

**PREDICTION OF COUPLE BURNOUT FROM  
EMPATHY, FACIAL EMOTION RECOGNITION  
AND TRAIT ANXIETY MEASURES**



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RECOGNITION AND TRAIT ANXIETY MEASURES

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and ethical conduct, I have fully cited and referenced all material and results that are not original to this work.

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*To my mum and dad ...*

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Çağla Küçükköseleci

## ÖZ

### EŞ TÜKENMİŞLİĞİNİ YORDAYAN DEĞİŞKENLER: EMPATİ, YÜZLERDEN DUYGU TANIMA, VE SÜREKLİ KAYGI

Küçükköseleci, Çağla

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Mevcut çalışmada Kişilerarası Tepkisellik Ölçeğinin alt boyutları (Perspektif Alma, Empatik Düşünce, Kişisel Rahatsızlık), yüzlerden duygu tanıma ve sürekli kaygının eş tükenmişliği ile ilişkisi araştırılmaktadır. Veriler en az bir yıllık ilişkisi olan 224 kişiden toplanmıştır. Araştırmada, Eş Tükenmişliği Ölçeği, Gözlerden Zihin Okuma Testi, Kişilerarası Tepkisellik İndeksi ve Sürekli Kaygı Ölçeği kullanılmıştır. Yürütülen araştırmanın sonucunda, Kişisel Rahatsızlık ve Empatik Düşünce alt boyutlarının eş tükenmişliğini yordadığı sonucuna varılmıştır. Cinsiyet farklılıkları göz önünde bulundurulduğunda, Kişisel Rahatsızlık ve Empatik Düşünce alt boyutlarının eş tükenmişliğini kadınlarda yordadığı bulunmuştur.

*Anahtar Kelimeler:* Eş Tükenmişliği, Empati, Yüzlerden Duygu Tanıma,  
Sürekli Kaygı

## ABSTRACT

### PREDICTION OF COUPLE BURNOUT FROM EMPATHY, FACIAL EMOTION RECOGNITION, AND TRAIT ANXIETY

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In the scope of the present study, prediction of couple burnout from divisions of Interpersonal Reactivity Index (Perspective Taking, Empathic Concern, Fantasy Scale, and Personal Distress), facial emotion recognition, and trait anxiety. The present study was conducted with 224 participants who have romantic relationship at least one year. Moreover, the measures of the present study were Couple Burnout Measure, Reading the Mind in the Eyes Test, Interpersonal Reactivity Index, and Trait Anxiety Scale. From the results of the present, it was concluded that Personal Distress and Empathic Concern dimensions predicted couple burnout. Moreover, in terms of gender differences, Personal Distress and Empathic Concern divisions predicted couple burnout in females.

*Keywords:* Couple Burnout, Facial Emotion Recognition, Empathy, Trait Anxiety

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## **LIST OF SYMBOLS AND ABBREVIATIONS**

IRI: Interpersonal Reactivity Index

PT: Perspective Taking

FS: Fantasy Scale

EC: Empathic Concern

PD: Personal Distress

PTSD: Post-Traumatic Stress Disorder

CBM: Couple Burnout Measure

RMET: Reading the Minds in the Eyes Test

TAI: Trait Anxiety Scale

SMLR: Standard Multiple Linear Regression

MANOVA: Multivariate Analysis of Variance

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## CHAPTER 1

### INTRODUCTION

#### **1.1. Burnout**

First literature regarding burnout was mentioned the construct as a social problem rather than an academic construct. Burnout was evaluated from pragmatic perspective (Freudenberger, 1974). However, as the time passed, burnout was started to be investigated empirically and developed theoretically (Maslach & Jackson, 1981). Firstly, Maslach and Jackson (1981) stated that burnout might be defined as state of emotional exhaustion and cynicism that observed in people who work with people as a job demand. Secondly, Freudenberger (1974) explained that burnout is accompanied by decrease in motivation, energy and loyalty. In addition, Freudenberger (1974) stated that mental and physical symptoms might be observed gradually when burnout continues.

