

THE ORIGINS OF INDIVIDUAL DIFFERENCES IN ROMANTIC
ATTACHMENT: EVOLUTIONARY PSYCHOLOGICAL INSIGHTS

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ABSTRACT

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The current thesis investigated the hypothesis that evolved psychological mechanisms producing adult attachment strategies are sensitive to personal and contextual inputs linked to costs and benefits of alternative attachment strategies. Three studies were designed to 1) identify the link between the inputs “early parental environment, speed of life, and mate value” and attachment strategies; 2) examine temporary activation of adult attachment mechanisms in response to a blind date opportunity with individuals varying in physical attractiveness; and 3) test the relationship between physical attractiveness and secure base use behavior in couples experimentally manipulating physical attractiveness. Study 1 results showed adult attachment mechanisms up-regulated both men’s and women’s attachment anxiety in response to low mate value and low quality early parental environment; men’s attachment avoidance in response to fast life speed and low quality early parental

environment; women's attachment avoidance in response to fast life speed and low mate value. Study 2 results showed both men and women exhibited an anxious attachment strategy in response to a blind date opportunity with an individual of high physical attractiveness whereas only women exhibited an avoidant strategy in response to a blind date opportunity with an individual of average physical attractiveness. Study 3 results revealed a positive correlation between women's ratings of facial attractiveness and secure base use scores; between individuals' physical attractiveness and their secure base scores specifically among individuals who compared themselves to attractive others. These results enhance the understanding of the origins of individual differences in adult romantic attachment.

Keywords: Adult Attachment, Individual Differences, Physical Attractiveness

ÖZET

ROMANTİK BAĞLANMADA GÖRÜLEN KİŞİSEL FARKLILIKLARIN KÖKENLERİ: EVRİMSEL PSİKOLOJİ YAKLAŞIMI

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Bu tezde, yetişkinlerde romantik bağlanma stratejilerini üreten evrimleşmiş psikolojik mekanizmaların bağlanma stratejilerinin fayda ve zararlarıyla bağlantısı olduğu düşünülen kişisel ve bağlamsal ipuçlarına duyarlı olduğu hipotezi incelenmiştir. Bu amaçla 3 ayrı çalışma dizayn edilmiştir. İlk çalışmada, kişilerin ebeveynleriyle çocuklukta olan ilişkilerinin niteliği, yaşam hızları ve partner olarak ne kadar arzulandıkları ile bağlanma stratejileri arasındaki ilişkiler araştırılmıştır. İkinci çalışmada, yetişkinlerde bağlanma mekanizmasının değişik düzeylerde çekiciliğe sahip kişilerle görücü usulü tanışma fırsatına cevaben geçici aktivasyonu incelenmiştir. Üçüncü çalışmada, fiziksel çekicilik ile partneri güvenli bir dayanak olarak kullanma davranışı arasındaki ilişki katılımcıların fiziksel çekicilik algıları manipüle edilerek ölçülmüştür. İlk çalışmanın sonuçları kadın ve erkelerin bağlanma kaygısının partner olarak arzulanma düzeyinin ve çocuklukta ebeveynlerle kurulan

ilişkinin niteliğinin düşüklüğüne cevaben arttığını; erkeklerin kaçınmalı bağlanma düzeyinin yaşam hızındaki artışa ve çocuklukta ebeveynlerle kurulan ilişkinin niteliğinin düşüklüğüne cevaben arttığını; kadınlarda kaçınmalı bağlanma düzeyinin ise yaşam hızındaki artışa ve partner olarak arzulanma düzeyinin düşüklüğüne cevaben arttığını göstermiştir. İkinci çalışmanın sonuçları hem kadın hem de erkeklerin bağlanma kaygılarının kendilerinden fiziksel olarak daha çekici buldukları bir partnerle görücü usulü tanışma fırsatına karşılık arttığını; kadınların kaçınmalı bağlanma düzeylerinin ise kendilerinden fiziksel olarak daha az çekici buldukları bir partnerle görücü usulü tanışma fırsatına karşılık arttığını göstermiştir. Üçüncü çalışmanın sonuçları kadınların yüzsel çekicilik dereceleri ile partnerlerini güvenli bir dayanak olarak kullanma davranışları arasında pozitif bir ilişki olduğunu ve bu ilişkinin tüm katılımcılar arasından spesifik olarak sadece kendilerini çekici insan fotoğraflarıyla karşılaştıran katılımcılar için anlamlı ve pozitif olduğunu göstermiştir. Bu sonuçlar romantik bağlanmada görülen kişisel farklılıkların kökenlerinin daha iyi anlaşılabilmesine katkı sağlayacak niteliktedir.

Anahtar Kelimeler: Yetişkinlerde Bağlanma, Kişisel Farklılıklar, Fizksel Çekicilik

TABLE OF CONTENTS

ABSTRACT.....	iii
ÖZET.....	v
TABLE OF CONTENTS.....	vii
LIST OF TABLES.....	x
LIST OF FIGURES.....	xi
CHAPTER 1: INTRODUCTION.....	1
1.1 Individual Differences as Evolved Functional Strategies.....	2
1.2 Cost-Benefit Trade-offs.....	4
1.3 Adaptive Individual Differences in Adult Romantic Attachment.....	5
1.4 Alternative Adult Attachment Strategies.....	7
1.4.1 Secure attachment.....	7
1.4.2 Anxious/ambivalent attachment.....	8
1.4.3 Avoidant attachment.....	8
1.5 Costs and Benefits of Alternative Adult Attachment Strategies.....	9
1.6 Inputs Linked to Cost-Benefit Trade-offs of Adult Attachment Strategies.....	10
1.6.1 Early environment and life history.....	10
1.6.2 Sex differences in life history strategies.....	13
1.6.3 Mating strategy.....	15
1.6.4 Mate value.....	16
CHAPTER 2: STUDY 1.....	19
2.1 Method.....	19

2.1.1 Participants.....	19
2.1.2 Materials	19
2.1.3 Procedure	22
2.2 Results	22
2.3 Discussion	27
CHAPTER 3: STUDY 2: TEMPORARY ACTIVATION OF ADULT ATTACHMENT MECHANISM.....	31
3.1 Method.....	33
3.1.1 Participants.....	33
3.1.2 Materials	33
3.1.3 Procedure	34
3.2 Results	35
3.3 Discussion	39
CHAPTER 4: STUDY 3: AN EXPERIMENTAL INVESTIGATION OF THE ADULT ATTACHMENT MECHANISM	42
4.1 Method.....	43
4.1.1 Participants.....	43
4.1.2 Materials	43
4.1.3 Procedure	45
4.2 Results	46
4.3 Discussion	52
CHAPTER 5: GENERAL DISCUSSION	54
5.1 Limitations and Future Directions.....	56
5.1.1 Measures	56
5.1.2 Sample	56
5.1.3 Procedure	57
5.2 Conclusions	57
REFERENCES.....	59
APPENDICES	65

A1-THE REVISED EXPERIENCES IN CLOSE IN CLOSE RELATIONSHIPS QUESTIONNAIRE (ECR-R)	65
A2-THE ECR-R TURKISH VERSION.....	68
B1-PARENTAL BONDING INSTRUMENT	70
B2-PARENTAL BONDING INSTRUMENT TURKISH-VERSION	71
C1-IPIP PHYSICAL ATTRACTIVENESS SCALE	72
C2-IPIP PHYSICAL ATTRACTIVENESS SCALE-TURKISH VERSION.....	73
D1- SELF PERCEIVED MATING SUCCESS SCALE	74
D2- SELF PERCEIVED MATING SUCCESS SCALE-TURKISH VERSION ..	75
E1-LIFE HISTORY STRATEGY MINI K.....	76
E2-LIFE HISTORY STRATEGY MINI K-TURKISH VERSION.....	77
F1-THE REVISED SOCIOSEXUAL ORIENTATION INVENTORY (SOI-R) .	78
F2-THE SOI-R-TURKISH VERSION	81
G1-MATING OPPORTUNITY SCENARIO	83
G2-MATING OPPORTUNITY SCENARIO-TURKISH VERSION	84
H-MATE PHOTOGRAPHS	85
I1-ATTRACTIVENESS RATINGS QUESTIONS	86
I2-ATTRACTIVENESS RATINGS QUESTIONS-TURKISH VERSION	87
J1- EXPERIENCES IN CLOSE RELATIONSHIPS–RELATIONSHIP STRUCTURES QUESTIONNAIRE (ECR-RS).....	88
J2- THE ECR-RS-TURKISH VERSION	89
K-ATTRACTIVENESS MANIPULATION PHOTOGRAPHS	90
L1-RELATIONSHIP THREAT SCENARIOS.....	96
L2-RELATIONSHIP THREAT SCENARIOS-TURKISH VERSION.....	97

LIST OF TABLES

1. Internal Reliabilities of Study Scales	22
2. Study 1 Descriptive Statistics.	23
3. Inter-correlations among study variables	25
4. Study 2 Descriptive Statistics.	35
5. Study 3 Descriptive Statistics.	48
6. Regression model predicting secure base use	52

LIST OF FIGURES

1. Mean state attachment anxiety scores across high attractiveness and average attractiveness conditions.....	36
2. Effects of gender and experimental condition on state attachment avoidance....	37
3. Relationship between physical attractiveness discrepancy and attachment anxiety.....	38
4. Relationship between physical attractiveness discrepancy and attachment avoidance scores of men and women.....	39
5. Relationship between ratings of facial attractiveness and secure base use scores of men and women.....	50
6. Relationship between ratings of facial attractiveness and secure base use scores of individuals in the increased self-perception of physical attractiveness condition and decreased self-perception of physical attractiveness condition.....	51

CHAPTER 1: INTRODUCTION

The aim of this thesis is to investigate individual differences in adult romantic attachment as the hypothesized outputs of evolved psychological mechanisms that calibrate their output according to inputs ancestrally linked to the costs and benefits of alternative adult romantic attachment strategies. I conducted 3 studies to test how the hypothesized mechanism calibrates attachment-related outputs according to these hypothesized inputs.

Study 1 examined the link between insecure attachment and the inputs of 1) early parental environment, 2) speed of life, and 3) mate value. Study 2 experimentally tested temporary activation of the proposed adult attachment mechanism in response to discrepancy between self-perceived physical attractiveness and physical attractiveness of a potential partner. Finally, Study 3 was designed as an experimental study to examine the effect of physical attractiveness manipulation and individuals' objective physical attractiveness on their attachment behavior.

In the first chapter, I will present an overview of evolved psychological mechanisms and individual differences as functional outputs of these mechanisms. Then, I will give background information for individual differences in adult attachment strategies and inputs hypothesized to be linked to costs and benefits of alternative attachment strategies. In the second chapter, I will provide the method and results of the first study which examined the link between these inputs and

attachment strategies and discuss the study results. In the third chapter, I will provide the method, results and discussion of the second study which investigated the temporary activation of the adult attachment mechanism. In the fourth chapter, I will provide the method, results and discussion of the third study which experimentally tested the adult attachment mechanism. In the final chapter, I will provide general discussion of the results, discuss research limitations and directions for future research.

1.1 Individual Differences as Evolved Functional Strategies

Humans possess psychological mechanisms which produce individual differences in response to different inputs (Tooby & Cosmides, 1990). Psychological mechanisms receive particular internal and external inputs and transform those inputs into outputs which are observed as manifested behavior (Buss 1991; 1995; Buss & Greiling, 1999). No behavior can exist without the existence of a psychological mechanism producing that behavior. A universal psychological mechanism can produce individual differences in behavioral strategies due to the different inputs either existing in an individual or in an individual's environment (Buss, 1991). Each psychological mechanism has a specific function and can be activated by only specific sets of internal or external inputs. As an illustration, the psychological mechanism producing jealousy has a specific function which is to solve the problem of one's partner's infidelity. The jealousy mechanism can be activated through only some specific inputs linked to the adaptive problem that the mechanism is evolved to solve such as one's partner's flirtatious behavior towards an opposite-sex individual. Partners' involvement in a different relationship is costly for both men and women, both sexes therefore possess the jealousy mechanism. However, different inputs activate jealousy mechanism of men and women since there are differences in the

adaptive problems faced by ancestral men and women. Men face the problem of paternity uncertainty since they cannot ensure that the offspring is their own if their partner involves in a sexual relationship with other men. Unlike men, women face the problem of losing or sharing their partners' resources and interest in them if their partner involves in a romantic relationship with other women. Therefore, men's and women's jealousy mechanism is activated by the inputs linked to the specific recurrent adaptive problems they faced. As a result, men's jealousy mechanism is activated by the cues related to sexual infidelity of the partner whereas women's jealousy mechanism is activated by the cues linked to emotional involvement of the partner with other women. According to differences in the adaptive problems faced by the two sexes and differences in the inputs linked to the adaptive problems, sex differences occur in the outputs produced by the mechanism (Buss, 1995; Tooby & Cosmides).

As well as between-sex differences, psychological mechanisms can produce within-sex differences through enduring situational factors. For example, the output produced by the mechanism producing calluses depends on how frequently an individual is exposed to repeated friction in his or her environment. Although all individuals possess a callus-producing mechanism, the toughness of an individual's skin depends on the context so the individual differences in calluses are due to differential activation of the universal callus-producing mechanism. Frequent friction of the skin can lead to repeated activation of the callus-producing mechanism and result in enduring individual differences in calluses (Buss & Greiling, 1999). Similarly, enduring personal characteristics such as one's mate value can cause the activation of a psychological mechanism even if there is no relevant cue in the environment. For example, if a man has a lower self-perceived mate value than his

long-term partner, this enduring feature of the man may lead the man's sexual jealousy mechanism to be more sensitive to sexual infidelity cues in the environment (Buss & Greiling, 1999; Tooby & Cosmides, 1990). Thus, benefits of possessing high levels of jealousy are more than its costs for this particular man. This demonstrates that costs and benefits of pursuing a behavioral strategy depend on the inputs received by the mechanism producing that behavioral strategy.

1.2 Cost-Benefit Trade-offs

Evolutionary theories acknowledge that adaptations carry fitness costs as well as having fitness benefits. Fitness benefits refer to being able to survive till reproductive age, reproduce successfully, and ensure survival of the offspring to reproductive age. A decrease in fitness benefits causes an increase in fitness costs. Therefore, successful allocation of resources to activities that maximize fitness benefits requires a careful analysis of cost-benefit trade-offs of adaptations (Gangestad & Simpson, 2000). For example, a trade-off occurs when an individual spends his or her resources for offspring. Although high parental investment has benefits such as offspring survival, it also carries costs such as missing opportunities to invest in mating or other offspring. Thus, cost-benefit trade-offs between parental and mating effort can lead to the pursuit of the best strategy among available alternatives. The trade-off between parental effort and mating effort can explain variations in women's and men's reproductive strategies. Since fitness benefits of allocating resources to mating activities (e.g. putting an effort to have more mates) are higher for men than women, we expect men, relative to women, to invest in mating activities more than parental activities. Such cost-benefit trade-offs can also explain within-sex variations in reproductive strategies. For example, although fitness benefits of short-term mating strategy are more for men than women, benefits

of pursuing a short-term mating strategy differ among men. For example, men who possess lower levels of characteristics desired in short-term mates, such as high levels of physical attractiveness may gain fewer benefits from adopting a short-term mating strategy relative to men who possess these characteristics. Therefore, we expect these men to invest in long-term mating tactics as a conditional strategy (Gangestad & Simpson, 2000). Lukaszewski and Roney (2011) employ a similar conditional logic to explain the origins of variation in extraversion. Since being physically strong and attractive are positively associated with the benefits of being extraverted such as gaining social status and increasing the number of social relationships (Neetle, 2005), high levels of physical attractiveness and physical strength increase the chance of gaining these benefits of an extraverted strategy. Consequently, individual differences in physical strength and physical attractiveness can explain variation in individuals' extraversion levels. Similar logic can apply to the origins of individual differences in the personality trait of openness to experiences. Previous research shows the evolved psychological mechanism producing individual differences in Openness is activated by individuals' mating strategy, physical attractiveness and gender which predict costs and benefits of high versus low levels of Openness (Lewis, Al-Shawaf, & Yilmaz, 2015). These empirical findings demonstrate that exploration of the origins of individual differences in personality or mating behavior can be possible through a careful examination of potential internal cues within and external cues around an individual that activate psychological mechanisms calibrating manifested strategies.

