

THE IMPACT OF ADULT ATTACHMENT STYLES
ON ROMANTIC JEALOUSY

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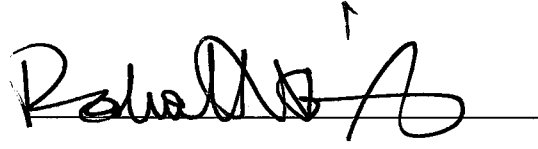
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GÜNNUR KARAKURT

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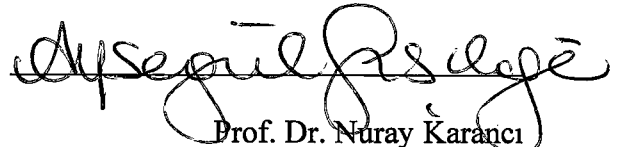
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Approval of the Graduate School of Social Sciences



Prof. Dr. Bahattin Akşit
Director

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



Prof. Dr. Nuray Karancı
Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science.



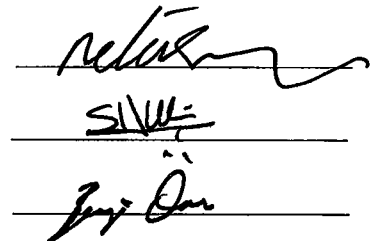
Assoc. Prof. Nebi Sümer
Supervisor

Examining Committee Members

Assoc. Prof. Nebi Sümer

Prof. Dr. Selim Hovardaoğlu

Asst. Prof. Bengi Öner



ABSTRACT

THE IMPACT OF ADULT ATTACHMENT STYLES ON ROMANTIC JEALOUSY

KARAKURT, Günnur

M.S., Department of Psychology

Supervisor: Assoc. Prof. Nebi Sümer

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This study examined the interplay between the dimensions of attachment (i.e., mental models, anxiety and avoidance dimensions of attachment) and the fundamental process in romantic jealousy; dependency, inadequacy, and coping with jealousy. Participants (N=306) of the study were students who were currently involved in a romantic relationship for more than one month. Participants completed several measures of attachment styles and dimensions, feelings of inadequacy, emotional dependency, jealousy, and coping strategies with jealousy.

Results revealed that behavioral jealousy was significantly affected by attachment styles while emotional and cognitive aspects of jealousy were not. Those with fearful attachment style reported higher levels of behavioral jealousy than those with secure. Investigation of attachment style differences on the affective reactions to jealousy showed that attachment styles had significant impact on inadequacy, self-doubt, fear, and worry. Overall, preoccupieds appear to have higher levels of negative affect and inadequacy feeling than secures.

Regarding coping with jealousy, secure individuals were more likely to protect the relationship and less likely to show the strategy of internalization and externalization than those with insecure styles. As expected, dismissing individuals reported the lowest tendency to protect the relationship. On the other hand, preoccupied participants had highest internalization strategy to cope with jealousy. Finally, fearful individuals had the lowest levels of self-esteem protection. Examination of structural equation models demonstrated that both models of self (anxiety) and others (avoidance) latent variables had significant direct effects on inadequacy, dependency and jealousy. Model of self also had marginally significant indirect effect on jealousy via inadequacy.

Current study has contributed to both attachment and jealousy literatures by showing that fundamental dimensions of attachment play a significant role in experiencing, expressing, and coping with jealousy and inadequacy feeling mediate the link between attachment dimensions and jealousy.

Key Words: Jealousy, attachment, close relationships, dependency, inadequacy

ÖZ

YETİŞKİN BAĞLANMA STİLLERİNİN ROMANTİK KISKANÇLIK ÜZERİNDEKİ ETKİLERİ

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Bu çalışmada temel bağlanma boyutları (bağlanma zihinsel modelleri ve bağlanmada kaygı ve kaçınma boyutları) ile romantik kıskançlıktaki temel süreçler (kıskançlık boyutları, yetersizlik ve bağımlılık duyguları ve kıskançlıkla başa çıkma) arasındaki ilişkiler incelenmiştir. Çalışmaya bir aydan daha uzun süredir romantik ilişki içinde bulunan 306 üniversite öğrencisi katılmıştır. Katılımcılar bağlanma stilleri, yetersizlik duygusu, bağımlılık, kıskançlık ve kıskançlıkla başa çıkma yöntemleri ile ilgili çeşitli anketleri doldurmuşlardır.

Sonuçlar, bağlanma stillerinin davranışsal kıskançlık üzerinde anlamlı bir etkiye sahip olduğunu gösterirken duygusal ve bilişsel kıskançlığın bağlanma stillerini anlamlı düzeylerde etkilemediğini göstermiştir. Korkulu bağlanma stiline sahip olanların güvenli stile sahip olanlardan daha yüksek düzeylerde davranışsal kıskançlık gösterdikleri saptanmıştır. Kıskançlığa yönelik tepkilerin incelenmesi, bağlanma stillerinin yetersizlik, kendinden şüphe etme, korku ve endişe duyguları üzerinde anlamlı etkileri olduğunu göstermiştir. Genel olarak, saplantılı bağlananlarda güvenli bağlananlardan anlamlı olarak daha yüksek düzeylerde olumsuz duygular ve yetersizlik duygusu rapor ettikleri bulunmuştur.

Kıskançlıkla başa çıkmaya ilişkin olarak, güvenli bağlanma stiline sahip bireylerin ilişkiyi korumaya daha fazla, içselleştirme ve dışsallaştırma yöntemlerine başvurmaya ise daha az yatkın oldukları ve, kayıtsız bağlanma stiline sahip olanların en düşük düzeyde ilişkiyi koruma eğilimi gösterdikleri gözlenmiştir. Öte yandan, saplantılı bağlananlar en fazla içselleştirme gösteren grup olmuşlardır. Korkulu bağlananlar, en düşük düzeyde özsaygı koruma eğilimini göstermişlerdir. Yapısal eşitlik modellerinin incelenmesi, benlik (kaygı) ve başkaları (kaçınma) modellerinin yetersizlik, bağımlılık ve kıskançlık üzerinde doğrudan yordayıcı güce sahip olduğu gösterilmiştir. Benlik modeli ayrıca yetersizlik değişkeni aracılığıyla kıskançlık üzerinde anlamlı dolaylı etki göstermiştir.

Bu çalışma, bağlanma temel boyutlarının kıskançlığın yaşanması, gösterilmesi, ve kıskançlıkla başa çıkılmasında önemli bir rol oynadığını ve yetersizlik duygusunun bağlanma ile kıskançlık arasında aracı bir değişken rolü oynadığını göstererek, hem bağlanma hem de kıskançlık literatürüne katkıda bulunmuştur.

Anahtar Kelimeler: Kıskançlık, bağlanma, romantik ilişkiler, bağımlılık, yetersizlik

To My Mother and Father



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CHAPTER 1

INTRODUCTION

“ O, beware of my lord of jealousy! It is the green eyed monster, which doth mock the meat it feeds on.”

-Shakespeare, Othello

Jealousy, Shakespeare's “green-eyed monster”, is a darker, more sinister side of passion or it is a true sign of love or caring. Jealousy is an extreme emotion or emotional complex that is a natural human reaction emerges at an early age generally before three years (Hinde 1997, Masciuch & Kineapple, 1993). It is an adaptive emotion, over the million of years; it's a primary defense against threats of infidelity and abandonment. Generally, the “appropriate” use of jealousy can enrich relationships, spark passion and amplify commitment. When it is excessive, however, it leads to serious difficulties and problems (Buunk and Bringle 1987). The focus of this study is limited to romantic jealousy, which is the jealousy that emerges in the context of romantic relationships. Jealousy can be defined as a complex reaction to a perceived threat to a valued relationship or its quality (Pines, 1998). According to Pines jealousy composed of internal and external components. Internal components of jealousy include emotional aspects

(e.g., pain, anger, fear, sadness etc.), cognitive aspects such as beliefs and attitudes (e.g. How could I have been so blind, I'm not as attractive, sexy, beautiful etc.), and physical symptoms (blood rushing to the head, stomach cramps etc.). External components of jealousy involve behaviors expressed overtly such as crying, screaming, and behaving aggressively.

The aim of this paper is to examine the fundamental dynamics of romantic jealousy within the framework of adult romantic attachment patterns in the following dimensions.

- The impacts of anxiety and avoidance dimensions of attachment; how these dimensions are influential in experiencing, expressing, coping with jealousy.
- Some other factors such as personality characteristics of jealous person, self-esteem and feeling of inadequacy and the relationship characteristics such as dependency will be tested with causal model.
- Within the framework of causal model, mental models of attachment are hypothesized to have influence both directly on the expressing, experiencing, coping and behaving violently and indirectly through by mediation with dependency and inadequacy.

1.1 Romantic Jealousy

Romantic jealousy is defined as a “ *complex of thoughts, feelings, and actions that follow threats to self-esteem and/or threat to existence or quality of the relationship when those threats are generated by the perception of a real or potential romantic attraction between one's partner and a (perhaps imaginary) rival*” (White, 1981) . That is, there must be a perceived threat to the relationship to feel jealousy. The threat

toward the valuable relationship, which could be valuable in many respects such as emotional, economical or social, could be either real or imagined. Regardless of the value of the relationship, however, person does not want to lose the relationship. Past research shows that, personality characteristics, nature of the relationship, the situation in which partners interact, partners' behaviors and certain personality characteristics, traits are related to feeling of jealousy (Sharpsteen, 1995, Aune and Comstock, 1997, Buunk, 1997, Buunk and Bringle 1987, Buunk 1982).

Previous studies on the antecedent of jealousy suggest that certain personality characteristics mainly as low self-esteem and feelings of inadequacy are strongly associated with jealousy.

1.2 Self-Esteem

Social comparison perspectives in social psychology suggest that people will employ others in their environment to form estimates of their self-worth in the absence of objective standards for comparison (Festinger, 1954). This perspective has been commonly applied in studying jealousy because jealousy is competitive or comparative in nature to a large degree. According to this perspective, when jealousy occurs individuals compare themselves with rivals to enhance their self-esteem, (Buunk et al 1984, Ellis & Weinstein 1986). Moreover, individuals believe that their partners have been comparing themselves with the rival, and as a result of this comparison process they failed in one respect. This belief intensely threatens self-esteem, because they assume that their partner knows each side well.

Furthermore, level of self-esteem is also critical because it is perceived as an important determinant of the partner's commitment. Those with low level of self-esteem are more likely to hesitate about the partner's commitment. In this perspective, it is assumed that, " the person who thinks badly of himself or herself is more likely to fear that any existing relationship is vulnerable to threat: Why would anyone stay with me?" (Buunk & Bringle, 1987). In a number of studies, those who had low self-esteem were more likely to react in a jealous manner (Mead 1977, Buunk 1982, Madler & Dotan 1992, Radecki & Bush 1988 Bringle and Williams). Although a person's global self-esteem is crucial for influencing jealous reaction, relationship specific self-esteem would be more influential on behaving jealously in close relationships. Hence, person's feeling of inadequacy/ low self-esteem as a partner creates a tendency for feeling high levels of jealousy (White, 1981).

1.3. Relational Factors

In addition to personality characteristics, the nature of a relationship including emotional dependency, interdependency and the feeling of security also affect jealousy.

1.3.1. Dependency

One of the most important relational factors influencing jealousy is emotional dependency. Regardless of the partner's involvement, people who are relatively dependent on a relationship will be more likely to experience jealousy regarding their relationship when their partner shows interest in someone else. Emotional dependency has two roots that are conceptually different despite being closely related to each other.

One root concerns actual and potential sources of alternatives that lead to satisfaction outside of the relationship, i.e. person's self-complexity. Person who has no outside job, few friends and little or no possibility of finding alternatives is more dependent on a relationship. In other words, when relationship is under threat, it can be more costly for such an individual (Buunk 1982, Berscheid & Fei 1977). The second aspect of dependency concerns the emotional involvement in the relationship, i.e. how much partner's actions are emotionally influential. This type of dependency appears within the time of commitment process in which partner's developed a common history and "link the relationship to their personal identities". Moreover, it makes one partner more sensitive to the partner's actions. Whatever the source of dependency in the relationship, it was found that as dependency increases the intensity of jealous reactions also increases (Aune & Comstock 1997, White 1981, Bringle and Buunk 1985 Buunk 1995).

1.3.2. Feeling of Insecurity

To a greater extent jealousy is evoked by the feeling of insecurity of partner's commitment to the relationship. The more insecure one feels in the relationship, the more likely she/he will be jealous. In other words, security provides a buffer against jealousy.

Emotional sense of security and confidence are probably developed with the passing years. In the early years of a relationship, insecurity is high and the partner's interest to another person threading the relationship (Salovey and Rodin 1984). However, most couples develop a sense of security in their relationship over time and are less likely to view jealousy-triggering events as serious threats (Buunk and Bringle, 1987).

1.4. Gender Differences

Studies on gender differences in jealousy are usually based on evolutionary psychology that has become a popular perspective in recent years. Jealousy has an important role in the evolutionary history of human beings. Within the evolutionary process, jealousy is a psychological mechanism that makes humans remember strong emotions with respect to their present and past adaptive benefits (DeSteno and Salovey, 1996). According to the evolutionary perspective, a man's jealousy is the result of the threats of loss of his investments, commitments, mating efforts and parenting efforts; because fertilization occurs inside woman, men were faced in evolutionary history with an adaptive problem that is the possibility of parenting another man's offspring. However, women in ancestral past never faced problems like this, rather man's long term involvement is more important, so man's slipping his attention, time, parental investment and resources to another woman and her children leads to jealousy by women.

To prove this point, David Buss and his colleagues (1992) asked students which situations would more seriously distress with them "Imagining your partner forming a deep emotional attachment to that other person" or "Imagining your partner enjoying passionate sexual intercourse with that other person". Results showed that sexual infidelity was more likely to lead to distress for men, while emotional infidelity leads to more distress for women. These findings were supported by later research. Buunk and his colleagues (1996) who studied jealousy in different cultures (Netherlands, Germany and United States) also found supporting evidence for asymmetry in jealousy with respect to gender differences. In these three cultures, the majority of males have shown a strong

differential preference to sexual rather than emotional infidelity. According to Harris and Christenfeld (1996), the reason for this sexual asymmetry is the 'reasonable' difference between the genders, in other words how they interpret evidence of infidelity. Men usually believe, women have sex only if they are in love with the person. However, women usually believe that men can have sex without love. Therefore, sexual infidelity is less treating for women. Similarly according to Hupka and Bask (1996), there are gender differences, however, these gender differences are natural results of ascribed gender norms rather than the differences in innate properties. Regardless of whether these gender differences are innate or not, jealousy is influenced by cultural differences. Some cultures encourage becoming jealous more than others. Moreover, the events triggering jealousy may differ in terms of cultural norms and values.

1.5. Coping with Jealousy

According to Richard Lazarus (1985), coping can be described as "efforts to master conditions of harm, threat or challenge when an automatic response is not readily available". Coping does not necessarily mean success in overcoming harm, but any effort to master is seen as coping. Depending on the type of coping strategy used, the effect can vary. For instance talking about the problem in an open manner results positively, while coping by using violence almost always gives negative results and escaping from the problem only delays the problem.

Although people have different reasons for feeling jealousy and they react differently while they are experiencing jealousy, people want to gain more control over it. The question "how people can overcome with jealousy?" is not easily answered by

researchers. First, the attitude toward jealousy should be changed for an effective coping. Despite the fact that jealousy occurs as a result of strong attachment, this does not necessarily mean that it is a true sign of love. However, it is a strong desire forcing the person to continue to an intimate relationship. Therefore, it is the reflection of own desire. In short, the first step of controlling jealousy is being aware of what it is. Secondly, the jealous person should try to diminish the connection between her self worth and the relationship (Pines 1992).

Those who have predisposition to jealousy usually show signs of it when there are triggering events. However, highly predisposed people show an intensive level of jealousy reactions at a minimum intensity of triggering events. For example, a partner's mere glance of another person brings about jealous reactions in a highly predisposed people. Regardless of behavioral and cognitive responses, jealousy behaviors are performed in order to preserve the relationship from possible abandonment or to preserve the self-esteem. Although, it is functional for protecting relationship and for protecting self-esteem, it leads to a problem when it interferes with the normal functioning in a person's life like DSM-IV. Individuals can cope with jealousy in a variety of ways. Pines and Aronson (1983) interested in how frequently individuals use variety of coping strategies. Among the 17 different strategies, the majority of the sample used rational discussion (80 %) to cope with jealousy, while %60 of them used verbal assault, %56 of them used sarcasm, %55 of the used crying, silence and visible suffering, and just %7 of them reported to they could used physical violence.

Another study was conducted by Sharpsteen (1991), according to results of this study males and females used different coping strategies. For example, males more often

to get drunk, get angry to themselves, to verbally threaten the rival. While, females cry when they are alone, try to become more attractive or try to make their partner believe that they are not caring about the situation, more often. Another study deals with gender differences found that males are likely to act in way that they maintain their self-esteem such as thinking how intelligent they are, while females are more likely to preserve the relationship.

Factors such as dependency, self-esteem, expectations, and beliefs about the partner, feelings of insecurity in the relationship, feelings of inadequacy, general suspiciousness, and gender are the critical factors which create a tendency for the feeling of jealousy. These factors have been examined separately with no conceptual framework that connects them. Attachment Theory seems to provide a comprehensive framework for all of these variables in explaining jealousy. The attachment patterns which are developed through early interactions with parents lead to development of internal working models (mental models) and these models have an important influence on the relationships of the individual throughout her/his life-span, as cognitive-affective structures guide person's perceptions, expectations, emotions and interpretations about both others and the self. The dynamics of jealousy such as self-esteem, dependency and feeling of insecurity have been shown to be strongly associated with underlying dimensions of attachment.

1.6. Attachment Theory

Bowlby examines the process how affectionate bonds are formed and broken; in particular, how infants become emotionally attached to their primary caregivers and emotionally distressed when separated from them. To fully understand the origin,

function, and development of the child's early socio-emotional relations, Bowlby (1969) developed the attachment theory by integrating psychoanalysis with ethnology, sociobiology, psychobiology, the cybernetic theory of control systems and modern structural approach to cognitive development.

According to Bowlby (1969), attachment is a part of many organisms' native development. Human infant, when it is just born, is so immature that it can survive only if an adult is willing to provide protection and care. Therefore, infants try to keep proximity to a protector or caregiver, and whenever primary caregivers move away, they follow visually and physically. If there is a failure to maintain proximity with parents, infants show anxiety. Therefore, Bowlby describes attachment behavior as “ any form of behavior that results in a person attaining or retaining proximity to some other differentiated and preferred individual, usually conceived as stronger and/or wiser” (Bowlby 1973 p.292). Due to the strong parallelism between human attachment behavior and nonhuman primate species, it was assumed that attachment behavior is adaptive. Attachment systems have a survival value because humans experienced a period called the environment evolutionary adaptedness. In that period, natural selection provided a survival advantage through infant-mother proximity which increased the likelihood of protection. Many outcomes such as feeding, learning about the environment, social interaction are also related with infant-parent proximity. Therefore, the infant is biologically predisposed to stay close to his/her caregivers due to survival value. For infants, proximity to caregiver provides a “ secure base” so that they can master and explore environment and a “safe haven” whenever the protection is needed. Furthermore, Bowlby stated that attachment behavior leads to organized behavioral systems. That is,

behaviors such as smiling, crying, visual following, all serve to a function of maintaining proximity to caregiver. According to Bowlby, among the exploration, caregiving and sexual mating, attachment is one of these distinct but interlocking behavioral systems where behavioral systems are defined as “homeostatic” control systems that maintain the steady state between individual and her/his environment. Each of these systems has unique function. However, during immaturity years attachment is the most powerful system because attachment system provides a balance between exploratory and proximity seeking behavior. As long as child experience “felt security”, the other systems could be available. In other words, to play and explore environment child must feel safe enough by taking into account the accessibility of the attachment figure when needed.

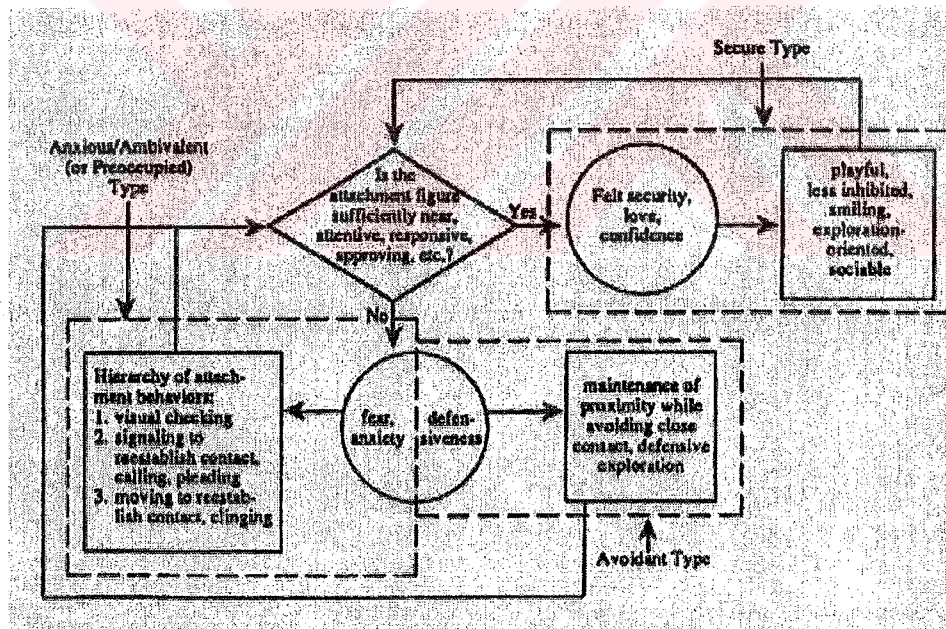


Figure 1: Child's attachment and exploratory behavior. Source: Hazan and Shaver (1994)

Figure 1 indicates how child's perception of the availability and responsiveness of

the caregiver influence the child's attachment and exploratory behaviors. Children are more likely to play and explore environment, behave more socially when they feel secure. On the other hand, when they feel insecure and lack of confidence to the caregiver, they are more likely to behave with either anxiety or defensiveness. Fear and anxiety responses cause behaviors such as crying, clinging, whereas defensiveness responses cause avoidance to a close contact with attachment figure.

Attachment is shaped in the light of parenting strategy. Infants approximately 6 to 7 month old select their primary caregivers in terms of who usually respond to their signals of distress and give qualitative response. Through repeating interaction, infants learn what to expect and adjust their behavior in terms of their expectations and beliefs. These expectations about the availability and responsiveness of attachment figure form the basis of mental representations or internal working models (Bretherton, 1992). Working models of attachment includes memories and beliefs that develop from the early experiences with caregiver, and they are transmitted to the new relationships in which they actively influence the perceptions and behaviors of the individual (Feeney and Noller 1996).

Although there are unlimited variability and models of caregiving environment in reality, there are limited numbers of categories corresponding to the availability of caregivers when needed. Internal working model formed in terms of consistent responsiveness, consistent unresponsiveness or inconsistent responsiveness from caregiver leads to expectations and beliefs about the self and the others that determine the mental models. Whether the self is evaluated as a kind of person that others are likely to respond in a helpful way determine mental model of self and whether the attachment

figure is evaluated as a kind of person that generally behave responsively determine the mental model of other. The continuity of the attachment system is provided by these internal working models (Bretherton, 1992, Feeney and Noller 1996) because once the positivity/negativity of mental models are established they become resistant to change.