As it was indicated in definitions of burnout construct, previously, burnout was thought as a term which was attributed solely to work domain and couple burnout was described mostly over career burnout (Lingard, 2004). However, Pines and Nunes (2003) indicated that there were essential similarities between career burnout and couple burnout, i.e., mental exhaustion, physical exhaustion and physical exhaustion.

Pines (1996) stated that making comparison between couple and career burnout, it was detected that burnout is stemming from marriage stress rather than work distress. From that point, it might be suggested that individual's life quality more likely to be effected by romantic relationship domain (Pines, 1996).

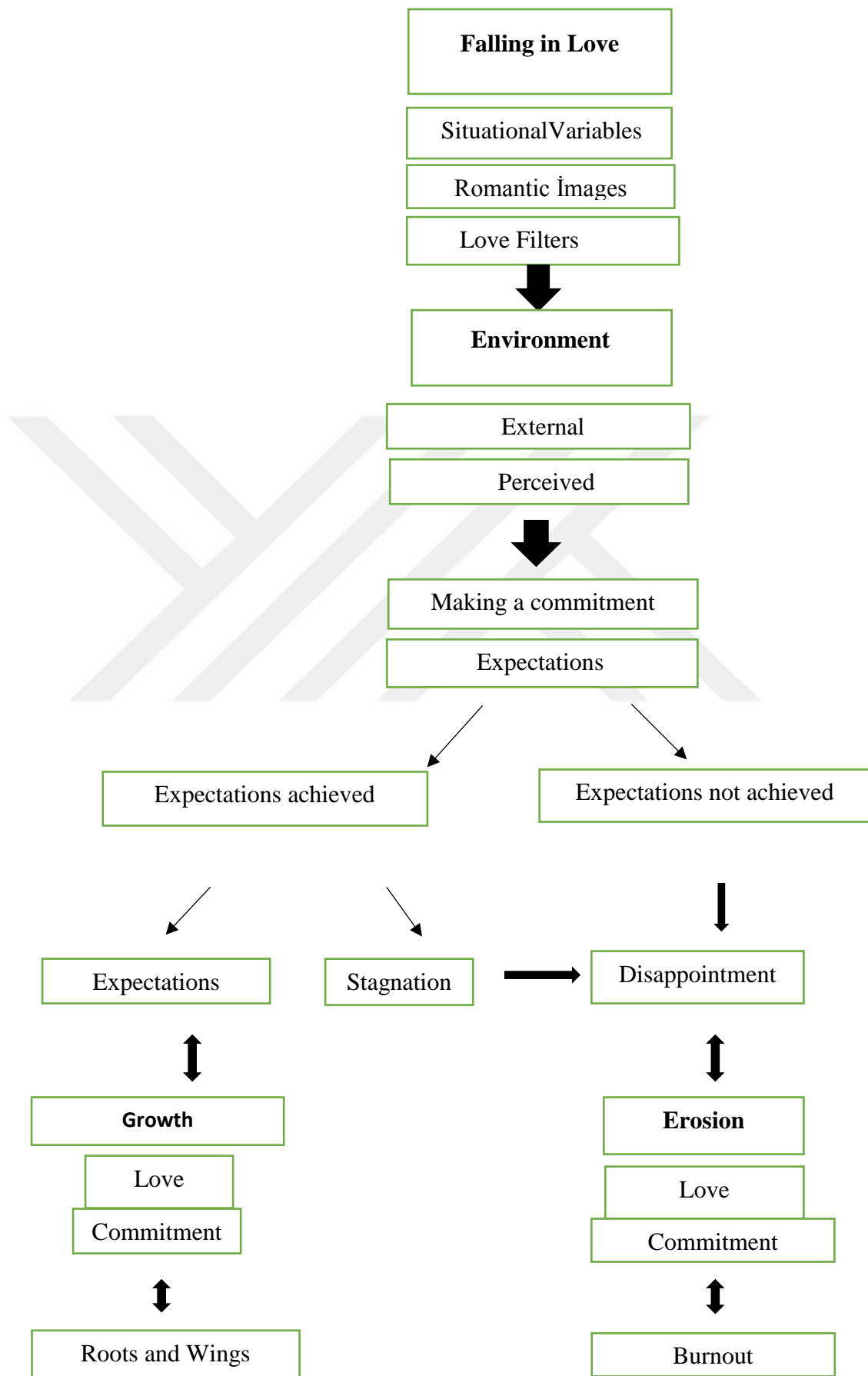
### **1.1.1. Couple Burnout**

In the present study, burnout construct will be examined on couple burnout basis. Burnout occurs when couples understand that romantic relationship does not cause a meaning in their life despite their efforts (Pines, 1996). To clarify, discrepancy between imagined and real romantic relationships results in burnout (Pines, 1996).

Recently, couple burnout phenomenon was investigated widely by researchers. Pines and Nunes (2003) described that couple burnout is also physical, emotional and mental fatigue which was experienced by couples as a result of loss of meaning in a life domain where they hold on big expectancies. Then couples feel disappointment and erosion follows as it is shown in Figure 1. Pines (1996) explained that firstly, physical exhaustion is described as tiredness that cannot be lessened by sleep. Secondly, emotional fatigue appear with disinterestedness in daily activities and hopelessness about solution of the problems that are stemming from the romantic relationship. Thirdly, mental fatigue gives signals with thoughts about dissatisfaction of individuals related to themselves and their relationships. In accordance with existential dilemma, Pines (2004) pointed out that when people think that they do not create meaningful difference in life, feelings of hopelessness and helplessness start to dominate their life, ending up with burnout. Fortunately, optimistically, couple burnout can be seen as an opportunity to take a close look at the relationship (Pines, 1996). Using the signals which were described, couples might look into problems in romantic relationships.