1.3 Adaptive Individual Differences in Adult Romantic Attachment

Many attachment theorists attempt to explain individual differences in adult attachment strategies based on early experiences with parents (Collins & Read, 1990;

Hazan & Shaver, 1987; 1994). Bowlby's attachment theory (1969) proposes that infants are prone to form an attachment bond with their caregivers, which enhances the survival likelihood of the dependent and vulnerable infants. However, differing levels of parental care and responsiveness lead infants to differ in their attachment to their caregivers. Based on the quality of care provided by the caregiver, Ainsworth and her colleagues (1978) classify variations in childhood attachment into three categories: secure attachment, anxious/ambivalent attachment, and avoidant attachment. Consistently responsive care is linked to secure attachment whereas inconsistent responsiveness towards and consistent rejection of the child leads to the formation of anxious/ambivalent and avoidant attachment, respectively. Adult Attachment Theory (Hazan & Shaver, 1987; 1994) suggests that the origins of individual differences in adult romantic attachment can be explained by examining differences in early attachment with parents. Hazan and Shaver (1987) suggest that adult attachment patterns are positively linked to attachment bonds established in early childhood. Similar to the types of infant attachment (Ainsworth et al., 1978), attachment in romantic relationships consists of three categories: secure attachment, anxious/ambivalent attachment and avoidant attachment. As the attachment between caregiver and infant has a survival value for the infant, adult attachment researchers posit that secure attachment has important fitness-related benefits for both couples and offspring. These include such as keeping pairs together, enhancing the survival of offspring, having an available partner to have sexual intercourse (Miller & Fishkin, 1997) and increasing paternity certainty (Fraley & Shaver, 2000).

Previous research on individual differences in romantic attachment has mainly focused on adaptive benefits of secure attachment and research on the potential adaptive benefits of insecure attachment strategies remains limited. The

current thesis proposes that whether benefits of pursuing a romantic attachment strategy are more than the pursuit of other attachment strategies for an individual depends on to what extent this individual faces a mating-related adaptive problem, whether the strategy helps solve the problem, and the costs and benefits of pursuing the attachment strategy for that particular individual. Insecure adult attachment patterns both anxious/ambivalent and avoidant attachment styles are alternative strategies that contribute to solve specific adaptive problems. Costs and benefits of insecure attachment strategies shift depending on the inputs existing in an individual or an individual's environment as posited by the concept of condition-dependent strategies (Buss & Greiling; Lewis, 2015; Tooby & Cosmides, 1990). In order to examine previously unidentified adaptive benefits of insecure attachment strategies, the current thesis aims to investigate the following 1) specific adaptive problems that anxious/ambivalent and avoidant attachment strategies contribute to solve, 2) specific inputs linked to cost-benefit trade-offs of different attachment strategies, 3) whether the link between those inputs and cost-benefit trade-offs of attachment strategies differ between men and women.

1.4 Alternative Adult Attachment Strategies

1.4.1 Secure attachment. Individuals with secure attachment strategy have a more positive view about romantic relationships than individuals who exhibit anxious/ambivalent and avoidant attachment orientation. Individuals exhibiting secure attachment are more likely to support and trust their romantic partners; tend to form long-lasting relationships more than do individuals with other attachment orientations (Hazan & Shaver, 1987). Longitudinal studies conducted on married couples supported the finding that secure individuals' relationships are more long-lasting (Kirkpatrick & Davis, 1994; Kirkpatrick & Hazan, 1994). Individuals with

secure attachment scored high on self-confidence, involvement in romantic relationships, and warmth (Bartholomew & Horowitz, 1991). Further, they scored higher in self-disclosure (Pistole, 1993), and the use of nonverbal cues signaling a positive attitude towards emotional intimacy in comparison to the individuals with avoidant attachment (Guerrero, 1996). Secure individuals experienced higher relationship satisfaction in marriage (Kobak & Hazan, 1991). The link between secure attachment and the aforementioned psychological features make it the best strategy to maximize offspring survival and reproduction since parental investment is at its maximum in a satisfying and long-lasting relationship (Belsky, 1997).

1.4.2 Anxious/ambivalent attachment. Individuals who exhibit anxious/ambivalent attachment strategy seek closeness with others and are obsessed about the love of close others (Hazan & Shaver, 1994). For anxiously attached individuals, it is extremely important to keep one's partner available. Individuals with anxious attachment orientation experience intense fear and anxiety about their partner's responsiveness and high levels of partner jealousy (Hazan & Shaver, 1994). Research indicates that individuals who exhibit anxious/ambivalent attachment strategy score high on involvement in romantic relationships and depending on others; low on self-confidence. Anxious lovers tend to be excessively expressive about revealing their emotions and disclosing information about themselves (Bartholomew & Horowitz, 1991). In comparison to the individuals with avoidant attachment, individuals with anxious attachment tend to exhibit nonverbal emotional intimacy more (Guerrero, 1996).

1.4.3 Avoidant attachment. As opposed to individuals exhibiting secure and anxious/ambivalent attachment strategies, individuals exhibiting avoidant attachment strategy tend to avoid emotional intimacy and prefer to keep a distance between

themselves and their romantic partners. In general, avoidant lovers have negative beliefs about romantic relationships (Hazan & Shaver, 1994). Previous research showed that individuals exhibiting avoidant attachment style score high on self-confidence (Bartholomew & Horowitz, 1991), low on emotional warmth and expressiveness; disclosing information about themselves; being dependent on others; and involvement in romantic relationships (Bartholomew & Horowitz, 1991); commitment to, interdependence, satisfaction, and trust in romantic relationships (Simpson, 1990); and; showing emotional intimacy nonverbally (Guerrero, 1996). Individuals who exhibit avoidant attachment pursue a faster life strategy (i.e. engaging in short-term relationships, polygamy, and low parental investment) (Belsky, 1997; Chisholm, 1996) and more likely to experience relationship termination (Feeney & Noller, 1992).

1.5 Costs and Benefits of Alternative Adult Attachment Strategies

Secure attachment functions in high parental investment by promoting stable pair-bonds. However, pursuing a secure attachment strategy may be costly for specific individuals who, in reality, face greater risk of partner infidelity and abandonment. For these individuals, adopting a secure attachment strategy could not function in protecting their relationship from potential threats that cause infidelity of and abandonment by their partners. Alternatively, adopting an anxious/ambivalent or avoidant attachment strategy would be less costly for these individuals. Anxious attachment style is characterized as hyper activation of the attachment system while avoidant attachment style is characterized as deactivation of the attachment system (Cassidy & Kobak, 1988). Hyper activation of the attachment system increases an individual's effort to keep a partner available and makes an individual extra-sensitive to the cues of potential threats such as a partner's unavailability, decrease in interest,

and intention for abandonment. In contrast, deactivation of the attachment system leads an individual to inhibit negative consequences of an attachment figure's unavailability and therefore reject cues of potential threats and support from an attachment figure to protect his or her (Mikulincer & Shaver, 2003). Although hyper activating and deactivating strategies seem costly for individuals, specific individuals who face a greater risk of partner infidelity and abandonment would gain benefits from either hyper activation strategies which enhance the detection of infidelity or abandonment cues and increasing the availability of the partner or deactivation strategies which contributes to the avoidance of costs related to infidelity or abandonment of a partner.

In order to understand for which individuals we should expect evolved psychological mechanisms to produce insecure attachment, we need to identify the specific conditions and contexts that would have been ancestrally predictive of the costs and benefits of these alternative attachment strategies.

1.6 Inputs Linked to Cost-Benefit Trade-offs of Adult Attachment Strategies

1.6.1 Early environment and life history. Although some psychological mechanisms are shared by all individuals, differences in individuals' early experiences lead to the inputs received by the mechanisms of each individual differ. Consequently, individual differences in the pursued output strategies occur. Several researchers have attempted to explain the effect of early experiences on the variation in adult attachment strategies based on the life history theory (Belsky, Steinberg, & Draper, 1991; Chisholm 1993; Draper & Harpending, 1982). Life History Theory proposes that since resources are limited, individuals must trade-off allocation of resources to somatic effort and reproductive effort. *Somatic effort* refers to total investment in an individual organism's whole developmental process whereas

reproductive effort is defined as allocation of resources to the transfer of genes to next generations. Reproductive effort consists of mating effort invested to mating activities and parenting effort invested for the survival of offspring (Figueredo et al., 2006). Environmental cues affect the costs and benefits of investing in mating versus parenting effort in a given environment. Environmental context determines the adaptive value of a strategy so life history strategies can shift depending on environmental conditions (Del Giudice, 2009; McNamara & Houston, 1996).

Parental environment is one of the cues in individuals' environment that we hypothesize to affect the costs and benefits of alternative reproductive strategies. For example, Draper & Harpending (1982) propose that absence or presence of father can be a cue predicting later reproductive strategies. Draper's and Harpending's (1982) proposed link between early life experiences and later reproductive strategies suggests that human psychological mechanisms are sensitive to early experiential cues. A reproductive strategy which had fitness benefits in the environment where a child was grown up is likely to serve the same function in the environment where the child continues to live as an adult (Belsky, 1997). In other words, the reproductive strategy produced depending on early experiential cues is the best strategy for an individual to successfully reproduce and survive in the environment where he or she grew up and live (Belsky, 1997; Belsky et al., 1991). The absence of a father predicts a social environment where multi-partner sexual activities and low levels of parental investment commonly exist whereas growing up with the presence of a father is a predictive cue of a mating environment in which monogamous relationships and high investment in offspring are common. This specific early environmental cue influences a woman's expectations about the society where she lives and about other people who live in the same society. Thus, a woman who is reared in a father-absent

family considers other people as untrustworthy and pursues strategies such as early sexuality and promiscuity whereas a woman who grows up with a father believes that others are trustworthy and pursues strategies such as late sexuality, long-term mating, and parental investment which function well in the environment where she lives. In sum, individual differences in reproductive strategies are sensitive to such early parental experiences (Belsky et al., 1991; Buss & Greiling, 1999; Tooby & Cosmides, 1990).

Belsky et al.'s (1991) theory of socialization proposes that different attachment strategies are evolved to solve the problem of environmental risk and uncertainty. Belsky et al. (1991) aim to explain why early environmental conditions affect later reproductive strategies. Belsky et al.'s (1991) theory suggests the quality of parenting behavior is influenced by the quality of the environmental conditions. For example, harsh environmental conditions such as problems with resources decrease parents' investment in and sensitivity towards their children. In response to low quality parenting, children see themselves as not deserving to be loved, others as not trustworthy and romantic relationships as not long-lasting. Children's self-view and view about others developed in response to parental sensitivity shape their pursued attachment strategy. Low quality parental care and scarcity of resources in an individual's environment cause an individual to adopt an insecure attachment strategy and to experience puberty and sexuality at early ages (Belsky et al., 1991). At first blush, uncommitted sexual relationships and insecure attachment could appear to be dysfunctional, these strategies may serve a function which maximize an individual's reproductive success in an environment where investment in offspring is low (Belsky et al., 1991; Chisholm, 1993; 1996; 1999; Chisholm, Quinlivan, Petersen, & Coall, 2005).

1.6.2 Sex differences in life history strategies. Parental investment theory (Trivers, 1972) posits that, because women's minimum obligatory investment in offspring is more than men, women have evolved choosier mating strategies than men, and that men compete more than women for access to a mate. This difference in parental investment leads costs and benefits of alternative life history strategies to differ for the two sexes. Women, relative to men, gain more benefit from allocating a greater proportion of their time and energy to parental activities as opposed to mating effort and vice versa for men. Since women allocate their time and energy more on parental activities, pursuing an anxious attachment strategy help women maintain their partners' investment in them and offspring in a risky environment. Unlike women, since men invest more in mating activities than women, pursuing an avoidant attachment strategy enables men to engage in short-term mating more, increase the quantity of offspring and reduce parental investment in a risky environment (Del Giudice, 2009; 2011; Del Giudice & Belsky, 2010). Schmitt's (2003) data obtained from 62 cultures provides support for the proposed sex differences in insecure attachment styles. He found that men reported they see themselves as more avoidant and less anxious/ambivalent than women whereas women reported the opposite. The difference between men's and women's attachment avoidance was lower in the countries with high mortality rates.

If the level of early parental care is statistically linked to the level of investment that an individual can expect from a romantic relationship partner in adulthood, then the probability of being exposed to low levels of partner responsiveness and subsequently partner infidelity or abandonment would have exhibited a recurrent ancestral link to the level of investment in one's parental environment. Based on this idea, the cost-benefit tradeoffs of alternative attachment

strategies would have differed across individuals who experienced different levels of parental investment as children, we hypothesize that the psychological mechanisms responsible for producing, as output, adult attachment strategies will take as a key input the individuals' early parental environment (Hypothesis 1).

Second, based on the differences in hypothesized sex differences in parental investment (Trivers, 1972), women grown up in an environment where male investment is low would gain more benefits from the pursuit of an anxious-ambivalent adult attachment strategy which enhances the likelihood of a mate's investment in them and offspring. Unlike women, men grown up in an environment where female investment is low would gain more benefits from the pursuit of an avoidant attachment strategy which enables to increase the number of sexual partners and offspring. Based on the sex differences in costs and benefits of pursuing alternative attachment strategies in response to low levels of early parental investment, I hypothesize that men's and women's adult attachment mechanism will produce different attachment strategies in response to the input of early parental environment (Hypothesis 2).

Prediction 1: The quality of men's early parental environment will be negatively correlated with their attachment avoidance scores.

Prediction 2: The quality of women's early parental environment will be negatively correlated with their attachment anxiety scores.

Third, based on the previously identified link between an individual's early environment and his/her preference for pursuing a slow versus fast life strategy, we expect individuals' life history strategies to predict adult attachment strategies. As a result, we hypothesize that evolved psychological mechanisms producing adult attachment strategies will be sensitive to an individual's life history strategy

(Hypothesis 3).

Prediction 3: Men's short-term life history strategy will be positively correlated with their attachment avoidance scores.

Prediction 4: Women's short-term life history strategy will be positively correlated with their attachment avoidance scores.

1.6.3 Mating strategy. Research on mating strategies have identified variation in individuals' sexual preferences such as the number of the sexual relationship and sexual partners that they have. Simpson and Gangestad (1991) define two types of mating strategy. Short-term mating strategy refers to mating strategies that minimize the commitment to and investment in sexual partners whereas long-term mating strategy refers to the opposite. Previous research identified a link between mating strategies and adult attachment styles. Hazan and Shaver (1987) identified a positive link between attachment security and having long-lasting relationships. Specifically, involvement in short-term relationships is associated with avoidant attachment (Brennan & Shaver, 1995; Feeney, Noller, & Patty, 1993; Kirkpatrick, 1998). However, individuals with anxious attachment strategy are not inclined to involve in short-term mating (Brennan & Shaver, 1995). Schmitt (2003) tested the relationship between adult attachment and short-term mating across 62 cultures. Results revealed a positive link between short-term mating and dismissing-avoidant attachment in most regions, whereas the link between short-term mating and other types of adult attachment varied across regions.