The first detailed study on individual differences in attachment was done by Ainsworth and her friends (1978). In order to assess the individual differences in attachment pattern, Ainsworth developed a procedure called as strange situation. The procedure takes place under low and high stress conditions in a 20 minutes miniature drama with eight episodes. First, mother and infant are introduced to a laboratory playroom. While they are playing, an unfamiliar woman joins, and then mother leaves for just a brief period of time and immediately comes back. In the second phase of the separation, both mother and the stranger leave the room respectively. Finally, the stranger and then the mother join. As a result of this procedure, Ainsworth discovered different patterns of infants' behaviors after reunion. A few of the infants were angry when mother returned after separation. They both cried and wanted to contact to the mother but did not simply cuddle when picked up and this group was labeled as anxious ambivalent. Another group of children seemed to avoid the mother on reunion, although they were searching for their mothers after she left and this group was labeled as avoidant. And a majority of infants sought to proximity, interaction or contact on reunion and this group was labeled as secure attachment. This secure attachment style is generally accepted as a norm (%56-80 of infants in many cultures). Results indicate that three types of attachment patterns were identified depending on internal working models and responsiveness of the primary caregiver. Bowlby's attachment theory and Ainsworth's

assessment technique dealt primarily with infant and caregiver's relationship. According to Bowlby, two sets of stimuli elicit fear for infant: presence of clues to danger or the absence of an attachment figure. Therefore, separation is a leading force of anxiety and the strange situation depends on separation and reunion episodes. For infants, skimming attention to others also leads to anxiety. So, attachment patterns in infants are important for jealous reactions in later years.

Bowlby (1973) stated that there is a sensitive period when sense of confidence is developed. This confidence can be defined as availability of an attachment figure whenever one desires it. This sensitive period includes the immaturity years, infancy, childhood and adolescence. Whatever the expectations and beliefs constructed during that years stay relatively stable throughout the rest of life and attachment behavior characterized human beings "from the cradle to the grave" (Bowlby 1979 p.129). Main et al. (1985) found that child's secure attachment, which were assessed through strange situation procedure remained same at 6 years of age including reunion behavior, discourse fluency within the child-parent dyad and emotional reactions to separation. According to Weiss (1982) central features of infant-mother attachment should also fulfilled by adult relationships: First, proximity seeking; person wants to be with the attachment figure particularly under stressful conditions. Secondly, secure base; person desires comfort and security from the attachment figure. Finally, separation protest; when the attachment figure is away or any threat to unavailability leads to protest. However, of course the attachment in immature years and attachment in adults are not exactly the same. For later years one's primary attachment figure is the romantic partner and it serves different functions. In particular, romantic love is defined as reciprocal caregiving in

which partners provide support for each other reciprocally, physically, emotionally, and economically. Whereas, infant-caregiver relationships are highly asymmetrical. That is, infants are cared by their attachment figures. In addition, sexuality is almost always included in adult romantic love while it is not included in infant caregiving relationships. Prototypical adult attachment relationships thus involve the integration of three behavioral systems: attachment, caregiving and sexual mating (Shaver, Hazan & Bradshaw 1988). Therefore, the nature of motivation for proximity seeking is changed in adulthood. Anxiety and distress in all ages cause proximity seeking, however, adult proximity seeking is also stimulated by protecting or offering comfort (caregiving) to other and engaging in sexual activity (sexual mating) (Hazan and Shaver 1994).

To demonstrate the parallelisms between childhood attachment experiences and adulthood romantic relations, Hazan and Shaver (1987) conducted a study. They found that the three attachment styles were as common in adulthood as they are in infancy; - secure, avoidant and anxious/ambivalent. Subjects' working models were also related to attachment style'. Moreover, people with different types of attachment styles reported to experience romantic love differently.

In Hazan and Shaver's (1987) study, anxious ambivalent strategy was associated with inconsistent responsiveness and anxious/ambivalent individuals see their parents as unfair. Therefore, they develop a strategy to spend much of the time and effort to keep the others close. In romantic attachment, anxious ambivalent strategy was associated with obsessive preoccupation, falling in love frequently, being extremely jealous, having low self-esteem and experiencing high rate of indiscriminant self disclosure (Hazan and Shaver, 1987). Range of insecure anxious/ambivalent attachment differs with respect to

culture, for example in collectivistic cultures the ratio of insecure anxious/ambivalent strategy is higher than that of insecure avoidant strategy as compared to individualistic cultures.

Avoidant attachment strategy, on the other hand, was associated with consistent unresponsiveness and avoidant individuals describe their mothers as cold and rejecting; this strategy can be characterized by maintaining self-security by escaping from intimate social contact, especially in stressful circumstances. In adult romantic attachment, avoidants are explained in fear of intimacy and close relationship and the pessimistic views of relationship (Hazan and Shaver, 1987)

Secure attachment was believed to result from consistent responsiveness. Those people reported warmer relationships with their parents, secures hold positive self and others' mental representations. They were more self-confident and interested in establishing and maintaining relationship (Hazan and Shaver, 1987).

Hazan and Shaver's (1987) initial study was followed by a number of studies reporting replications and extensions of their findings. These studies examine the quality of adult romantic relationships and the other relevant variables such as self-esteem, loving, love addiction, expectations, extreme dependency, and satisfaction on the basis of attachment group differences (Feeney and Noller 1990, Carnelley, Pietromonaco and Jaffe, 1994, Collins and Read, 1990). Moreover, children and adults distribution into attachment categories (about %55 secure, 20% anxious/ambivalent and 25% avoidant) yielded similarities. Researchers using Ainsworth's typology documented cross-cultural differences in attachment style distributions. Although past research described secure attachment pattern as a norm, insecure patterns showed differences in terms of culture.

For example, avoidant attachment pattern was observed to be more common in Germany while anxious-ambivalent patterns are observed to be more common in Japan and Israel.

According to Bowlby (1973), individuals' experiences with their caregivers are internalized through internal working models of their own self worth, their expectations of care and support from others. Bartholomew (1990) systematized Bowlby's conceptions of internal working models to explain adult attachment by combining model of self and model of others. Both models are dichotomized as positive and negative (Bartholomew 1990, Bartholomew and Horowitz, 1991).

		MODEL OF SELF (Dependence)	
		Positive (Low)	Negative (High)
MODEL OF OTHER (Avoidance)	Positive (Low)	SECURE Comfortable with intimacy and autonomy	PREOCCUPIED Preoccupied with relationships
	Negative (High)	DISMISSING Dismissing of intimacy Counter-dependent	FEARFUL Fertful of intimacy Socially avoidant

Figure 2: Bartholomew's four-category model of attachment. Source: Bartholomew (1994).

Model of self describes whether self is seen as worthy of love and support or not, and model of others describes whether others are seen as trustworthy and available or unreliable and rejecting. Through this combination, a four-category model is achieved.

When person has positive expectations from others such as support and trust and has a positive sense of worthiness and lovability, this prototypical attachment pattern is called secure attachment. If sense of unworthiness and unlovability are combined with positive evaluation of others, then this combination indicates preoccupied attachment patterns, which is parallel to anxious ambivalent attachment. These people have strong desire to be accepted by valued others. On the other hand, when person shows a sense of esteem and worthiness with negative evaluations of others, this style is labeled as dismissive-avoidant. These people defend themselves against disappointment by avoiding close relationship and maintaining a sense of independency and invulnerability. Finally, if person has a negative evaluation of both self and others, this style characterizes fearful avoidant pattern. These people escape from close involvement with others and protect themselves against the expected rejection.

Bartholomew and Horowitz's (1991), four-category model differs from Hazan and Shaver's (1987), typology in terms of categorization of avoidant attachment in Hazan and Shaver's model. In the four-category model, avoidant category is split into two patterns: fearful avoidance and dismissing avoidance. Fearful attachment is defined in terms of a negative model of self and a negative model of others while dismissing attachment is defined in terms of a positive model of self and a negative models of others. The differences in the self-model are supported by empirical evidence which consistently report higher self esteem and lower actual/ideal self-discrepancies among dismissing individuals rather than fearful individuals (Bylsma, Cozzarelli and Sümer 1997). The validity of four category model of adult attachment empirically supported by Brennan, Shaver and Tobey (1991) and Griffin and Bartholomew (1994) through comparison of

Hazan and Shaver's (1987) and Bartholomew's (1990) measures. As expected, the profile of the secure attachment category is also endorsing the secure category of the previous conceptualization of secure attachment and it is also diametrically opposite of fearful attachment. Similarly, preoccupied subjects in the Bartholomew's (1990) measure, consistent with Hazan and Shaver's (1987) measure, represent the contrary profile with the anxious ambivalent attachment pattern. Brennan, Shaver and Tobey (1991) also provide a considerable support for the two distinct avoidant group. Feeney, Noller and Hanrahan (1994) also provide a strong support for the existence of four rather than three groups. Bartholomew also argued that these four types could be embedded into two dimensional space in terms of two underlying dimensions mental model of self (anxiety) and mental model of other (avoidance) dimensions. However, Bartholomew's assessment procedure does not directly measure these two underlying dimensions. Rather, they are derived from the combinations of four prototype ratings, and these two dimensions are not independent (Griffin and Bartholomew 1994). In Turkey, a collectivist culture (İmamoğlu 1998, Kağıtçıbaşı 1998), research done by Sümer and Güngör (1999) show that preoccupied styles in Turkish sample seems to be overrepresented. For the cross-cultural validity and the reliability of Bartholomew's four category model, single and multi item measures of attachment styles (RQ and RSQ respectively) were examined by Sümer and Güngör (1999). Results of Turkish samples were compared to U.S. samples. Results indicate that both measures have satisfactory levels of reliability, stability and convergent validity.

In recent studies underlying dimensions of attachment were re-conceptualized and some investigators attempted to capture the two dimensions that stand out in the analysis

referred to above. In a recent study, Brennan, Clark and Shaver (1998) conducted a large sample factor analytic study in which all of the self-report measures were included. Twelve specific factors were detected by Brennan et al (1998). Further factor analysis with these factors yielded, two global factors, rotated 45° from Bartholomew's proposed model in Figure 2. In other words, intersection of anxiety and avoidance dimensions gives Bartholomew's four category.

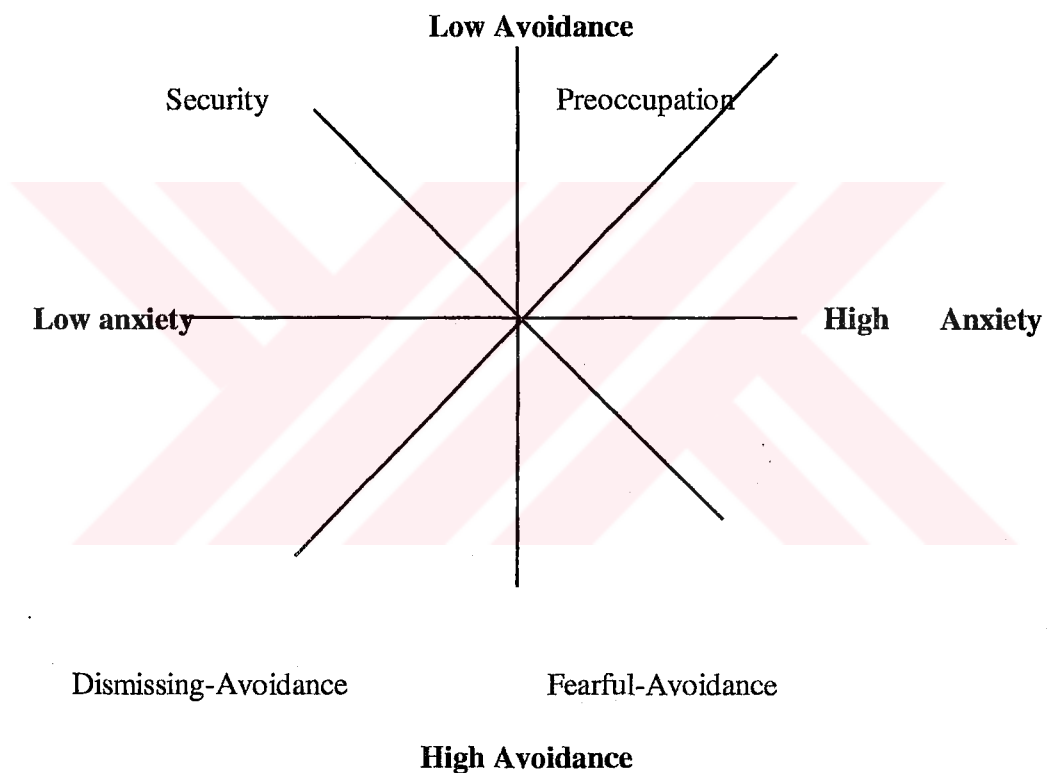


Figure 3: Brennan and Shaver's two dimensions of attachment SOURCE: Brennan et.al, (1998).

Results indicated that the anxiety dimension consists of need for approval, preoccupation with relationships and it is similar to Bartholomew's model of self. Fear of

being abandoned and avoidance dimensions consisting of discomfort with intimacy and closeness factors emerged clearly and this dimension is similar to model of other dimension in Bartholomew's approach. Dimensional measure of Brennan, Clark and Shaver's Experience of Close Relationships (ECR) instrument gives two-dimensional scores for anxiety and avoidance. The distribution of four category model formed on the basis of these two dimensions showed that Brennan et. al's measure was more conservative than Bartholomew's measure in classifying people as secure, because this new scale was able to measure different levels of insecurity more precisely. This measure provided the highest scores for internal validity among all dimensional measures. Brennan, Clark and Shaver demonstrated that the four categories which were produced on the basis of anxiety and avoidance dimensions by this new scale explained more variance on touch and sex subscales than Bartholomew's measure. Later study done by Sümer and Güngör (2000) have shown that Brennan's measure provide higher explained variance on self related variables such as self esteem, self concept clarity, trait anxiety, separation anxiety and need for approval. Moreover, these emotional scores can easily be converted to the four-category model. Therefore, Brennan, Clark and Shaver's instruments will be used in this study.

In recent years, attachment theory has been utilized in studying the dimensions of adult romantic relationships. Therefore, it provides a basis for predicting the individual differences for relationship features such as attitudes and beliefs towards romantic love (Hazan and Shaver, 1994), relationship satisfaction and commitment (Collins and Read, 1990; Finney and Noller, 1990; Simpson, 1990, Sümer and Cozzarelli, 1999), partner

pairing (Kirkpatrick and Davis, 1994) and relationship stability (Kirkpatrick and Davis, 1994; Kirkpatrick and Hazan, 1994).

1.7. Romantic Jealousy and Romantic Attachment

Berscheid (1983) defined jealousy as a response to threatened disruption of the interconnections between two people by a third party. The stronger the interconnections, the greater the jealousy provoked. According to Bowlby (1969), main aim of attachment behavior is maintaining proximity and hence any threat to separation leads to anxiety, protest and attempts to reestablish contact. Threat of loss or separation from attachment relationship activates the attachment system. Although there are many possible reasons for ending, separating or losing attachment relationship, one common circumstance generally results from the threat to relationship and abandonment by partner.

Romantic jealousy and romantic attachment share some common features in understanding the nature of relationships. Both of them are supported by evolutionary perspective, both of them base on the motivation to maintain the relationship and most importantly both of them are activated by a threat which can lead to separation or ending of a close relationship.

Over the last several years romantic attachment and romantic jealousy have been gaining increasing attention. However, little research was done on integrating these two related field. Radecki-Bush, Farrell and Bush (1993)' s recent attempts is an exception. This study focused on a model of romantic jealousy on the basis of cognitive motivation theory from the framework of adult attachment studies. These researchers hypothesized that personal variables like attachment and depression predict relationship quality.

Moreover these variables predict jealousy responses indirectly through prediction of appraisal of situation together with situational variables through a varying degree of imagined threat and relationship variables which both predict appraisal of the situation directly. Findings demonstrated that person who has higher score on depression are rated as more jealous and having lower esteem in the relationship as expected. Securely attached people reported more security, less jealousy, more esteem to their partner and greater willingness to depend on their partners as compared to insecurely attached people. Moreover, anxiously attached participants perceived themselves as having less control in their relationships.

Another study that dealt with the relationship between attachment styles and jealousy was done by Buunk (1997). He hypothesized that individual differences in attachment styles would explain the occurrence of jealousy. Results of this study indicated that securely attached people were consistently less jealous than insecurely attached people. Specifically, anxious ambivalent individuals reported more possessive and anxious jealousy than avoidant individuals. On the other hand, Sharpsteen and Kirkpatrick (1997) used attachment theory as a framework for examining individual differences in the ways that how individuals experience and express jealousy. They found that person who has anxious ambivalent attachment pattern reported more jealousy than secure individuals. This result has been found in different studies (Hazan and Shaver, 1987, 1990; Collins and Read, 1990). Guerrero (1998) speculated that this more jealous tendency of the anxious ambivalent individuals is the result of the negative model of self. Although individuals with an anxious ambivalent attachment pattern show more emotional reactions when specific jealousy related emotions are considered, these

individuals are also more likely to resist expressing their anger while avoidantly attached individuals reflect their anger to third person or interloper. Securely attached people especially reflect their anger toward the partner and at the same time they try to protect the relationships (Sharpsteen and Kirkpatrick 1997).

In past studies, Hazan and Shaver's categorical measure was used. However, recently more reliable, continuous measures have been developed to assess attachment styles; Brennan et al's ECR is measuring attachment on two underlying dimensions (anxiety and avoidance). These dimensions provide better understanding for the relationships between variables including self-concept clarity, self-esteem, threat anxiety, separation anxiety, and need for approval and the attachment patterns. Another limitation of these studies is that they do not consider the fact that jealousy experiences differ in terms of individual differences in attachment styles. The underlying reasons of these individual differences should be explored in detail.

1.8. Attachment and Dependency

When infants first born as human beings, they are so dependent and prepared for relating to others for protection, nurturance and support. Dependency and attachment are often interchangeably used terms while referring to behaviors that maintain closeness between a child and another person. Bowlby (1969) noted that “ the term dependency should be reserved for contact based upon caretaking of other close interactions and nurturance between parent and child” which he labels ‘attachments’. Despite the similarities between attachment and dependency, studies on this issue found clear

distinctions (Livesley, Schroeder and Jackson, 1990). For separation of these two constructs conceptually, Ainsworth (1972) specified the following areas:

- 1- Specificity: Attachment is dyadic whereas dependency is generalized.
- 2- Duration: Attachment is enduring while dependency tends to be transient.
- 3- Level of Maturity: Attachment is desirable and positive at all ages, but dependency implies immaturity.
- 4- Affective implications: Attachment implies strong affect, especially love, whereas the affective component of dependency is usually not addressed.
- 5- Proximity-seeking: In attachment, proximity-seeking is specified to attachment figure, while in dependency it is more generalized.
- 6- Learning: Attachment requires some discriminative learning while dependence does not.(cited in West, Sheldon-Keller 1994).

Infant-parent interaction studies on parenting style found that parental overprotectiveness and authoritarianism play a significant role on the level of dependency (Fu, Hinkle, and Hanna, 1986) and these parenting styles leads to lack of independence and mastery to environment (Bernstein, 1992). In that sense, it can be speculated that because of their high levels of anxiety and need for intense proximity, anxious ambivalent individuals would be more likely to have high levels of dependency. Bowlby (1969, stated that people who have the ability to rely on others when necessary are usually self-reliant. They show more mature relatedness in the form of mutuality which is similar to the notion of 'secure attachment' (Gilligan et al. 1989, Jordan 1986). This mature relatedness includes an understanding of self as a separate individual, yet being still connected to others unlike insecure attachment patterns. Dependency is a more characteristic term for

anxious ambivalently attached people who have high levels of attachment anxiety. In a number of studies this notion was supported (Feeney and Noller 1990, Simpson 1990, Collins and Read 1990, Feeney and Noller 1991).

1.9. Attachment and Self-esteem

Sense of lovability and being worthy of love, which are characterized as underlying dimensions of the attachment styles through mental model of self by Bartholomew and Horowitz (1991).

Bowlby (1969), reported that “attachment theory thus implies that beliefs and feelings about the self, especially social and global self-esteem are determined in part by the responsiveness of the caregiving environment...” (p5). Number of studies found that attachment patterns are significantly related to levels of self-esteem. Secure and dismissing attachment groups reported higher levels of self-esteem than those with those with fearful and preoccupied individuals (Bartholomew and Horowitz 1991, Feeney and Noller 1990, Simpson 1990, Feeney and Noller 1991). A study done by Bylsma, Cozzarelli and Sümer (1997) tried to investigate the overlapping relations between attachment and self-esteem in terms of self-perception of competence in specific domains. As they expected, the results indicated that early attachment experiences were among the important determinants of self-esteem. These experiences influence the one’s self sense of pride and shame which are developed “ prior to make complex judgments and that continues to exist independent of specific self-perceptions later in life.” (Bylsma, Cozzarelli and Sümer, 1997)

1.10 Maintaining Strategies for Romantic Relationships

According to Bowlby, infant is innately equipped with a repertoire of species-characteristics behaviors that promote a proximity to a caregiver. These behaviors include crying, cooing, and smiling in order to stimulate the caregiver's attention. Infant also follows and maintains contact with the caregiver to satisfy the security need and explore environment. Throughout the life span, attachment relationships continue to be important (Ainsworth, 1982; Bowlby, 1977, 1980, 1982). Main attachment figure during the adulthood period is usually the romantic partner. Attachment in adult romantic relationship is the experience of security and comfort obtained from the relationship and it is also a relatively long enduring tie. Partner is important as a unique individual and cannot be replaced with another. Therefore, attachment system influences maintenance of the present romantic attachment relationships.

Researchers frequently noticed that jealousy is a complex and strong emotion as similar to attachment system, it is also important for maintaining of relationship. According to Clanton (1981), and Constantine (1976), jealousy motivates overcoming the problems in romantic relationships. Davis (1948) noted that jealousy is a "fear and rage reaction fitted to protect, maintain and prolong the intimate association of love". Threats to relationship like jealousy should motivate efforts to protect it. In a number of studies, it was confirmed by Sharpsteen (1991), Hazan (1991), White (1981), Bryson and Wehmeyr's (1988) findings that subjects who induced a jealousy provoking situation were more likely to work on maintaining the relationships and less likely to end their

relationship. In sum basic motivation in both attachment and jealousy system is to maintain the close relationships.

Although there are different ways of coping with jealousy, Bryson (1977) stated that possible coping strategies fall into two major goal-oriented categories: Attempts to maintain self-esteem and attempts to maintain the relationship. These two major orientations, when classified into four categories, seem to match four category attachment styles as shown in Figure 4. For example, people who have a secure attachment would probably try to maintain both self-esteem and relationship in the way of negotiation a mutually acceptable solution and open communication. Whereas, fearful individuals would probably show self-destructive behaviors because of their negative mental model of self and others. Moreover, those people would neither try to maintain self-esteem nor maintain relationship.

		RELATIONSHIP	MAINTAINING
		<i>Yes</i>	<i>No</i>
ESTEEM	<i>Yes</i>	Negotiating a mutually acceptable solution (Secure attachment)	Verbal/ physical attacks against the partner (Dismissing attachment)
MAINTAINING	<i>No</i>	Clinging to the relationship (Preoccupied attachment)	Self-destructive behaviors (Fearful attachment)

Figure 4: Self-esteem and relationship maintaining. Source: Bryson (1977).

Radecki-Bush et.al. (1993) similarly argued that the threat of separation from an attachment figure (one's romantic partner) motivates people to seek physical and psychological proximity to the attachment figure. Literature on both infants and adults provided consistent findings indicating that the effects of separation change in terms of individual differences in attachment styles (Finney, Kirkpatrick 1996). When threat of separation from or loss of a romantic partner when attributed to a third person, jealousy is triggered just as threats to an attachment relationship triggering distress.

Previous research has shown consistent differences in the emotional experience people have in their personal relationships. Attachment theory speculates that these affective and interpersonal experiences are guided by stable internal representations (mental models) and these representations also provide a base for regulation of their affect (Kobak and Sceery, 1988, Brennan and Shaver 1995). Early experiences of stressful and insecure environments are associated with dysregulation of affect in later life. The mother's responsiveness to the child influences the development of affect regulation, infants whose signals of distress are not responded appropriately adopt their environments in different ways. They either chronically hyperactivate or deactivate their feelings. Since, jealousy is an emotional complex, when people are faced with this kind of problem, their responses to it would be influenced strongly by their attachment history on the way they deal with it. For example, secure use appraisal effectively as a primary method for controlling negative affects, they have relatively low level of anxiety and they rarely use self-blame and criticism for assessing situations. However, insecure individuals have complementary features of secure individuals (Fuendeling, 1998).

In that respect, because jealousy produces emotional responses, the aim of this study is to provide a deep understanding of how individual differences influence experiences, expressions, and coping strategies of jealousy on the basis of fundamental attachment dimensions, namely anxiety and avoidance dimensions.

