhangi bir sorunuz varsa, aşağıda iletişim bilgileri olan araştırmacıyla iletişim kurabilirsiniz.**

Bu araştırma Gizem Karaca tarafından, Yrd. Doç. Dr. Burcu Kaya Kızılöz denetiminde yürütülmektedir. Araştırmanın amacı **episodik**, gelecek düşünme ve aldatmayı araştırmaktır. Çalışma en fazla 20 dakikanızı alacaktır.

Çalışmaya katılmanız zorunlu değildir ve katılmayı reddetme hakkına sahipsiniz. Çalışmadan, istediğiniz bir anda, açıklama yapmaksızın çekilme hakkına sahipsiniz. Araştırmadan çekilmeniz durumunda, yanıtlarınız yok edilecektir ve araştırmada kullanılmayacaktır. Eğer araştırmaya katılmayı ve tamamlamayı kabul ederseniz, cevaplar ve anketler **gizlilikle** korunacaktır. İsminiz ve tanımlayıcı bilgileriniz, anketin geri kalan kısımlarından ayrı olarak muhafaza edilecektir. Veriler, araştırma tamamlandıktan sonra en çok 6 yıl boyunca muhafaza edilecektir. Verilerin analizinden sonra, araştırma ile ilgili bir rapor yayınlanabilir.

Gönüllü katılımınızı belirtmek için, lütfen aşağıda bulunan bilgilendirilmiş onam formunu imzalayınız.

**BİLGİLENDİRİLMİŞ ONAY FORMU**  
Araştırmanın Başlığı: Aldatmayı Hayal Etme: **Episodik Düşünme ve Cinsiyet**  
Araştırmacıların Adları:  
Burcu Kaya Kızılöz ([burcu.kaya@emu.edu.tr](mailto:burcu.kaya@emu.edu.tr)),  
Gizem Karaca ([gizem.karaca@emu.edu.tr](mailto:gizem.karaca@emu.edu.tr))

Her ifadeye katıldığınızı belirtmek için lütfen yanda bulunan kutuları işaretleriniz.

1. Bilgileri okuyup anladığımı ve soru sorma fırsatımın olduğunu onaylıyorum.
2. Katılımımın gönüllü olduğunu ve açıklama yapmaksızın, istediğim bir anda araştırmadan çekilebileceğimi anlıyorum.

Tarih

İmza

Araştırmanın etiği ile ilgili bir endişeniz var ise, endişenizi detaylı bir şekilde açıklayan yazılı bir metin ile Doğu Akdeniz Üniversitesi, Araştırma ve Etik Komitesi Başkanı, Dr. Şenel Hüsnü Raman ile iletişime geçebilirsiniz ([shenelhusnu.raman@emu.edu.tr](mailto:shenelhusnu.raman@emu.edu.tr)).

## Appendix B: Demographic Questions

Sayın Katılımcı, lütfen aşağıdaki anketi olabildiğince doğru şekilde doldurun. Lütfen doldurduğunuz bilgilerin gizli ve tamamen gizli tutulacağından emin olun. Tüm bu bilgiler güvenli bir şekilde saklanır ve sadece araştırmacılar ve bu çalışmanın sorumlusu tarafından kullanılabilir.

1. Cinsiyet:
  - a. Kadın
  - b. Erkek
  - c. Diğer
  - d. Belirtmek istemiyorum
2. Doğum Yılı: \_\_\_\_\_
3. Eğitim Durumu:
  - a. İlkokul
  - b. Ortaokul
  - c. Lise
  - d. Üniversite
4. Ana Dil
  - a. Türkçe
  - b. Diğer: \_\_\_\_\_
5. Romantik ilişkilerinde hiç aldatma yaşadınız mı?
  - a. Evet
  - b. Hayır
  - c. Cevap vermek istemiyorum
6. Hiç bir romantik ilişkinizde birini aldattınız mı?
  - a. Evet
  - b. Hayır
  - c. Cevap vermek istemiyorum
7. İlişki Durumu
  - a. Bekar
  - b. Evli
  - c. Boşanmış
  - d. Dul

## Appendix C: Imagination Task

Lütfen, Őu an sahip olduĐunuz ve gelecekte devam edeceĐini dŐşündüĐünüz veya gelecekte sahip olmak istediĐiniz, ciddi ya da kararlı bir romantik iliŐki dŐŐünün. Bu iliŐkide ciddi bir Őekilde baĐlı olduĐunuz kiŐinin sizi baŐka biriyle duygusal olarak aldattıĐını keŐfettiĐinizi hayal edin. Duygusal aldatma bireyin devam eden bir iliŐkisi varken bir baŐkasıyla duygusal bir yakınlık yaŐaması, bir baŐkasına âŐık olması, bir baŐkasıyla özel bir paylaŐımda bulunması olarak tanımlanmaktadır. Őimdi bu durumu öĐrendiĐiniz anı zihninizde canlandırın ve lütfen bu olayı detaylı bir Őekilde anlatın.