Since short-term mating strategy identifies with no commitment to and no emotional involvement with sexual partners, benefits of pursuing an avoidant attachment strategy are more for an individual who prefer to pursue a short-term mating orientation than for an individual who is not short-term oriented. The pursuit

of a secure or anxious-ambivalent attachment strategy would require being committed or dependent to a sexual partner. Therefore, pursuing a secure or anxious-ambivalent attachment strategy is more costly for short-term oriented individuals. In line with the costs and benefits of adopting an avoidant attachment strategy for the short-term versus long-term oriented individuals, we hypothesize that proposed psychological mechanism producing attachment avoidance is sensitive to the cues of individuals' mating strategy (Hypothesis 4).

Prediction 5: Men's unrestricted socio-sexual orientation scores will be positively correlated with their attachment avoidance scores.

Prediction 6: Women's unrestricted socio-sexual orientation scores will be positively correlated with their attachment avoidance scores.

1.6.4 Mate value. An individual's mate value is an important factor affecting the dynamics of a relationship. Mate value of an individual depends on the characteristics valued in selecting a mate. Men and women exhibit sex-differentiated mate preferences. Men attach greater importance to physical attractiveness of a partner compared to women and women value financial resources of a partner more than men. Therefore, physical attractiveness is more indicative of women's mate value than men whereas resource acquisition potential is more indicative of men's mate value than women (Buss, 1989). Although mate value is a sum of many different characteristics, mate value can be used to refer an individual's overall desirability and success in attracting members of the opposite sex (Buss, 2015; Landolt, Lalumiere, & Quinsey, 1995).

Men and women face many mating-related adaptive problems such as the problem of infidelity or abandonment (Shackelford & Buss, 1997). Infidelity and abandonment by a partner are two mating-related problems that all individuals

attempt to solve when encounter. For example, a partner's infidelity is costly for both men and women. Men face the problem of paternity certainty and the risk of investing in offspring of other men if their mates engage in infidelity. Women encounter the problem of losing their partner's resources or sharing them with other women and their offspring if their mates engage in infidelity (Buss et al., 1992). Research shows that physical attractiveness component of mate value is an important cue which predicts the likelihood of an individual to be involved in infidelity. Men with lower fluctuating asymmetry and higher physical attractiveness engaged in more extra-pair copulations than men with higher fluctuating asymmetry and lower physical attractiveness (Gangestad & Thornhill, 1997). Both women and men who were in a relationship and were poached from their existing relationship reported higher levels of physical attractiveness than individuals who were not poached (Sunderani, Arnocky, & Vaillancourt, 2013).

Previous research identified a negative link between individuals' self-perceived physical attractiveness and attachment anxiety. Individuals who see themselves as less physically attractive exhibit higher scores of attachment anxiety (Bogaert & Sadava, 2002). Individuals' body image dissatisfaction was associated with both anxious and preoccupied attachment styles (Cash, Theriault, & Annis, 2004). Another research finding supported the link between individuals' body dissatisfaction and preoccupied attachment style (Troisi et al., 2006). Lower levels of competence on physical attractiveness were more related with preoccupied attachment style than other attachment orientations (Bylsma, Cozzarelli, & Sumer, 1997). Women's tendency to pursue physical appearance enhancing strategies was positively related with their attachment anxiety scores more than men (Davis & Vernon, 2002).

We propose that since the individuals who have lower physical attractiveness and mate value are under greater risk of partner infidelity and abandonment, pursuing an anxious/ambivalent attachment strategy would be best for these individuals to solve the problem of infidelity and abandonment by keeping the partner close. Accordingly, we hypothesize that proposed psychological mechanism producing adult attachment anxiety is sensitive to the cues of individuals' physical attractiveness and overall mate value (Hypothesis 5).

Prediction 7: Men's self-perceived physical attractiveness will be negatively correlated with their attachment anxiety scores.

Prediction 8: Women's self-perceived physical attractiveness will be negatively correlated with their attachment anxiety scores.

Prediction 9: Men's self-perceived mate value will be negatively correlated with their attachment anxiety scores.

Prediction 10: Women's self-perceived mate value will be negatively correlated with their attachment anxiety score.

CHAPTER 2: STUDY 1

2.1 Method

2.1.1 Participants

One hundred sixty-nine men ($M_{\text{age}} = 21.86$ years, $SD_{\text{age}} = 3.96$) and 313 women ($M_{\text{age}} = 21.51$ years, $SD_{\text{age}} = 3.92$) participated in the study. Participants were Bilkent University students and the general public recruited through social networking websites. Bilkent University students were provided with the opportunity to receive course credit as compensation for completion of the study. There were three inclusionary criteria. First, participants were required to be at least 18 years of age. Second, because study hypotheses were generated based on a heterosexual model¹, only heterosexual participants were recruited. Third, because the study was conducted in Turkish language, participants needed to be fluent in Turkish.

2.1.2 Materials

For survey questionnaires for which Turkish adaptations already existed, I used these extant adaptations. For questionnaires without preexisting Turkish versions, we created a Turkish adaptation using a translation and back translation procedure (see Appendices for Turkish adaptations of the scales).

¹ The evolutionary framework behind this model does not yield clear *a priori* hypotheses about the psychology of individuals' with a non-heterosexual orientation. Because of the theory-anchored nature of the rest of the study, data were not collected that would have been entirely exploratory and had no bearing on the study hypotheses, regardless of the absence, presence, or direction of relationships between variables.

2.1.2.1 Adult attachment. Individuals' adult attachment patterns were assessed using the Experiences in Close Relationships-Revised Questionnaire (ECR-R, Fraley, Waller, & Brennan, 2000), a 36-item scale designed to measure individuals' general feelings about romantic relationships (Appendices A1-A2). The ECR-R was adapted to Turkish by Selcuk, Gunaydin, Sumer, and Uysal (2005). The scale includes 18 items measuring attachment anxiety and 18 items measuring attachment avoidance. Sample items measuring attachment anxiety include "When I show my feelings for romantic partners, I'm afraid they will not feel the same about me". Sample items measuring attachment avoidance include "I get uncomfortable when a romantic partner wants to be very close". Items are rated on a 7-point Likert-type scale ranging from 1 (Strongly disagree) to 7 (Strongly agree).

2.1.2.2 Early parental environment. Individuals' perception of care and protection received from mother and father was measured using the Parental Bonding Instrument (PBI, Parker, Tupling, & Brown, 1979). The PBI consists of two scales: 12 items intended to measure parental "care" and 13 to measure parental "overprotection". The PBI was adapted to Turkish by Kapçı and Küçüker (2006). The measure requires adults to respond to scale items based on what they remember about their parents until they were 16 years of age. Individuals complete the same items once for mother and once for father. Example items from the "care" scale include "Spoke to me in a warm and friendly voice" and "Appeared to understand my problems and worries". Example items from the "overprotection" scale include "Liked me to make my own decisions" and "Did not want me to grow up". Items are rated on a 4-point Likert-type scale (0= *Very unlike*, 1= *Moderately unlike*, 2= *Moderately like*, 3= *Very like*) (Appendix B1-B2).

2.1.2.3 *Physical attractiveness.* Individuals' self-perceived physical attractiveness was measured using the Physical Attractiveness Scale (PAS) from the International Personality Item Pool (IPIP; Goldberg et al., 2006). The PAS consists of 9 items. Example items include "I am considered attractive by others" and "I like to look at my body" The scale items are rated on a 5-point Likert-type scale ranging from 1 (Strongly disagree) to 5 (Strongly agree) (Appendix C1-C2).

2.1.2.4 *Mating Success.* The Self-Perceived Mating Success Scale (SPMSS; Landolt, Lalumiere, & Quinsey, 1995) was used to measure participants' mate value. The SPMSS includes 8 items. Sample items include "Members of the opposite sex that I like tend to like me back" and "I receive many compliments from members of the opposite sex". The items are rated on a 7-point Likert-type scale ranging from 1 (Disagree) to 7 (Agree) (Appendix D1-D2).

2.1.2.5 *Life history strategy.* Individuals' life history strategy was measured using the Mini-K (Figueredo et al., 2006). The Mini-K includes 20 items. Sample items include "I often make plans in advance" and "I would rather have one than several sexual relationships at a time". The scale items are rated on a 5-point Likert type scale ranging from 1 (not at all) to 5 (very much). Higher scores obtained from the scale represent a slower life history strategy (Appendix E1-E2).

2.1.2.6 *Mating strategy.* Individuals' mating strategy was measured using the revised Sociosexual Orientation Inventory (SOI-R; Penke & Asendorpf, 2008). Example items include "With how many different partners have you had sex within the past 12 months?", "Sex without love is OK", and "How often do you have fantasies about having sex with someone you are not in a committed romantic relationship with?" All items are rated on a Likert-type 9 point scale. Items are summed to create a single SOI-R score, with higher scores indicating a greater

proclivity for uncommitted mating (Appendix F1-F2).

2.1.3 Procedure

Prior to the completion of the study, participants were asked to give their consent to participate in the study by clicking next button on the first page of an online survey that shows the consent form. Then, participants were asked to complete an online survey consisting of all study measures.

2.2 Results

2.2.1 Internal Reliability

Prior to testing the study hypotheses, I computed Cronbach's alpha reliability coefficients to test if the internal reliabilities of the Turkish version of the scales reached an acceptable level. Internal reliabilities of the scales varied between 0.77 and 0.91 (Table 1).

Table 1. Internal Reliabilities of Study Scales

Scale	Cronbach's alpha
SOI-R	.85
IPIP PA	.89
ECR-R Anxiety	.88
ECR-R Avoidance	.89
Mating Success	.91
PBI Mother Care	.91
PBI Mother Overprotection	.82
PBI Father Care	.91
PBI Mother Overprotection	.84
Life History Strategy	.77

2.2.2 Descriptive Statistics

Table 2 shows descriptive statistics.

Table 2. Study 1 Descriptive Statistics.

Variable	Men					Women				
	N	Min	Max	M	SD	N	Min	Max	M	SD
Age	160	18	40	21.83	3.97	277	18	42	21.55	3.78
ECR-R Anxiety	160	1.78	6.00	3.95	.88	277	1.72	6.39	4.00	1.03
ECR-R Avoidance	160	1.11	5.94	3.95	.88	277	1.00	5.83	2.85	3.97
Life History Strategy	160	2.70	7.00	4.71	.74	275	2.94	6.82	4.96	.70
Mating Success	160	1.00	7.00	4.15	1.44	277	1.00	7.00	4.67	1.47
SOI-R	160	1.00	7.56	3.79	1.57	277	1.00	7.50	2.61	1.43
Physical Attractiveness	160	1.22	4.67	3.21	.69	277	1.00	5.00	3.50	.73
PBI Father Care	160	1.00	4.00	2.99	.71	275	1.00	4.00	3.15	.69
PBI Father Overprotection	160	1.00	3.31	2.00	.58	275	1.00	3.77	2.07	.58
PBI Mother Care	160	1.08	4.00	3.39	.59	275	1.50	4.00	3.38	.61
PBI Mother Overprotection	160	1.15	3.38	2.10	.50	275	1.00	3.62	2.06	.56

2.2.2 Mate Value, Parental Environment, and “Speed of Life”

Before proceeding to test study predictions, I first examined the inter-correlations 1) between predictor variables hypothesized to have similar directional influences on the outcome variables of interest, and 2) between the outcome variables. First, mating success and physical attractiveness were positively correlated (Table 3). Second, life history strategy and socio-sexual orientation were negatively correlated (Table 3). Third, all four scales of the PBI were inter-correlated (Table 3). These results suggested that these measures were tapping shared underlying constructs. I then conducted 3 principal component analyses as data reduction procedure. Principal component analyses of 1) mating success and physical attractiveness, 2) life history strategy and socio-sexual orientation, and 3) all four parental bonding scales each had a single-factor solution. I therefore extracted one factor from each of these analyses to create three variables: 1) “mate value,” which captured mating success and physical attractiveness; 2) “speed of life” to capture life history strategy and socio-sexual orientation; and 3) “early parental environment” to capture maternal and paternal care and overprotection.

Table 3. Inter-correlations among study variables

Variable	2	3	4	5	6	7	8	9	10
1. ECR-R Anxiety	.19***	-.15**	-.25***	.03	-.22***	-.21***	.18***	-.16**	.22***
2. ECR-R Avoidance		-.29***	-.16**	.05	-.18***	-.18***	.08	-.19***	.09
3. Life History Strategy			.22***	-.34***	.25***	.41***	-.20***	.39***	-.24***
4. Mating Success				-.02	.55***	.16**	.01	.15**	-.05
5. SOI-R					.004	-.09	-.03	-.09	.04
6. Physical Attractiveness						.17***	.01	.10*	-.03
7. PBI Father Care							-.48***	.43***	-.34***
8. PBI Father Overprotection								-.34***	.65***
9. PBI Mother Care									-.48***
10. PBI Mother Overprotection									

*** $p < .001$, ** $p < .01$, * $p < .05$

2.2.3 Hypotheses Testing

I tested the hypotheses that evolved psychological mechanisms producing adult attachment strategies are sensitive to the cues of individuals' mate value, life speed, and early parental environment using backward stepwise regression. To be able to detect the interactive effects of mate value, speed of life, and early parental environment on participants' attachment anxiety and avoidance, the initial model specified was a full-factorial model. I employed this as a predictive model of 1) men's attachment anxiety, 2) women's attachment anxiety, 3) men's attachment avoidance, and 4) women's attachment avoidance.

The final model predicting attachment anxiety was identical for the two sexes. Mate value ($\beta = -0.27, p < .001$) and early parental environment ($\beta = 0.24, p < 0.001$) significantly predicted women's attachment anxiety, $F(2, 274) = 23.30, p < 0.001, R^2 = 0.15$. Mate value ($\beta = -0.23, p = .003$) and early parental environment ($\beta = 0.20, p = .009$) significantly predicted men's attachment anxiety, $F(2, 159) = 9.00, p < 0.001, R^2 = 0.10$.

The model for men's and women's attachment avoidance differed from each other. Speed of life ($\beta = -0.13, p = .03$) and mate value ($\beta = -0.19, p = .001$) significantly predicted women's attachment avoidance, $F(2, 274) = 8.92, p < 0.001, R^2 = 0.06$. Speed of life ($\beta = -0.24, p = .002$) and early parental environment ($\beta = 0.31, p < 0.001$) significantly predicted men's attachment avoidance, $F(2, 159) = 16.61, p < 0.001, R^2 = 0.18$.

The result on men's attachment avoidance suggests the possibility that parental care may only predict men's attachment avoidance whereas parental overprotection may only predict men's attachment anxiety. To be able to explain why early parental environment predicts both men's attachment anxiety and

avoidance, I further conducted correlation analyses between each parental environment dimension and both men's attachment anxiety and avoidance. Men's attachment anxiety was positively correlated with father overprotection ($r = 0.23, p = 0.004$) and mother overprotection ($r = 0.27, p = 0.001$). There was no correlation between men's attachment anxiety and either father care ($r = -0.11, p = 0.15$) or mother care ($r = -0.11, p = 0.19$). Men's attachment avoidance was positively correlated with father overprotection ($r = 0.28, p < 0.001$) and mother overprotection ($r = 0.26, p < 0.001$); negatively correlated with father care ($r = -0.26, p = 0.001$) and mother care ($r = -0.34, p < 0.001$).

2.3 Discussion

Study 1 results provide support for the hypothesis that the psychological mechanisms producing individual differences in adult attachment are sensitive to cues of individuals' early parental environment, speed of life, and mate value which is a new, previously non-identified predictor of adult attachment.

2.3.1 Attachment Anxiety

Mate value and early parental environment independently predicted men's and women's attachment anxiety, but speed of life did not. Regarding mate value, we expected both men and women with lower levels of physical attractiveness and desirability to be more vulnerable to be cheated or abandoned by their mates. Consistent with this reasoning, these individuals appear to pursue an anxious attachment strategy – a strategy with important potential benefits such as keeping the partner proximate, detecting potential threats, and preventing the risk of infidelity and abandonment. Conversely, adopting a secure attachment strategy would not necessarily serve these important functions for individuals under greater risk of infidelity and abandonment.