1.11 Hypothesis and Research Questions

The primary focus of this study is to examine the impacts of the underlying dimensions of attachment, anxiety and avoidance on expressing, experiencing, and coping due to jealousy. The relationship between attachment and jealousy will be investigated within the framework of model displayed in figures 4 and 5. People with different attachment patterns are expected to display specific reactions to jealousy involving situations consistent with their anxiety / avoidance dimensions and attachment style specific patterns. Specifically, within the framework of causal models, mental models of attachment are hypothesized to have influence both directly on expressing, experiencing, coping and behaving violently and indirectly through by mediation with dependency and inadequacy. Inadequacy and dependency are the mediating factors because they have been found to be important determinants of jealousy (e.g. Buunk, 1991; White, 1981) and they are also strongly influenced by underlying attachment dimensions. The first important factor, dependency concerns the emotional involvement in the relationship, i.e., to what degree a person is emotionally affected by the partner's action. In this respect, individual differences play an important role. For example, individuals who are preoccupied would show the highest rates of dependency. This is because individuals with preoccupied attachment patterns would be more sensitive to their partner's actions as they are over-

involved and having problems with their own autonomy. In contrast, dismissive individuals are compulsively independent and try to avoid closeness and intimacy so these people show the lowest rates of jealousy. Besides dependency, inadequacy is also a mediating factor since White (1981) has identified perceived inadequacy as an influential variable for jealousy, vigilance and worrying. Presumably, someone who feels inadequate is likely to find threats to self-esteem more salient than threats to relationship. Therefore, a person who has a preoccupied attachment pattern with negative self and positive others mental models would show more jealous responses when threat is attributed to one's own inadequacy.

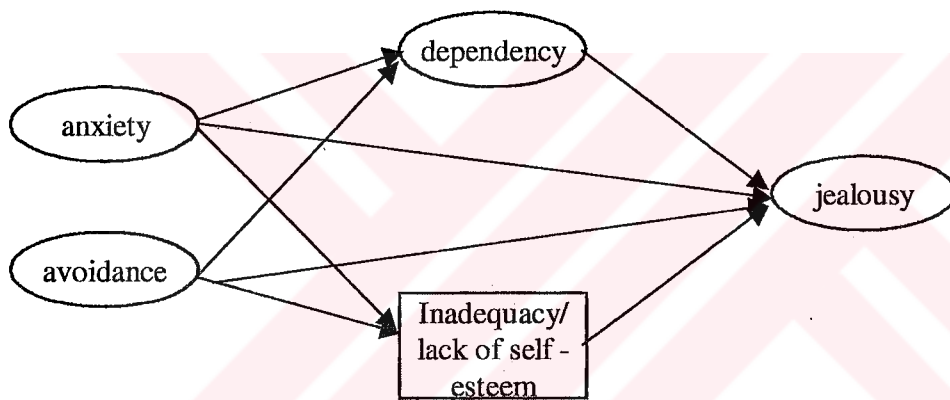


Figure 5: Proposed model 1.

In this study, it is expected that the response of an individual with dismissing attachment pattern would be anger at being betrayed, a feeling of being cheated, being trickled and being unjustly treated accompanied by anger. Secondly a securely attached individual's emotional response would be disappointment because one does not expect the partner to be unfaithful and one feels the partner's affair influences the intimacy of the relationship negatively. This is because these individuals have positive expectations from

and belief in others. The responses that are expected from a preoccupied individual would be feeling of self-doubt, (i.e. feeling uncertain and inadequate particularly) because such a person feels she/he is not meeting the standards of the partner.

The occurrence of jealousy potentially damages a person's self-concept and the image that is portrayed to others. In order to cope with this damage, there is an attempt to change or influence the self, the partner, the relationship or the situation. It is possible that attachment style patterns also influence the coping strategies. For example, dismissively attached people will try to protect their self-esteem whereas preoccupied people will try to protect their relationship. Across many cultures, jealousy is a major cause of homicide, family violence and wife battering. When the magnitude of jealousy is considered, it is powerful enough to provoke violence and sometimes mortal actions. The direction of the jealousy-related violence can depend on attachment pattern. Dismissing people would probably direct this violence toward the other person (partner or third person). On the other hand, preoccupied person would probably direct the violence toward himself or herself.

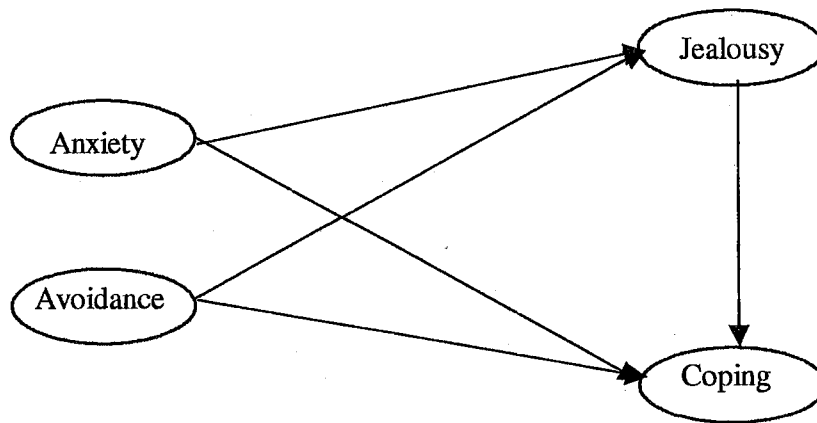


Figure 6: Proposed model 2.

In path models, the dotted arrows show weak relations while the solid arrows show expected strong relations.

Hypothesis on the basis of attachment styles:

H1: Those with preoccupied attachment style would be more likely to report high levels of jealousy those with secure and dismissive styles.

H2: Those with dismissive attachment pattern would show more anger toward the interloper, those with secure attachment pattern would show more disappointment and those with preoccupied pattern would show more self-doubt and those with a fearful attachment would show more fear in response to jealousy.

H3: Those with preoccupied attachment pattern would show more jealous reaction when threat is attributed to the self than those with other attachment patterns.

H4: Those with dismissing attachment pattern would try to protect self-esteem, those with preoccupied pattern would try to protect the relationship, those with secure attachment pattern would try to protect both the self esteem and the relationship those with fearful attachment pattern would try to escape from the relationship in order to cope with the feeling of jealousy.

H5: Those with dismissing attachment style would show more aggression toward the others while those with preoccupied attachment pattern would show more aggression toward herself/ himself and those with fearful attachment pattern would show more aggression toward both herself/himself and others than those with other attachment patterns.

CHAPTER 2

METHOD

2.1. Pilot Study- Adaptation of Scales

Since some of the measures used in this study were translated from other languages and were employed for Turkish sample first time, a pilot study was conducted to examine the reliability of the scales.

2.1.1. Sample Characteristics

The sample consisted of eighty-three female (68.6 %) and thirty-eight male (31.4 %) college students. Mean age of participants was 23 years ranged from 18 to 33, ($SD=.46$). They were enrolled in different courses at Middle East Technical University. At the time of the study 95 of the participants were dating and 29 of them were male and 66 of them were female. Of the 91 dating participants, 26 were newly dating younger than 17 months, 31 were had a developed relationship ranging from 17 to 37 months and 33 of them were in longer relationships older than 37 months. Participants also completed several other questionnaires, which were selected to provide an evidence for initial convergent and discriminant validity. Participants received an extra credit for their

participation.

2.1.2. Measures

Aim of the pilot study was to understand the how well measures are suited to Turkish culture therefore participants completed a battery of questionnaires that were previously used in some other research in Turkey as well as measures which were translated into Turkish for this study.

2.1.2.1. Demographic Information

In this section of the questionnaire demographic information such as age, sex, department, SES were asked. Moreover, questions about the romantic relationships were asked such as length of the relationship and satisfaction etc. These questions were given in Appendix A.

2.1.2.2. Relationship Satisfaction Scale

This scale is a six-item seven-point Likert scale. This scale's Turkish version was previously used by Sümer and Güngör (1999) in various research. Previously specified selection criteria also used for these 6 items. A principle component analysis was performed without a rotation through SPSS analysis. 1 factor was extracted which explained 86% of the variance (eigenvalue=5.177). The Relationship Satisfaction Scale was found be highly reliable with alpha of .96.

2.1.2.3. Faith in People

This 6-item scale developed by Rosenberg (1957) was used to measure the extent to which individuals have faith in others trustworthiness. Participants rated each item on a 7-point scale (1=disagree, 7=agree). The reliability coefficients for the scale was acceptable ($\alpha=.75$). Sümer used the Turkish version of this scale in various research. Principal component analysis with orthogonal rotation was used. 1-factor solution explained 47.4% of the variance. Two of the items did not meet the selection criteria. Their communality score is lower than .30. Thus they were eliminated from the analysis.

2.1.2.4. The Relationship Questionnaire(RQ)

The RQ was developed by Bartholomew. This self-report instrument is designed to assess adult attachment within Bartholomew's (1990) four-category framework. Respectively four general relationship styles that people often report was used in the measure with a following instruction: "Place a checkmark next to the letter corresponding to the style that best describes you or is closest to the way you are and scaling how much do you feel about it". This questionnaire was translated into Turkish by Sümer and Güngör (1999).

2.1.2.5. Rosenberg Self-esteem Scale

Self-esteem scale is a 10-item scale developed by Rosenberg (1965) and translated into Turkish by Tuğrul (1986). Principal component analysis results show that one factor had emerged and explained variance through this factor was 55%, alpha reliability of this scale was .90. All the items in the analysis satisfied criteria that were

mentioned above and all they were included in the analysis.

2.1.2.6. Emotional Dependency Scale

Buunk (1981) developed the emotional dependency scale with 9 items each rated in 5-point scale, it contains items that refer directly to the Comparison Level of Alternatives as well as the degree of attachment and interdependency. Original internal consistency was .81. However, in the analysis 7-point scale was used (from 'totally agree' to 'totally disagree') rather than original 5-point scale. Translations and back translations were made during adaptation. This scale was also constructed one factor which explains 48.2% of the variance. It involves items like 'I can't imagine what my life would be like without my partner', 'it would be difficult for me to have to live without my partner', 'it would be difficult for me to find any other person with whom I would be so happy as with my present partner'.

2.1.2.7. Multidimensional Jealousy Scale (MDJS)

Multidimensional Jealousy Scale was developed by Pfeiffer and Wong (1987) which has three sub-scales; cognitive, emotional and behavioral jealousy. The scale was developed through factor analytic refinement of faced valid items. Reliability of the each sub-scales was high ranged from .80 to .90. Moreover, inter-scale correlations were generally in the .30's. 24-item 7-point scale with endpoints labeled 'never' to 'all the time'. Multidimensional Jealousy Scale was not previously used in a research in Turkish culture. First of all, this scale was translated to Turkish and appropriateness of this

translation was examined by several researchers. Original items showed high agreement with the back translations.

In the original analysis of the scale, three factors emerged. These three factors construct three sub-scales; cognitive jealousy, emotional jealousy and behavioral jealousy. Consistent with the original study, principal axis factoring with orthogonal rotation was used in the current analysis. These factors explain 61% of the variance. The first factor, cognitive jealousy ($\alpha = .91$) had items measuring cognitive side of jealousy including 'I suspect that X is secretly seeing someone of the opposite sex' and 'I think that some members of the opposite sex may be romantically interested in X'. This factor explained the 23% of the total variance (eigenvalue=8.444). The second factor tapping behavioral jealousy ($\alpha=.86$) included 8 items which were related with behavioral side of jealousy. For example, 'I look through X's drawers, handbag, or pockets', 'I call X unexpectedly just to see if s/he is there'. This factor explained 21% of the total variance (eigenvalue =4.780). The last factor was emotional jealousy. This factor explained 18% of the variance. Its value was 4.0. This sub-scale involved items such as 'X comments to you on how great looking a particular member of the opposite sex', 'X shows a great deal of interest or excitement in talking to someone of the opposite sex'. Alpha level of this sub-scale was .86. Factor analysis results for this scale could be seen in table 1.

Table 1: Factor Loadings for Multidimensional Jealousy Scale

	Emotional J	Behavioral J	Cognitive J	H2
MDJS18	0.88			0.83
MDJS21	0.85			0.77
MDJS22	0.84			0.77
MDJS19	0.83			0.75
MDJS16	0.79			0.70
MDJS23	0.61	0.32		0.47
MDJS17	0.56		0.30	0.44
MDJS20	0.52			0.32
MDJS9		0.84		0.80
MDJS12		0.82		0.70
MDJS15		0.77		0.68
MDJS8		0.72		0.63
MDJS13		0.69		0.52
MDJS14		0.59		0.44
MDJS11		0.51		0.30
MDJS10*		0.39		0.18
MDJS2			0.81	0.69
MDJS4			0.70	0.50
MDJS6			0.70	0.60
MDJS3		0.31	0.63	0.54
MDJS7	0.31		0.62	0.56
MDJS1			0.61	0.41
MDJS5			0.61	0.38
Eigenvalues	8.45	2.48	2.03	
Explained Variance	21.96	19.06	15.33	
Alpha Reliability	0.86	0.88	0.91	
* under 30 communality score				

2.1.2.8. Interpersonal Relationship Scale

Interpersonal relationship scale was developed by Hupka and his colleagues in 1977 (Hupka and Bachelor, 1977). The original scale was consisting of 27 items and six subscales. However, in this analysis, four sub-scales were used with 16 items. These are trust, dependency, self-deprecation and sexual permissiveness. These sub-scales were chosen because they are conceptually related to jealousy and adult attachment. Participants used a 7-point scale in pilot study to indicate the extent of agreement with each item from strongly agree to strongly disagree.

Factor analysis by using principal axis factoring with varimax rotation found four factors. These four factors which accounted for 58.2% of the total variance.

The first factor was *self-deprecation/envy*. It explained 25.2% of the total variance (eigenvalue=4.034). It involves items like 'I do not know why', 'but I usually seem to be underdog', 'it is somewhat annoying to see others have all the luck in getting the best dating partners'. Alpha of this factor was .89.

The second factor was labeled as *trust* which explained 13.4% of the total variance (eigenvalue=2.14). It include items such as 'I am confident that my lover is not cheating behind my back', 'when I am away from my mate for any length of time, I do not become suspicious of my mate's whereabouts', 'I see my mate as a faithful person'. The alpha value of this subscale was .87.

The third factor was *dependency*, which explained 12.3% of the total variance (eigenvalue=1.97). Some items involved in this factor were, 'I often feel I could not exist without him/her', 'life would not have much meaning without him/her'. The alpha value

of this subscale was .76.

The fourth factor was labeled as *sexual permissiveness*, which explained 7.24% of the total variance (eigenvalue=1.16). The items were 'I want my lover to enjoy sex only with me', 'it would not bother me if my lover had satisfying sexual relations with someone else' and 'when my lover goes out with another wo/man I become physically upset'. This item cross load with the dependency factor and has a difficulty in translation to Turkish. Thus this item was eliminated form the analyses. Alpha level of this factor was .67. Factor analysis results for the Interpersonal Relationship Scale could be seen in table 2

Table 2: Factor Loadings for Interpersonal Relationship Scale

	1	2	3	4	h2
IRS15	0.83				0.77
IRS16	0.74				0.58
IRS10	0.70	-0.32			0.62
IRS13	0.68				0.49
IRS14	0.68				0.51
IRS11	0.67				0.55
IRS12	0.62				0.44
IRS8		0.88			0.86
IRS7	-0.42	0.84			0.89
IRS9	-0.40	0.54			0.46
IRS2			0.90		0.83
IRS1			0.76		0.60
IRS3*			-0.50		0.28
IRS5			0.46	0.60	0.70
IRS6				0.57	0.33
IRS4				0.54	0.40
Eigenvalues	4.03	2.15	1.97	1.16	
Explained Variance	25.21	13.40	12.30	7.25	
Alpha Reliability					
* under 30 communality score					
Factor 1	Self deprecation				
Factor 2	Trust				
Factor 3	Dependency				
Factor 4	Sexual possessiveness				

2.1.2.9. Inadequacy Measure

Seven items which measure the degree of the person's feelings of inadequacy in the current relationship. Conceptually these items related to partner's perceived dissatisfaction in the relationship were self-attributed. Some items were taken by White's (1981) research, for example 'I wish I were a different person so my relationship would be better', 'I like how I am around my partner'(reverse item), and 'I feel confident of my ability to keep the relationship growing' (reverse item). Moreover, some of other items were written by the researcher, for instance 'I think that my partner deserves someone better than me', 'I believe that I have the characteristics that make my partner happy', 'I feel that I am inadequate for my partner', 'I think that my partner is ashamed of me'. Principal component analysis was made. These seven items loaded on one factor which explains 52.4% of the variance. Alpha level of this measure was .83.

2.1.2.10. Measures of Coping with Jealousy

This measure was composed of 17 items that were related to coping behaviors of jealousy. Initial analysis suggested a five-factor solution, which explains 45.5% of the variance. However, 3 of these five factor's eigenvalues was greater than 1, scree plots and analyzing of the item loading suggesting that 3 factor solutions were more suitable. After forcing three factor solution the explained total variance was equal to 45.5%. The first factor accounted for 16.5% of the total variance (eigenvalue=2.208). The sub-scales with high loading on this factor (stony silence, suffering silently and covertly, suffering

silently and visibly, sarcasm) seemed to reflect an “internalization” of the problem. This factor’s alpha was .76. The second factor accounted for 15.7 % of the total variance (eigenvalue=2.670). The sub-scales with high loading on this factor (physical violence, denial, screaming, throwing things) seemed to be associated with “externalization” of the problem. Alpha level of this factor was .67. The next factor accounted for 13.3 % of the total variance (eigenvalue=2.263). Sub-scales that loaded in this factor involved “joking” such as making a joke of it, finding the funny side. This factor has .70 alpha level. Factor analysis results for coping measures could be seen in table 3.

Table 3: Factor Loadings for Measures for Coping with Jealousy

	Internalization	Externalization	Joking	h2
COPING11	0.80			0.65
COPING5	0.79			0.63
COPING16	0.62			0.41
COPING8	0.57			0.40
COPING10*	0.35			0.18
COPING4		0.69		0.49
COPING13		0.66		0.47
COPING2		0.62		0.46
COPING12		0.62		0.43
COPING14*		0.35		0.15
COPING6			0.88	0.78
COPING17			0.73	0.55
COPING7*			0.41	0.21
Eigenvalues	2.30	2.10	1.80	
Explained Variance	13.51	12.35	10.58	
Alpha Reliability				
* under 30 communality score				

2.2. Main Study

2.2.1. Participants

Three hundred and six participants who were currently in a romantic relationship participated in this study. Of the participants, 178 were female (58.2 %), 126 were male (41.2 %) and 2 participants (.06) did not disclose their gender. Participants were selected from three different universities in Ankara. While the majority of participants were dating students in the Middle East Technical University (219 and 71.6 %), % 28.4 were selected from two other universities, 29 (9.9%) of them were from Hacettepe University, 47 (15.8%) of them were from Bilkent University. Students from different universities were compared to examine whether there were significant differences on major variables by using one way ANOVA' s. Results showed that there were no significant differences among groups with the exception of dependency variable. A post hoc analysis with SNK indicated that participants attending to Bilkent University were less dependent to their partners than students from Hacettepe and Middle East Technical University.

The average age of the students in the sample was 21.41 years ($SD=2.49$). The mean duration of dating was 14 months ranging from 1 month to 11 years. Of the 306 dating participants, 101 were newly dating (i.e. the duration of dating was shorter than 6 months). Ninety had improved relationship ranging from 6 to 20 months, and 95 had relationships longer than 20 months. Moreover, to examine the role of the duration of the relationship in detail, correlations between duration of the relationship and major variables were computed. It was found that some major variables such as dependency ($r=.21$, $p<.001$) , emotional jealousy ($r=.16$, $p<.01$) and disappointment($r=.13$, $p<.05$), were significantly correlated with relationship length, indicating that as people have

longer relationship they become more dependent, jealous, and feel disappointment. Observing that the length of the relationship was important, this variable was used as a covariate in the remaining analyses. Of the students, 5.7% were attending to English prep-school, 27% were freshmen, 14% were sophomores, 17.7% were juniors, 17.7% were seniors and 11.7% were graduate students. To see whether there were significant group differences in terms of education duration, a series of One Way ANOVA's were performed on major variables which were used in the hypotheses and model testing. Results revealed no significant difference among students attending different classes with the exception of dependency. However, post hoc analysis with Duncan on dependency did not reach significance. The mean perceived happiness in the relationship by participants was 6.06 ($SD=1.26$) on a 7-point scale.

2.2.2. Procedure

In all universities, researcher contacted with the lecturers of various courses before the application of the questionnaire. After assurance of questionnaire's suitability for the courses, appointments for the application were arranged with the instructors. In the appointments, dating participants were asked if they were willing to fill out a questionnaire regarding their romantic relationships. All of the participants were assured about the confidentiality of their responses. Participants were especially asked not to identify their names on the questionnaire forms. Completing the questionnaires took approximately 40 minutes. After completion of the battery, participants were completely debriefed by giving information about the objectives of the study. Students voluntarily participated in the study and received an extra credit for their participation.

2.2.3. Measures

Multiple measures for certain variables were used since structural equation modeling which requires multiple indicators of latent variables were proposed in testing the main model suggested in this study. Four sets of measures were included in the questionnaire battery. First set of measures involved demographic information, the second set of measures consisted of attachment style measures, third set of questions contained jealousy related measures, and the final set of measures included other variables which were used in the suggested model.

2.2.4. Demographic Information

Demographic questionnaire included 21 questions about some basic demographic characteristics of the participants and their relationships. Some of them were about age, gender, education level and SES of the participants while the rest were related with relationship characteristics of the participants, such as duration of the relationship, expected length of the relationship, perceived happiness, and perceived satisfaction (Appendix A).

2.2.5. Attachment Style Measures

Attachment styles and underlying dimensions of attachment (i.e., mental models and dimensions of anxiety and avoidance) were measured via two well known attachment measures; Bartholomew and Horowitz's (1991) Relationship Questionnaire (RQ) and Brennan, Clark, and Shaver's (1996) Experiences in Close Relationship (ECR) scale.

2.2.5.1. Relationship Questionnaire (RQ)

As previously mentioned, the RQ involves four short paragraphs each describing Bartholomew's four-attachment prototypes (secure, preoccupied, fearful and dismissing). Participants both rated how much they were suited to the paragraphs on 7-point Likert type of scale and selected one of the paragraphs that describes them best. Four continuous attachment ratings were used to compute scores for the mental models of self and others through Griffin and Bartholomew's (1994) outlines. For computing mental model of self dimension, the sum of each individual score on the fearful and preoccupied items were subtracted from the sum of each individual score on the secure and dismissing items. Mental model of others was computed by adding each individual score on the secure and dismissing items and then subtracting from the sum of the scores on the fearful and preoccupied subscales. Previous studies in both western cultures (e.g. , Bartholomew and Horowitz, 1991; Griffin and Bartholomew 1994) and Turkey (Sümer and Güngör 1999) demonstrated that the RQ has satisfactory reliability and construct validity (Appendix B).

2.2.5.2. Experiences in Close Relationships (ECR)

The ECR was recently developed by Brennan et. al (1998) on the basis of a number of previously used attachment scales. Before developing the ECR, Brennan et. al (1998) searched for all of the related literature and had a pool of 323 items from 60 attachment sub-scales. Higher order factor analysis was performed through principal

component analysis to the 60 subscales and two factors were obtained. Finally, a new self-report measure of attachment was constructed on the basis of the two major dimensions; anxiety and avoidance, consisting 36 items, 18 items for each dimension. Each item is rated on a seven-point Likert scale. In the original study, items related to the avoidance dimension had .94 alpha and anxiety dimension had .91 alpha reliability. The ECR measure was translated into Turkish by Sümer (1999) and the ECR's Turkish version was previously used in two studies conducted in Turkey (Sümer and Güngör 2000, and Güngör 2000). However, since this measure has been newly developed, reliability and validity of this measure were not fully explored. Therefore, in this study, the factor structure of the subscales was specifically examined.