As a relational construct, Rusbult and Buunk (1993) defined that relationship satisfaction is positive emotions and attraction toward the romantic relationship and spouse. In opposite, Heyman (2009) explained relationship dissatisfaction with relationship unhappiness, ideas about separation or divorce and requirement for professional assistance. In relation with couple burnout, relationship dissatisfaction defined with unhappiness; however, couple burnout contains emotional, mental and physical exhaustion. The difference between two constructs might be stemming from symptoms of couple burnout which are not observed in relationship dissatisfaction, i.e. emotional exhaustion, mental exhaustion and physical exhaustion.

**Figure 1.1. The Love and Burnout Model**



## **1.2. Empathy**

Empathy can be described as the ability of individuals that provides opportunity to feel the same way as the others feel, without any direct contact (Singer, 2006). From the other side, Davis (1983) described empathy as reaction to others' behaviors. Taking a glance at divisions of empathy, Epa and Dudek (2015) stated that dyadic empathy contains two divisions, i.e. cognitive and emotional empathy. Cognitive empathy was thought as a construct which comprehends other's mental states. However, emotional empathy was described as the capability of reacting on other's emotionality. Both divisions of the empathy are seeming important elements of empathy by definition. From that point, Singer (2006) pointed out that empathizing and mentalizing are constructs that are intermingled because of the fact that an individual needs to understand other's mental states at first to feel the other's emotional state without any cue. In this regard, in relationships, both divisions of the empathy might be thought as essential part of human interaction. 274