As expected, early parental environment predicted attachment anxiety in women. We also observed an unexpected relationship between early parental environment and men's attachment anxiety in men. Here, I offer a potential interpretation of that relationship. I speculate that men's attachment anxiety may be more related to parental overprotection than parental care. Parental overprotection limits a child's independency and makes the child dependent on his parents (Parker et al., 1979). Given that an anxious attachment strategy which is associated with excessive need for dependency in romantic relationships, it is perhaps not surprising that an adult man who grows up without a sense of independence and autonomy exhibits such a dependency-linked attachment style (Collins & Read, 1990). Based on this reasoning, I conducted follow-up analyses testing the relationship between men's attachment avoidance and the distinct parental environment subscales. Consistent with my current line of reasoning, men's attachment avoidance was correlated with overprotection – from both parents – but not with parental care from either parent. This provides at least tentative support for the claim that parental overprotection or control is associated with increased need of men for dependency in adult romantic relationships.

2.3.2 Attachment Avoidance

The predictors of adult attachment avoidance differed for men and women. Although speed of life predicted attachment avoidance for both sexes, we observed that mate value predicted women's attachment avoidance whereas early parental environment predicted men's attachment avoidance.

The positive link between individuals' preference for fast life strategy and their attachment avoidance scores was consistent with study hypothesizing. As reasoned, the benefits of pursuing an avoidant attachment strategy may be greater for

individuals more oriented toward uncommitted mating and relatively lower levels of parental investment compared to a strategy which is associated with long-lasting relationships and high investment in partner and offspring (Hazan & Shaver, 1987).

As hypothesized, early parental environment only predicts attachment avoidance in men. This finding offers support for the predictions of Del Giudice's (2009) adult attachment model. Del Giudice (2009) posits that sex differences in attachment derive from the Parental Investment Theory (Trivers, 1972) and have functional benefits. Because females' minimum obligatory investment in offspring is higher than minimum male investment (Trivers, 1972) and reproductive rate of females is more limited than men (Archer & Mehdikhani, 2000 as cited in Del Giudice, 2009), the comparative benefits of investing in parenting effort versus mating effort are greater for women than men. When environmental resources are scarce, this difference between men's and women's reproductive strategies leads women to adopt an attachment strategy to keep their partner close – such as an anxious strategy – whereas men are more motivated adopt an avoidant attachment strategy that is linked to short-term, opportunistic mating. The reasoning behind Del Giudice's (2009) model successfully explains why men but not women pursue an avoidant attachment strategy when the parental resources are scarce.

Considering a new finding that mate value predicted attachment avoidance in women but not in men, I speculate that a consideration of sex differences in mate preferences across short-term versus long-term mating contexts can explain this sex difference. Men are more open to have short-term mating than women in general (Buss & Schmitt, 1993) and although men value physical attractiveness of a short-term mate, they tend to keep their standards for short-term mates lower and than women and accept an overall quality mate for short-term mating (Li & Kenrick,

2006). In the long-term mating context, men put a greater emphasis on the cues of physical attractiveness in a long-term mate than do women (Li & Kenrick, 2006; Li, Valentine, & Patel, 2011; Stewart, Stinnett, & Rosenfeld, 2000). These findings from previous studies indicate that only women with high physical attractiveness can obtain long-term commitment of men. I therefore claim that women with low mate value may pursue avoidant attachment as an alternative strategy to take advantages of short-term, opportunistic relationships as in the results of Walsh's (1993) study which revealed a negative link between women's self-perceived physical attractiveness and the number of the sexual partners that they had.

Although this study offered important results showing the relationship between mate value, speed of life, early parental environment and romantic attachment strategies, results were entirely correlational and reverse interpretation of the study findings is also plausible.

CHAPTER 3: STUDY 2: TEMPORARY ACTIVATION OF ADULT ATTACHMENT MECHANISM

A discrepancy in partners' physical attractiveness and mate value increases the probability of the partner with higher mate value being unfaithful or abandoning (Shackelford & Buss, 1997). Men who have higher mate value than their wives and women whose physical attractiveness and mate value is higher than their husbands reported higher likelihood of getting divorce if their spouses cheated on them (Shackelford, 1998). Buss (1994) suggests that a decrease in a woman's physical attractiveness would cause her partner to seek another woman of higher physical attractiveness and relationship termination for that purpose. On the other hand, an increase in a woman's mate value would cause the woman to terminate the current relationship and seek a partner of higher mate value. The mate value of an individual's partner is also linked to his or her partner's suspicion about being cheated on and use of tactics to prevent the infidelity or abandonment. Women whose husbands' mate value is higher than them reported higher estimates of their husbands' infidelity within the next year than women who have husbands with lower mate value and men who mated with a woman of higher mate value engaged in mate retention behaviors more than men whose mate has lower mate value (Buss & Shackelford, 1997). These findings show that discrepancy between partners' mate value and physical attractiveness influences the degree to which an individual faces

the threat of his or her partner's infidelity and abandonment.

Based on the previous research findings on the discrepancy in partners' physical attractiveness, I hypothesized that the discrepancy in partners' physical attractiveness should be key inputs that activate the proposed adult attachment mechanism (Hypothesis 6).

In this study, we offered participants a blind date opportunity with an individual of either high attractiveness or average attractiveness to test the link between the discrepancy in partners' physical attractiveness and their attachment strategies.

Prediction 11. Discrepancy between both men's and women's scores of self-physical attractiveness and the potential partner's physical attractiveness will be negatively correlated with their attachment anxiety scores.

Regarding attachment avoidance, women can prefer to engage in short-term mating with men with high physical attractiveness to transform good genes from the attractive partner to offspring (Gangestad & Simpson, 2000). However, women do not get benefit from a short-term mating with an individual low in physical attractiveness and other qualities of the mate that can be considered as important for a long-term relationship are unknown. I therefore propose that for women high in physical attractiveness, pursuing an avoidant attachment strategy would be the best strategy to avoid dating with an individual of lower physical attractiveness. On the other hand, I do not expect men to completely avoid date with a woman lower in physical attractiveness. Men are in general more willing to engage in short-term mating regardless of the characteristics of the partner in comparison to women (Clarck & Hatfield, 1989). This shows that men set lower standards for short-term mates than women (Li & Kenrick, 2006). Therefore, men may consider the offered

blind date as a short-term mating opportunity and not need to avoid the offer in the current study.

Prediction 12. Attachment avoidance scores of women in the average attractiveness condition will be higher than individuals in the high attractiveness condition.

3.1 Method

3.1.1 Participants

One hundred fifteen men ($M_{\text{age}} = 21.58$ years, $SD_{\text{age}} = 4.48$) and 153 women ($M_{\text{age}} = 20.40$ years, $SD_{\text{age}} = 2.92$) participated in the study. The same recruitment strategies, compensation for participation, and inclusion criteria as employed in Study 1 were used in Study 2.

3.1.2 Materials

3.1.2.1 Mating opportunity scenario. A single vignette describing a blind date opportunity with an opposite sex individual was used (Appendix G1-G2). In the scenario, participants were told to imagine that they are invited to have a blind date with a friend of their close friend. It was emphasized that the potential date has never seen the participant before.

3.1.2.2 Mates. A photograph of one of two potential mates was shown to participants. The two potential mates differed in physical attractiveness. As described in Lewis et al. (2015), one male and one female were rated as average on a scale ranging from 1= *Not at all attractive* to 5= *Extremely attractive* (male: $M = 2.4$, $SD = 0.7$, female: $M = 2.7$, $SD = 0.8$), whereas the other man and women were rated as attractive (male: $M = 4.4$, $SD = 0.7$, female: $M = 4.1$, $SD = 0.6$) on (Appendix H). The vignette paired with one of these four photographs resulted in four experimental conditions: for women, 1) a blind date opportunity with a male of high attractiveness,

and 2) a blind date opportunity with a male of average attractiveness; and for men, 3) a blind date opportunity with a female of high attractiveness, and 4) a blind date opportunity with a female of average attractiveness.

3.1.2.3 Attractiveness ratings. Participants rated their own attractiveness and the attractiveness of the potential partner on an 11-point Likert-type scale (0 = extremely unattractive, 10 = extremely attractive). Participants were also asked to indicate if the potential partner is more attractive than themselves (Appendix I1-I2).

3.1.2.4 State attachment. In order to assess temporary changes in individuals' adult attachment in response to mating opportunity vignettes, we used the Experiences in Close Relationships–Relationship Structures questionnaire (ECR-RS; Fraley, Heffernan, Vicary, & Brumbaugh, 2011) a scale derived from the ECR-R and which has been previously used by Fraley, Vicary, Brumbaugh, & Roisman (2011) to assess attachment anxiety and avoidance that individuals experience at the moment. The ECR-RS consists of 6 items measuring state attachment avoidance and 3 items measuring state attachment anxiety. Example items measuring attachment anxiety include “I worry that others won't care about me as much as I care about them”, and items measuring attachment avoidance include “I prefer not to show others how I feel deep down” Scale items are rated on a 7-point Likert-type scale where 1 is strongly disagree strongly and 7 is strongly agree (Appendix J1-J2).

3.1.3 Procedure

Participants first completed a demographics survey and then were randomly assigned to either the “attractive” or “average” condition for their respective sex. Participants were then asked to spend three minutes writing what they would think, feel, say and do in response to the scenarios, as in Lewis (2013). Participants then completed the ECR-RS and compared their own physical attractiveness to the

attractiveness of the potential mate.

3.2 Results

3.2.1 Descriptive Statistics.

Table 4 shows descriptive statistics.

Table 4. Study 2 Descriptive Statistics.

Variable	Men					Women				
	N	Min	Max	M	SD	N	Min	Max	M	SD
Age	115	18	49	21.58	4.48	153	18	42	20.40	2.92
ECR-RS Anxiety	116	1.00	7.00	3.23	1.51	152	1.00	7.00	3.37	1.65
ECR-RS Avoidance	116	1.17	7.00	3.52	1.28	152	1.00	6.67	3.67	1.30
PA Discrepancy	116	-5.00	8.00	.23	3.10	155	-6.00	10.00	1.46	3.24

3.2.2 Physical Attractiveness and Attachment Styles

3.2.2.1 State attachment anxiety. Prior to testing the hypothesis that evolved psychological mechanisms producing adult attachment strategies are sensitive to the cues of individuals' physical attractiveness, I first conducted multiple linear regression to test if the effect of experimental condition on individuals' attachment anxiety scores depends on gender. Results did not reveal a significant interaction between experimental condition and gender, $F(1, 268) = 0.11, p = .74$. The effect of experimental condition on state attachment anxiety did not differ across the two sexes. Then, I performed a one-way ANOVA to test the difference in attachment anxiety scores between high attractiveness and average attractiveness conditions. Results showed that there was a significant main effect of experimental condition on individuals' attachment anxiety scores, $F(1, 267) = 20.03, p < .001$. Individuals given a blind date opportunity with an individual of high attractiveness reported higher levels of state attachment anxiety ($M = 3.71, SD = 1.56$) than individuals given a

blind date opportunity with an individual of average attractiveness ($M = 2.87$, $SD = 1.51$), $t(266) = -4.48$, $p < 0.001$ (fig. 1).

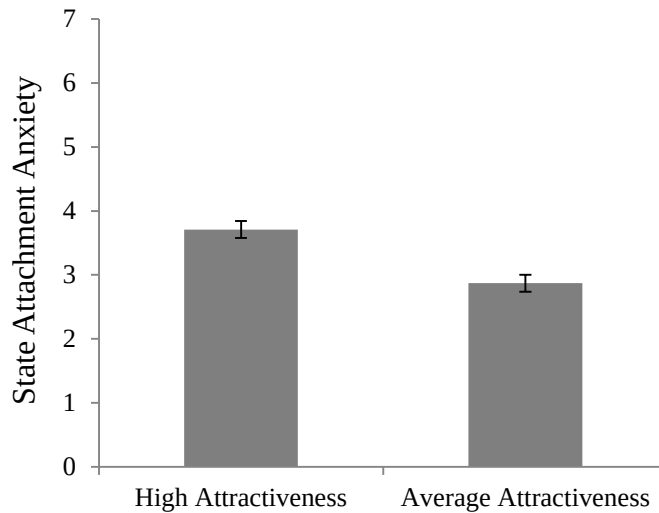


Figure 1. Mean state attachment anxiety scores across high attractiveness and average attractiveness conditions. Error bars indicate ± 1 SE.

3.2.2.2 State attachment avoidance. I first conducted a multiple linear regression to test if the effect of experimental condition on attachment avoidance differs by gender. Interaction between experimental condition and gender was significant, $F(1,268) = 4.23$, $p = .04$. Women given a blind date opportunity with an individual of average attractiveness reported higher levels of state attachment avoidance [$M = 4.11$, $SD = 1.33$] than women given a blind date opportunity with an individual of high attractiveness [$M = 3.26$, $SD = 1.13$, $t(150) = 4.28$, $p < .001$] (fig. 2). There was no significant difference between state attachment avoidance scores of men given a blind date opportunity with an individual of average attractiveness [$M =$

3.63, $SD = 1.33$] and men given a blind date opportunity with an individual of high attractiveness [$M = 3.41$, $SD = 1.23$, $t(114) = 0.92$, $p = .360$] (fig. 2).

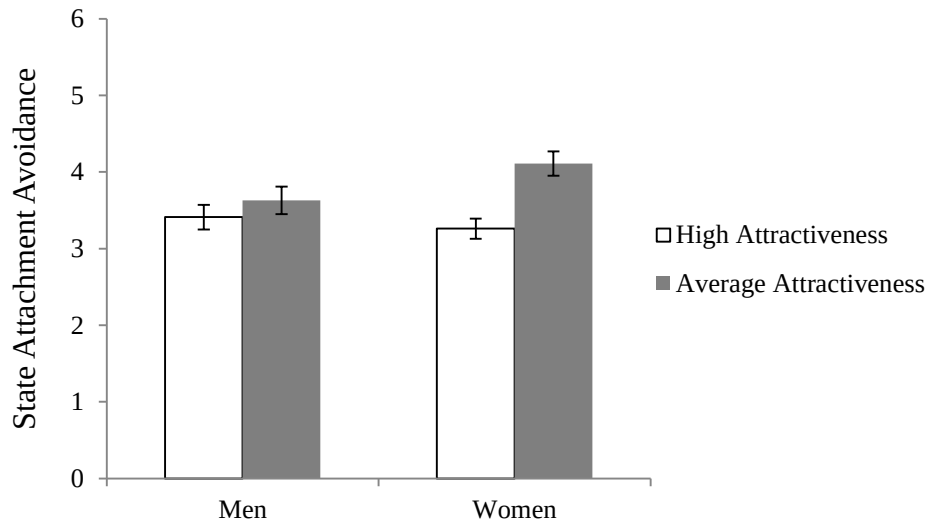


Figure 2. Effects of gender and experimental condition on state attachment avoidance. Error bars indicate ± 1 SE.

3.2.3 Discrepancy in physical attractiveness between self and partner. A physical attractiveness comparison score was computed by subtracting the participant's rating of the potential partner's physical attractiveness from his or her own self-rated attractiveness.

3.2.3.1 *State attachment anxiety*. To test if the relationship between state attachment anxiety and physical attractiveness discrepancy is moderated by individuals' gender, I conducted a multiple regression. Results indicated there is no significant interaction effect of gender and physical attractiveness comparison on state attachment anxiety, $\beta = -.09$, $t(264) = -.45$, $p = 0.65$. Then, a simple correlation was performed to assess the link between physical attractiveness discrepancy and

attachment anxiety. Results showed that the magnitude of self-perceived physical attractiveness discrepancy was negatively correlated with state attachment anxiety, $r = -0.31$, $p < 0.001$ (fig. 3). When participants saw themselves as more physically attractive than the potential partner, their state attachment anxiety decreased.