Principle component analysis was performed to test the factor structure of the ECR subscales for the current study. Initial analysis indicated that two-factor solution was appropriate, and therefore, solution was forced to the two factors which yielded two clear components representing the dimensions of anxiety and avoidance and 35.84% of the variance was explained by these two components. The first component tapping avoidance dimension included 18 items ($\alpha=.89$), 8 of which were negatively keyed. This component explained 20% of the total variance (eigenvalue=7.21) Second component which represents anxiety dimension consisted of 18 items ($\alpha=.86$), one of which was is negatively worded. This second component explained 15.8% of the total variance (eigenvalue=5.67). Reliability and factor structure of the scale showed that the ECR provides a reliable measure for the current sample. Table 4 shows the reliability coefficients and results of factor analysis.

In the original study, both hierarchical and nonhierarchical cluster analyses were

used to assign participants into attachment patterns by using two underlying attachment dimensions; anxiety and avoidance. In the current study, nonhierarchical cluster analysis was used to classify participants into attachment groups. Participants in the 'secure' category were expected to be scored low on both anxiety and avoidance dimension. As expected, secures were scored low on both anxiety ($M=2.54$) and avoidance ($M=1.87$) dimensions in contrast to the fearful individuals who were scored high on both anxiety ($M=5.25$) and avoidance($M=2.58$) dimensions. Moreover, dismissing individuals showed the highest avoidance ($M=3.78$) and low anxiety ($M=3.44$). On the other hand, preoccupied individuals were expected to be scored the highest on anxiety and lowest on avoidance. The cluster that corresponds to this group had a mean score of 3.88 for anxiety and 1.84 for avoidance. Although cluster analysis results provided a well distinction between dismissing and secure groups, fearful and preoccupied groups were not distinguished properly. The secure attachment style was reported to be the most frequently observed style by a number of studies regardless of cultural differences and so it is accepted as a norm. However, the results of the ECR's cluster analysis in this study showed that the ratio of the secure attachment group was less frequent than that of the preoccupied group, which formed the majority of participants with relatively high percentage.

Table 4: Results of Principal Component Analysis on the items of the ECR

	Avoidance	Anxiety
Avoid 15	.73	
Avoid 17	.71	
Avoid 25	.66	
Avoid 3	.66	
Avoid 27	.66	
Avoid 29	.63	
Avoid 13	.63	
Avoid 11	.63	
Avoid 19	.62	
Avoid 31	.61	
Avoid 33	.60	
Avoid 35	.58	
Avoid 7	.57	
Avoid 23	.57	
Avoid 9	.55	
Avoid 5	.51	
Avoid 21	.45	
Avoid 1	.35	
Anxiety 30		.64
Anxiety 6		.63
Anxiety 2		.61
Anxiety 32		.61
Anxiety 24		.60
Anxiety 34		.60
Anxiety 8		.59
Anxiety 18		.58
Anxiety 20		.58
Anxiety 14		.57
Anxiety 36		.56
Anxiety 26	.34	.50
Anxiety 4	.40	.48
Anxiety 28		.44
Anxiety 22		.44
Anxiety 12		.36
Anxiety 10		.33
Anxiety 16		.32
Eigenvalues	7.21	5.69
Explained variance	2.04	15.84
Alpha Reliability	.89	.86

* Please see the items on Appendix C.

It was expected that the number of participants with preoccupied attachment style would be significantly larger than that of people with other insecure attachment styles due to cultural influences. However, the distribution of participants with different attachment styles was not consistent with previous studies conducted in Turkey and other cultures.

Comparison of Bartholomew's four-category self-classification measure and cluster analysis result on the subscales of the ECR are presented in the Table 5. Relatively moderate percentage (34%) of participants were classified in the same particular attachment group by both measures. 38.8% of the 139 individuals classified to be secure by RQ were in the secure group of ECR's cluster analysis, while 36.1%, 18.1%, and 9.0% of them were found to be in dismissing, preoccupied and fearful groups respectively by the ECR. Of the 51 participants who were found to be preoccupied by the RQ, 49.0% were classified as fearful by the ECR while only 23.5% were found to be preoccupied. In contrast, the majority of the RQ's fearful individuals (36.7%) were classified into the preoccupied group by the ECR, whereas only 23.3 were categorized into the fearful group by the ECR. Of the individuals who are found to be in the dismissing group by the RQ, 38.5%, 34.6%, 15.4%, and 11.5% were classified as dismissing, secure, fearful, and preoccupied respectively by the ECR.

Table 5: Crosstabulation of the ECR and the RQ.

		<i>Bartholomew's RQ</i>				<i>Total</i>
		1	2	3	4	
Brennan et al's ECR	1	54	3	7	9	73
	2	10	7	25	4	46
	3	50	11	12	3	76
	4	25	9	7	10	51
Total		139	30	51	26	246

Note: 1=secure, 2=fearful, 3=preoccupied, 4=Dismissing

Although multi-item measures have been shown to have more stable results and strong predictive power (Carnelley et.al, 1994; Scharfe and Bartholomew (1994), Sümer and Güngör, 1999) than single item measures, Bartholomew's four-category measure was used to assign the participants into particular attachment groups in this study to be consistent with previous studies. In addition, since Brennan et. al's measure did not satisfactorily discriminate between fearful and preoccupied attachment patterns and the preoccupied group seemed to be overrepresented in this sample the ECR was not used in category analyses. Therefore, Bartholomew's four category self-classification was used in classifying participants into the four attachment group and the ECR was used in forming the two dimensions of attachment; avoidance, anxiety (Appendix C).

2.2.6. Jealousy Related Measures

2.2.6.1. Dependency Measures

As explained in the pilot study, dependency was measured by the following scales.

2.2.6.1.1. Emotional Dependency Scale (EDS)

As explained in the pilot study, this nine-item scale was developed by Buunk (1981). It is a seven point Likert scales. In the original study, internal consistency was .81, in the pilot study alpha was .86 and finally in the current study it was .87 suggesting a satisfactory reliability coefficient (Appendix D).

2.2.6.1.2. Interpersonal Relationship Scale (IRS)

This scale was developed by Hupka and colleagues (1977). The scale had 27 items in its original format, However, in this study 16 of them were used in a 7-point scale. The scale contains a three-item dependency subscale which had a .76 alpha level in the pilot study and .70 alpha level in the current study and a seven-item self-deprecation/envy subscale which had a .89 alpha reliability in the pilot study and .84 alpha level in the current study (Appendix E).

2.2.6.2. Inadequacy Measures

2.2.6.2.1. Self-esteem Scale

Rosenberg's (1965) ten-item self-esteem inventory was used on a seven point Likert format to measure self-esteem. This scale was translated into Turkish by Çuhadaroglu (1986). This scale has been previously used in different studies (e.g. Çuhadaroglu 1986; Tuğrul, 1994 and Sümer and Güngör, 1999). In Tuğrul's (1994) study, alpha reliability of the scale was found as .76 and in Sümer and Güngör's (1999) study alpha reliability was found as .85. Alpha reliability of the scale in the pilot study was .90 and alpha reliability in the current study was .86 (Appendix F).

2.2.6.2.2. Feelings of Inadequacy

Feeling of inadequacy was specifically measured via a total of 7 items, three items were taken from White's (1981) study, and four new items were developed by the researcher on the basis of literature reviewed. Newly added items were 'I think that my partner deserves someone better than me', 'I believe that I have the characteristics that make my partner happy', 'I feel that I am inadequate for my partner' and 'I think that my partner is ashamed of me'. While alpha reliability of this measure was .87, in the pilot study and it was .76 in the current study (Appendix G).

2.2.7. Jealousy Measures

2.2.7.1. Multi-dimensional Jealousy Scale (MDJS)

The MDJS was developed by Pfeiffer and Wong (1987), including three sub-

scales measuring cognitive, emotional and behavioral dimensions of jealousy. In the original study, reliability of subscales ranged from .80 to .90. The reliability analysis of the scale's Turkish version in the pilot study showed that alpha reliability was .91 for cognitive jealousy, .86 for behavioral jealousy, and .86 for emotional jealousy. In the current study alpha was .81 for emotional jealousy subscale, .80 for behavioral jealousy subscale, and .84 for cognitive jealousy subscale, indicating satisfactory internal consistency for all subscales (Appendix H).

2.2.8. Measures of Coping with Jealousy:

This measure was developed by Pines in 1998. It consists of 17 items which are related to coping behaviors with jealousy. In the pilot study, results of the factor analysis showed that three factors emerged which were named as externalization ($M=2.81$), internalization ($M=3.49$), and joking ($M=3.07$) with alpha levels ranging from .67 to .76. In the current study, alpha levels ranged from .66 to .82 (Appendix I). These factors were slightly correlated with each other ranging from .10 to .25, yet internalization and joking was totally unrelated to each other.

2.2.9. Other Measures

2.2.9.1. Affective Reactions to Partner's Extradyadic Sexual Behaviors

In this measure, participants were asked to imagine a situation in which their partner would tell them that s/he had sexual contact with a third person. A list of eleven emotional reactions to the given situation was presented to the participants. Then,

participants were requested to indicate how they would feel regarding each of the eleven emotional reactions for the given situation, on a seven-point Likert scale (1: not at all, 7: extremely). The emotional reactions were anger, fury, betrayal, sadness, disappointment, powerlessness, inadequacy, self-doubt, fear, hostility and worry. Principal component analysis on these reactions with varimax rotation was performed to test the factor structure of the scale. Table 6 shows the results of this analysis. Three factors emerged in the initial analysis supported by the test of scree plots, and eigenvalues also suggested that three factors were interpretable. These factors explained 69.7% of the total variance. The first factor consisted of the reactions of inadequacy, self-doubt, fear, powerlessness and worry ($\alpha=.89$). This factor was named as “miserable reactions” and explained 31.72% of the total variance (eigenvalue=3.49). Second factor consisted of the adjectives of fury, envy, and anger ($\alpha=.76$). This factor was named as “hostile reaction”. It explained 9.3% of the total variance (eigenvalue=2.12). Although anger had a crossloading in the analysis, it was more suitable to be placed in this factor solution. The last factor consisted of sadness, disappointment, and betrayal ($\alpha=.72$). This factor was called as “disappointed reaction”. It explained 18.7% of the total variance. Reliabilities of the subscales varied from .72 to .89. These three factors were moderately related to each other with correlations ranging from 0.15 to 0.34 (Appendix J). Results could be seen in table 6.

Questions regarding participants' jealousy reactions and past jealousy experiences were also asked. These questions were presented in (Appendix K).

Table 6: Results of Principal Component Analysis on the Items of Affective Reactions to Partner's Extradyadic Sexual Behaviors

	Components		
	Miserable	Hostile	Disappointment
Inadequate	.87		
Self-doubt	.85		
Fear	.82		
Powerless	.80		
Worried	.77		
Fury		.87	
Envy		.85	
Angry		.68	.42
Sad			.83
Disappointment			.78
Betrayed		.34	.69
Eigenvalues	3.49	2.12	2.06
Explained variance	31.73	19.29	18.72
Alpha Reliability	.89	.76	.72

CHAPTER 3

RESULTS

Before testing specific hypotheses, all of the variables included in the analysis were examined through various statistical techniques in order to maintain accuracy of the data. It was observed that out of 306 cases, no variables contained more than 2% missing cases. In order to extract univariate outliers, z-transformation was used. Eight cases with z-value greater than 3.29 in self-esteem, emotional jealousy and cognitive jealousy variables were extracted from the analysis. Using Mahalanobis distance with $p < .001$, three cases were identified as multivariate outliers, and these cases were also removed. After removal of outliers, 295 cases remained. At the end of these various analyses, it was concluded that the data were suitable for multivariate analysis satisfying linearity, homoestatisticity, and normality assumptions.

Table 7: Descriptive Statistics for all Variables.

	Variables	Mean	SD	Possible range	Obtained Range	Alpha
<i>Attachment Variables</i>						
	RQ Secure	4,61	1,69	1.0 - 7.0	1.0 - 7.0	
	RQ Fearful	2,87	1,68	1.0 - 7.0	1.0 - 7.0	
	RQ Preoccupied	3,21	1,85	1.0 - 7.0	1.0 - 7.0	
	RQ Dismissing	2,64	1,72	1.0 - 7.0	1.0 - 7.0	
	RQ Model of Self	2,30	3,64	-12.0 - 12.0	-10.0 - 12.0	
	RQ Model of Other	1,17	3,97	-12.0 - 12.0	-9.0 - 10.0	
	ECR Anxiety	3,55	0,99	1.0 - 7.0	1.3 - 6.3	0,86
	ECR Avoidance	2,45	0,98	1.0 - 7.0	1.0 - 5.4	0,89
<i>Dependency</i>						
	Emotional Dependency	4,26	1,33	1.0 - 7.0	1.3 - 7.0	0,87
	Dependency	3,94	1,13	1.0 - 7.0	1.0 - 6.7	0,70
<i>Jealousy</i>						
	Emotional Jealousy	5,63	0,91	1.0 - 7.0	2.6 - 7.0	0,81
	Behavioral Jealousy	2,51	1,11	1.0 - 7.0	1.0 - 6.5	0,80
	Cognitive Jealousy	1,94	0,99	1.0 - 7.0	1.0 - 5.3	0,84
<i>Coping</i>						
	Internalization	3,49	1,65	1.0 - 7.0	1.0 - 7.0	0,82
	Externalization	2,81	1,24	1.0 - 7.0	1.0 - 7.0	0,66
	Joking	3,07	1,58	1.0 - 7.0	1.0 - 7.0	0,68
<i>Emotional Reactions</i>						
	Hostile	5,20	1,58	1.0 - 7.0	1.0 - 7.0	0,76
	Disappointment	6,19	1,14	1.0 - 7.0	2.0 - 7.0	0,72
	Miserable	3,30	1,70	1.0 - 7.0	1.0 - 7.0	0,89
<i>Other Related Measures</i>						
	Self Esteem	5,80	0,96	1.0 - 7.0	2.5 - 7.0	0,86
	Inadequacy	1,94	0,87		1.0 - 4.86	0,76
	Satisfaction	5,79	1,27	1.0 - 7.0	1.0 - 7.0	
	Relationship length	18,06	18,25		1.0 - 132.0	
	SES	4,49	0,94	1.0 - 7.0	1.0 - 7.0	

* RQ subscales consisted of single items (paragraph), so alphas cannot be computed.

3.1. General Description of Responses

Descriptive statistics, (mean, standard deviation, range and reliability coefficient) for the major variables are presented in the Table 7. Inter-correlations between multiple measures of the same construct are presented in Tables 8 and 9 for attachment styles and mental models, and jealousy related measures respectively.

As mentioned in the previous section, the RQ was used to assign participants into attachment style categories. In this measure, there was a paragraph for each attachment pattern and respondents selected the paragraph that prescribes them best. Moreover, participants rated each paragraph on seven point Likert type of scale in terms of prescribing themselves. For some respondents, the selection was not so pure that they rated two or more paragraphs with the same score or some of the respondents did not select the paragraph to which they rated with the highest score. Therefore, to make the categories clear, participants who were inconsistent in their ratings and paragraph endorsement were excluded from the analyses in which attachment styles were used as categorical variables. This resulted in diminishing of the sample size from 295 to 249 in those analyses. According to Kirkpatrick and Davis (1994), these people who were eliminated from the analyses using such a procedure were those who were not falling into an attachment category exactly. Of the remaining 249 participants, 140 (56.2%) were categorized as secure, 32 (12.9%) were categorized as fearful, 51 (20.5%) were categorized as preoccupied and 26 (10.4%) were categorized as dismissing.

Table 7 shows the mean, standard deviation and range of the major variables. Among the attachment groups, secure attachment style had the highest mean security

score ($M = 4.61$). The dismissing attachment style had the lowest mean ($M=2.64$) indicating that the secure attachment was the most descriptive and the dismissing attachment was the least descriptive for this sample. Examination of the ECR's two dimensions indicated that overall, participants reported higher levels of attachment anxiety ($M=3.55$) than attachment avoidance ($M=2.45$). As seen in Table 7, respondents were moderately dependent on their partners on the average. The emotional dependency scale showed that the participants were emotionally dependent on their partners with mean of 4.26 while the dependency subscale of the IRS showed that they were less relatively dependent with mean of 3.94. These two scales were highly correlated with each other ($r=0.59$). Participants' mean self-esteem scores were relatively high with 5.80 mean on 7-point scale. Moreover, inadequacy scores were relatively low on the average of 1.94. These two were also highly negatively correlated ($r=-0.55$). As can be seen in Table 7, the participants were most reactive to emotional side of jealousy ($M=5.63$) and least reactive to cognitive side of jealousy ($M=1.94$) indicating that jealousy was perceived as an emotional experience rather than a cognitive appraisal. The correlation between the three subscales of the jealousy scales indicated that emotional and behavioral dimensions of jealousy were moderately correlated ($r=.30$) while emotional and cognitive dimensions of jealousy were independent from each other ($r=.08$). The correlation between cognitive and behavioral dimensions of jealousy, however, was relatively high ($r=.42, p<.001$).

Respondents mostly showed 'disappointed reactions' with 6.19 rather than 'hostile reactions' which had mean of 5.20. 'Miserable reactions' however had a relatively low mean ($M=3.30$).

Table 8: Correlations Between Attachment Variables

Variables	1	2	3	4	5	6	7	8
1. Secure	1,00							
2. Fearful	-0,38	1,00						
3. Preoccupied	-0,16	0,17	1,00					
4. Dismissing	0,02	0,16	-0,03	1,00				
5. Anxiety	-0,29	0,25	0,39	-0,14	1,00			
6. Avoidance	-0,15	0,22	0,10	0,31	0,10	1,00		
7. Model of self	0,67	-0,60	-0,62	0,39	-0,47	-0,07	1,00	
8. Model of other	0,56	-0,63	0,37	-0,56	0,02	-0,27	0,09	1,00

Correlation < .11, insignificant

Correlation > .12 and < .14 significant at .05 level

Correlation > .15 significant at .01 level

As can be seen in Table 8, correlations between related attachment variables were moderately high and consistent with previous studies. Results indicated that all intercorrelations were in the expected direction. For example, secure and fearful attachment styles (which were diametrically opposite of each other in the RQ) were significantly negatively correlated ($r = -.38$, $p < .05$). Also as expected, secure attachment style was significantly negatively correlated with anxiety dimension of the ECR ($r = -.29$, $p < .05$). Finally, model of self had a mean of 2.30 and model of others had a mean of 1.17. It is interesting to note that, preoccupied attachment was positively correlated with avoidance dimension this correlation was insignificant.

Correlations between two attachment dimensions (anxiety and avoidance) confirmed the relationships found in previous research (e.g.) Brennan and Shaver (1995). These two dimensions were independent from each other ($r = .10$, $p > .05$). As expected, the correlation between mental model of self and mental model of others dimensions of

Bartholomew RQ was insignificant ($r=.09$, $p>.05$). On the other hand, confirming the consistency between the two attachment measures mental model of self and anxiety dimensions were highly negatively correlated as expected ($r=-.47$, $p<.01$). Avoidance dimension was significantly negatively correlated with mental model of others in the expected direction ($r=-.27$, $p<.001$).

As can be seen in the Table 9, high correlations were obtained between conceptually related variables. For example, self-esteem and inadequacy were highly negatively correlated ($r=-.55$, $p<.001$). Similarly, emotional dependency and dependency showed .59 correlation. Emotional dependency and relationship satisfaction were also highly correlated ($r=.48$, $p<.001$) Internalization and miserable reaction indicated a .37 correlation.

As can be seen in Table 9, secure attachment style was positively correlated with self-esteem ($r= .35$, $p<.01$) and relationship protection ($r= .17$, $p<.05$). It also showed negative moderate correlation with anxiety ($r= -.29$, $p<.01$), miserable reaction ($r= -.27$, $p<.01$), inadequacy ($r= -.23$, $p<.01$), self-deprecation ($r= -.21$, $p<.01$), internalization ($r= -.20$, $p<.01$), behavioral jealousy ($r= -.16$, $p<.01$), emotional dependency ($r= -.15$, $p<.01$), and cognitive jealousy ($r= -.14$, $p<.01$), consistently with previous research. Fearful attachment style was positively correlated with anxiety ($r= .25$, $p<.01$), self-deprecation ($r= .24$, $p<.01$), avoidance ($r= .22$, $p<.01$), behavioral jealousy($r= .19$, $p<.05$), hostile reaction ($r= .17$, $p<.05$), and inadequacy ($r= .17$, $p<.05$).

Table 9: Correlations Between Attachment Styles and The Major Variables.

	Secure	Fearful	Preoccupied	Dismissing	Anxiety	Avoidance
Self-esteem protection	.06	-.03	-.12	.00	-.01	.09
Relationship protection	.17	-.06	-.10	-.09	.02	-.08
Self-esteem	.35	-.21	-.34	.09	-.43	-.11
Emotional dependency	-.15	.04	.09	-.13	.25	-.15
Emotional jealousy	-.14	.11	.06	-.04	.21	.01
Behavioral jealousy	-.16	.19	.15	.02	.30	.01
Cognitive jealousy	-.10	.10	.19	.10	.27	.19
Self-deprecation	-.21	.24	.34	.11	.40	.25
Dependency	-.06	.09	.00	-.14	.25	-.11
Miserable	-.27	.11	.19	-.03	.44	.12
Disappointed	-.02	-.02	.06	-.21	.30	-.11
Hostile	-.12	.17	.01	.00	.22	-.01
Inadequacy	-.23	.17	.29	.08	.30	.24
Internalization	-.20	.08	.24	-.01	.35	.07
Joking	.11	-.02	-.12	.02	-.10	.15
Externalization	-.09	.07	.05	.06	.13	-.03
Model of others	.56	-.63	.37	-.56	-.44	.02
Model of self	.67	-.60	-.62	.39	.01	-.18

Bold numbers indicate $p < .05$.

On the other hand it showed negative correlation with self-esteem ($r = -.21$, $p < .01$). Consistently, preoccupied attachment style was positively correlated with anxiety ($r = .39$, $p < .01$), self deprecation ($r = .34$, $p < .01$), inadequacy ($r = .29$, $p < .01$), internalization ($r = .24$, $p < .01$), cognitive jealousy ($r = .19$, $p < .05$), miserable reactions ($r = .19$, $p < .05$) and behavioral jealousy ($r = .15$, $p < .05$) while being negatively correlated with self esteem ($r = -.34$, $p < .01$), self esteem protection ($r = -.12$, $p < .05$) and joking ($r = -.12$, $p < .05$). Dismissing attachment style showed positive correlation with avoidance ($r = .31$, $p < .01$), while negatively correlated with disappointment ($r = -.21$, $p < .05$), anxiety ($r = -.14$, $p < .05$), dependency ($r = -.14$, $p < .05$) and emotional dependency ($r = -.14$, $p < .05$). On the other hand, anxiety dimension showed positive correlation with miserable reaction ($r =$

.44, $p < .01$), self deprecation ($r = .40$, $p < .01$), internalization ($r = .35$, $p < .01$), inadequacy ($r = .30$, $p < .01$), disappointed ($r = .30$, $p < .01$), behavioral jealousy ($r = .30$, $p < .01$), cognitive jealousy ($r = .27$, $p < .01$), emotional jealousy ($r = .21$, $p < .01$), emotional dependency ($r = .25$, $p < .01$), dependency ($r = .25$, $p < .01$), and hostility ($r = .22$, $p < .01$), while negatively correlated with self esteem ($r = -.43$, $p < .01$). Avoidance dimension were positively correlated with self-deprecation ($r = .25$, $p < .01$), inadequacy ($r = .24$, $p < .01$), cognitive jealousy ($r = .19$, $p < .01$), and miserable reaction ($r = .12$, $p < .05$), whereas, avoidance dimension were negatively correlated with emotional dependency ($r = -.15$, $p < .05$), and dependency ($r = .12$, $p < .05$).

3.2. Testing Hypotheses

For testing the relationship between the four attachment groups and other variables, and jealousy reactions, the RQ was used to assign participants into attachment categories and multi-dimensional jealousy scale was used for jealousy reactions with three subscales: emotional, behavioral and cognitive jealousy subscales.

3.2.1. Selection of Covariates

Prior to testing hypothesis, a number of analyses were accomplished to understand whether some of the demographic variables (e.g., gender, age) or relationship variables (such as, satisfaction, happiness) were significantly related to any of the major variables in the study to deal with as covariates. The covariates were selected through multiple regression analysis, the variables which have significant influence on dependent and independent variables would be held constant in the analysis. This procedure led to

the selection of 'gender' and 'relationship length' as covariates in most of the analyses.