Beside the empathy divisions that are related to others, Davis (1980) suggested that empathy cannot be thought separate from emotional reactions that were given in interpersonal relationships individually. In this regard, Interpersonal Reactivity Index (IRI) might be explained which contains divisions that measures both self-oriented and other-oriented empathy with Perspective Taking scale, Fantasy scale, Empathic Concern scale and Personal Distress scale (Davis, 1980). To explain, Peloquin and Lafontaine (2010) explained divisions of IRI in relation with romantic relationships. Perspective Taking (PT) scale is used to measure ability to take other's psychological viewpoint and placed in cognitive empathy. Fantasy scale (FS) is used to measure ability of individuals to put themselves into shoes of fictitious characters in media, such as films, books and so on and placed in cognitive empathy. Empathic Concern

scale (EC) is used to assess individuals' understanding of other people who are in disastrous conditions and placed in emotional empathy. Personal Distress scale (PD) is used to measure personal anxiety level and nervousness in urgent interpersonal situations and placed in emotional empathy. Based upon contents of divisions of IRI, Peloquin and Lafontaine (2010) explained that Empathic Concern and Perspective Taking divisions were placed in other-oriented; Fantasy Scale and Personal Distress divisions were placed in self-oriented group. In this regard, Peloquin and Lafontaine (2010) used only other-oriented scales which are Empathic Concern and Perspective Taking in their study. However, thinking holistically, Personal Distress might have contribution to relationship quality. Personal Distress is negatively associated with social functioning; in addition, there is positive relationship between Personal Distress and anxiety, fear and shyness (Davis, 1983).

### **1.2.1. Empathy in Romantic Relationships**

In order to understand place of empathy in romantic relationship context, a glance needs to be taken at relationship between empathy and social relationships. Hetu, Taschereau-Dumouchel and Jackson (2012) stated that empathy is a multifaceted concept that gives opportunity to understand other's emotions and react suitably in social contexts. Indeed, empathy is an essential part of human interaction and socialization. Individuals determine future actions in social situations according to signals that they take from the other's mental states with the help of empathic abilities and hereat they behave in a cooperative and altruistic manner (Hetu, Taschereau-Dumouchel & Jackson, 2012; Ferrari et al., 2014). In brief, empathy is an important element to endure social relationships.

Considering the effect of empathy in human interaction, romantic relationship arena will be highlighted in the present study. Cramer (2003) found that relationship

satisfaction is effected by the individuals' perception about empathy level of their partners which is key aspect of perceived emotional support. In line with this, Angera and Long (2006) justified significance of empathy in satisfying relationships. For instance, they have shown that an increase in relationship satisfaction is observed when an individual perceive his or her partner more emphatic.

### **1.2.2. Relationship between Empathy and Burnout**

Burnout have association with some mental disorders that are related to empathy. In order to understand the association, we had a glance on psychopathological correlates. Mazza et al. (2015) found that patients with Post-Traumatic Stress Disorder (PTSD) have disrupted emotional empathy while their cognitive empathy was preserved and Brattberg (2006) mentioned PTSD is significantly related to burnout presence. Moreover, Maurage et al. (2011) found that patients with alcoholism have impairment in emotional empathy. In relation with burnout, Olivares-Faundez, Gil-Monte & Fequeiredo-Ferraz (2014) found that there is relationship between alcohol use and burnout with mediating effect of feelings of guilt. In that sense, it might be thought that divisions of empathy have roles in different psychopathologies which have association with burnout.

The linear relationship between empathy and burnout is supported by 'Compassion fatigue theory'. Although empathy is thought as a term which is containing only positive meaning, popularly, conventional 'Compassion fatigue theory' can explain negative effect of empathy. Figley (2002) stated that high empathizers who bear others' emotional distress might experience burnout. In short, excessive empathy may result in compassion fatigue which means exhaustion that is stemming from spending time with people who have stressful life experiences (Figley,

2002). In this regard, compassion fatigue might be followed by burnout (Tei et al, 2014).

On the other hand, there are studies which found inverse relationship between empathy and burnout. Hojat et al (2015) found negative relationship between empathy and burnout. However, researchers added that associations between empathy and burnout might be depending on divisions of empathy. Lamothe et al. (2014) suggested that cognitive empathy might be associated with lower burnout level rather than emotional empathy. On the other hand, Lamothe et al. (2004) stated that feeling with somebody in the long run might lead to confusion about ownership of the emotions. Indeed, individuals might have difficulty about differentiate the emotions that they experience on their own and emotions of people who they empathize with. In addition, from the other side, cognitive empathy might function as preventive factor to avoid burnout (Lamothe et al, 2004; Gleichgerrcht & Decety, 2013). To sum up, in the light of the findings that were presented above, divisions of empathy might have different associations with burnout. Although there is no study that analyze relationship between empathy and couple burnout, the present study will show the associations firstly.