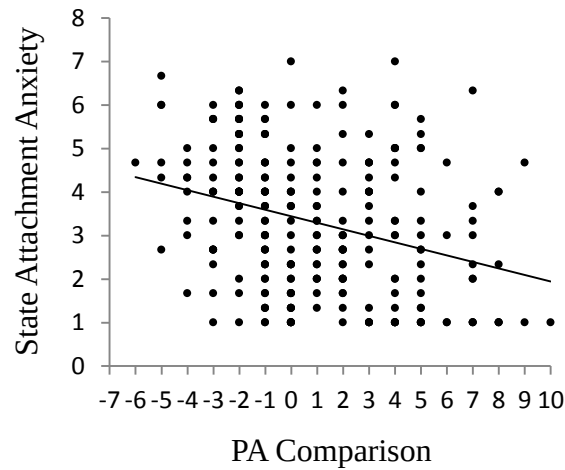


Figure 3. Relationship between physical attractiveness discrepancy and attachment anxiety.

3.2.3.2 State attachment avoidance. There is a marginally significant interaction effect of gender and physical attractiveness comparison on state attachment avoidance, $\beta = .40$, $t(264) = 1.93$, $p = 0.05$. There is no correlation between men's physical attractiveness comparison scores and state attachment avoidance scores, $r = 0.12$, $p = 0.19$. Unlike men, women's physical attractiveness comparison scores positively correlated with their state attachment avoidance scores, $r = 0.36$, $p < 0.001$ (fig. 4). When women saw themselves as more physically attractive than the potential partner, their state attachment avoidance increased.

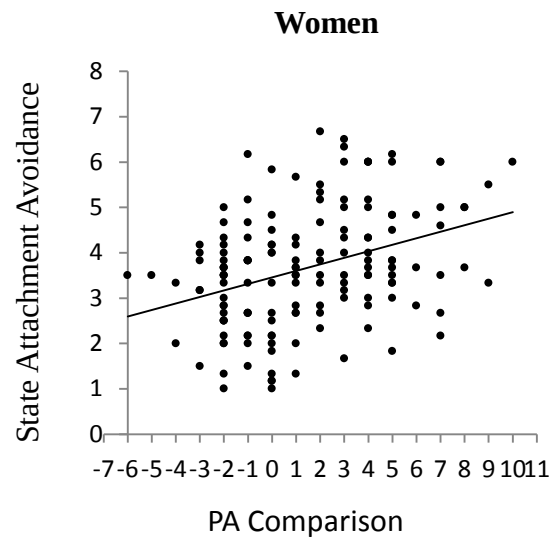
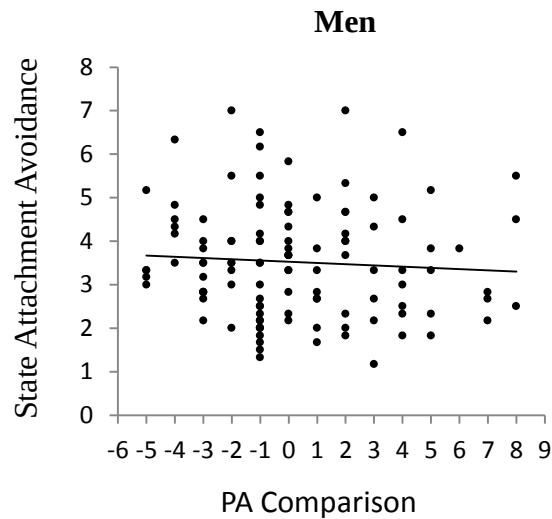


Figure 4. Relationship between physical attractiveness comparison scores and state attachment avoidance scores of men and women.

3.3 Discussion

The results of Study 2 provided support for the hypothesis that the psychological mechanisms responsible for adjusting adult attachment strategies are sensitive to a potential mate's physical attractiveness; in response to mates of varying levels of attractiveness, and in response to variation in the discrepancy between one's own attractiveness and that of one's potential mate, the mechanisms produce systematic patterns of individual differences in state attachment. Results showed that both men

and women exhibit an anxious attachment strategy in response to a blind date opportunity with an individual of high physical attractiveness. On the other hand, only women pursue an avoidant strategy in response to a blind date opportunity with an individual of average physical attractiveness. Hyper activating strategies which are identified with anxious attachment strategy lead a person to develop expectations about negative consequences of future events even if there is no threat related cue (Mikulincer & Shaver, 2003). In the case of a blind date opportunity with an individual of high physical attractiveness, the pursuit of an anxious attachment strategy by an individual lower in physical attractiveness enhances the probability of directing his or her attention towards cues linked to the probability of a successful versus unsuccessful mating effort. Paying greater attention to these cues such as being extra polite to the partner has benefits for these individuals such as reducing the likelihood of not succeeding on the date.

Considering the positive link between attachment avoidance of women and the discrepancy between their physical attractiveness and the potential partner's physical attractiveness, I speculate that state-like avoidant attachment strategy functions as an inhibitor in this context. Avoidant attachment is defined as the deactivation of the attachment system—which enables one to avoid contact (Besser & Priel, 2009). For women with high physical attractiveness, pursuing an avoidant strategy and avoiding contact with the less attractive potential mate may be more beneficial than seeking a relationship with him. Since attractive women have high levels of physical attractiveness – a feature on which men place a great premium in mating contexts, including in long-term contexts – (Li et al., 2002), they can attract men who are more desirable as mates than the potential mate depicted.

On the other hand, men are more prone to engage in short-term mating (Buss & Schmitt, 1993) and set lower standards for short-term mates compared to women (Li & Kenrick, 2006). Consequently, the opportunity costs for them of considering a date with the potential mate offered are lower. Contrarily, avoiding the date would cost them to miss a short-term mating opportunity with the potential mate offered.



CHAPTER 4: STUDY 3: AN EXPERIMENTAL INVESTIGATION OF THE ADULT ATTACHMENT MECHANISM

Because an individual's physical attractiveness would have been statistically linked to the threat of their mate's infidelity and abandonment, we should expect the mechanisms responsible for calibrating attachment strategies to take, as input, an individual's own physical attractiveness. Study 2 supported this notion in multiple ways. In Study 3, I tested the predictions that both 1) an individual's physical attractiveness and 2) a decrease or increase in their attractiveness should be variables that result in the psychological mechanisms responsible for calibrating adult attachment strategies to adjust their output.

Since physical attractiveness of women is valued in long-term relationships more than men (Li & Kenrick, 2006; Li, Valentine, & Patel, 2011; Stewart, Stinnett, & Rosenfeld, 2000), low physical attractiveness or a decrease in self-perceived physical attractiveness increases women's susceptibility towards infidelity and abandonment in comparison to men. I therefore hypothesize that psychological mechanism producing adult attachment will be sensitive to the interaction among individuals' objective physical attractiveness, self-perceived physical attractiveness and sex (Hypothesis 7).

In order to test this hypothesis, I had independent raters to rate participants' physical attractiveness and attempted to manipulate individuals' self-perceived

physical attractiveness. Then, I measured how effectively participants use their partners as a secure base under stressful contexts.

Prediction 13. Women's objective physical attractiveness will be positively correlated with their secure base use scores.

Prediction 14. The relationship between individuals' objective physical attractiveness and their secure-base use scores will depend on experimental manipulation they received—decreased self-perception of physical attractiveness or increased self-perception of physical attractiveness.

4.1 Method

4.1.1 Participants

Eighty-seven couples (174 participants at total; 87 males ($M_{\text{age}} = 20.77$ years, $SD_{\text{age}} = 1.99$), 87 females ($M_{\text{age}} = 19.88$ years, $SD_{\text{age}} = 1.38$)) participated in the study. Participants were Bilkent University students and the general public recruited through social networking websites and by posting posters on Bilkent University Campus. Participants from Bilkent University were provided with the opportunity to receive course credit as compensation for completion of the study. There were four eligibility criteria to participate in the study. Participants were required to be at least 18 years of age, to speak Turkish as their first language, have a heterosexual mating orientation, and be involved in a committed romantic relationship at least for 3 months. Relationship duration ranged from 3 months to 60 months ($M = 15.81$ months, $SD = 12.92$ months). The study was conducted in Turkish language.

4.1.2 Materials

4.1.2.1 Secure base behavior. Individuals' secure base behavior was assessed using the Secure Base Scoring System (SBSS; Crowell et al., 2002). The SBSS is a behavioral measure of adult attachment designed to assess secure-base support and

secure-base use based on a 15 minute interaction between a couple. According to the original scoring system, the topic of discussion was determined based on the topics that couples discuss most often. For the current study, the topic of discussion was determined by a researcher-generated scenario that captures a situation with cues to the relationship being threatened (Appendix O1, O2).

4.1.2.1.1 Secure base use scale. The secure base use scales assess clarity and maintenance of distress in response to a relationship-related problem, approach to the attachment figure to seek care, and ability to be comforted when the partner provides care.

4.1.2.1.2 Secure base support scale. The secure base support scales consists of interest in, recognition and interpretation of, and responsiveness to the partner's needs.

Individuals get a summary score from the secure base use and the secure base support scales.

4.1.2.2 Physical attractiveness.

4.1.2.2.1 Physical attractiveness scale. Individuals' self-perceived physical attractiveness was assessed using the Physical Attractiveness Scale (PAS) from the International Personality Item Pool (IPIP; Goldberg et al., 2006)

4.1.2.2.2 Attractiveness comparison manipulation. Participants compared themselves to both the same-sex individuals and the opposite sex individuals. They were randomly assigned to either compare the attractiveness of their own face to the attractiveness of 10 attractive male and 10 attractive female photographs, or to 10 unattractive male and 10 unattractive female photographs. These photographs were selected from open-access photographs on the Internet, Chicago Face Database (Ma, Correll, & Wittenbrink, 2015), and the FEI Face Database (Thomaz & Giraldi, 2010)

(Appendix N). Attractiveness comparisons were made on a 7-point Likert-type scale (1= *My face is much less attractive*, 4= *Same*, and 7= *My face is much more attractive*). Scores were averaged to obtain a single facial attractiveness comparison score.

4.1.2.3 Relationship threat scenarios. A relationship threat scenario was created for couples to discuss. Two versions of this scenario were created, one in which male participants were the observers of a situation involving their mate, and one in which female participants were the observers of a situation involving their mate. The scenarios describe a situation in which an individual observes his/her partner involved in a particularly warm interaction with a member of the opposite sex unknown to the observer (Appendix O1, O2).

4.1.3 Procedure

4.1.3.1 Online survey. Couples were invited to come to the study together. First, each member of each couple provided their written, informed consent to participate in the study. Female and male participants were then taken to separate rooms to complete an online survey on laboratory computers. Female and male participants were randomly assigned to one of four conditions based on a combination of 1) the two levels of the attractiveness manipulation and 2) the gender of the participant exposed to the manipulation – only one of the members of the couple was exposed to the manipulation. For example, when a female participant was assigned to one of the attractive comparison conditions, her partner completed a survey that includes the same questionnaires but does not include any attractiveness comparison.

4.1.3.2 Interaction session. After the completion of the online survey, couples were taken to a video room and instructed to sit face to face. After beginning to

record video, the researcher entered the room. The researcher read the relationship threat scenario clearly to the couple. The partner who was previously exposed to an attractiveness comparison manipulation was the observer of the scenario; the partner who received no manipulation was the one described to be involved in the scenario.

Participants were asked to imagine what they would think, feel, say and do in response to the event described in the scenario, and then to spend 15 minutes discussing on it. After providing these instructions, the researcher left couples alone in the video room. After 15 minutes, the researcher stopped the video record, returned to the video room, debriefed participants, and thanked them for their participation.

4.2 Results

4.2.1 Reliability Analyses

4.2.1.1 Video coding. Two independent coders (one female and one male) blind to the study hypotheses were trained to score the couples' interactions based on the SBSS (Crowell et al., 2002). Each coder rated 87 videos. Disagreements between the first and the second coders' coding scores were resolved through discussion. Subsequent to these discussions, the inter-rater reliability for two coders was observed to be satisfactory (ICC= .71).

4.2.1.2 Facial attractiveness ratings. Five opposite-sex individuals rated the facial attractiveness of the participants from the video records. Each rater rated each opposite-sex partner on a 7-point Likert-type scale ranging from 1 (*Not attractive at all*) to 7 (*Extremely attractive*). Scores from 5 raters were averaged to create a single facial attractiveness score. Inter-rater reliability was assessed using intra-class correlation coefficients (ICC). The inter-rater reliability for five male raters who rated the facial attractiveness of female participants was good (ICC= .75). The inter-

rater reliability for five female raters who rated the facial attractiveness of male participants was good (ICC= .80).

4.2.2 Manipulation Check

A one-way ANOVA was performed to check if the attractiveness manipulation worked. Results showed that participants who were exposed to a comparison condition involving attractive individuals rated photographs of the same-sex individuals as significantly more attractive than themselves compared to participants in the unattractive manipulation condition, $t(85) = -14.50$, $p < 0.001$ as well as rated photographs of the opposite-sex individuals as significantly more attractive than themselves compared to participants in the unattractive manipulation condition, $t(85) = -18.18$, $p < 0.001$.

4.2.3 Descriptive Statistics

Table 5 shows descriptive statistics for study variables.

Table 5. Study 3 Descriptive Statistics.

Variable	Men					Women				
	N	Min	Max	M	SD	N	Min	Max	M	SD
Age	44	18	28	20.77	1.99	43	18	24	19.88	1.38
Relationship Length	44	3.00	54.00	17.75	12.24	43	3.00	60.00	14.15	13.45
Relationship Satisfaction	44	2.00	5.00	4.52	.66	43	3.00	5.00	4.67	.52
Secure Base Use	44	2.00	6.50	4.63	1.12	43	3.00	6.50	4.90	.88
Physical Attractiveness	44	1.67	4.56	3.38	.67	43	2.22	4.89	3.49	.62
Attractiveness Ratings	44	1.20	6.00	3.07	.99	43	1.20	5.00	3.26	1.07

4.2.4 Secure Base Use

To test the hypothesis that evolved psychological mechanisms producing adult attachment strategies are sensitive to the cues of individuals' physical attractiveness, we conducted several analyses. First, a full factorial, backward stepwise regression analysis was conducted to test the interactive effects of 1) gender, 2) facial attractiveness, and 3) experimental condition on participants' use of secure base. This analytical approach yielded a final model with a two-way interaction between participants' gender and their facial attractiveness in predicting their use of secure base, $\beta = 1.01$, $p = 0.03$ (Table 6). Ratings of participants' facial attractiveness and secure base use scores were positively correlated among women, $r = 0.41$, $p = 0.01$. There was no correlation between ratings of participants' facial attractiveness and participants' secure base use scores among men, $r = 0.89$, $p = 0.02$ (Fig 5).