3.2.2. Hypothesis 1

First hypothesis stated that those with preoccupied attachment style would be more likely to report high levels of jealousy than those with secure and dismissing style.

Between-subjects analysis of covariance was performed on jealousy experience for each of the jealousy subscales separately as dependent variable (i.e. emotional, behavioral and cognitive jealousy). The independent variable was attachment styles consisting of four categories (fearful, preoccupied, secure and dismissing) and, relationship length and gender served as covariates. After adjustment by covariates, results revealed that attachment styles did not have a significant effect on emotional jealousy and cognitive jealousy. Attachment styles, however, had a significant effect on behavioral jealousy ($F(3, 242) = 2.849, p < .05$). Post hoc analysis of behavioral jealousy through Duncan indicated that secure ($M = 2.29$) and fearful ($M = 2.82$) groups were significantly different from each other (See Table 10). Although preoccupied individuals had higher mean on behavioral jealousy ($M = 2.66$) than secures ($M = 2.29$) the difference was not significant. The strength of relationship was $\eta^2 = .034$. These results seem to partially support for Hypothesis 1.

Table 10: Result of the ANCOVA of Attachment Styles on Jealousy Dimensions:

	<i>Secure</i> <i>N=134</i> <i>M</i>	<i>Fearful</i> <i>N=30</i> <i>M</i>	<i>Preoccupied</i> <i>N=47</i> <i>M</i>	<i>Dismissing</i> <i>N=23</i> <i>M</i>	<i>MS</i>	<i>Univariate F</i>	η^2
Emotional Jealousy	5.55	5.76	5.71	5.55	.55	.67	.01
Behavioral Jealousy	2.29 ^a	2.82 ^b	2.66 ^{ab}	2.50 ^{ab}	3.31	2.85*	.03
Cognitive Jealousy	1.81	2.01	2.04	2.01	1.13	1.21	.01

Note: Means are adjusted for sex, and duration of the relationship. Means with different subscripts within a row differ significantly at $p < .05$.

* $p < 0.05$

3.2.3. Hypothesis 2

Hypothesis two states that those with dismissing attachment pattern were expected to show more anger toward the interloper, those with secure attachment pattern were expected to show more disappointment, those with preoccupied pattern were expected to show more self-doubt and those with fearful attachment pattern were expected to show more fear in response to jealousy.

For testing these hypotheses ANCOVA was employed with attachment style as independent variable, and relationship length and gender served as covariate. Responses on hostile and disappointed reactions showed that there were no significant main effect of attachment style on hostile reactions, and disappointment reactions. However, as shown in Table 11, ANCOVA yielded a significant main effect of attachment style on miserable

reactions ($F(3, 241)=5.26, p<.05$) (See table 11). Post hoc analysis of attachment styles using Duncan post hoc test demonstrated that highest level of miserable reactions was reported by preoccupied group ($M=3.97$) and this group was significantly different from secure group ($M=2.97$) which had the lowest level of self-doubt reaction as compared to other groups (dismissing ($M=3.68$) and fearful ($M=3.61$)). The strength of the relationship was .064. For the final section of the second hypothesis, fear reactions were compared in terms of attachment groups and the results revealed that there was a significant main effect of attachment styles on fear reactions ($F(3, 241)=4.826, p<.01$) and strength of relationship was $\eta^2=.057$. Post hoc comparison indicated that preoccupied individuals had higher levels of fear reactions ($M=3.64$) than secure ($M=2.52$) participants. Moreover, the secure attachment group was found to have the lowest fear reactions as compared to other attachment groups (dismissing ($M=3.34$) and fearful ($M=3.25$)). Moreover, as can be seen in Table 11, there were a significant main effects of attachment styles on the attractions of inadequacy ($F(3, 241)=3.77, p<.05$), self doubt ($F(3, 241)=5.47, p<.05$), and worry ($F(3, 241)=3.60, p<.05$). Post hoc analysis yielded that mostly preoccupied individuals reported the highest emotional reactions (e.g., inadequacy, $M=4.04$, and self doubt $M=3.96$). However fearful individuals showed the highest levels of worry reaction ($M=4.13$) as compared to others.

Findings partially supported the second hypothesis. In general the attachment group with a negative mental model of self and a positive mental model of others (i.e., preoccupied group) reported higher level of emotional reactions than secure, dismissing and fearful groups. However, no significant differences on hostile and disappointment reactions were noticed across groups .

Table 11: ANCOVA of Attachment Styles on Emotional Reactions to Jealousy with Gender and Relationship Length as Covariate:

	Secure N=134 <u>M</u>	Fearful N=30 <u>M</u>	Preoccupied N=47 <u>M</u>	Dismissing N=23 <u>M</u>	MS	Univariate F	η^2
Anger	6.16	6.29	5.96	6.15	.54	.27	.00
Betrayal	6.38	6.29	6.28	5.85	2.06	1.05	.01
Sadness	6.24	5.74	6.30	5.61	4.69	2.12	.03
Disappointment	6.22	6.35	6.22	6.04	.27	.15	.00
Powerlessness	3.42	3.71	4.14	3.88	8.18	2.08	.03
Inadequacy	2.92 ^a	3.55 ^{ab}	4.04 ^b	3.53 ^{ab}	15.83	3.77*	.05
Self-doubt	2.69 ^a	3.39 ^{ab}	3.96 ^b	3.50 ^{ab}	20.72	5.47*	.06
Fear	2.53 ^a	3.26 ^{ab}	3.64 ^b	3.35 ^{ab}	17.64	4.83**	.06
Envy	4.07	4.68	4.20	4.85	6.46	1.39	.02
Worry	3.27 ^a	4.13 ^a	4.08 ^a	4.11 ^a	14.30	3.60*	.04
Fury	5.00	5.52	5.00	5.50	3.82	.91	.01

	Secure N=134 <u>M</u>	Fearful N=30 <u>M</u>	Preoccupied N=47 <u>M</u>	Dismissing N=23 <u>M</u>	MS	Univariate F	η^2
Hostile	5.08	5.49	5.05	5.50	2.62	1.07	.01
Disappointed	6.28	6.13	6.27	5.83	1.38	1.06	.01
Miserable	2.97 ^a	3.61 ^{ab}	3.97 ^b	3.68 ^{ab}	14.47	5.26*	.06

Note: Means are adjusted for sex, and duration of the relationship. Means with different subscripts within a row differ significantly at $p < .05$, ** $p < .01$, * $p < .05$

3.2.4. Hypothesis 3

Hypothesis 3 stated that those with preoccupied attachment pattern would show more jealous reactions when threat is attributed to the self than those with other attachment patterns. In order to test this hypothesis, between-subject analysis of covariance was performed by using two levels of self-esteem, inadequacy and self-deprecation with the four levels of attachment on each 3 sub-scales of the MDJS; emotional, behavioral and cognitive jealousy where, relationship length and gender served as covariates. On the first analysis, emotional jealousy was used as dependent variable. Results indicated that among all of the 4 independent variables and interactions between them, no significant main effect of self esteem, self deprecation, inadequacy, and no significant interaction effects: self esteem and attachment, self deprecation and attachment, and inadequacy and attachment were found on emotional jealousy (See table 12).

For behavioral jealousy, results showed that no significant main effects of self-esteem, self-deprecation, and inadequacy, and no interaction effects of: self esteem and attachment, self-deprecation and attachment, and inadequacy and attachment were found (See table 13).

For cognitive jealousy, results demonstrated a significant main effect of self esteem ($F(1, 224)=10.067, p < .01$), and self deprecation ($F(1, 223)=5.321, p < .05$) on cognitive jealousy. Results suggested that people who have a low self esteem ($M=2.13$) were more cognitively jealous than people with high self esteem ($M=1.64$). The strength of relationship was $\eta^2=.043$. Moreover, people who were more self deprecated ($M=2.10$) were more likely to report higher levels of cognitive jealousy than people who were less

self deprecated ($M=1.74$). The strength of relationship was $\eta^2=.023$. However, no significant main effect of inadequacy was found. Furthermore, no significant interaction effects of inadequacy and attachment, self esteem and attachment, and self-deprecation and attachment were found (See table 14).

Table 12: ANCOVA of Emotional Jealousy Scores as a Function of Self-esteem, Self-deprecation and Inadequacy

	df	MS	F
Self-esteem (SE)	1	2.11	2.60
Attachment * SE	3	1.30	1.61
Self-deprecation (SD)	1	.59	.73
Attachment * SD	3	1.33	1.63
Inadequacy (IAQ)	1	.08	.09
Attachment * IAQ	3	.27	.32

Table 13: ANCOVA of Behavioral Jealousy Scores as a Function of Self-esteem, Self-deprecation and Inadequacy.

	df	MS	F
Self-esteem (SE)	1	.30	.25
Attachment * SE	3	.32	.27
Self-deprecation (SD)	1	.19	.16
Attachment * SD	3	2.04	1.74
Inadequacy (IAQ)	1	.04	.04
Attachment * IAQ	3	1.46	1.23

Table 14: ANCOVA of Cognitive Jealousy Scores as a Function of Self-esteem, Self-deprecation and Inadequacy

	df	MS	F
Self-esteem (SE)	1	8.42	10.07**
Attachment * SE	3	.40	.48
Self-deprecation (SD)	1	4.55	5.32*
Attachment * SD	3	.87	1.02
Inadequacy (IAQ)	1	.25	.29
Attachment * IAQ	3	.10	.11

* *p<0.01, *p<0.05

3.2.5. Hypothesis 4

Hypothesis 4 stated that those with dismissing attachment pattern would try to protect self-esteem, those with preoccupied pattern would try to protect the relationship, those with secure attachment pattern would try to protect both the self-esteem and the relationship, those with fearful attachment pattern would try to escape from the relationship in order to cope with the feeling of jealousy. This hypothesis was tested via univariate analysis of covariance. Dependent variable was self-esteem protection, the independent variable was attachment style with four categories, and relationship length and gender served as covariates. Post-hoc comparison was performed to examine whether individuals with different attachment styles showed differences in terms of self-esteem and relationship protection. As can be seen in Table 15, results revealed no significant main effect of attachment style on self-esteem protection, although secures had the highest mean score.

Table 15: ANCOVA of Attachment Styles on Self-esteem and Relationship Protection with Gender and Relationship Length as Covariates

	<i>Secure</i> <i>N=134</i> <i>M</i>	<i>Fearful</i> <i>N=30</i> <i>M</i>	<i>Preoccupied</i> <i>N=47</i> <i>M</i>	<i>Dismissing</i> <i>N=23</i> <i>M</i>	<i>MS</i>	<i>Univariate F</i>	η^2
Self-esteem	5.05	4.68	4.84	4.84	1.93	.69	.01
Relationship Protection	5.87 ^b	5.48 ^{ab}	5.31 ^{ab}	4.77 ^a	11.04	4.73**	.06

Note: Means are adjusted for sex, and duration of the relationship. Means with different subscripts within a row differ significantly at $p < .05$.

* $p < 0.01$

Another ANCOVA was employed to explain the effect of attachment style differences on relationship protection. Results revealed a significant main effect of attachment style on relationship protection ($F(3, 240) = 4.726, p < .01$). The strength of relationship was .06. As expected post-hoc analysis using the Duncan test on relationship protection showed that dismissing attachment group ($M = 4.76$) was less likely to try to protect the relationship compared to secure attachment group ($M = 5.87$) as stated in the fourth hypothesis.

3.2.6. Hypothesis 5

This hypothesis stated that those with dismissing attachment style would show more aggression toward the others while those with preoccupied attachment pattern would show more aggression toward the self and those with fearful attachment pattern would show more aggression toward both the self and others than those with other

attachment patterns. In other words, dismissing and fearful groups who have a negative mental model of others would be more likely to show aggression toward others while preoccupied and fearful individuals who have a negative mental model of self would be more likely to report aggressiveness toward themselves.

Hypothesis 5 requires the examination of externalization in response to jealousy of individuals across the four attachment styles so it was tested via ANCOVA. Gender and the relationship length of the participants served as covariates. Findings showed a significant main effect of attachment style on externalization ($F(3, 240) = 3.353, p < .05$). Post-hoc analysis with Duncan test was performed to see whether each attachment group could be characterized by a mental model and no significant difference across groups was found (See table 16).

Results of ANCOVA on internalization revealed a significant main effect of attachment, $F(3, 240) = 4.257, p < .01$. The strength of relationship was .05. Post hoc analysis by using Duncan indicated that secure group ($M = 3.20$) showed less internalization than preoccupied group ($M = 4.16$), partially supporting the hypothesis 5. Preoccupied group showed more internalization than other groups. Although there were no significant group differences across groups on externalization, fearful individuals ($M = 3.14$) reported the highest levels of externalization while secure individuals ($M = 2.56$) reported the lowest levels of this variable.

Table 16: ANCOVA of Attachment Styles on Coping Strategies with Gender and Relationship Length as Covariates

	<i>Secure</i> <i>N=134</i>	<i>Fearful</i> <i>N=30</i>	<i>Preoccupied</i> <i>N=47</i>	<i>Dismissing</i> <i>N=23</i>	<i>MS</i>	<i>Univariate F</i>	η^2
	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>			
Internalization	3.20 ^a	3.60 ^{ab}	4.16 ^b	3.25 ^a	9.70	3.76*	.05
Interaction (gender)					8.31	3.22*	.04
Externalization	2.56 ^a	3.05 ^a	2.98 ^a	3.14 ^a	5.17	3.35*	.04
Joking	3.17	3.07	2.84	2.85	1.61	.65	.01
Confrontation	3.59 ^a	3.81 ^a	3.37 ^a	3.53 ^a	1.70	2.74*	.03

Note: Means are adjusted for sex, and duration of the relationship. Means with different subscripts within a row differ significantly at $p < .05$.

* $p < 0.05$

In order to examine the role of gender and attachment style, interaction effects were tested. According to the interaction effect, male participants who have a fearful attachment reported the lowest levels of internalization while fearful female participants reported the highest levels of internalization. On the contrary, female participants who have a dismissing attachment reported the lowest levels of internalization, while dismissingly attached male participants showed relatively high internalization

Table 17: Mean Scores for Attachment Styles and Gender Interaction.

Gender	Male	Female
Secure	3.25	3.19
Fearful	2.92	3.99
Preoccupied	4.26	3.99
Dismissing	3.85	2.28

Post-hoc comparisons of interaction effect with unequal sample sizes performed by Tuckey-Kramer as described by Hovardaoğlu (1994) indicated a significant difference between preoccupied females and dismissing females, fearful females and dismissing females, dismissing females and preoccupied males, and dismissing females and dismissing males. Those differences were significant at .05 confidence interval.

3.3. Data Analysis

The model given in Figure 5 was tested by LISREL analysis in two steps as suggested by Anderson and Gerbing (1988). In the first step, a measurement model was tested via confirmatory factor analysis in order to see how well the indicators serve as measurement instruments for latent variables. In the second step, structural models including the hypothesized model were tested.

3.3.1. Evaluation of Fit

There is an inconsistency about evaluating how well a proposed model fits the data among researchers. In this study, a set of absolute and incremental fit indices was

used as suggested in several studies (e.g., Anderson and Gerbing (1988), Hoyle and Panter, Hu and Bentler (1995), Hoyle (1995), Joreskog and Sorborm (1993)). Among the absolute fit indices, Chi-square (χ^2) goodness of fit index, χ^2 /degrees of freedom ratio, root-mean-square (RMS) error, and adjusted goodness of fit index (AGFI) were used to test how well a model reproduced the sample data. Fit indices that are based on χ^2 statistics concern the discrepancy between the correlation matrix reproduced by the model and the original correlation matrix. The magnitude of χ^2 measures acceptability of the fit of a model to the data. As smaller values of χ^2 indicate a better fit, it is actually a 'badness of fit' index. Therefore, non-significant χ^2 values are desired. However, there are some problems with the χ^2 test. Firstly, for small sample size, χ^2 may not be powerful enough to identify the discrepancy between the original and reproduced correlation matrices. On the other hand, it is so powerful for large sample sizes so that the model may be rejected for negligible reasons. Moreover, the ratio of χ^2 to degree of freedom is also crucial. The ratio χ^2 :df of 2:1 to 5:1 is suggested to be acceptable by Marsh and Hocevar (1988).

Because of the problems of χ^2 statistics, other fit indices were also provided by several researchers (Hu and Bentler (1995)). The RMS index estimates the discrepancies between the observed and reproduced correlations. RMS values lower than .10 show a good fit to the data while those lower than 0.05 show an excellent fit. The goodness of fit index (GFI) gives the degree of fit between predicted squared residuals and observed data. AGFI was developed to adjust GFI by the degrees of freedom in the mode. AGFI ranges from 0 to 1.0 and values closer 1.0 indicate good fit. (Sümer, 1996)

~ Among the incremental fit indices, the comparative fit index (CFI) and the non-

normed fit index (NNFI) were also considered. Incremental fit indices provide information about in which extent a proposed model is superior to alternative models. Values of these indices range from 0 to 1.0 and values greater than .95 show a good fit while values between .90 and .95 are acceptable (Hu and Bentler (1995)).

Table 18: Correlations and Partial Correlations Between Indicators for the Model 1

	1	2	3	4	5	6	7	8	9	10	11
1. Emotional J	1.00	.31	.08	.00	.22	-.12	-.08	-.05	.00	.31	.24
2. Behavioral J	.30	1.00	.45	.00	.28	-.18	-.10	-.11	.10	.15	.05
3. Cognitive J	.08	.42	1.00	.18	.25	-.09	-.03	-.22	.18	.00	-.08
4. Avoidance	.01	.01	.19	1.00	-.06	.04	-.17	-.09	.21	-.15	-.11
5. Anxiety	.21	.30	.27	-.04	1.00	-.43	.02	-.43	.30	.25	.24
6. Model of self	-.15	-.21	-.13	.02	-.44	1.00	.08	.43	-.27	-.18	-.12
7. Model of other	-.06	-.09	-.04	-.18	.01	.09	1.00	.04	-.06	-.01	-.02
8. Self-esteem	-.06	-.11	-.23	-.11	-.43	.44	.04	1.00	-.55	-.10	-.04
9. Inadequacy	-.01	.10	.21	.24	.30	-.27	-.07	-.55	1.00	-.04	-.10
10. Emotional dep	.32	.17	-.02	-.15	.25	-.17	.02	-.06	-.09	1.00	.57
11. Dependency	.25	.09	-.10	-.11	.25	-.12	.00	-.01	-.14	.59	1.00

Above diagonal is a partial correlation after controlling gender and relationship length
 $p > .05$ for correlation lower than .11,
 $p < .05$ for correlation between .12-.15,
 $p < .01$ for correlation higher than .15

3.3.2. Measurement Model 1

Table 18 presents the correlations and partial correlations among the observed variables. Results of the correlations reveal that almost all correlations among various measures of the same construct were higher than the correlations among measures of different constructs. However, the correlation between mental model of others and avoidance dimension was relatively low ($r=.24$) when sex and relationship length were controlled. Therefore, analysis was performed through free error covariance of avoidance dimension (special process was applied to this indicator and variances were added as errors).

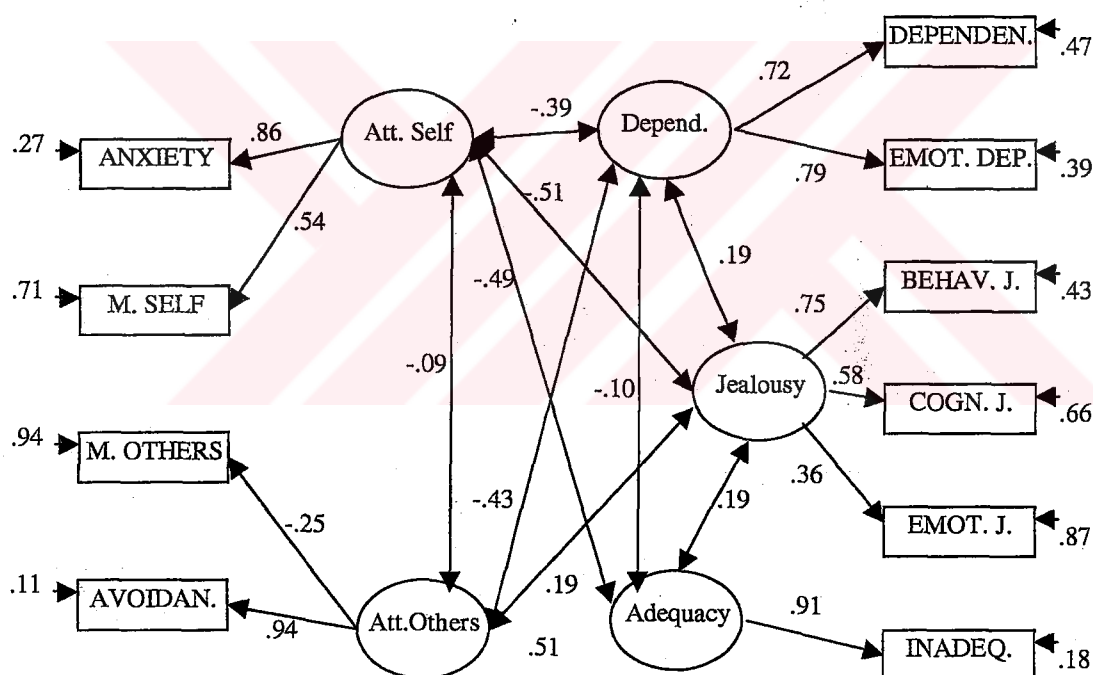


Figure 7: Measurement Model 1.

As can be seen in Figure 7, the measurement model consists of five latent variables: jealousy, dependency, inadequacy, mental model of self and mental model of

others, which are represented by circles. Latent variables are not directly measured but they are assumed to influence responses to the measured variables. Indicator variables are represented by rectangles in the figure.

Latent variable attachment self was measured by two indicators: model of self-dimension measured by the RQ and the anxiety dimension measured by the ECR. Similarly, latent variable attachment other was measured by two indicators: model of others dimension measured by the RQ and the avoidance dimension measured by the ECR. Latent variable dependency was measured by the scores on the emotional dependency scale and dependency subscale of the interpersonal relationship scale as indicators. The indicators that measured latent variable inadequacy were the scores on developed inadequacy measure and Rosenberg's self-esteem scale. However, Self-esteem scale was highly correlated with mental model of self variable. Therefore, it was excluded from the analysis. Therefore, analysis was performed through free error covariance of inadequacy measures. Finally, latent variable jealousy was measured by three indicators formed by the three subscales of MDJS.

In Figure 7, each indicator has two incoming arrows. These arrows represent the structural effects of one variable on another. The unidirectional arrows from a latent variable to each of its indicators represent the linear structural coefficients between the latent variable and its indicators. These coefficients are equivalent to factor loadings in factor analysis. Analyses were performed using the data collected from 293 subjects. As seen in Figure 7, all of the indicators loaded significantly on the latent variables, the loadings of the indicators range from .25 to .94.

Maximum likelihood estimation of the measurement model produced a highly

significant $\chi^2(27, N=203)=80.35, p<0.01$. However, this result was effected by sample size and degree of freedom. The χ^2 :df ratio was well below the suggested 5:1 ratio (Bollen, 1989). The measurement model provides a satisfactory fit to the data (RMSEA=.08, AGFI=.89, NNFI=.85, CFI=.91). This indicates that all of the latent variables were reliably measured by the indicators.

Examination of the correlations among latent variables indicated that all of the structural correlations were in the expected direction. As expected, the two latent variables representing mental models of attachment were uncorrelated ($r=.09$). The correlation between mental model of self and adequacy latent variables was very high ($r=-.49$) and mental model of self was negatively correlated with dependency ($r=-.39$) and jealousy ($r=-.51$). On the other hand, mental model of others was positively correlated with adequacy ($r=.51$) and dependency ($r=.43$) while being negatively correlated with jealousy ($r=.19$). Moreover, dependency and adequacy were unrelated while jealousy was positively correlated with dependency ($r=.19$) and negatively correlated with adequacy ($r=-.10$).