### **1.3. Emotion**

Izard (2002) stated that emotions organize inner reactions, i.e. behavioral, physiological, experiential and cognitive, of individuals and make preparation for thoughts and actions. Considering importance of emotions in determination of thoughts and actions, in the present study emotions will be analyzed in the romantic relationship context because of the fact that emotions might be thought as important elements of interpersonal relationships. In line with this, Campos et al. (1989) stated that emotions are described not only as feelings but also mean to start, regulate and endure interpersonal relationships. Ekman and Cordaro (2011) explained that

emotional behaviors are adapting to individuals' own environment. They indicated that emotional reactions are changeable and depending on the environment, so they might change as the situations change. To sum up, it might be stated that emotions are making interpersonal relationships easier with its adaptable nature.

Continuing with the place of emotions in the romantic relationship context, expression of emotions might be thought as key aspect to endure romantic relationships because of its adaptable nature. Mckinnon and Greenberg (2013) stated that expression of emotions results in positive inferences about relationship. It was inferred that expression of emotions; especially vulnerable ones, perceived as decrease in defense of the partner and make the relationship more open (Greenberg et al., 1993). As a result, it might be stated that expression of emotions make relationship more intimate and strengthen the attachment between the partners (Mckinnon & Greenberg, 2013).

### **1.3.1. Facial Emotion Recognition**

Following empathy, second probable predictor of couple burnout, i.e. emotion recognition, was described as truthiness of perception and interpretation of others' emotional states which were observed in social situations (Banziger, Grandjean, & Scherer, 2009). In terms of facial emotion recognition, Zhang and Parmley (2015) stated that expression of emotions from faces provide individuals opportunity to give reactions suitable to emotional cues that come from others. In this regard, accurate recognition of expression from faces might be thought as an essential part of human communication and interaction (Zhang & Parmly, 2015).

Darwin (1872) stated that emotional expressions are universal and made involuntarily. Based on this assumption, Ekman and Friesen developed an instrument in 1978 with 60 black-white female and male pictures which contains six basic

emotions, i.e. happiness, sadness, anger, surprise, disgust, and fear (Paiva- Silva et al., 2016). As the time passed, new improvements were made in facial emotion recognition measurement area. Lundkvist, Flykt, and Öhman developed an instrument with 490 colored pictures of 35 female and 35 male in 1988 that includes seven emotions, i.e. angry, fearful, disgusted, sad, happy, surprised, and neutral. Indeed, in the facial emotion recognition instruments, it was aimed to highlight the accurate emotion in order to make the instrument reliable and valid (Paiva- Silva et al., 2016).

Cues that are used to recognize non-verbal emotions are not limited to facial expressions. Nowicki and Duke (1989) stated that postures, gestures and tone of voice are important, too (as cited in Carton, Kessler & Pape, 1999). In the present study, facial expressions were taken into account, considering the link between facial emotion recognition and some psychopathologies that lead to malfunction in social relationships. To start with Autism Spectrum Disorders, facial emotion recognition deficits were detected in the literature (Baron-Cohen, 1997, Lacroix et al., 2014). Secondly, schizophrenia and psychosis might be taken into consideration because of the fact that it was reported that schizophrenia patients have impairment in facial emotion recognition and hereat, social functioning is affected negatively (Addington et al., 2006, Pan, 2009).