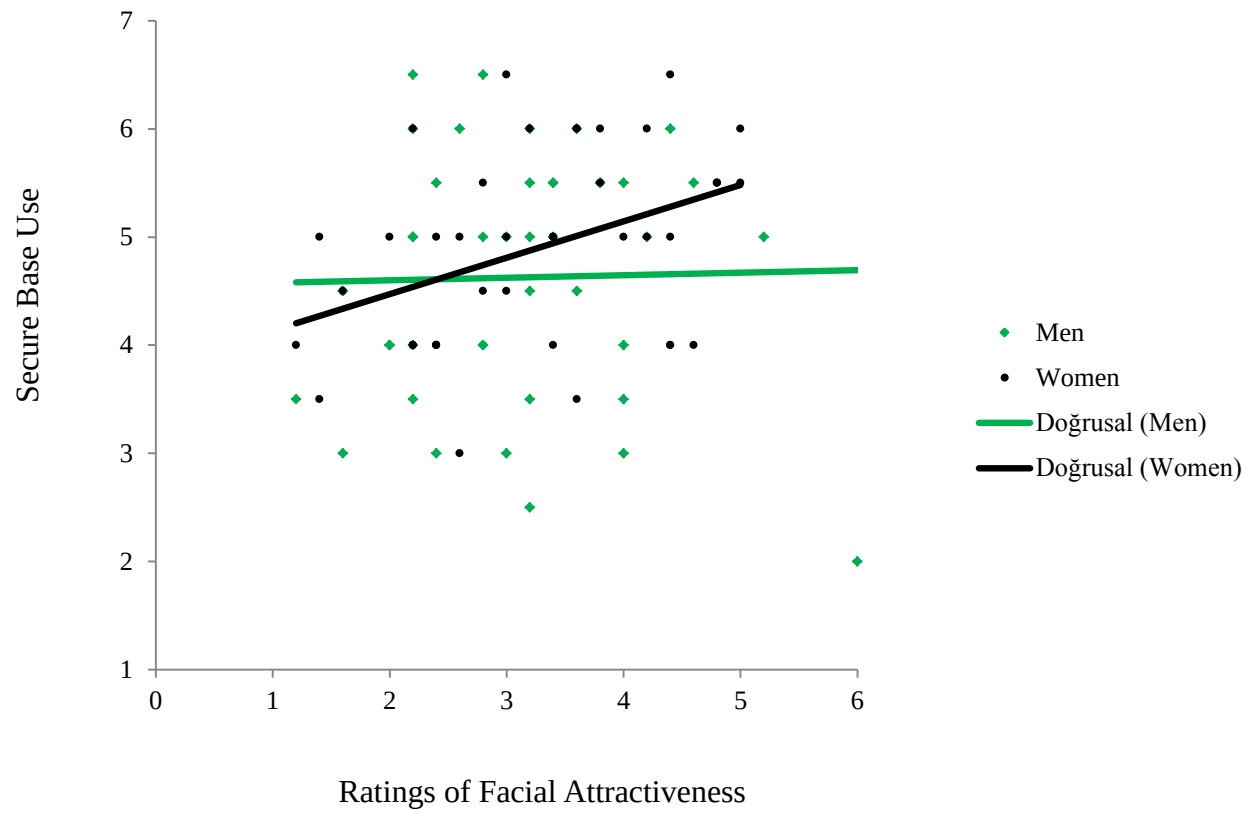


Figure 5. Relationship between ratings of facial attractiveness and secure base use scores of men and women

The two-way interaction between participants' facial attractiveness and experimental condition also predicted participants' use of secure base, $\beta = -1.56$, $t(86) = -3.51$, $p = 0.001$ (Table 6). Participants' facial attractiveness and their secure base use scores were positively correlated among participant who were asked to compare themselves to attractive individuals, $r = 0.54$, $p < 0.001$. There was no correlation between participants' facial attractiveness and secure base use scores among participants who were asked to compare their own attractiveness to unattractive individuals, $r = -0.10$, $p = 0.52$ (Fig 6).

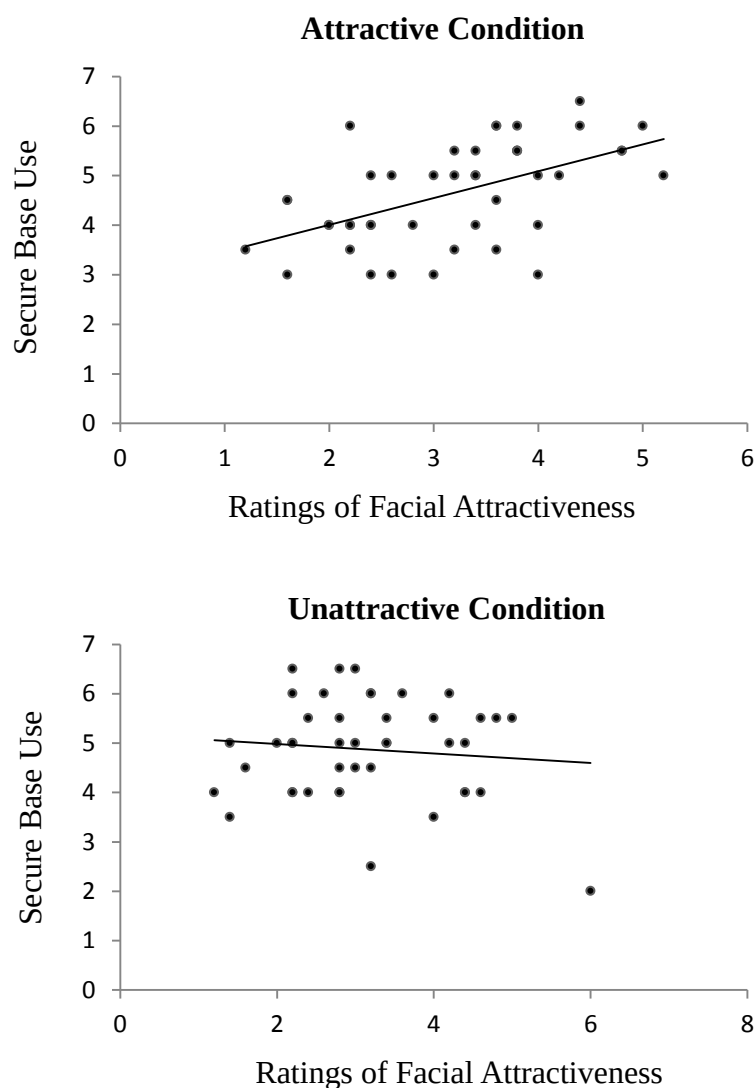


Figure 6. Relationship between ratings of facial attractiveness and secure base use scores of individuals assigned in the increased self-perception of physical attractiveness condition and individuals assigned in the decreased self-perception of physical attractiveness condition.

Table 6. Regression model predicting secure base use

	B	SE	B
<i>Predictive variables</i>			
Ratings of facial attractiveness	.60	.41	.61
Gender	-1.15	.66	-.57
Experimental condition	2.44	.65	1.21*
<i>Two-way interactions</i>			
Gender x FA	.43	.20	1.01*
Condition x FA	-.70	.20	-1.56*

*p < 0.05

4.3 Discussion

Study 3 revealed two important results regarding the interactive effects between gender, individuals' objective physical attractiveness, and self-perceptions of their *relative* physical attractiveness on their secure base use. First, we found a positive correlation between individuals' ratings of facial attractiveness and secure base use scores in women and no correlation in men. This finding provided support for our prediction that women's physical attractiveness is linked to their use of secure base. When women sense a threat to their relationship, information about their physical attractiveness activates their psychological mechanism of adult attachment. Since physical attractiveness of a women is valued more than men in long-term relationships (Li & Kenrick, 2006; Li et al., 2011; Stewart et al., 2000), we expect

women with high physical attractiveness to consider this situation as less threatening and consequently be better at signaling distress, seeking support from their partners and get calm easier than women with lower physical attractiveness.

Conversely, we observed that men's physical attractiveness does not appear to function as an input activating their attachment system. Here, I offer one possible explanation for the finding that men with lower physical attractiveness are not low in secure base use. Because men's physical attractiveness in long-term relationships is less valued than women's attractiveness (Li & Kenrick, 2006; Li et al., 2011; Stewart et al., 2000), low physical attractiveness may not increase men's likelihood of being cheated or abandoned by their partners. Therefore, information about men's physical attractiveness does not activate the adult attachment mechanism to produce insecure attachment.

Study 3 also revealed a positive link between individuals' ratings of facial attractiveness and their secure base use scores *specifically among who compared themselves to attractive others*. This result highlighted that when the discrepancy between individuals' self-perceived physical attractiveness and the attractiveness of the person they compared themselves to decrease or individuals perceive themselves as more attractive than the person in the photograph, they become better at using their partner as a secure base. This result offers support for the predictive value of individuals' physical attractiveness on their attachment behavior.

CHAPTER 5: GENERAL DISCUSSION

In the current thesis, I proposed that humans possess psychological mechanisms that functionally calibrate individuals' adult attachment strategies according to contextual and conditional variables linked to the costs and benefits of alternative attachment strategies. I designed three studies to 1) identify the link between the inputs "early parental environment, speed of life, and mate value" and adult attachment strategies; 2) experimentally examine temporary activation of the proposed adult attachment mechanisms in response to inputs related specifically to the cue of physical attractiveness – a variable that, ancestrally, would have been predictive of the cost-benefit tradeoffs of alternative attachment strategies; and 3) test the link between this cue and attachment behavior by experimentally manipulating physical attractiveness.

The results of the study 1 showed that psychological mechanisms produce individual differences in adult attachment in response to early parental environment, speed of life and mate value. Both men's and women's adult attachment mechanisms appear to up-regulate attachment anxiety in response to the input cues of low mate value and low quality early parental environment. On the other hand, the mechanisms responsible for regulating attachment avoidance exhibited sex-differentiated features; men's avoidance was up-regulated in response to fast life speed and low quality early parental environment, whereas women's avoidance was up-regulated in response to fast life speed and low mate value.

These Study 1 findings make important contributions to the exploration of the origins of individual differences in adult attachment. In addition to providing results supporting previously proposed predictors of adult attachment strategies, this study identifies a new predictor of attachment anxiety and avoidance: individuals' mate value. Motivated by an evolutionary logic, the current study is the first to 1) explain *why* we should expect the mechanisms that regulate attachment strategies to be sensitive to individuals' mate value, and 2) empirically demonstrated this previously undiscovered link.

To my knowledge, Study 2 was the first to experimentally investigate the link between physical attractiveness and adult attachment strategies. Results of the study suggest that state attachment anxiety functions in avoiding negative consequences of a future event through directing one's attention to cues likely to decrease the probability of negative consequences to happen. On the other hand, state-like avoidance functions in enhancing the pursuit of more advantageous mating opportunities of women through avoiding to date with a man of lower in physical attractiveness. These functions show that although the proposed adult attachment mechanism produces stable individual differences in adult attachment in response to relatively stable personal and contextual cues, the same mechanism can take the person- or context-specific cues and produce individual differences in adult attachment that serve adaptive benefits in the context of that specific relationship dyad.

Study 3 was the first – to my knowledge – to examine the link between physical attractiveness and adult attachment using a behavioral measure of adult attachment. Via this method, Study 3 makes a unique and important contribution: it

demonstrates the relationship between physical attractiveness and adult attachment using real-life couples and actual behavior.

5.1 Limitations and Future Directions

When making sense out of the findings of the current thesis, we should consider potential limitations regarding the measures, samples and procedure of the studies conducted.

5.1.1 Measures

First, in study 1, we created a mate value variable using individuals' self-perceived physical attractiveness and self-perceived mating success scores which show individuals' desirability as a mate in general. This caused the examination of mate value as an input of the adult attachment mechanism to be limited. Therefore, future studies can examine predictive value of other aspects of individuals' mate value on variation in adult attachment. For example, how desirable people find themselves in the mating market in terms of financial status or personality characteristics can be investigated.

Second, in Study 3, we measured participants' use of their partners as a secure base to assess their attachment behavior. This led us to obtain a single score of secure base use and did not enable us to make conclusions about attachment anxiety and avoidance separately. As a result, we only observed the link between physical attractiveness and secure base use ability. Future studies should strive to create independent behavioral measures of attachment anxiety and avoidance.

5.1.2 Sample

First, all of our participants were Turkish. Future studies can aim to obtain within-culture and cross-cultural data to examine culture-specific inputs to the proposed mechanisms of adult attachment. Second, most of our participants were

Bilkent University undergraduates. Future research can aim to obtain data from older individuals and investigate the effect of age on the functioning of the adult attachment mechanism. Third, we did not consider the differences between the psychology of single individuals and individuals in a committed relationship in study 1 and 2. Future studies can consider relationship status as a potential input. Indeed, I'm confident that relationship status *is* a variable that influence the costs and benefits of alternative adult attachment strategies.

5.1.3 Procedure

In study 2, we asked participants to imagine that they are offered a blind date opportunity with the individual presented in a photograph and measured their state attachment anxiety and avoidance. Although participants differed in their levels of attachment anxiety and avoidance in response to hypothetical scenarios at that moment, their responses to scale questions may not reflect their actual feelings they would experience in the real-life. Future research can consider designing a laboratory experiment where participants will be given a real life blind date opportunity with an individual of varying levels of physical attractiveness.

5.2 Conclusions

The current thesis examined the origins of individual differences as functional output strategies of evolved psychological mechanisms. The first study contributed to the previous literature on adult romantic attachment revealing the predictive value of individuals' mate value on individual differences in adult romantic attachment. The second study was the first to experimentally investigate temporary activation of the adult attachment mechanism in response to physical attractiveness discrepancy. The third study was the first to experimentally investigate the association between physical attractiveness and attachment behavior. Most of the results provided support

for the hypothesis and provided an insight for future research.



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APPENDICES

A1-THE REVISED EXPERIENCES IN CLOSE IN CLOSE RELATIONSHIPS QUESTIONNAIRE (ECR-R)

1 2 3 4 5 6 7
Strongly Neutral Strongly
Disagree Agree

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you *generally* experience relationships, not just in what is happening in a current relationship. Respond to each statement by circling a number to indicate how much you agree or disagree with the statement.

1. _____ I'm afraid that I will lose my partner's love.
2. _____ I often worry that my partner will not want to stay with me.
3. _____ I often worry that my partner doesn't really love me.
4. _____ I worry that romantic partners won't care about me as much as I care about them.
5. _____ I often wish that my partner's feelings for me were as strong as my feelings for him or her.
6. _____ I worry a lot about my relationships.
7. _____ When my partner is out of sight, I worry that he or she might become interested in someone else.
8. _____ When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.
9. _____ I rarely worry about my partner leaving me.
10. _____ My romantic partner makes me doubt myself.

11. ____ I do not often worry about being abandoned.
12. ____ I find that my partner(s) don't want to get as close as I would like.
13. ____ Sometimes romantic partners change their feelings about me for no apparent reason.
14. ____ My desire to be very close sometimes scares people away.
15. ____ I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.
16. ____ It makes me mad that I don't get the affection and support I need from my partner.
17. ____ I worry that I won't measure up to other people.
18. ____ My partner only seems to notice me when I'm angry.
19. ____ I prefer not to show a partner how I feel deep down.
20. ____ I feel comfortable sharing my private thoughts and feelings with my partner.
21. ____ I find it difficult to allow myself to depend on romantic partners.
22. ____ I am very comfortable being close to romantic partners.
23. ____ I don't feel comfortable opening up to romantic partners.
24. ____ I prefer not to be too close to romantic partners.
25. ____ I get uncomfortable when a romantic partner wants to be very close.
26. ____ I find it relatively easy to get close to my partner.
27. ____ It's not difficult for me to get close to my partner.
28. ____ I usually discuss my problems and concerns with my partner.
29. ____ It helps to turn to my romantic partner in times of need.
30. ____ I tell my partner just about everything.
31. ____ I talk things over with my partner.
32. ____ I am nervous when partners get too close to me.
33. ____ I feel comfortable depending on romantic partners.
34. ____ I find it easy to depend on romantic partners.
35. ____ It's easy for me to be affectionate with my partner.
36. ____ My partner really understands me and my needs.

Scoring Information: The first 18 items above comprise the attachment-related anxiety scale. Items 19 – 36 comprise the attachment-related avoidance scale. *In real research, the order in which these items are presented should be randomized.* To

obtain a score for attachment-related *anxiety*, please average a person's responses to items 1 – 18. However, because items 9 and 11 are “reverse keyed” (i.e., high numbers represent low anxiety rather than high anxiety), you'll need to reverse the answers to those questions before averaging the responses. (If someone answers with a “6” to item 9, you'll need to re-key it as a 2 before averaging.) To obtain a score for attachment-related *avoidance*, please average a person's responses to items 19 – 36. Items 20, 22, 26, 27, 28, 29, 30, 31, 33, 34, 35, and 36 will need to be reverse keyed before you compute this average.