Lütfen, Őu an sahip olduĐunuz ve gelecekte devam edeceĐini dŐşündüĐünüz veya gelecekte sahip olmak istediĐiniz, ciddi ya da kararlı bir romantik iliŐki dŐŐünün. Bu iliŐkide ciddi bir Őekilde baĐlı olduĐunuz kiŐinin sizi baŐka biriyle cinsel olarak aldattıĐını keŐfettiĐinizi hayal edin. Cinsel aldatma; kiŐi romantik bir iliŐki yaŐarken baŐka biriyle cinsel iliŐki yaŐamak olarak tanımlanmaktadır. Őimdi bu durumu öĐrendiĐiniz anı zihninizde canlandırın ve lütfen bu olayı detaylı bir Őekilde anlatın.

## Appendix D: Centrality of Event Scale

Lütfen biraz önce hayal ettiğiniz duygusal aldatma anını ve yazdıklarınızı düşünerek aşağıdaki soruları cevaplayınız.

1. Bu olayın kimliğimin bir parçası haline geldiğini hissediyorum.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)
2. Bu olay, kendimi ve dünyayı anlamamda bir referans noktası haline geldi.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)
3. Bu olayın hayat hikayemin merkezi bir parçası haline geldiğini hissediyorum.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)
4. Bu olay, diğer deneyimlerimle ilgili duygu ve düşüncelerimi etkiledi.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)
5. Bu olay, hayatımı kalıcı bir biçimde değiştirdi.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)
6. Sık sık bu olayın geleceğim üzerindeki etkileri hakkında düşünürüm.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)
7. Bu olay, hayatımda bir dönüm noktası oldu.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)

Lütfen biraz önce hayal ettiğiniz cinsel aldatma anını ve yazdıklarınızı düşünerek aşağıdaki soruları cevaplayınız.

1. Bu olayın kimliğimin bir parçası haline geldiğini hissediyorum.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)
2. Bu olay, kendimi ve dünyayı anlamamda bir referans noktası haline geldi.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)
3. Bu olayın hayat hikayemin merkezi bir parçası haline geldiğini hissediyorum.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)
4. Bu olay, diğer deneyimlerimle ilgili duygu ve düşüncelerimi etkiledi.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)
5. Bu olay, hayatımı kalıcı bir biçimde değiştirdi.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)

6. Sık sık bu olayın geleceğim üzerindeki etkileri hakkında düşünürüm.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)
7. Bu olay, hayatımda bir dönüm noktası oldu.	1 (Hiç) / 2/ 3/ 4/ 5/ 6/ 7 (Tamamen)

## Appendix E: Autobiographical Memory Questionnaire

1. Bu hayali olay, canlı bir olaydır.

Hiç 1 2 3 4 5 6 7 Son derece canlı

2. Bu olayı zihnimde canlandırdığımda, henüz gerçekleşmemiş olayı önceden yaşıyormuşum gibi hissediyorum.

Hiç 1 2 3 4 5 6 7 Şu anda oluyormuş gibi

3. Bu olayı zihnimde canlandırdığımda, onu zihnimde görebiliyorum.

Hiç 1 2 3 4 5 6 7 Şu anda oluyormuş gibi

4. Bu olayı zihnimde canlandırdığımda, onu zihnimde duyabiliyorum.

Hiç 1 2 3 4 5 6 7 Şu anda oluyormuş gibi

5. Bu olayı zihnimde canlandırdığımda, olayın geçtiği mekanda kimin/neyin nerede durduğunu biliyorum.

Hiç 1 2 3 4 5 6 7 Şu anda oluyormuş gibi

6. Bu olayı zihnimde canlandırdığımda hissettiğim duygular

Son derece olumsuz -3 -2 -1 0 +1 +2 +3 Son derece olumlu

7. Bu olayı zihnimde canlandırdığımda yoğun duygular hissediyorum.

Hiç 1 2 3 4 5 6 7 Son derece yoğun

8. Zihnimde canlandırdığım bu olay hayatımda önemli bir yere sahip olacaktır.

Hiç 1 2 3 4 5 6 7 Son derece önemli

9. Bu olayı zihnimde canlandırdığımda, gelecekte gerçekleşebilecek olayı ağırlıklı olarak gördüğüm perspektif (bakış açısı) aşağıdaki gibidir.