### **1.3.2. Facial Emotion Recognition in Romantic Relationships**

Considering the link between social functioning and facial emotion recognition, in the scope of social relationships, romantic relationships might be associated with facial emotion recognition. It was found that, despite controlling depression, inefficacy in facial emotion recognition effects relationship quality. It was suggested that there might be two-way relationship between non-verbal emotion

recognition and relationship quality. To clarify, individuals who have difficulties about decoding facial expressions might not have chance to carry out their emotion recognition abilities in satisfying relationships and go around in circles (Carton, Kessler & Pape, 1999). Considering importance of emotions in adaptation to environment, emotional recognition might become more important as the closeness of the relationship and shared environment increase. For instance, Sternglanz and DePaulo (2004) stated that in romantic relationships, individuals start to get used to read their partner's emotions in the long run and accurate understanding of emotions makes relationship happier.

#### **1.4. Trait Anxiety**

The third probable predictor of the couple burnout, anxiety, has variety of definitions. Freud is the first theoretician who explained the importance of anxiety and declared that anxiety is function as a mechanism for individuals to adapt to environment and endure life in emergent or hazardous conditions (Saragnano, 2013). As time passed, diverse definitions emerged. For instance, according to American Psychological Association (APA), anxiety is an emotion characterized by fear and state of tension with unknown origin which is accompanied by physical symptoms like palpitation, swelter, nausea and vomit. Fernández-Blázquez et al (2015) defined anxiety as state of tension and uneasiness which can emerge in specific circumstances.

Anxiety has two divisions which are state and trait anxiety. State anxiety refers how an individual feels at the present moment and trait anxiety refers how an individual feels in general (Marteau & Bekker, 1992). In the literature emergence of trait anxiety is explained by underlying mechanisms. Individuals who are anxious tend to see situations more threatening than normal controls (Mogg and Bradley, 2005). In line with this, in meta-analysis, Mitte (2008) explained that anxious people are more

alert to threatening signals and negative information. Thinking in relation with social relationships, when individuals give attention to negative and threatening signals, interpersonal relationships might be affected negatively. As a support, Allsop et al. (2014) indicated that trait anxiety is correlated with impaired social relationships.

#### **1.4.1. Trait Anxiety in Romantic Relationships**

Surcinelli et al. (2006) found that individuals with high trait anxiety are more prone to investigate emotions which are containing fear comparing individuals with low trait anxiety. In addition, they stated that fear about prospective occurrence of uncertain events may occur as a result of threat evoking perception of daily situations. In this regard, one of the explanations about association between anxiety and romantic relationships was made in relation with attachment theory in the literature. To start with the place of anxiety in attachment theory, Collins (1996) stated that anxiously attached individuals think repeatedly about fear of possible rejection that might come from their partners; however, at the same time, they burn with love of their partners (as cited in Stanton & Campbell, 2015). As a result, with the dilemma which was reported, anxious individuals live romantic relationships like a battle. In line with this, Stanton and Campbell (2015) found that because of the fact that cognitive load inhibit their ability to see a situations holistically, anxious individuals focus on negative features of their partner's behavior, not the positive ones. Totally, difficulties in the relationships might be stemming from negative attributions about romantic partner's behavior because of high levels of anxiety.

In the literature, findings support the relationship between romantic relationships and trait anxiety. Bayrami, Heshmati and Karami (2011) found that reduction in marital satisfaction is triggered by the increase in both state and trait

anxiety. In fact, especially trait anxiety explained a great majority of variance in marital satisfaction. In brief, anxiety influences marital relationship negatively (Bayrami, Heshmati & Karami, 2011). Caughlin, Huston and Houts (2000) found results which support the relationship between trait anxiety and relationship satisfaction.