A2-THE ECR-R TURKISH VERSION

1	2	3	4	5	6	7
Hiç			Kararsızım			Tamamen
katılmıyorum						katılıyorum

Aşağıdaki maddeler romantik ilişkilerinizde hissettiğiniz duygularla ilintilidir. Sadece şu anki ilişkinizde değil, genel olarak ilişkilerinizde neler olduğunu ya da neler yaşadığınızı anlamak istiyoruz. Maddelerde sözü geçen “birlikte olduğum kişi” ifadesi ile şimdiye kadar romantik ilişkide bulunduğunuz kişiler kastedilmektedir. Lütfen her maddeye ne kadar katılıp katılmadığınızı en sağdaki sütuna size uygun olan rakamı yazarak belirtin.

1. ____ Birlikte olduğum kişinin sevgisini kaybetmekten korkarım.
2. ____ Sıklıkla, birlikte olduğum kişinin artık benimle olmak istemeyeceği korkusuna kapılırım.
3. ____ Sıklıkla, birlikte olduğum kişinin beni gerçekten sevmediği duygusuna kapılırım.
4. ____ Romantik ilişkide olduğum kişilerin beni, benim onları önemsemişim kadar önemsemeyeceklerinden endişe duyarım.
5. ____ Sıklıkla, birlikte olduğum kişinin bana duyduğu hislerin benim ona duyduğum hisler kadar güçlü olmasını isterim.
6. ____ İlişkilerimi kafama çok takarım.
7. ____ Benden uzakta olduğunda, birlikte olduğum kişinin başka birine ilgi duyabileceği korkusuna kapılırım.
8. ____ Romantik ilişkide olduğum kişilere duygularımı gösterdiğimde, onların benim için aynı şeyleri hissetmeyeceğinden korkarım.
9. ____ Birlikte olduğum kişinin beni terkeceğinden pek endişe duymam.
10. ____ Romantik ilişkide olduğum kişi kendime olan güvenimi sarsar.
11. ____ Terk edilmekten pek korkmam.
12. ____ Birlikte olduğum kişinin, bana istediğim kadar yakın olmadığını düşünürüm.
13. ____ Romantik ilişkide olduğum kişiler bazen bana olan duygularını sebepsiz yere değiştirirler.
14. ____ Çok yakın olma arzum bazen insanları korkutup uzaklaştırır.

15. ____Romantik ilişkide olduğum bir kişi beni yakından tanıdıkça, benden hoşlanmayacağından korkarım.
16. ____Birlikte olduğum kişiden ihtiyaç duyduğum şefkat ve desteği görememek beni öfkeliendirir.
17. ____Başka insanlara denk olamamaktan endişe duyarım
18. ____Birlikte olduğum kişi beni sadece kızgın olduğumda farkeder.
19. ____Gerçekte ne hissettiğimi birlikte olduğum kişiye göstermemeyi tercih ederim.
20. ____Özel duygu ve düşüncelerimi birlikte olduğum kişiyle paylaşmak konusunda kendimi rahat hissederim.
21. ____Romantik ilişkide olduğum kişilere güvenip inanmak bana zor gelir.
22. ____Romantik ilişkide olduğum kişilere yakın olma konusunda çok rahatımdır.
23. ____Romantik ilişkide olduğum kişilere açılma konusunda kendimi rahat hissetmem.
24. ____Romantik ilişkide olduğum kişilere fazla yakın olmamayı tercih ederim.
25. ____Romantik ilişkide olduğum kişi benimle çok yakın olmak istediğinde rahatsızlık duyarım.
26. ____Birlikte olduğum kişiyle kolayca yakınlaşabilirim.
27. ____Birlikte olduğum kişiyle yakınlaşmak bana zor gelmez.
28. ____Genellikle, birlikte olduğum kişiyle sorunlarımı ve kaygılarımı tartışırım.
29. ____Zor zamanlarımda, romantik ilişkide olduğum kişiden yardım istemek bana iyi gelir.
30. ____Birlikte olduğum kişiye hemen hemen her şeyi anlatırım.
31. ____Başımdan geçenleri birlikte olduğum kişiyle konuşurum.
32. ____Birlikte olduğum kişiler benimle çok yakınlaştığında gergin hissederim.
33. ____Romantik ilişkide olduğum kişilere güvenip inanma konusunda rahatımdır.
34. ____Romantik ilişkide olduğum kişiye güvenip inanmak benim için kolaydır.
35. ____Birlikte olduğum kişiye şefkat göstermek benim için kolaydır.
36. ____Birlikte olduğum kişi beni ve ihtiyaçlarımı gerçekten anlar.

B1-PARENTAL BONDING INSTRUMENT

This questionnaire lists various attitudes and behaviors of parents. As you remember your MOTHER/FATHER in your first 16 years would you place a tick in the most appropriate box next to each question.

1	2	3	4
Very Unlike	Moderately Unlike	Moderately Like	Very Like

- 1.____ Spoke to me in a warm and friendly voice
- 2.____ Did not help me as much as I needed
- 3.____ Let me do those things I liked doing
- 4.____ Seemed emotionally cold to me
- 5.____ Appeared to understand my problems and worries
- 6.____ Was affectionate to me
- 7.____ Liked me to make my own decisions
- 8.____ Did not want me to grow up
- 9.____ Tried to control everything I did
- 10.____ Invaded my privacy
- 11.____ Enjoyed talking things over with me
- 12.____ Frequently smiled at me
- 13.____ Tended to baby me
- 14.____ Did not seem to understand what I needed or wanted
- 15.____ Let me decide things for myself
- 16.____ Made me feel I wasn't wanted
- 17.____ Could make me feel better when I was upset
- 18.____ Did not talk with me very much
- 19.____ Tried to make me feel dependent on her/him
- 20.____ Felt I could not look after myself unless she/he was around
- 21.____ Gave me as much freedom as I wanted
- 22.____ Let me go out as often as I wanted
- 23.____ Was overprotective of me
- 24.____ Did not praise me
- 25.____ Let me dress in any way I pleased

B2-PARENTAL BONDING INSTRUMENT TURKISH-VERSION

Asağıda, ana-babanızın çeşitli tutum ve davranışlarına ilişkin ifadeler yer almaktadır. 16 yaşınıza kadar olan dönemde annenizi/babanızı hatırlamaya çalışarak, her bir ifadede en uygun seçeneğin karşısındaki paranteze X isareti koyunuz.

- | 1 | 2 | 3 | 4 |
|-------------------|-------------------|-----------------|------------------|
| Hiç böyle değildi | Pek böyle değildi | Kısmen böyleydi | Tamamen böyleydi |
-
- 1.____ Benimle yumuşak ve arkadaşça bir tarzda konuşurdu.
 - 2.____ İhtiyaç duyduğum kadar yardım etmezdi.
 - 3.____ Hoşlandığım şeyleri yapmama izin verirdi.
 - 4.____ Duygusal olarak bana karşı soğuk görünürdü.
 - 5.____ Sorunlarımı ve endişelerimi anlıyor görünürdü.
 - 6.____ Bana karşı sevgi doluydu.
 - 7.____ Kendi kararlarımı vermemden memnuniyet duyardı.
 - 8.____ Büyümemi istemezdi.
 - 9.____ Yaptığım her şeyi kontrol etmeye çalışırdı.
 - 10.____ Mahremiyetime müdahale ederdi.
 - 11.____ Olan-bitenler hakkında benimle konuşmaktan keyif alırdı.
 - 12.____ Genellikle bana karşı güleryüzlüydü.
 - 13.____ Bana, bebekmişim gibi davranma eğilimi vardı.
 - 14.____ İhtiyaçlarımı ve isteklerimi anlamıyor gibiydi.
 - 15.____ Kendimle ilgili kararları almama izin verirdi.
 - 16.____ İstenmediğimi hissettirirdi.
 - 17.____ Üzgün olduğum zamanlarda kendimi daha iyi hissetmemi sağlardı.
 - 18.____ Benimle pek fazla konuşmazdı.
 - 19.____ Ona bağımlı olduğum duygusunu yaşatmaya çalışırdı.
 - 20.____ Babam/Annem yanımda olmadığı zaman, kendime bakamayacağımı hissedirdim.
 - 21.____ İsteddiğim kadar özgürlük tanırdı.
 - 22.____ İsteddiğim zaman dışarı çıkmama izin verirdi.
 - 23.____ Bana karşı aşırı koruyucuydu.
 - 24.____ Beni övmezdi.
 - 25.____ İsteddiğim gibi giyinmeme izin verirdi.

C1-IPIP PHYSICAL ATTRACTIVENESS SCALE

Describe yourself as you generally are now, not as you wish to be in the future.

Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence.

Please read each statement carefully, and then mark your answer using the following rating scale

1	2	3	4	5
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

1. ___ Am considered attractive by others.
2. ___ Attract attention from the opposite sex.
3. ___ Have a pleasing physique.
4. ___ Like to look at my body.
5. ___ Like to look at myself in the mirror.
6. ___ Like to show off my body.
7. ___ Don't consider myself attractive.
8. ___ Dislike looking at myself in the mirror.
9. ___ Dislike looking at my body.

C2-IPIP PHYSICAL ATTRACTIVENESS SCALE-TURKISH VERSION

Kendinizi gelecekte olmayı arzuladığınız şekilde değil, genelde olduğunuz şekilde tanımlayın. Aynı cinsiyette ve aşağı yukarı aynı yaşta olan insanlar karşısında kendinizi nasıl görüyorsanız, kendinizi o şekilde dürüstçe tanımlayın. Kendinizi dürüstçe tanımlayabilirsiniz çünkü cevaplarınız kesin bir gizlilik içinde tutulacaktır.

1	2	3	4	5
Hiç	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen
katılmıyorum				katılıyorum

- 1.____Başkaları tarafından çekici bulunurum.
- 2.____Karşı cinsin dikkatini çekerim.
- 3.____Hoşa giden bir fiziğim vardır.
- 4.____Vücuduma bakmayı severim.
- 5.____Aynada kendime bakmayı severim.
- 6.____Vücudumla gösteriş yapmayı severim.
- 7.____ Kendimi çekici bulmuyorum.
- 8.____Aynada kendime bakmayı sevmiyorum.
- 9.____Vücuduma bakmayı sevmiyorum.

D1- SELF PERCEIVED MATING SUCCESS SCALE

1	2	3	4	5	6	7
Strongly disagree						Strongly Agree

1. ___Members of the opposite sex that I like, tend to like me back.
2. ___Members of the opposite sex notices me.
3. ___I receive many compliments from members of the opposite sex.
4. ___Members of the opposite sex are not very attracted to me.
5. ___I receive sexual invitations from members of the opposite sex
6. ___Members of the opposite sex are attracted to me.
7. ___I can have as many sexual partners as I choose.
8. ___I do not receive many compliments from members of the opposite sex.

D2- SELF PERCEIVED MATING SUCCESS SCALE-TURKISH VERSION

1	2	3	4	5	6	7
Hiç katılmıyorum						Tamamen katılıyorum

- 1.____İlgi duyduğum cinsiyetten hoşlandığım kişiler olursa genellikle onlar da benden hoşlanır.
- 2.____ İlgi duyduğum cinsiyetten kişiler benim farkıma varır.
- 3.____ İlgi duyduğum cinsiyetten birçok iltifat alırım.
- 4.____ İlgi duyduğum cinsiyetten kişiler benden çok etkilenmez.
- 5.____ İlgi duyduğum cinsiyetten kişiler bana cinsel anlamda ilgi gösterir.
- 6.____ İlgi duyduğum cinsiyetten kişiler benden etkilenir.
- 7.____ İstedğim kadar çok romantik partnere sahip olabilirim.

E1-LIFE HISTORY STRATEGY MINI K

Please indicate how strongly you agree or disagree with the following statements.

1	2	3	4	5	6	7
Strongly Disagree	Somewhat Disagree	Slightly Disagree	Don't know/Not Applicable	Slightly Agree	Somewhat Agree	Strongly Agree

- 1.____ I can often tell how things will turn out.
- 2.____ I try to understand how I got into a situation to figure out how to handle it.
- 3.____ I often find the bright side to a bad situation.
- 4.____ I don't give up until I solve my problems.
- 5.____ I often make plans in advance.
- 6.____ I avoid taking risks.
- 7.____ While growing up, I had a close and warm relationship with my biological mother.
- 8.____ While growing up, I had a close and warm relationship with my biological father.
- 9.____ I have a close and warm relationship with my own children.
- 10.____ I have a close and warm romantic relationship with my sexual partner.
- 11.____ I would rather have one than several sexual relationships at a time.
- 12.____ I have to be closely attached to someone before I am comfortable having sex with them.
- 13.____ I am often in social contact with my blood relatives.
- 14.____ I often get emotional support and practical help from my blood relatives.
- 15.____ I often give emotional support and practical help to my blood relatives.
- 16.____ I am often in social contact with my friends.
- 17.____ I often get emotional support and practical help from my friends.
- 18.____ I often give emotional support and practical help to my friends.
- 19.____ I am closely connected to and involved in my community.
- 20.____ I am closely connected to and involved in my religion.

E2-LIFE HISTORY STRATEGY MINI K-TURKISH VERSION

Lütfen aşağıdaki ifadelere ne derecede katılıp katılmadığınızı verilen ölçek üzerinde belirtiniz.

1	2	3	4	5	6	7
Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen katılmıyorum	Bilmiyorum/ Uygun değil	Kısmen katılıyorum	Katılıyorum	Kesinlikle Katılıyorum

Ben...

1. ___Çoğunlukla olayların nasıl sonuçlanacağını öngörebilirim.
2. ___Bir durumla nasıl başa çıkacağımı bulmak için nasıl o duruma girdiğimi anlamaya çalışırım.
3. ___Çoğunlukla kötü bir durumun olumlu yanını bulurum.
4. ___Sorunlarımı çözene kadar pes etmem.
5. ___Sıkça önceden planlar yaparım.
6. ___Risk almaktan kaçınırım.
7. ___Büyürken öz annem ile yakın ve sıcak bir ilişkim vardı.
8. ___Büyürken öz babam ile yakın ve sıcak bir ilişkim vardı.
9. ___Kendi çocuklarım ile yakın ve sıcak bir ilişkim var.
10. ___Cinsel ilişki partnerim ile yakın ve sıcak bir romantik ilişkim var.
11. ___Bir seferde birkaç yerine bir cinsel ilişkim olmasını tercih ederim.
12. ___Biriyle cinsel ilişkiye girmeye rahat hissetmeden önce o kişiyle yakından bağlı olmalıyım.
13. ___Sıkça akrabalarım ile temas içindeyim.
14. ___Sıkça akrabalarımından duygusal destek ve pratik yardım alırım.
15. ___Sıkça akrabalarımaya duygusal destek ve pratik yardımda bulunurum.
16. ___Sıkça arkadaşlarım ile temas içindeyim.
17. ___Sıkça arkadaşlarımdan duygusal destek ve pratik yardım alırım.
18. ___Sıkça arkadaşlarıma duygusal destek ve pratik yardım veririm.
19. ___Toplumum ile yakın ilişki içindeyim ve toplumum ile ilişkili aktivitelerde yer alırım.
20. ___Dinim ile yakın ilişki içindeyim ve dinim ile ilişkili aktivitelerde yer alırım.