3.3.3. Testing Hypothesized Model 1

In testing the hypothesized model, the initial test yielded a poor fit to the data. However, an examination of the modification indices indicates that inadequacy latent variable was not suitable for the analysis, because this variable was produced by self-esteem and inadequacy measures. However, self-esteem measure was not only highly correlated with the inadequacy variable but is also strongly related with the mental model of self due to the nature of the variable. Therefore, in the analysis, inadequacy latent

variable was represented by inadequacy measure only. Then an error covariance was added to this single indicator latent variable. Examination of the hypothesized model showed that the hypothesized model provided an excellent fit to the data, as indicated by high values of the AGFI=.9, NNFI=.9, and CFI=.96 indices, together with a small value of RMSEA=.08. Maximum likelihood estimation of the proposed model produced a highly significant chi-square, $\chi^2(28, N=293)=82.76, p<.01$. However this result was effected by sample size and degree of freedom. The $\chi^2:df$ ratio was well below the suggested 5:1 ratio. The magnitude of the error covariance was .18 for inadequacy indicator and .11 for avoidance indicator.

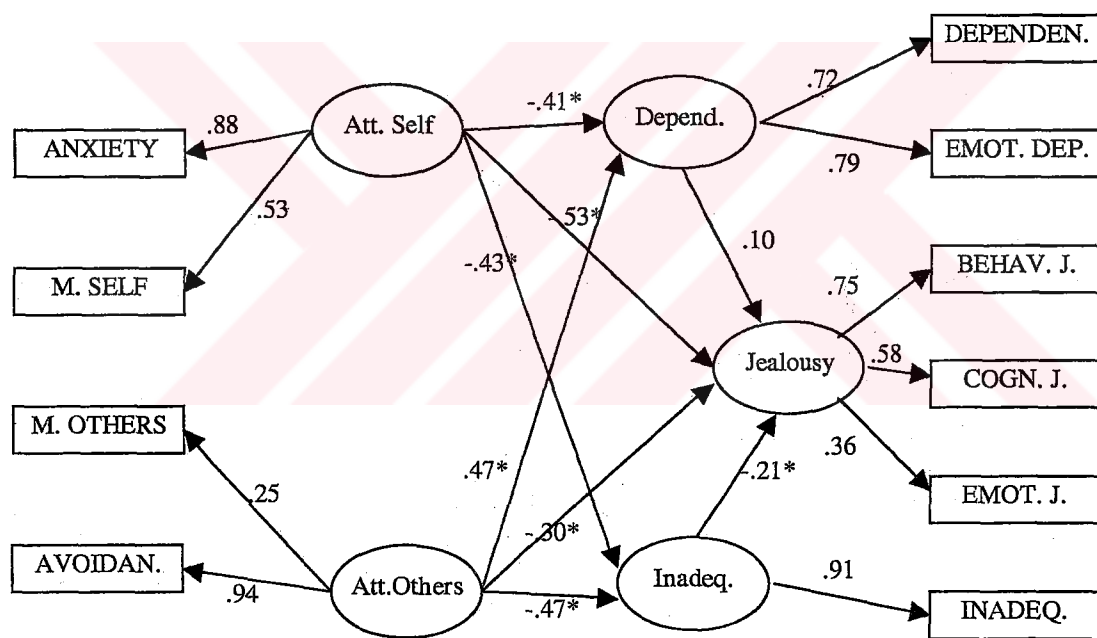


Figure 8. Proposed Structural Model 1.

Examination of the structural path parameters showed that, mental model of self had a significant direct effect on dependency (path=-.41, $p<.001$), inadequacy (path=-.43, $p<.001$) and jealousy (path=-.53, $p<.001$) as expected. Mental model of others also had a significant direct effect on dependency (path=.47, $p<.001$) and inadequacy (path=-.47, $p<.001$).

$p < .001$) and although it was not expected the influence of mental model of others on jealousy this path was also significant (path = $-.30$, $p < .001$).

As a result, after the addition of an error covariance of inadequacy and avoidance indicators, the hypothesized model provided a good fit to the data. Examination of path parameters indicated a partial support for the hypothesis that mental model of self has a direct effect and indirect effect (via the inadequacy variable) on jealousy similar to mental model of others.

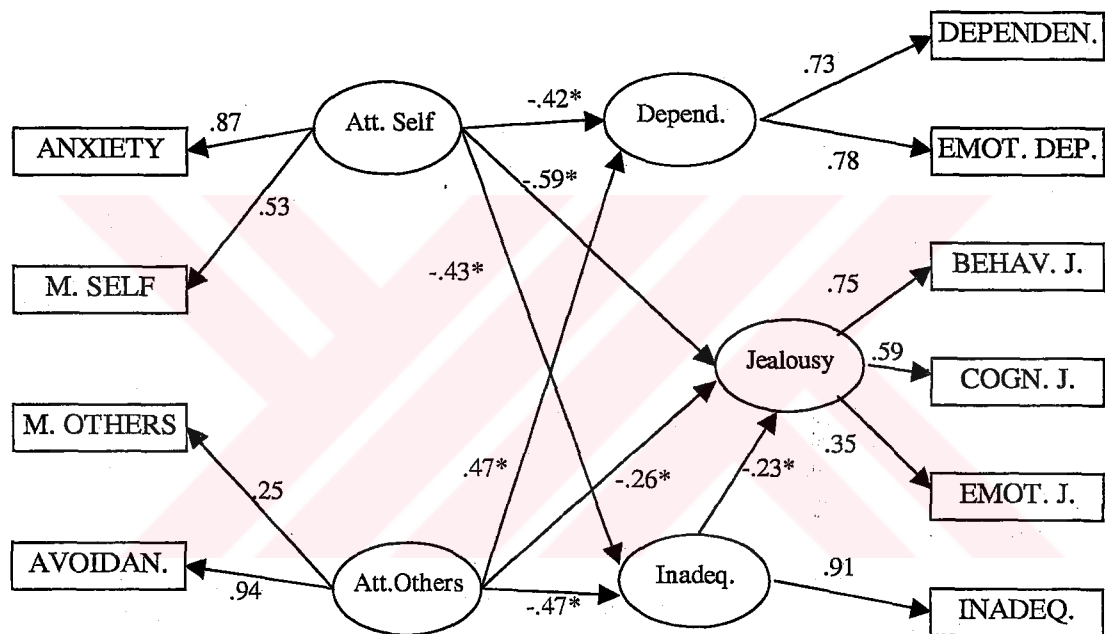


Figure 9. Structural Model 1.

After elimination of insignificant path, structural analysis was repeated. Results indicated that model of self did not have a significant effect on jealousy via inadequacy. However, model of other had a marginal effect on jealousy mediated by inadequacy (indirect effect = $.11$, $p < .10$). Model of self explained 50% of the total variance on jealousy, and model of other on the other hand explained 15% of the total variance on jealousy. As

can be seen on the comparison of total variance explained by model of self and other on jealousy. Model of self seem to play a crucial role in predicting the levels of jealousy.

3.3.4. Measurement Model 2

Examination of the paths indicated that all paths were not significant for the coping latent variable indicating that these indicators were not suitable for representing coping latent variable. This result showed that individuals select a coping strategy that is most suitable for them and these strategies may not be related to each other. Therefore, model was tested for each coping strategy separately using only one indicator respectively; externalization, internalization and joking.

Table 19: Correlations and Partial Correlations Between Indicators for the Model 2

	1	2	3	4	5	6	7	8	9	10
1. Emotional J	1.00	.31	.08	.00	.22	-.12	-.08	.15	.26	-.20
2. Behavioral J	.30	1.00	.45	.00	.28	-.18	-.10	.07	.27	-.08
3. Cognitive J	.08	.42	1.00	.18	.25	-.09	-.03	.10	.14	.02
4. Avoidance	.01	.01	.19	1.00	-.06	.04	-.17	.07	-.03	.15
5. Anxiety	.21	.30	.27	-.04	1.00	-.43	.02	.35	.13	-.10
6. Model of self	-.15	-.21	-.13	.02	-.44	1.00	.08	-.23	-.06	.12
7. Model of others	-.06	-.09	-.04	-.18	.01	.09	1.00	-.01	-.08	-.01
8. Internalization	.15	.07	.10	.07	.35	-.23	-.01	1.00	.03	.02
9. Externalization	.26	.27	.14	-.03	.13	-.06	-.08	.03	1.00	-.16
10. Joking	-.20	-.08	.02	.15	-.10	.12	-.01	.02	-.16	1.00

Above diagonal is a partial correlation after controlling gender and relationship length

p>.05 for correlation lower than .11

p<.05 for correlation between .12-.15

p<.01 for correlation higher than .15

Maximum likelihood estimation of the measurement model in this section produced a highly significant chi-square ($\chi^2(3, N=293)=117.74, p<0.01$). However, this result was effected by sample size and degree of freedom. The χ^2 :df ratio was well below the suggested 5:1 ratio (RMSEA=.1, AGFI=.86, NNFI=.67, CFI=.78).

3.3.5. Testing Hypothesised Model 2

The next step of the analysis involves testing the structural model. The testing hypothesis is that the effects of mental models of self and others as well as jealousy had an influence on internalization coping strategy. This model fit the data well, $\chi^2(16, N = 293) = 49.99, p = .00$. The ratio of chi-square to degrees of freedom indicated adequate fit indices, with NNFI = .82, CFI = .89, RMSEA = .08 and AGFI = .91. Results of the analysis indicated that internalization was highly and significantly related with mental model of self (structural coefficient = $-.72, p<.001$).

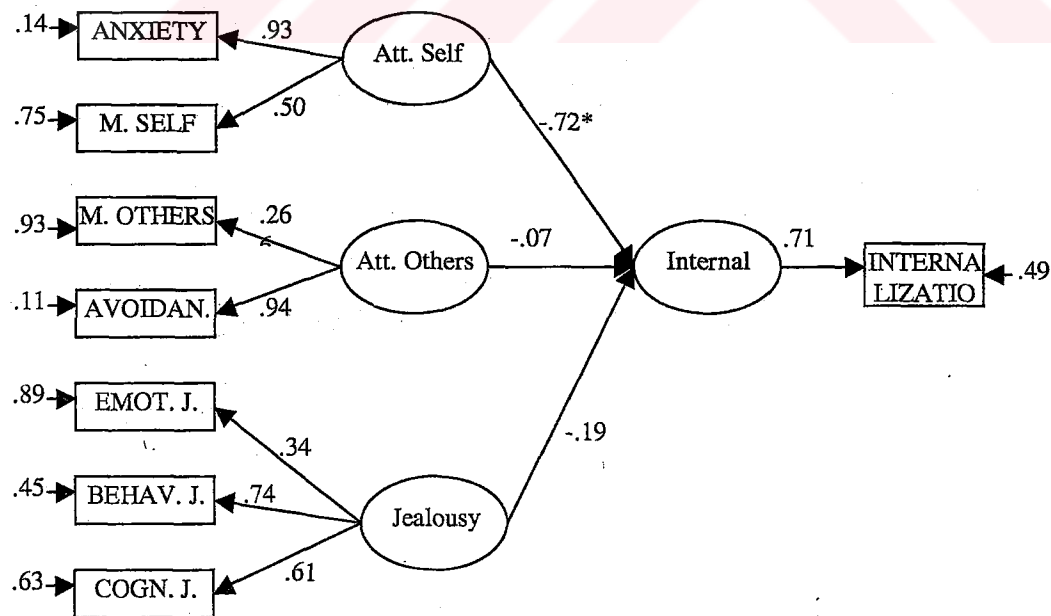


Figure 10: Structural Model for the Internalization

Another hypothesized model testing the effects of mental models of self and others as well as jealousy on externalization coping strategy was tested in the form of structural equation modeling. χ^2 (16, N = 293) = 59.58, $p = .00$. The ratio of chi-square to degrees of freedom indicated adequate fit indices, with NNFI = .74, CFI = .85, RMSEA = .10 and AGFI = .89. Results of the analysis indicated that externalization was highly and significantly related with jealousy (structural coefficient = .57)

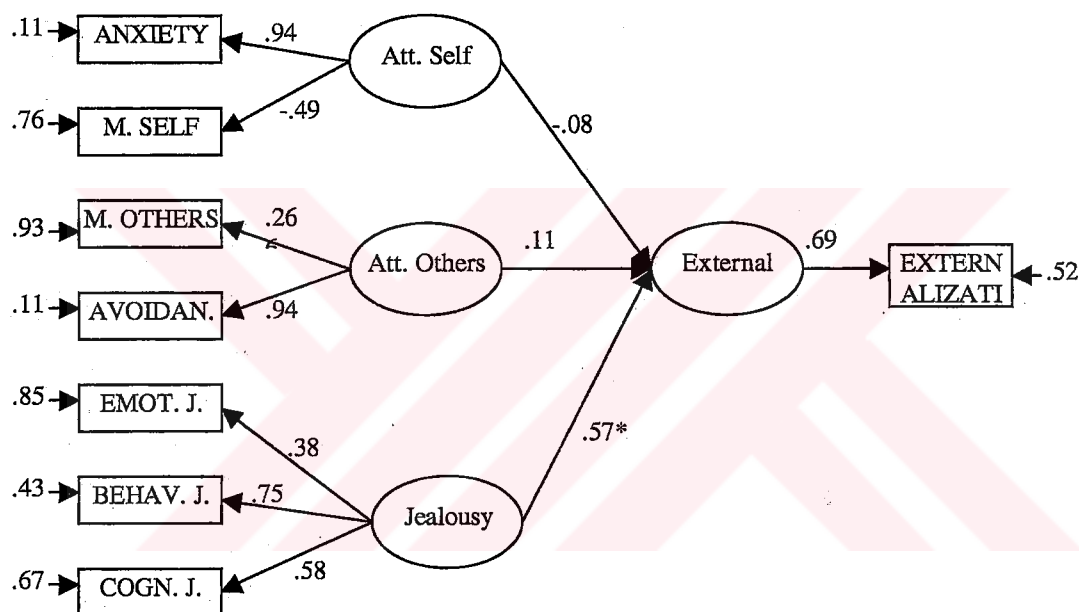


Figure 11: Structural Model for the Externalization

The other structural model is presented in Figures 8, 9 and 10, this model examines the effects of mental models of self and others as well as jealousy on joking coping strategy was tested in form of structural equation modeling., χ^2 (16, N = 293) = 61.01. $p = .00$. The χ^2 / df ratio indicated adequate fit indices, with NNFI = .72. CFI = .84, RMSEA = .1. GFI = .95 and AGFI = .89. Results of the analysis indicated that joking was

significantly related with model of others (structural coefficient = $-.41$).

As a result, after separating these three coping strategies in structural equation modeling, internalization was influenced by the model of self latent variable, externalization was influenced by jealousy latent variable and joking was influenced by model of others latent variable.

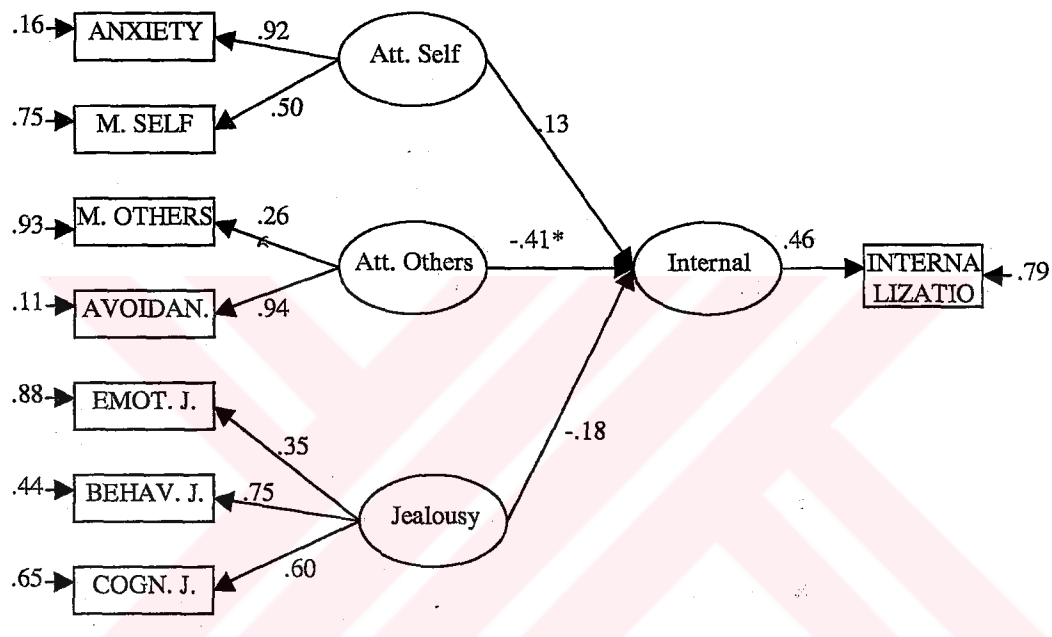


Figure 12 : Structural Model for the Joking

CHAPTER 4

DISCUSSION

In the present study, the aim was to examine the interplay between underlying dimensions of attachment (anxiety and avoidance), and expressing, experiencing and coping with jealousy. To test, several self-report scales were used and a pilot study was conducted for adaptation of these scales. In the discussion part, after giving brief information about the results of the pilot study, results for each hypothesis of the study will be discussed. Finally, limitations of the present study and suggestions for future research will be discussed.

4.1. Pilot study

In order to understand how well the measures used in this study were appropriate for Turkish culture, participants completed a battery of questionnaire, which includes both kinds of measures that were previously used in Turkish or newly translated into Turkish. All measures that were translated into Turkish for this study were examined through various statistical techniques for reliability and validity analysis. Newly translated scales; Emotional Dependency Scale, Multidimensional Jealousy Scale, Interpersonal

Jealousy Scale and Pine's measures showed high internal consistency, reliability, high correlation between conceptually similar constructs and low correlation between conceptually distinct constructs. Moreover, inadequacy measure was developed in the light of White's (1981) study. This measure also provided a highly reliable measure for inadequacy construct. In summary, these newly translated scales and the developed scale through the analyses of the data collected from Turkish University students seemed to have satisfactory reliability coefficients and promising validity.

4.2. Attachment Style Differences in the Three Dimensions of Jealousy

First hypothesis of the study stated that those with preoccupied attachment style would be more likely to report high levels of jealousy than those with secure and dismissing style. Results of the study yielded that only behavioral jealousy was significantly affected by attachment styles rather than cognitive and emotional jealousy. It was expected that preoccupied individuals would indicate the highest levels of jealousy in all these three dimensions because of their negative model of self. This was expected for cognitive jealousy because attachment styles (working models) influence individual's cognition through influencing the individual's attention process by selecting stimuli which one paid attention, leading to biases in memory and influencing explanation processes (Baldwin, Fehr, Keedian, Seidel and Thomson, 1993). Therefore, any threat toward the attachment relationship would significantly influence appraisal of the threat and lead to jealousy. However, cognitive jealousy was not significantly affected by attachment pattern in this study. This result was inconsistent with Radecki-Bush et al. (1993). In their study, they found that individuals feeling more insecure (anxious and avoidant

individuals) perceived the threat as more threatening. Working models of individuals are shaped by emotional response patterns through influencing both primary appraisal and secondary appraisal process. The behavioral responses of individuals are also strongly influenced by working models through the activation of stored plans, strategies and forming new plans and strategies. Consistent with conceptualizations, it was expected that emotional and cognitive dimensions of jealousy as well as behavioral dimension, would be affected by attachment. One of the possible explanation for the lack of association between emotional jealousy and attachment is that the emotional jealousy subscale includes items that directly and severely threaten the relationship for all of the participants. In other words, the majority of participants were highly emotionally jealous ($M=5.63$). It may restrict the range of the responses and thus the predisposition of the preoccupied individuals toward emotional jealousy may not have been observed. Moreover, preoccupied individuals did not report significantly higher levels of cognitive jealousy than other attachment groups. This may be because this dimension includes the suspiciousness of the responses and participants received generally lower scores for cognitive jealousy ($M=1.94$). Therefore, this may be due to this general tendency for lower score on cognitive jealousy. On the basis of their attachment styles, individuals could easily distort their emotions and cognitions through appraisal process while, the behaviors which were occurred in the past, are not distorted as easy as emotional and cognitive jealousy. In other words, behavioral jealousy was not repressed through defensive strategies of attachment styles and could bbe easily observed and/or defined. Given the fact that the RQ represents the behavioral attachment pattern in the relationship, these differences may imply that self-report measures may be sensitive to

behavioral jealousy. Participants would not tend to distort their behaviors as they distort their cognition's through biases in memory and emotions through influencing their primary and secondary appraisals. Despite insignificant group differences, post hoc comparison of behavioral jealousy indicated that preoccupied individuals showed a tendency to show higher levels of behavioral jealousy than dismissing and secure individuals consistent with the previous research (e.g., Hazan and Shaver, 1987, Collins and Read, 1990). Although these group differences were insignificant, results suggested that individuals with negative mental model of self showed higher levels of behavioral jealousy than individuals with positive mental model of self. Results of the study was consistent with other studies on the basis of secure-insecure distinction, that is securely attached were consistently less jealous than insecurely attached people (Buunk 1981, Sharpsteen & Kirkpatrick 1997). Previous studies also found that anxious ambivalent individuals reported more possessive and anxious jealousy than avoidant individuals. This result was also partially consistent with the current study. Guerrero (1998) speculated that this more jealous tendency of the anxious ambivalent individuals is the result of the negative model of self as also observed in the current study. This study provides a powerful support for this speculation as both preoccupied and fearful individuals who had a negative mental model of self reported higher levels of jealousy than secure and preoccupied individuals.

In sum, the results of present study did not fully support the first proposed hypothesis. It was expected that people who were anxious about being abandoned or unloved and not confident in themselves, in other words people who are preoccupied, were more likely to experience jealousy. However, these expectancies were only partially

supported for behavioral jealousy in the current study.

Investigation of attachment style differences on the affective reactions to partner's extra dyadic sexual behaviors revealed that while there were no attachment style differences on anger, betrayal, sadness, disappointment, powerlessness, envy and fury, attachment styles had significant impact on inadequacy, self doubt, fear and worry. The differences in inadequacy, self doubt, fear and worry provide a powerful secure-insecure distinction. That is, individuals who had a secure attachment pattern reported less intense negative emotions related with jealousy than those who had insecure attachment patterns. Consistently with this finding, Kobak and Hazan (1991) found that secure individuals were more successful to regulate their emotional expressions and Simpson (1990) observed that insecure patterns were associated with more negative emotions.

Interestingly, all of the affective reactions that were significantly affected by attachment patterns were involved in the miserable component. This leads to the fact that, not only there was a secure-insecure distinction among significant affective reactions, but also secure and preoccupied individuals diverged in their tendency to experience negative emotions intensely. This tendency of preoccupied individuals may be due to negative mental model of self. In other words, according to Bowlby (1982), the perceived inconsistent availability of attachment figure in early infancy becomes the basis for the internal working model. This leads to chronic fear of abandonment in future relationships in adulthood (Bookwala & Zdanivk, 1998). Therefore, it is possible then, any threat of rejection with low sense of self worth leads (especially for preoccupied individuals) to intense mental energy and hypersensitivity (Hazan & Shaver 1987, Dutton 1994). This hypersensitivity of preoccupied individuals was especially observed with emotions related

to low self worth such as self-doubt, inadequacy and powerlessness. Moreover, as expected, preoccupied individuals showed the lowest levels of anger, although the significance was marginal, because they are afraid of driving partners away, consistently with Sharpsteen and Kirkpatrick (1997). In their study Sharpsteen and Kirkpatrick (1997) found that anxiously attached individuals were more likely than others to resist showing anger to their partner, avoidantly attached individuals were more likely to reflect their anger to rival and securely attached individuals more likely to express their anger to partner. Consistent with the Sharpsteen and Kirkpatrick (1997) study, indicating that avoidant individuals were especially likely to reflect their anger to rival, in the present study dismissing individuals showed higher levels of envy. Also, the highest mean on envy for dismissing individuals may be the result of the negative mental model of others, (i.e. lack of trust toward others). Moreover, the deactivation of emotional reactions shown by dismissing individuals was consistent with some of the previous studies (e.g. Hazan and Shaver 1987, Fuendeling 1998, cited in Cassidy and Kobak, 1988, Crittenden et al., 1992). Since dismissing individuals use deactivation and avoidance from emotional experience as a coping strategy. Consistently, results showed that the joking strategy was only influenced by avoidance dimension in SEM.