Kendi gözümden 1 2 3 4 5 6 7 Olaya dışarıdan  
bakan bir gözlemci gözünden

10. Bu olayı istemli olarak (kendi isteğimle) zihnimde canlandırarak onun hakkında  
düşündüm ya da konuştum.

Hiç 1 2 3 4 5 6 7 Çok sık

11. Bu olay, siz onu zihninizde canlandırmaya çalışmadığınız halde, aniden ve  
istemsizce zihninizde belirdi mi?

Hiç 1 2 3 4 5 6 7 Çok sık

12. Bu olayı zihnimde canlandırmak

Çok kolaydı 1 2 3 4 5 6 7 Çok zordu

13. Zihnimde canlandırıdığım bu olay, belli bir yer ve zamanda gerçekleşebilecek ve  
süresi bir tam günü (24 saati) aşmayacak bir olay olması sebebiyle belirgin  
(spesifik) bir olaydır.

Hiç 1 2 3 4 5 6 7 Son derece belirgin

14. Bu olay ne kadar süre sonra gerçekleşebilir? \_\_\_\_\_ hafta sonra.

## **Appendix F: Debriefing Form**

Psikoloji Bölümü  
Doğu Akdeniz Üniversitesi  
Gazimağusa, Kuzey Kıbrıs Türk Cumhuriyeti  
Tel: +(90) 392 630 1389 Fax: +(90) 392 630 2475  
Web: <http://brahms.emu.edu.tr/psychology>

### **Katılımcı Bilgilendirme Formu**

Aldatmayı Hayal Etme: Episodik Düşünme ve Cinsiyet Farklılıkları başlığı altında yürütülen bu çalışmaya katıldığınız için teşekkür ederim. Araştırmanın amaçlarını ve hedeflerini açıklamayı amaçlayan aşağıdaki bilgileri okumak için birkaç dakikanızı ayırınız. Araştırma ile ilgili sorularınız varsa, aşağıda iletişim bilgileri olan araştırmacıyla iletişim kurabilirsiniz. Bu araştırmada episodik düşünme ve aldatma araştırılacaktır. Bu konuda daha önce yapılan çalışmalar, kadınlar ve erkekler arasında farklılık olduğunu göstermektedir. Bu çalışmaları, gelecek hayal edilerek de aynı farklılık elde edilecek mi sorusunu inceleyebilmek amacıyla genişletiyoruz.

Araştırmada kullanılan anket doldurulduktan sonra herhangi bir rahatsızlık veya sıkıntı duyuyorsanız lütfen çalışmanın akademik danışmanı Burcu Kaya Kızılöz ve bir uzman ile konuşmak istiyorsanız, DAÜ öğrencisi iseniz PDRAM ile iletişim kurunuz eğer değilseniz Klinik Psikolog Hasan Ergüler (+90 392 366 7076) ile iletişim kurunuz. Ayrıca, sorularınız için araştırmacı (Gizem Karaca, [gizem.karaca@emu.edu.tr](mailto:gizem.karaca@emu.edu.tr), +90 392 692 2418) veya araştırmanın danışmanı (Burcu Kaya Kızılöz, [burcu.kaya@emu.edu.tr](mailto:burcu.kaya@emu.edu.tr), +90 392 692 3051) ile iletişim kurabilirsiniz.

Araştırmaya yaptığınız değerli katkıdan ve katılımınızdan dolayı teşekkür ediyorum.

Saygılarımla,

Gizem Karaca



**Appendix G: Eastern Mediterranean University Psychology  
Department's Ethics and Research Committee Approval Letter**



**Doğu Akdeniz  
Üniversitesi**  
*"Endem, Bilgi, Gelişim"*

**Eastern  
Mediterranean  
University**  
*"Virtue, Knowledge, Advancement"*

99628, Gazimağusa, KUZZEY KIBRIS /  
Famagusta, North Cyprus,  
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Faks/Fax: (+90) 392 630 2919  
E-mail: bayek@emu.edu.tr

**Etik Kurulu / Ethics Committee**

**Reference No:** ETK00-2019-0238

**12. 11.2019**

**Subject:** Application for Ethics.

**RE:** Gizem Karaca (18500076)  
Department of Psychology

To Whom It May Concern:

On the date of **12.11.2019**, (Meeting number **2019/26-01**), EMU's Scientific Research and Publication Ethics Committee (BAYEK) has granted, Gizem Karaca from the Department of Psychology to pursue with her MA thesis work "**Imagining Infidelity: Gender differences in future episodic thinking**" under the supervision of Assist. Prof. Dr. Burcu Kaya Kızıllöz. This decision has been taken by the majority of votes.

Regards,



Prof. Dr. Fatma Güven Lisaniler  
Director of Ethics Committee

FGL/ns.

[www.emu.edu.tr](http://www.emu.edu.tr)