F1-THE REVISED SOCIOSEXUAL ORIENTATION INVENTORY (SOI-R)

Please respond honestly to the following questions:

1. With how many different partners have you had sex within the past 12 months?

0 1 2 3 4 5-6 7-9 10-19 20 or more

2. With how many different partners have you had sexual intercourse on one and only one occasion?

0 1 2 3 4 5-6 7-9 10-19 20 or more

3. With how many different partners have you had sexual intercourse without having an interest in a long-term committed relationship with this person?

0 1 2 3 4 5-6 7-9 10-19 20 or more

4. Sex without love is OK.

0 1 2 3 4 5 7 8 9
Strongly disagree Neither agree nor disagree Strongly agree

5. I can imagine myself being comfortable and enjoying "casual" sex with different partners.

0 1 2 3 4 5 7 8 9
Strongly disagree Neither agree nor disagree Strongly agree

6. I do not want to have sex with a person until I am sure that we will have a long-term, serious relationship.

0 1 2 3 4 5 7 8 9
Strongly disagree Neither agree nor disagree Strongly agree

7. How often do you have fantasies about having sex with someone you are not in a committed romantic relationship with?

- 1 – never
- 2 – very seldom
- 3 – about once every two or three months
- 4 – about once a month
- 5 – about once every two weeks
- 6 – about once a week
- 7 – a few times each week
- 8 – nearly every day
- 9 – at least once a day

8. How often do you experience sexual arousal when you are in contact with someone you are not in a committed romantic relationship with?

- 1 – never
- 2 – very seldom
- 3 – about once every two or three months
- 4 – about once a month
- 5 – about once every two weeks
- 6 – about once a week
- 7 – a few times each week
- 8 – nearly every day
- 9 – at least once a day

9. In everyday life, how often do you have spontaneous fantasies about having sex with someone you have just met?

- 1 – never
- 2 – very seldom
- 3 – about once every two or three months
- 4 – about once a month
- 5 – about once every two weeks

- 6 – about once a week
- 7 – a few times each week
- 8 – nearly every day
- 9 – at least once a day

Note for scale use: Item 6 should be reverse-keyed. Items 1 to 3 are aggregated (summed or averaged) to form the Behavior facet, items 4 to 6 form the Attitude facet, and items 7 to 9 form the Desire facet. Finally, all nine items can be aggregated to form a full scale score that represents the global sociosexual orientation, similar to the full score of the original SOI.



F2-THE SOI-R-TURKISH VERSION

Lütfen aşağıdaki soruları dürüstçe yanıtlayınız:

1. Son 12 ay içinde kaç farklı partnerle cinsel ilişkiniz oldu?

0 1 2 3 4 5-6 7-9 10-19 20 veya daha fazla

2. Kaç farklı partnerle yalnızca tek defaya mahsus cinsel ilişkiniz oldu?

0 1 2 3 4 5-6 7-9 10-19 20 veya daha fazla

3. Uzun süreli ilişki anlamında ilgi duymadan cinsel ilişki kurduğunuz kaç farklı partneriniz oldu?

0 1 2 3 4 5-6 7-9 10-19 20 veya daha fazla

4. Aşk olmadan seks sorun değildir.

0 1 2 3 4 5-6 7-9 10-19 20 veya daha fazla

5. Farklı partnerlerle rastgele seks konusunda rahat olduğumu ve bundan zevk aldığımı kafamda canlandırabilirim.

1 Kesinlikle katılmıyorum 2 3 4 5 Kararsızım 6 7 8 9 Kesinlikle katılıyorum

6. Birisiyle uzun süreli ciddi bir ilişkim olacağından emin olmadan onunla cinsel ilişkiye girmek istemem.

1 Kesinlikle katılmıyorum 2 3 4 5 Kararsızım 6 7 8 9 Kesinlikle katılıyorum

7. Romantik, bağlanılmış bir ilişkiniz olmayan bir insanla cinsel ilişkiye girmek ile ilgili ne sıklıkta fantezi kurarsınız?

1–asla

2–ayda yılda bir

- 3– yaklaşık iki veya üç ayda bir kere
- 4–yaklaşık ayda bir
- 5–yaklaşık iki haftada bir
- 6–yaklaşık haftada bir
- 7–haftada birkaç kere
- 8–neredeyse her gün
- 9–günde en az bir kere

8. Bağlanılmış romantik bir ilişkide olmadığınız biriyle temas halindeyken ne sıklıkta cinsel uyarı yaşarsınız?

- 1–asla
- 2–ayda yılda bir
- 3– yaklaşık iki veya üç ayda bir kere
- 4–yaklaşık ayda bir
- 5–yaklaşık iki haftada bir
- 6–yaklaşık haftada bir
- 7–haftada birkaç kere
- 8–neredeyse her gün
- 9–günde en az bir kere

9. Günlük hayatta, henüz yeni tanıştığınız biri hakkında ne sıklıkta spontane fanteziler kurarsınız?

- 1–asla
- 2–ayda yılda bir
- 3– yaklaşık iki veya üç ayda bir kere
- 4–yaklaşık ayda bir
- 5–yaklaşık iki haftada bir
- 6–yaklaşık haftada bir
- 7–haftada birkaç kere
- 8–neredeyse her gün
- 9–günde en az bir kere

G1-MATING OPPORTUNITY SCENARIO

For the following scenario, please read the situation described and, in the text box below, please answer the following questions:

What would you think?

What would you feel?

What would you say?

What would you do?

Scenario

Imagine that one of your close friends told you that he knows the woman in the picture below. She is currently single, and is interested in going on a date. She's already told your friend that she is willing to go on a date with you. If you accept the date, your friend will give her your phone number to agree on a time and place. All she knows about you is that you are single and open to a new relationship. (Unlike you, she hasn't seen a picture of you and won't before the date.) So, it will be a "blind date" for her -- when she meets you, she will see you for the first time.

G2-MATING OPPORTUNITY SCENARIO-TURKISH VERSION

Lütfen bir sonraki sayfada göreceğiniz senaryoda anlatılan durumu okuyun ve aşağıdaki soruları senaryonun altındaki kutucuğa yazarak cevaplayın:

Ne düşündünüz?

Ne hissederdiniz?

Ne söylediniz?

Ne yapardınız?

Scenario

Yakın arkadaşlarınızdan birinin size aşağıdaki fotoğraftaki kadını tanıdığını söylediğini hayal edin. Fotoğraftaki kadının şu anda bir ilişkisi yok ve birisiyle randevuya çıkmakla ilgileniyor. O, arkadaşınıza zaten sizinle randevuya çıkmaya istekli olduğunu söylemiş. Eğer onunla görüşmeyi kabul ederseniz, görüşmenin yerine ve zamanına karar vermek için arkadaşınız sizin numaranızı ona verecek. O sizin hakkınızda sadece ilişkiniz olmadığını ve yeni bir ilişkiye açık olduğunuzu biliyor. Sizin aksinize, o sizin fotoğrafınızı henüz görmedi ve randevudan önce de görmeyecek. Onun için bu bir “görücü usulü randevu” (daha önce hiç görmediğin ve tanımadığın biriyle ilk randevu) olacak. Yani, o sizinle tanıştığında sizi ilk kez görmüş olacak.

H-MATE PHOTOGRAPHS

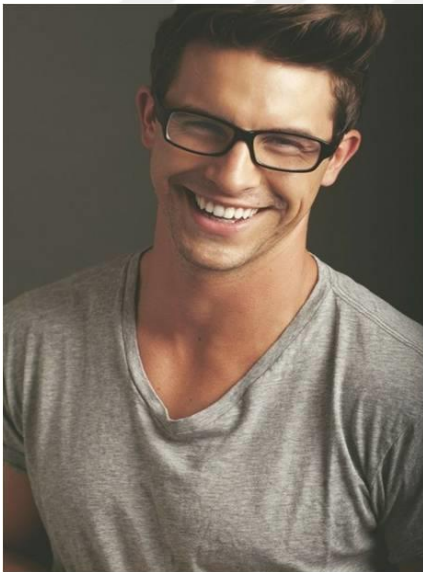
Attractive Woman



Average Woman



Attractive Man



Average Man



I1-ATTRACTIVENESS RATINGS QUESTIONS

1. Relative to other members of your gender who are a similar age as you, how physically attractive are you?

0=Extremely unattractive

10=Extremely attractive

2. How physically attractive is your potential date?

0=Extremely unattractive

10=Extremely attractive

3. Who is more physically attractive, you or your potential date?

Me

Potential Partner

I2-ATTRACTIVENESS RATINGS QUESTIONS-TURKISH VERSION

1. Sizinle benzer yaştaki ve aynı cinsiyetten diğer kişilere göre fiziksel olarak kendinizi ne kadar çekici buluyorsunuz?

0= hiç çekici değil

10=fazlasıyla çekici

2. Potansiyel partnerinizi ne kadar çekici buldunuz?

0= hiç çekici değil

10=fazlasıyla çekici

3. Potansiyel partneriniz mi yoksa siz mi fiziksel olarak daha çekicisiniz?

Ben

Potansiyel Partner

J1- EXPERIENCES IN CLOSE RELATIONSHIPS–RELATIONSHIP
STRUCTURES QUESTIONNAIRE (ECR-RS)

Please answer the following questions about your dating or marital partner.

1	2	3	4	5	6	7
Strongly disagree						Strongly Agree

1. ___ It helps to turn to this person in times of need.
2. ___ I usually discuss my problems and concerns with this person.
3. ___ I talk things over with this person.
4. ___ I find it easy to depend on this person.
5. ___ I don't feel comfortable opening up to this person.
6. ___ I prefer not to show this person how I feel deep down.
7. ___ I often worry that this person does not really care for me.
8. ___ I'm afraid that this person may abandon me.
9. ___ I worry that this person won't care about me as much as I care about him or her.

J2- THE ECR-RS-TURKISH VERSION

Aşağıdaki maddeler fotoğrafta gördüğünüz kişiye karşı **su anda** hissettiğiniz duygular ile ilgilidir.

Maddelerde yer alan "romantik partnerim" ifadesi ile kast edilen fotoğraftaki kişidir

.

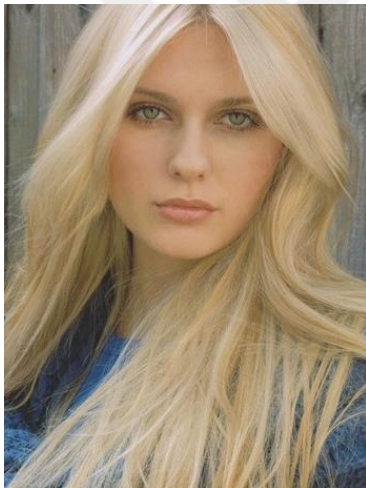
Lütfen her bir maddenin **su andaki** duygu ve düşüncelerinizi ne oranda yansıttığını karşılarındaki 7 aralıklı ölçek üzerinde işaretleyiniz.

1	2	3	4	5	6	7
Hiç						Tamamen
katılmıyorum						katılıyorum

1. ___ Zor zamanlarımda, romantik partnerimden yardım istemek bana iyi gelirdi.
2. ___ Genellikle, romantik partnerimle sorunlarımı ve kaygılarımı tartışırdım.
3. ___ Başımdan geçenleri romantik partnerimle konuşurdum.
4. ___ Romantik partnerime güvenip inanma konusunda rahat olurdum.
5. ___ Romantik partnerime açılma konusunda kendimi rahat hissetmezdim.
6. ___ Gerçekte ne hissettiğimi romantik partnerime göstermemeyi tercih ederdim.
7. ___ Sıklıkla, romantik partnerimin beni gerçekten sevmediği kaygısına kapılırdım.
8. ___ Romantik partnerimin beni terk etmesinden korkardım.
9. ___ Romantik partnerimin beni, benim onu önemseydiğim kadar önemsemediğinden endişe duyardım.

K-ATTRACTIVENESS MANIPULATION PHOTOGRAPHS

Attractive Women





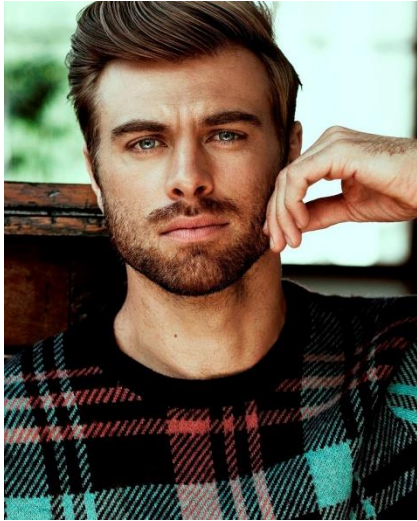
Unattractive Women





Attractive Men





Unattractive Men





L1-RELATIONSHIP THREAT SCENARIOS

Scenario #1

You are at a party with your girlfriend and you are talking with some of your friends. You get up to get a drink and when you return you see your partner across the room having an animated conversation with a man you do not know. You can see from his face that he is very interested in your girlfriend. He is listening closely to what she is saying and you notice that he casually touches her hand. You notice that he is flirting with her. After a minute, your girlfriend also appears to act flirtatiously. It seems from the way she is looking at him that she is enjoying the conversation a great deal. When you finish your drink, your partner and this man are still talking to each other.

In this case;

What would you think?

What would you feel?

What would you say?

What would you do?

Scenario #2

You are at a party with your boyfriend and you are talking with some of your friends. You get up to get a drink and when you return you see your partner across the room having an animated conversation with a woman you do not know. You can see from her face that she is very interested in your boyfriend. She is listening closely to what he is saying and you notice that she casually touches his hand. You notice that she is flirting with him. After a minute, your boyfriend also appears to act flirtatiously. It seems from the way he is looking at her that he is enjoying the conversation a great deal. When you finish your drink, your partner and this woman are still talking to each other.

In this case;

What would you think?

What would you feel?

What would you say?

What would you do?

L2-RELATIONSHIP THREAT SCENARIOS-TURKISH VERSION

Scenario #1

Erkek arkadaşınla bir partide olduğunuzu ve bazı arkadaşlarınızla konuştuğunuzu hayal edin. Sen içki almak için kalkıyorsun ve geri döndüğünde erkek arkadaşını tanımadığın bir kızla neşeli ve canlı bir şekilde sohbet ederken görüyorsun. Kızın yüzünden erkek arkadaşınla ilgilendiğini görebiliyorsun. Kız erkek arkadaşının dediklerini yakından dinliyor. Erkek arkadaşının koluna kaçamak bir şekilde dokunduğunu ve onunla flört ettiğini fark ettin. Bir dakika sonra, senin erkek arkadaşın da flörtüz davranıyor gibiydi. Erkek arkadaşının ona bakışından sohbetten bir hayli hoşlanır gibi bir hali vardı. Sen içkini bitirdiğinde, erkek arkadaşın ve bu kız hala birbiriyle konuşuyorlardı.

Bu durumda;

Ne düşündün?

Ne hissederdin?

Ne söyledin?

Ne yaptın?

Scenario #2

Kız arkadaşınla bir partide olduğunuzu ve bazı arkadaşlarınızla konuştuğunuzu hayal edin. Sen içki almak için kalkıyorsun ve geri döndüğünde kız arkadaşını tanımadığın bir erkekle neşeli ve canlı bir şekilde sohbet ederken görüyorsun. Çocuğun yüzünden kız arkadaşınla ilgilendiğini görebiliyorsun. Çocuk kız arkadaşının dediklerini yakından dinliyor. Kız arkadaşının koluna kaçamak bir şekilde dokunduğunu ve onunla flört ettiğini fark ettin. Bir dakika sonra, senin kız arkadaşın da flörtüz davranıyor gibiydi. Kız arkadaşının ona bakışından sohbetten bir hayli hoşlanır gibi bir hali vardı. Sen içkini bitirdiğinde, kız arkadaşın ve bu çocuk hala birbiriyle konuşuyorlardı.

Bu durumda;

Ne düşündün?

Ne hissederdin?

Ne söyledin?

Ne yaptın?