In this study, it was expected that when the threat is attributed to the self, people with preoccupied attachment pattern would show more jealous reactions than those with other attachment patterns. However, results were not in the expected direction. In detail, self-esteem and self-deprecation had significant main effect only on cognitive jealousy. In jealousy literature, past researchers found that, variables related with self-worth such as inadequacy, self-esteem and self-deprecation have links with jealousy. However, in this

study, self-deprecation and self-esteem provide a significant relation only with cognitive jealousy rather than emotional and behavioral ones. This result may clarify the inconsistency in romantic jealousy literature, in the way that cognitive jealousy may be more strongly associated with self concept related variables such as self worth as compared to emotional and behavioral jealousy.

Individuals' attachment styles have an important influence on the way of coping with jealousy. As they cope with jealousy, secure individuals are most likely to protect the relationship. This finding was consistent with the study of Sharpsteen and Kirkpatrick (1997). Showing that securely attached participants were more likely to maintain their relationship. This result may be due to their confidence in themselves and their partners, and communication pattern with their partner (Feeney & Noller, 1994) or appraisal process of jealousy related situations (Radecki-Bush et al. 1993). They are more likely to be effective in dealing with their partner than others, so they can achieve proximity to their partner to cope with jealousy. Moreover, secure individuals showed less internalization and externalization as coping strategy. In other words, secure individuals were more effectively to cope with jealousy than insecurely attached individuals. On the other hand, dismissing individuals showed the lowest level of relationship protection tendency to cope with jealousy. As described earlier, dismissing individuals have a tendency to deactivate their attachment system, therefore they also have a tendency to suppress behaviors aimed at achieving proximity to attachment figure. Moreover, because they have a negative mental model of others and lack of trust toward others, they showed envy, least tendency to protect relationship, and externalization consistently.

Directing anger to the partner was not the typical characteristic of preoccupied

(anxious) participants, therefore they showed highest internalization but they did not report low levels of externalization. This result is consistent with recent research indicating that preoccupied have a tendency for internalization related disorders, such as depression and anxiety disorders (Fuendeling, 1998). Thus, preoccupied participants had a tendency to suppress to show their anger toward their partner, yet they tended to indirectly expressing their anger in the way of internalization and passive manifestation of anger (being defensive, sarcastic, suffering silently and visibly) consistent with previous research (Fuendeling, 1998, Sharpsteen & Kirkpatrick 1997).

As expected, fearful individuals reported the lowest levels of self-esteem protection. Moreover, relationship protection was generally more prominent of fearful individuals than of dismissing individuals. This may be associated with their need for approval (Bartholomew & Horowitz, 1991) similar to preoccupied individuals. Moreover, internalization was more prominent for fearful individuals fearful individuals than of dismissing and secure individuals.

Testing the hypothesis 5 showed that secure and dismissing individuals, who have positive mental model of self, reported the lowest levels of internalization. However, in this hypothesis there was a significant interaction effects of gender indicating that fearfully attached male participants reported the lowest levels of internalization while fearfully attached female participants reported the highest levels of internalization. This interaction effect may be caused by the gender roles that determine the appropriate coping mechanism for males and females. For females showing more dependency, relationship protection and internalization was expected. However, when these roles interact with attachment styles, female participants who had the negative mental model of

self associated with highest levels of internalization.

The second general objective of the study was to examine the relationships among mental models, dependency, inadequacy and jealousy within the framework of proposed model. In this model, mental models were expected to have both direct and indirect effects, mediated by dependency and inadequacy on jealousy. The results of the measurement model analysis indicated that all of the indicators loaded highly on the appropriate latent structure, thus these findings have some implications for the construct validity of the observed measures (Joreskog & Sorbom, 1993).

Result of the structural model provided support for the hypothesized model on the basis of goodness of fit to the data. Examination of the path parameters showed that both model of self and model of others latent variable had a significant direct effect on inadequacy, dependency and jealousy. Moreover, model of self latent variable was also marginally significant indirect effect on jealousy over the inadequacy latent variable indicating that those who have insecure mental models of attachment may feel inadequate in their relationships and this elevates their jealousy reactions to partners. However, a significant indirect effect of model of self via dependency was expected on the contrary of findings. This insignificant path may be caused by dependency variable that was strongly related with attachment variables, therefore this powerful path would have diminished the influence of an indirect effect.

Overall, findings indicated that: a more positive model of self and others were associated with a lower level of inadequacy, that in turn, contributes to a lower level of jealousy. In addition, models of self and others influence jealousy above and beyond dependency and inadequacy. Thus, secure individuals who have positive mental models of

self and others indicated the lowest levels of jealousy. This result was consistent with Hypothesis 1. Results also suggested that both model of self and model of others have direct effect on jealousy, dependency and, inadequacy. However, model of self excited more powerful influence on jealousy as expected.

Other structural model analysis for the coping variables indicated that internalization was dominantly influenced by model of self. A more positive model of self was associated with lower levels of internalization. This result was consistent with previous studies (Fuendeling, 1998). Moreover, anxiously attached participants perceived themselves as having less control in their relationships (Radecki-Bush & Farrell 1993), therefore may be preoccupied individuals showed the highest levels of internalization. On the other hand, for externalization coping strategy results suggested that higher levels of jealousy were associated with also higher levels of externalization. The jealousy variables were more effective in predicting externalization than attachment variables. Finally, for joking strategy results revealed that more positive model of others were associated with lower levels of joking. In other words, participants who have a positive mental model of others use joking strategy for avoiding or coping with jealousy.

4.3. Contribution of the Study

This study makes a number of important contributions to the literatures on both adult attachment and romantic jealousy. It contributes to the attachment literature by illustrating the effects of attachment styles and the underlying mental models on emotional, behavioral and cognitive jealousy. These findings also provide support for Bowlby's (1973) and other attachment theorists (e.g. Bartholomew 1991, Collins & Read

1994) the idea that mental models have an important influence on expectations, evaluations and behaviors (Griffin & Bartholomew 1994, Brennan, Hazan & Shaver 1998). Comparison of the results of the study with those of other attachment studies in Turkey revealed many similarities in distribution of the sample to attachment styles. In Turkey, research done by Sümer and Güngör (1999) showed that preoccupied style in Turkish sample seems to be overrepresented as compared to other cultures. In this study, the findings were consistent with previous study (Sümer and Güngör 1999) and the population of the preoccupied individuals was higher than the other insecure (dismissing and preoccupied) groups.

Second the present study indicated that mental models have a systematic influence on jealousy and it mediated the link between model of self and other via inadequacy. This study also contributes to jealousy literature in understanding the fundamental dynamics of jealousy on the framework of attachment theory. Specifically attachment patterns and mental models create a tendency in demonstrating jealousy reactions.

Moreover, this study is one of the first ones which explores the jealousy dimensions as a whole by incorporating, coping with jealousy, coping strategy and attachment relations, dependency, and inadequacy influence on the basis of a proposed model.

Results also indicated that Turkish university students were highly emotionally jealous ($M=5,63$), rarely showed cognitive jealousy ($M=1,94$) and slightly behaviorally jealous ($M=2,51$). Moreover, Turkish university students were highly emotionally dependent to their partner ($M=4,26$).

4.4. Limitations and Suggestions for Future Research

Some methodological limitations should be considered while evaluating the findings of this study. Firstly, methodological limitations involve the measurement of attachment styles and mental models. Two different measures of attachment styles, the RQ and the ECR were used in the study. Both of them could be used to assign participants into attachment style categories. Bartholomew's (1991) RQ was used to classify participants into attachment styles. However, this measure assigns participants to discrete attachment categories, which may not reflect individual's attachment experiences accurately.

Second, only self-report measures were used to collect data in the study. However, this may lead to a problem of common method variance in explaining the obtained relationship between variables. Multi method approach can minimize the problem caused by method variance.

Third, the sample of the study was university students from different universities in Ankara. Some of these students had limited dating experience with their romantic partners, therefore they may not have enough relationship experience to feel jealousy, emotional dependency etc. This limits the generalization of the results to other individuals and married individuals.

Fourth, in this study data collection took approximately 40 minutes, so some of the participants get bored while filling out questionnaire, which may negatively affect the validity of the results.

Fifth, in this study some, predispositional factors were used for predicting jealousy such as self-esteem, dependency, and inadequacy. However, for future research

some situational factors such as attractiveness of the rival. should also be analyzed.

Sixth, the sample in this study included only single individuals, however, the traditional approach in close relationship area is to study both couples or partners in a relationship. Some variables used in this study were influenced by the nature of the relationship system between partners. For future research, in order to understand the association, and the role of partner in jealousy should be considered.

Finally, causal inferences from these results are not suitable since findings were correlational and data were collected in a cross sectional design rather than from couples on a longitudinal base. For future studies data should be collected from couples in longitudinal design.

4.5. Conclusion

This research improved the previous research by providing evidence of attachment styles had an impact on jealousy through underlying dimensions. Secure and insecure individuals experience, express and cope with jealousy differently on the basis of attachment styles and/or mental models. Furthermore, this study showed that mental models are mediated and inadequacy feelings in predicting jealousy. Moreover, model of self (anxiety dimension) seemed to be a dominant predictor for jealousy and coping with jealousy. These findings need to be replicated and clarified by future research.

REFERENCES

Ainsworth, M.D.S. (1972). Attachment & Dependency: A comparison, In Gewirtz, J.L. Attachment and Dependency. Washington, D.C: V.H. Winston.

Ainsworth, M. D. S. (1982). Attachment: Retrospect and prospect. In C. M. Parkes and J. Stevenson-Hinde (Eds.) The place of attachment in human behavior, 3-30, New York: Basic Books.

Ainsworth, M.D.S. , Blehar, M.C. , Waters, E. , and Wall, S. (1978). Patterns of Attachment: A Psychological Study of the Strange Situation. Hillsdale, N.J: Erlbaum

Aune, K.S. and Comstock, J. (1991). The experience and expression of jealousy: A comparison between friends and romantics. Psychological Reports , 69, 315-319.

Anderson, J. C. & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin, 103, 411-423.

Baldwin, M.W., Fehr, B., Keedian, E., Seidel, M., & Thomson, D.W. (1993). An exploration of the relational schema underlying attachment styles: Self-report and lexical decision approaches. Personality and Social Psychology Bulletin, 19, 746-754.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective.

Journal of Social and Personal Relationships, 7, 147-178.

Bartholomew, K. (1994). Assessment of individual differences in adult attachment. Psychological Inquiry, 5, 23-67.

Bartholomew, K., & Horowitz, L.M. (1991). Attachment styles among young adults: A test of a four-category model. Journal of Personality and Social Psychology, 61, 226-244.

Berscheid, E. (1983). 'Emotion' in H. Kelly, E. Berscheid, A. Christensen, J. Harvey, T. Huston, G. Levinger, E. McClintock, L. Peplau and D. Peterson (eds), Close Relationships, New York: Freeman.

Berscheid, E. and Fei, J.(1977). Romantic love and sexual jealousy. in G. Clanton and L.S. Smith(Eds.), Jealousy, 101-109, Englewood Cliff, NJ: Prentice Hall.

Bollen, K.A. (1989). Structural equations with latent variables. Wiley-Interscience.

Bowlby, J. (1969/1982). Attachment and loss: Vol. 1. Attachment. New York: Plenum Press.

Bowlby, J. (1973). Attachment and loss: Vol. 2. Separation. New York: Basic Books.

Bowlby, J. (1977) The making and breaking of affectional bonds. British Journal of Psychiatry, 130, 201-210.

Bowlby, J. (1980). Attachment and loss: Vol. 3. Loss, sadness and depression. New York: Basic Books.

Brennan, K. A., Shaver, P. R., & Tobey, A. E. (1991). Attachment styles, gender, and parental problem drinking. Journal of Social and Personal Relationships, 8, 451-466.

Brennan, K.A. and Shaver, P.R. (1995). Dimensions of adult attachment, affect regulation and romantic relationship function. Personality and Social Psychology Bulletin, 21, 267-284.

Brennan, K.A., Clark, C.L, and Shaver, P.R. (1998). Self-report measures of adult romantic attachment. An integrative overview. in J.A.Simpson and W.S. Rholes (Eds.), Attachment Theory and Close Relationships, New York: Guildford.

Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. Developmental Psychology, 28, 759-775.

Bringle, R.G. and Buunk, B.P. (1985). Jealousy and social behavior. Review of Personality and Social Psychology, 6, 241-264.

Buss, D. M. (1992). Do women have evolved preferences for men with resources? Ethology and Sociobiology, 12, 401- 408.

Buunk, B.P. (1981). Jealousy in sexually open marriages. Alternative Lifestyles, 4, 357-372.

Buunk, B.P. (1982). Strategies of jealousy: Styles of coping with extramarital involvement of the spouse. Family Relations, 31, 13-18.

Buunk, B.P. (1995). Sex, self-esteem, dependency and extradyadic sexual experience as related to jealousy responses. Journal of Social and Personal Relationships, 12, 147-153.

Buunk, B.P. (1997). Personality, birth order and attachment styles as related to various types of jealousy. Personality and Individual Differences, 23, 997-1006.

Buunk, B.P. and Bringle, R.G. (1987). Jealousy in love relationships. In D. Perlman and S. Duck(Eds.), Intimate Relationships: Development, Dynamics and

Deterioration, 123-147, Newbury Park, CA: Sage.

Buunk, B., Bringle, B. & Arends, H. (1984). Jealousy - a response to threatened self concept? Paper presented at the International Conference on Self and Identity, Cardiff, U.K.

Bylsma, W.H., Cozzarelli, C. and Sümer, N. (1997). Relation between adult attachment styles and global self-esteem. Basic and Applied Social Psychology, 19, 1-16.

Carnelley, K.B., Pietromonaco, P.R., & Jaffe, K. (1994). Depression, working models of others, and relationship functioning. Journal of Personality and Social Psychology, 66, 127-140.

Clanton, G. (1981). Frontiers of jealousy research. Alternative Life Styles, 4, 259-273.

Collins, N. & Read, S. (1990). Adult attachment, working models, and relationship quality in dating couples. Journal of Personality and Social Psychology, 58, 644-663.

Collins, N. & Read, S. (1994). Cognitive representations of attachment: The structure and function of working models. In K. Bartholomew & D. Perlman (Eds.), Advances in personal relationships, Vol. 5: Attachment processes in adulthood (pp. 53-93). London: Jessica Kingsley.

Constantine, L. (1976). Jealousy: From theory to intervention. In D. Olson (Ed.) Threatening Relationships, 383-398, Lake Mill, IA: Graphic.

Çuhadaroğlu, F. (1986). Adolesanlarda benlik saygısı. Unpublished M.S. thesis. Ankara: Hacettepe University.

Davis, K. (1977). Jealousy and sexual property. in G. Clanton and L.G. Smith

(eds) Jealousy, 129-135, Englewood Cliffs, NJ: Prentice Hall.

DeSteno, D.A. and Salovey, P. (1996). Evolutionary origins of sex differences in jealousy? Questioning the fitness of the model. Psychological Science, 7, 367-372.

DeSteno, D.A. and Salovey, P. (1996). Genes, jealousy and replication of the misspecified models. Psychological Science, 7, 376-377.

Dutton, D. G., Starzomski, A. J., Saunders, K., & Bartholomew, K. (1994). Intimacy-anger and insecure attachment as precursors of abuse in intimate relationships. Journal of Applied Social Psychology, 24(15), 1367-1386.

Ellis, C., & Weinstein, E. (1986). Jealousy and the social psychology of emotional experience. Journal of Social and Personal Relationships, 3(3), 337-357

Feeney, J., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. Journal of Personality and Social Psychology, 58, 281-291.

Feeney, J.A. and Noller, P., and Hanrahan M. (1994). Assessing adult attachment: Developments in the conceptualization of security and insecurity, in M.B. Sperling and W. H. Berman (Eds.), Attachment in Adults: Theory, Assessment and Treatment, 128-152, New York: Guildford.

Feeney, B.J. and Kirkpatrick, L.A. (1996). The effects of adult attachment and presence of romantic partners on physiological responses to stress. Journal of Personality and Social Psychology, 70, 255-270.

Feeney, J.A. and Noller, P. (1996). Adult Attachment, London: Sage.

Festinger, G., (1954). A theory of social comparisons. Human Relations, 2, 117-140.

Fuendeling, J.M. (1998). Affect regulation as a stylistic process within adult

attachment. Journal of Social and Personal Relationships, 15, 291-322.

Griffin, D., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. Journal of Personality and Social Psychology, 67, 430-445.

Guerrero, L.K. , Andersen, P.A. , Jorgensen, P.F. , Spitzberg, B.H. and Eloy, S.V. (1995). Coping with the green-eyed monster: Conceptualizing and measuring communicative responses to romantic jealousy. Western Journal of Communication, 59, 270-304.

Guerrero, L.K. (1998). Attachment-style differences in the experience and expression of romantic jealousy. Personal Relationships, 5, 273-291.

Harris, CR & Christenfeld, N. (1996). Jealousy and rational responses to infidelity across gender and culture. Psychological Science, 7, 378-379.

Hazan, C, & Shaver, P.R. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, 52, 511-524.

Hazan, C. and Shaver, P. R. (1990). Love and work: An attachment theoretical perspective. Journal of Personality and Social Psychology, 59, 270-280.

Hazan, C, & Shaver, P.R. (1994). Attachment as an organizational framework for research on close relationships. Psychological Inquiry, 5, 1-22.

Hinde, R.A. (1997). Relationships: a dialectical perspective. Hove, UK: Psychology Press.

Hovardaoğlu, S. (1994). Davranış Bilimleri İçin İstatistik. Ankara:Hatipoğlu Yayınları.

Hoyle, R. H. (1995). Structural equation modeling: Concepts, issues, and

application. London: Sage.

Hoyle, R.H., & Panter, A.T. (1995). Writing about structural equation models. In R. H. Hoyle (Ed.), Structural equation modeling: Concepts, issues, and application (pp. 158-177). London: Sage.

Hu, L., & Bentler, P.M. (1995). Evaluating model fit. In Structural equation modeling: Concepts, issues, and application (pp. 76-100). London: Sage.

Hupka, R. B., & Bank, A. L. (1996). Sex differences in jealousy: Evolution or social construction?. Cross-Cultural Research, 30, 24-60.

Joreskog, K.G., & Sorbom, D. (1993). LISREL 8: Structural equation modeling with the SIMPLIS command language. Hillsdale, NJ: Lawrence Erlbaum Associates Publishers.

İmamoğlu, E.O. (1998). Individualism and collectivism in a model and scale of balanced differentiation and integration. Journal of Psychology, 132, 95-105.

Kağıtçıbaşı, Ç. (1998). Kültür ve benlik. Kültürel Psikoloji: İnsan bağlamında insan ve aile, İstanbul: Altan Yayınları.

Kirkpatrick, L. A., & Davis, K. E. (1994). Attachment styles, gender, and relationship stability: A longitudinal analysis. Journal of Personality and Social Psychology, 66, 502-512.

Kirkpatrick, L.A. and Hazan, C. (1994). Attachment styles and close relationships. Personal Relationships, 1, 123-142.

Kobak, R. R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation and representations of self and others. Child Development, 59, 135-146.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security of infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.), Growing points of attachment theory and research, 66-106, Chicago: University of Chicago Press.

Marsh, H.W., & Hocevar, D. (1988). A new, more powerful approach to multitrait-multimethod analyses: Application of second-order confirmatory factor analysis. Journal of Applied Psychology, 73, 107-117.

Mead, M. (1977). 'Jealousy: Primitive and civilized', in G. Clanton and L.G. Smith (eds) Jealousy, 115-127, Englewood Cliffs, NJ: Prentice Hall.

Pfeiffer, S., & Wong, P. T. P. (1989). Multidimensional jealousy. Journal of Personal and Social Relationships, 6, 181-196

Pines, A.M. (1998). Romantic Jealousy: Causes, Symptoms, Cures. New York: Roudledge Press.

Radecki-Bush, C., Farrell, A.D., and Bush, J.P. (1993). Predicting jealous responses: The influence of adult attachment and depression on threat appraisal. Journal of Social and Personal Relationships, 10, 569-588.

Rosenberg, M. (1965). Society and adolescent self-image. Princeton, NJ: Princeton University Press.

Scharfe, E., & Bartholomew, K. (1994). Reliability and stability of adult attachment patterns, Personal Relationships, 1, 23-43.

Sharpsteen, D.J. (1991). The organization of jealousy knowledge: Romantic Jealousy as a blended emotion. In P. Salovey (Ed.), The psychology of jealousy and envy. New York: Guilford Press

Sharpsteen, D.J. (1995). The effects of relationship and self-esteem threats on the likelihood of romantic jealousy. Journal of Social and Personal Relationships, 12, 89-101.

Sharpsteen, D.J. and Kirkpatrick, L.A. (1997) Romantic jealousy and adult romantic attachment. Journal of Personality and Social Psychology, 72, 627-640.

Shaver, P. R., Hazan, C., & Bradshaw, D. (1988). Love as attachment: The integration of three behavioral systems. In R. J. Sternberg & M. L. Barnes (Eds.), The psychology of love (pp. 68-99). New Haven, CT: Yale University Press.

Simpson, J. A. (1990). Influence of attachment styles on romantic relationships. Journal of Personality and Social Psychology, 59, 971-980.

Sümer, N. and Cozzarelli C. (1999). Interplay between mental models of attachment, relationship attributions and satisfaction. Paper accompanied poster presented at the 107th Annual Convention of the APA, Boston, USA.

Sümer, N. and Güngör, D. (1999). Yetişkin bağlanma stilleri ölçeklerinin Türk örneklemini üzerinde değerlendirmesi ve kültürlerarası bir karşılaştırma, Türk Psikoloji Dergisi, 14, 71-106.

Tuğrul, C. (1994). Alkoliklerin çocuklarının aile ortamlarındaki stress kaynakları, etkileri ve stresle başa çıkma yolları, Türk Psikoloji Dergisi, 9, 57-73.

Weiss, R. S. (1982) Attachment in adult life Pp in C. M. Parkes and J. Stevenson-Hinde (Eds.) The place of attachment in human behaviour, 171-184, New York: Basic Books.

West, M., & Sheldon-Keller, A. (1992). The assessment of dimensions relevant to adult reciprocal attachment. Canadian Journal of Psychiatry, 37, 1-7.

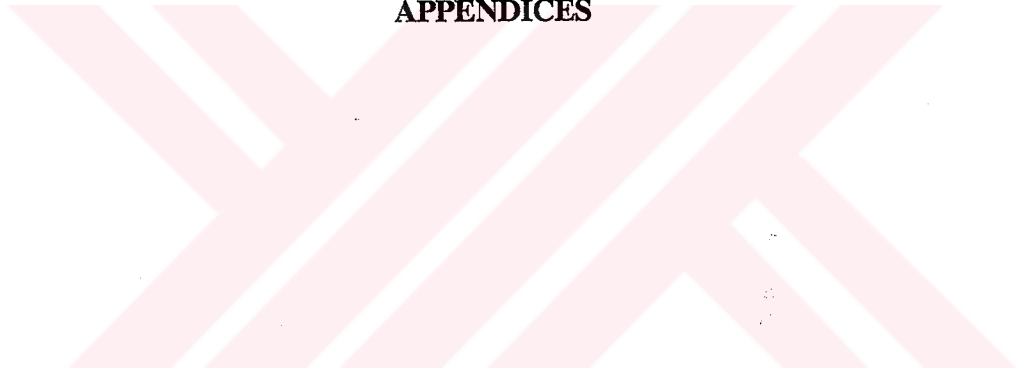
White, G.L. (1981). A model of romantic jealousy, Motivation and Emotion, 5,

295-310.

White, G.L. and Mullen, P. (1989). Jealousy: Theory, research and clinical strategies. New York: Guilford Press.



APPENDICES



APPENDIX A

Demographic Information

Cinsiyetiniz: Kadın () Erkek () Yaşınız:.....
Bölümünüz:..... Sınıfınız:.....
Annenizin eğitim durumu:..... Annenizin Mesleği:.....
Babanızın eğitim durumu:..... Babanızın Mesleği:.....
Ailenizin gelir durumu: 1 2 3 4 5 6 7

Şu anda herhangi bir romantik (duygusal) ilişkiniz var mı?

Evet () Hayır () Varsa ne kadar süredir? Yıl Ay

Bu ilişkinin ne kadar sürmesini bekliyorsunuz?

Çok kısa 1 2 3 4 5 6 7 Sonsuza dek

Bu ilişkiye ne kadar bağlısınız?

Hiç bağlı değilim 1 2 3 4 5 6 7 Çok bağılım

Ne sıklıkta görüşüyorsunuz?

Çok seyrek 1 2 3 4 5 6 7 Çok sık

Şu anda yaşadığınız romantik ilişkide kendinizi ne kadar güvenli hissediyorsunuz?

Çok güvensiz 1 2 3 4 5 6 7 Çok güvenli

Birlikte olduğunuz kişiyi fiziksel olarak ne kadar çekici buluyorsunuz?

Hiç 1 2 3 4 5 6 7 Çok

Birlikte olduğunuz kişiyi duygusal olarak ne kadar yakın buluyorsunuz?

Hiç 1 2 3 4 5 6 7 Çok

Birlikte olduğunuz kişiyi ne kadar seviyorsunuz?

Hiç 1 2 3 4 5 6 7 Çok

Birlikteliğinizde ne kadar mutlusunuz?

Hiç 1 2 3 4 5 6 7 Çok

Genellikle birlikte olduğunuz kişiyle aranızdaki ilişkinin ne ölçüde iyi gittiğine inanmıyorsunuz?

Hiçbir zaman 1 2 3 4 5 6 7 Her zaman

Birlikteliğinizdeki sorunlar ne kadar ciddidir?

Hiç ciddi değil 1 2 3 4 5 6 7 Çok ciddi

Tüm yönleriyle düşündüğünüzde birlikteliğinizden ne kadar doyum alıyorsunuz?

Hiç doyum almıyorum 1 2 3 4 5 6 7 Çok doyum alıyorum

APPENDIX B

Relationship Questionnaire (RQ) by Bartholomew (1990)

Aşağıdaki paragraflar yakın duygusal ilişkilerde yaşanan farklı duygu ve düşünceleri yansıtmaktadır. Yakın duygusal ilişkilerden kastedilen arkadaşlık, dostluk, romantik ilişkiler ve benzerleridir. Lütfen aşağıdaki 7 noktalı ölçeği kullanarak, herbir paragrafın kendi yakın ilişkilerinizde yaşadığınız duygu ve düşünceleri ne ölçüde tanımladığınızı belirtiniz.

____ 1. Başkaları ile kolaylıkla duygusal yakınlık kurarım. Başkalarına güvenmek, onlara bağlanmak ve başkalarının bana güvenip bağlanması konusunda kendimi oldukça rahat hissederim. Birilerinin beni kabul etmemesi ya da yalnız kalmak beni pek kaygılandırmaz.

1-----2-----3-----4-----5-----6-----7

____ 2. Başkaları ile yakınlaşmak konusunda rahat değilim. Duygusal olarak yakın ilişkiler kurmak isterim, ancak başkalarına tamamen güvenmek ya da inanmak benim için çok zor. Başkaları ile çok yakınlaşırsam incinip kırılacağımdan korkarım.

1-----2-----3-----4-----5-----6-----7

____ 3. Başkaları ile duygusal yönden tamamıyla yakınlaşmak, hatta bütünleşmek isterim. Fakat genellikle başkalarının benimle benim arzu ettiğim kadar yakınlık kurmakta isteksiz olduklarını görüyorum. Yakın ilişki(ler) içinde olmazsam huzursuzluk duyarım, ancak bazen başkalarının bana, benim onlara verdiğim kadar değer vermediklerini düşünür endişelenirim.

1-----2-----3-----4-----5-----6-----7

___ 4. Yakın duygusal ilişkiler içinde olmaksızın çok rahatım. Benim için önemli olan kendi kendine yetmek ve tamamen bağımsız olmaktır. Ne başkalarına güvenmeyi ne de başkalarının bana güvenmesini tercih ederim.

1-----2-----3-----4-----5-----6-----7

**!!! ŞİMDİ LÜTFEN YUKARIDA DEĞERLENDİRDİĞİNİZ DÖRT PARAGRAFI GÖZ
ÖNÜNE ALARAK SİZİ EN İYİ TANIMLADIĞINI DÜŞÜNDÜĞÜNÜZ PARAGRAFIN
ÖNÜNDE BOŞ BIRAKILMIŞ OLAN YERİ İŞARETLEYİNİZ!!!**



APPENDIX C

Experiences in Close Relationships (ECR) by Brennan et. al (1998)

Aşağıda, romantik ilişkilerde yaşanan bazı duygu ve davranışlara ilişkin ifadeler yer almaktadır. Sizden, genel olarak, yakın ilişkilerde yaşadıklarınızı dikkate alarak bu ifadeleri değerlendirmeniz istenmektedir. Maddelerde sözü geçen ‘birlikte olduğum kişi’ ifadesi ile romantik ilişkide bulunduğunuz kişi kastedilmektedir. Eğer halihazırda bir romantik ilişki içerisinde değilseniz, aşağıdaki maddeleri bir ilişki içinde olduğunuzu varsayarak cevaplandırınız. Her bir maddenin ilişkinizdeki duygu ve düşüncelerinizi ne oranda yansıttığını karşılarındaki 7 aralıklı ölçek üzerinde işaretleyiniz.

Hiç katılmıyorum 1-----2-----3-----4-----5-----6-----7 Kesinlikle katılmıyorum

1. Gerçekte ne hissettiğimi birlikte olduğum kişiye göstermemeyi tercih ederim.	1	2	3	4	5	6	7
2. Terk edilmekten korkarım.	1	2	3	4	5	6	7
3. Romantik ilişkide olduğum kişilere yakın olmak konusunda çok rahatım.	1	2	3	4	5	6	7
4. İlişkilerim konusunda çok kaygılıyım.	1	2	3	4	5	6	7
Birlikte olduğum kişi bana yakınlaşmaya başlar başlamaz kendimi geri çekiyorum.	1	2	3	4	5	6	7
6. Romantik ilişkide olduğum kişilerin beni, benim onları umursadığım kadar umursamayacaklarından endişelenirim.	1	2	3	4	5	6	7
7. Romantik ilişkide olduğum kişi çok yakın olmak istediğinde rahatsızlık duyarım.	1	2	3	4	5	6	7
8. Birlikte olduğum kişiyi kaybedeceğim diye çok kaygılanırım.	1	2	3	4	5	6	7
9. Birlikte olduğum kişilere açılma konusunda kendimi rahat Hissetmem	1	2	3	4	5	6	7
10. Genellikle, birlikte olduğum kişinin benim için hissettiklerinin benim onun için hissettiklerim kadar güçlü olmasını arzu ederim.	1	2	3	4	5	6	7
11. Birlikte olduğum kişiye yakın olmayı isterim, ama sürekli kendimi geri çekerim.	1	2	3	4	5	6	7
12. Genellikle birlikte olduğum kişiyle tamamen bütünleşmek isterim ve bu bazen onları korkutup benden uzaklaştırır.	1	2	3	4	5	6	7
13. Birlikte olduğum kişilerin benimle çok yakınlaşması beni gerginleştirir.	1	2	3	4	5	6	7

14. Yalnız kalmaktan endişelenirim.	1	2	3	4	5	6	7
15. Özel duygu ve düşüncelerimi birlikte olduğum kişiyle paylaşmak konusunda oldukça rahatımdır.	1	2	3	4	5	6	7
16. Çok yakın olma arzum bazen insanları korkutup uzaklaştırır.	1	2	3	4	5	6	7
17. Birlikte olduğum kişiyle çok yakınlaşmaktan kaçınmaya çalışırım.	1	2	3	4	5	6	7
18. Birlikte olduğum kişi tarafından sevildiğimin sürekli ifade edilmesine gereksinim duyarım.	1	2	3	4	5	6	7
19. Birlikte olduğum kişiyle kolaylıkla yakınlaşabilirim.	1	2	3	4	5	6	7
20. Birlikte olduğum kişileri bazen daha fazla duygu ve bağlılık göstermeleri için zorladığımı hissederim.	1	2	3	4	5	6	7
21. Birlikte olduğum kişilere güvenip dayanma konusunda kendimi rahat bırakmakta zorlanırım.	1	2	3	4	5	6	7
22. Terk edilmekten pek korkmam.	1	2	3	4	5	6	7
23. Birlikte olduğum kişilere fazla yakın olmamayı tercih ederim.	1	2	3	4	5	6	7
24. Birlikte olduğum kişinin bana ilgi göstermesini sağlayamazsam üzülür ya da kızarım.	1	2	3	4	5	6	7
25. Birlikte olduğum kişiye hemen hemen herşeyi anlatırım.	1	2	3	4	5	6	7
26. Birlikte olduğum kişinin bana istediğim kadar yakın olmadığını düşünürüm.	1	2	3	4	5	6	7
27. Sorunlarımı ve kaygılarımı genellikle birlikte olduğum kişiyle tartışırım.	1	2	3	4	5	6	7
28. ir ilişkide olmadığım zaman kendimi biraz kaygılı ve güvensiz hissederim.	1	2	3	4	5	6	7
29. Birlikte olduğum kişilere güvenip dayanmakta rahatımdır.	1	2	3	4	5	6	7
30. Birlikte olduğum kişi istediğim kadar yakınımnda olmadığında kendimi engellenmiş hissederim.	1	2	3	4	5	6	7
31. Birlikte olduğum kişilerden teselli, öğüt ya da yardım istemekten rahatsız olmam.	1	2	3	4	5	6	7
32. İhtiyaç duyduğumda birlikte olduğumya ulaşamazsam kendimi engellenmiş hissederim.	1	2	3	4	5	6	7
33. İhtiyaç duyduğumda birlikte olduğum kişiden yardım istemek işe yarar.	1	2	3	4	5	6	7
34. Birlikte olduğum kişiler beni onaylamadıkları zaman kendimi gerçekten kötü hissederim.	1	2	3	4	5	6	7
35. Rahatlama ve güvencenin yanısıra birçok şey için birlikte olduğum kişiyi ararım.	1	2	3	4	5	6	7
36. Birlikte olduğum kişi benden ayrı zaman geçirdiğinde üzülürüm.	1	2	3	4	5	6	7

APPENDIX D

Emotional Dependency Scale (EDS) by Buunk (1981)

Aşağıdaki ifadelerin size ne kadar uygun olduğunu aşağıdaki ölçek üzerinde işaretleyiniz. Lütfen maddelerde “O” şeklinde ifade edilen kişiyi romantik ilişkide bulunduğunuz kişi olarak dikkate alınız.

Hiç katılmıyorum 1-----2-----3-----4-----5-----6-----7 Kesinlikle katılıyorum

1. O birkaç günlüğüne benden ayrı kaldığında genel olarak kendimi pek iyi hissetmem.	1	2	3	4	5	6	7
2. O olmasaydı hayatımın nasıl olacağını tahmin bile edemem.	1	2	3	4	5	6	7
3. Şu anda onunla mutlu olduğum kadar mutlu olabileceğim başka insan bulmak benim için zor olurdu.	1	2	3	4	5	6	7
4. O olmadan da mutlu olabilirdim.	1	2	3	4	5	6	7
5. Onunla birlikte yapmaktan hoşlandığım birçok şey var.	1	2	3	4	5	6	7
6. O olmadan yaşamak zorunda olmak benim için zor olurdu.	1	2	3	4	5	6	7
7. O olmadan karar vermeyi zor buluyorum.	1	2	3	4	5	6	7
8. Kendimi iyi hissetmediğim zaman bu konuda konuşabileceğim tek insan ddir.	1	2	3	4	5	6	7
9. Hayatımdaki en önemli şey onunla olan ilişkimdir.	1	2	3	4	5	6	7

APPENDIX E

Interpersonal Relationship Scale (IRS) by Hupka et al (1977)

Aşağıdaki ifadelerin sizin düşüncenize ne kadar uygun olduğunu aşağıdaki ölçek üzerinde işaretleyiniz.

	1	2	3	4	5	6	7
Hiç Katılmıyorum							Kesinlikle Katılıyorum
1. Sık sık sevgilim olmadan yaşayamayacağım hissine kapılıyorum.	1	2	3	4	5	6	7
2. Hayatın onsuz pek bir anlamı olmazdı.	1	2	3	4	5	6	7
3. Sevgilimi kaybetmek beni olmak istediğim kişi olmaktan alıkoymazdı.	1	2	3	4	5	6	7
4. Sevgilimin geçmişte birisiyle mutlu bir ilişkisinin olması beni rahatsız ederdi.	1	2	3	4	5	6	7
5. Sevgilim başka birisiyle buluştuğunda çok rahatsızlık duyarım.	1	2	3	4	5	6	7
6. Sevgilimin sadece benimle yaşadığı cinsellikten zevk almasını isterim.	1	2	3	4	5	6	7
Sevgilimin beni aldatmadığına ilişkin güvenim tamdır.	1	2	3	4	5	6	7
8. Sevgilimi sadık bir kişi olarak görüyorum.	1	2	3	4	5	6	7
9. Sevgilimden uzak kaldığımda nerelerde olduğuna ve ne yaptığına ilişkin kuşku duymam.	1	2	3	4	5	6	7
10. Başkalarının en iyi flörtleri bulmakta hep şanslı olduğumu görmek biraz rahatsız edici.	1	2	3	4	5	6	7
11. Hiçbir zaman gördüklerim kadar iyi bir romantik ilişkim olabileceğini düşünemiyorum.	1	2	3	4	5	6	7
12. Çekici bir kişi gördüğümde kendimi yetersiz hissediyorum.	1	2	3	4	5	6	7
13. Kendimi sık sık kişileri ya da ilişkileri idealize ederken (yüceltirken) yakalıyorum.	1	2	3	4	5	6	7
14. Neden bilmiyorum ama genellikle kendimi 'kaybeden' olarak görüyorum.	1	2	3	4	5	6	7
15. Başarılı ve mutlu bir ilişki gördüğümde içimde bir boşluk hissediyorum.	1	2	3	4	5	6	7
16. Çoğu arkadaşımın benimkinden daha heyecanlı aşk hayatları var.	1	2	3	4	5	6	7

APPENDIX F

Self-esteem Scale by Rosenberg (1965)

Aşağıdaki ifadelerin size ne kadar uygun olduğunu aşağıdaki ölçek üzerinde işaretleyiniz.

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

Kendimi en az diğer insanlar kadar değerli buluyorum.	1	2	3	4	5	6	7
Bazı olumlu özelliklerim olduğunu düşünüyorum.	1	2	3	4	5	6	7
Genelde kendimi başarısız bir kişi olarak görme eğilimindeyim.	1	2	3	4	5	6	7
Ben de diğer insanların birçoğunun yapabildiği kadar bir şeyler yapabilirim	1	2	3	4	5	6	7
Kendimde gurur duyacak fazla birşey bulamıyorum.	1	2	3	4	5	6	7
Kendime karşı olumlu bir tutum içindeyim	1	2	3	4	5	6	7
Genel olarak kendimden memnunum.	1	2	3	4	5	6	7
Kendime karşı daha fazla saygı duyabilmeyi isterdim	1	2	3	4	5	6	7
Bazen kesinlikle kendimin bir işe yaramadığımı düşünüyorum	1	2	3	4	5	6	7
Bazen kendimin hiç de yeterli bir insan olmadığımı düşünüyorum	1	2	3	4	5	6	7

APPENDIX G

Feelings of Inadequacy by White (1981) and Karakurt (2001)

Aşağıdaki ifadelerin sizin düşüncenize ne kadar uygun olduğunu aşağıdaki ölçek üzerinde işaretleyiniz.

1-----2-----3-----4-----5-----6-----7
Hiç Katılmıyorum Kesenlikle Katılıyorum

1. Keşke farklı bir insan olsaydım da ilişkim de daha güzel olsaydı.	1	2	3	4	5	6	7
2. Sevgilimin yanındaki kendimden hoşnutum.	1	2	3	4	5	6	7
3. İlişkimi geliştirecek becerilere sahip olduğumdan eminim.	1	2	3	4	5	6	7
4. Sevgilimin benden daha iyilerine layık olduğunu düşünüyorum.	1	2	3	4	5	6	7
5. Sevgilimi mutlu edecek özelliklere sahip olduğuma inanıyorum.	1	2	3	4	5	6	7
6. Sevgilimin yanında kendimi yetersiz hissediyorum.	1	2	3	4	5	6	7
7. Sevgilimin benden utandığını düşünüyorum.	1	2	3	4	5	6	7

APPENDIX H

Multi-dimensional Jealousy Scale (MDJS) by Pfeiffer and Wong (1987)

Aşağıdaki ifadelerin size ne kadar uygun olduğunu aşağıdaki ölçek üzerinde işaretleyiniz. Lütfen maddeleri okurken "X" harfinin yerine romantik ilişkide bulunduğunuz kişinin adını koyunuz.

	1-----2-----3-----4-----5-----6-----7							
Sevinirim							Üzülürüm	
1. X size karşı cinsten bir başkasının ne kadar iyi görüldüğü hakkında yorum yapıyorsa.	1	2	3	4	5	6	7	
2. X karşı cinsten birisiyle konuşmak için aşırı ilgi ve heyecan gösterirse.	1	2	3	4	5	6	7	
3. X karşı cinsten birisine sıcak bir tavırla gülümserse.	1	2	3	4	5	6	7	
4. X karşı cinsten birisiyle flört ederse.	1	2	3	4	5	6	7	
5. Karşı cinsten birisi X'le çıkarsa.	1	2	3	4	5	6	7	
6. X karşı cinsten birisini kucaklar ve öperse.	1	2	3	4	5	6	7	
7. X karşı cinsten biriyle çok yakın çalışırsa.	1	2	3	4	5	6	7	

	1-----2-----3-----4-----5-----6-----7							
Beni tanımlamıyor							Beni tanımlıyor	
8. X'in çekmecelerini, el çantasını ve ceplerini kontrol ederim.	1	2	3	4	5	6	7	
9. X'i hiç beklemediği zamanlarda orada olup olmadığını anlamak için ararım.	1	2	3	4	5	6	7	
10. X'e geçmişteki ve bugünkü romantik ilişkileri hakkında sorular sorarım.	1	2	3	4	5	6	7	
11. Eğer X karşı cinsten birisine ilgi gösterirse onun hakkında kötü şeyler söylerim.	1	2	3	4	5	6	7	
12. X'i telefon konuşmaları hakkında sorgularım.	1	2	3	4	5	6	7	
13. X'e nerede olduğu konusunda sorular sorarım.	1	2	3	4	5	6	7	
14. X'i ne zaman karşı cinsten biriyle konuşurken Görsem araya girerim.	1	2	3	4	5	6	7	
15. Sadece yanında kim olduğunu görmek için X'e sürpriz Ziyaretler yaparım.	1	2	3	4	5	6	7	
16. X'in karşı cinsten birisiyle gizlice görüştüğünden şüphe ediyorum.	1	2	3	4	5	6	7	
17. Karşı cinsten birisinin X'in peşinden koşuyor olmasından kaygı duyuyorum.	1	2	3	4	5	6	7	
18. X'in başka birisinden etkilenmiş olmasından şüpheleniyorum.	1	2	3	4	5	6	7	
19. X'in benim arkamdan karşı cinsten bir başkasıyla fiziksel yakınlık kurmuş olmasından kuşulanıyorum.	1	2	3	4	5	6	7	
20. Karşı cinsten bazı insanların X'e romantik ilgi duyuyor olduğunu düşünüyorum.	1	2	3	4	5	6	7	

21. X'in gizlice karşı cinsten birisiyle romantik yakınlık kurmakta olduğunu düşünüyorum.	1	2	3	4	5	6	7
22. Karşı cinsten birisinin X'i ayarttığından endişe ediyorum.	1	2	3	4	5	6	7
23. X'in karşı cinse aşırı tutkun olduğunu düşünüyorum.	1	2	3	4	5	6	7



APPENDIX I

Measures of Coping with Jealousy by Pines (1998)

Lütfen en şiddetli kıskançlık yaşantınızı dikkate alarak, bununla nasıl başettiğinize ilişkin soruları aşağıdaki 7 noktalık ölçek üzerinde yanıtlayınız.

1-----2-----3-----4-----5-----6-----7
Asla Her zaman

1. Mantıklı tartışmalara girerim.	1	2	3	4	5	6	7
2. Bağırır çağırırım.	1	2	3	4	5	6	7
3. Ağlarım.	1	2	3	4	5	6	7
4. Fiziksel şiddet kullanırım.	1	2	3	4	5	6	7
5. İçime atar acı çekerim.	1	2	3	4	5	6	7
6. Olayın gülünç yanlarını bulurum.	1	2	3	4	5	6	7
7. Durumu olduğu gibi kabullenirim.	1	2	3	4	5	6	7
8. Acı çekerim.	1	2	3	4	5	6	7
9. İlgili durumdaki rolümün üzerine düşünür ve neler yapıp yapamayacağımı değerlendiririm.	1	2	3	4	5	6	7
10. Sorundan kaçırım, kaçınırım.	1	2	3	4	5	6	7
11. İçime atar kendi kendimi yerim	1	2	3	4	5	6	7
12. Birşeyler fırlatırım, kırarım.	1	2	3	4	5	6	7
13. İnkâr ederim.	1	2	3	4	5	6	7
14. Ben de sevgilimi kıskandıracak şeyler yaparım.	1	2	3	4	5	6	7
15. Terkederim.	1	2	3	4	5	6	7
16. Sessizce fakat farkedilir şekilde acı çekerim.	1	2	3	4	5	6	7
17. Konu hakkında şakalar yaparım.	1	2	3	4	5	6	7

APPENDIX J

Affective Reactions to Partner's Extradyadic Sexual Behaviors

Varsayın ki sevgiliniz size başka birisiyle ilişkisi olduğunu söyledi. Bu durumda, aşağıdaki duyguları ne ölçüde hissedeceğinizi aşağıdaki ölçek üzerinde işaretleyiniz.

Hiç 1-----2-----3-----4-----5-----6-----7 Çok

Kızgınlık	1	2	3	4	5	6	7
Aldatılmışlık	1	2	3	4	5	6	7
Üzüntü	1	2	3	4	5	6	7
Hayal kırıklığı	1	2	3	4	5	6	7
Güçsüzlük	1	2	3	4	5	6	7
Yetersizlik	1	2	3	4	5	6	7
Kendinden şüphe etme	1	2	3	4	5	6	7
Korku	1	2	3	4	5	6	7
Düşmanlık	1	2	3	4	5	6	7
Endişe	1	2	3	4	5	6	7
Hiddet	1	2	3	4	5	6	7

APPENDIX K

Faith in People Scale by Rosenberg (1957)

Aşağıda insanlara karşı tutumunuzla ilgili beş soru yer almaktadır. Lütfen bu soruları her sorudan sonraki 7 dereceli ölçeği kullanarak cevaplayınız.

1. Kimileri insanların genelde güvenilir olduğunu söylerler, kimileride başka insanlara karşı çok dikkatli olunması gerektiğini belirtirler. Siz bu konuda ne düşünüyorsunuz?

Başkalarına karşı çok 1 2 3 4 5 6 7 İnsanlar genelde dikkatli olunmalıdır güvenilirlerdir

2. Genel olarak çoğu insanın başkalarına yardım etmeye mi yoksa kendi çıkarlarını gözetmeye mi daha eğilimli olduklarını düşünürsünüz?

Çıkarını gözetmeye 1 2 3 4 5 6 7 Yardım etmeye

3. Başınıza kötü birşey geldiğinde kimse size ne olduğuyla yakından ilgilenmez.

Hiç katılmıyorum 1 2 3 4 5 6 7 Tamamen katılıyorum

4. Kendinizi gözetmezseniz insanlar sizi kullanacaklardır.

Hiç katılmıyorum 1 2 3 4 5 6 7 Tamamen katılıyorum

5. İnsan doğuştan işbirliğine yatkındır.

Hiç katılmıyorum 1 2 3 4 5 6 7 Tamamen katılıyorum