It was thought that couple burnout might have correlation with trait anxiety, considering its connection with romantic relationships in the present study. Unfortunately, there is no any study which search the relationship between couple burnout and trait anxiety. However, the relationship between burnout and trait anxiety was analyze and in the literature, studies justified the association between burnout and trait anxiety (Toker et al., 2005; Lee et al., 2015)

### **1.5. Gender Differences**

To start with empathy, gender differences were analyzed in relation with couple burnout in the present study. In the literature women took the advantage of empathic capabilities with different explanations. Eisenberg (1990) concluded that females are more empathetic than men in high demanding conditions with high conscious control. However, gap between females and males become smaller in subtle conditions with low control. This results might be stemming from the fact that females are socialized in a more empathic manner than males and feel obliged to behave empathically. In relation with gender differences in empathy, Milfont and Sibley (2016) concluded that females are more prone to be concerned about environment because of the fact that they have more empathic abilities than males.

Secondly, continuing with facial emotion recognition, in the literature, evolutionary theory provides explanation to gender differences in facial emotion

recognition. Hall (1978) reported that women might be evolved to be sensitive about nonverbal cues to be awake to signals and threats while they are rearing their children. From the other side, in meta-analysis, McClure (2005) stated that mothers are more prone to express emotions to their daughters than sons. As a result, in socialization process, daughters are more exposed to emotions than sons and learn to recognize emotions with practice. Totally, in the literature, females are thought to have advantage about emotion recognition.

Thirdly, trait anxiety might be investigated from dyadic perspective. For instance, Dehle and Weiss (2001) stated that males are more prone to show their negative feelings with stress; on the other hand, women tend to demonstrate their negative feelings with sorrow and depression. In line with this finding, it was found that husbands' anxiety level is more likely to predict marital quality than wife's anxiety level (Dehle & Weiss, 2001). Moreover, Rehman et al (2015) investigated that while high anxiety level of husbands lead to decrease in relationship satisfaction of wives, the same is not true for husbands. In the light of the findings which were presented above, it might be thought that males and females need to be analyzed separately in order to see differences which they make in romantic relationships.

#### **1.6. Relationship between Couple Burnout, Facial Emotion Recognition, Empathy and Trait Anxiety**

Emotion recognition is detection of other's emotional states, whereas empathy refers to feel other's emotions. Surcinelli et al. (2006) stated that emotion recognition is a factor which facilitates non-verbal communication and can be thought as a base of adaptation to the environment and its manipulation. They also mentioned that emotion recognition has effects on many psychological disorders because of its crucial

importance on adaptive skills and relationship with others. These findings deduced that emotion recognition and empathy are constructs that are highly related to relationship with others. In that sense, romantic relationships and couple burnout can be analyzed with both emotion recognition and empathy. Secondly, in the literature, the relationship between trait anxiety and facial emotion recognition was studied and the linkage between two constructs was confirmed (Surcinelli et al., 2006; Cooper, Rowe & Penton-Voak, 2008). Totally, the constructs that were selected are highly related which was proved in the literature. Considering the linkage between constructs, the relationship between empathy, emotion recognition, trait anxiety and couple burnout was wondered in the present study.

### **1.7. The Current Study**

The aim of the present study is to highlight association between empathy, facial emotion recognition, and trait anxiety with couple burnout. There is no study which examines couple burnout with empathy, facial emotion recognition or trait anxiety. In addition, it is expected to have contribution to clinicians who work with couples with the results of the present study.

Firstly, as it was indicated, facial emotion recognition is a concept which facilitates relationship with others. From that point, romantic relationships may be analyzed in the scope of facial emotion recognition in relation with couple burnout. Considering facial emotion recognition's importance in enduring relationships, it might be expected that emotion recognition will predict couple burnout negatively.

Secondly, high trait anxiety leads to increase in concern for negative behaviors of the partner, and this might lead to couple burnout. From that point, it might be hypothesized that trait anxiety will predict couple burnout in positive direction.

Thirdly, although empathy was thought as a construct that effects relationships positively in some previous research, experiencing high emotional load of the others might lead to couple burnout as it was indicated. The effect of empathy is depending on divisions of empathy in the literature. Interpersonal Reactivity Index (IRI) is the scale which will be used to measure empathy in the present study. The divisions of IRI are Perspective Taking (PT), Empathic Concern (EC) and Personal Distress (PD). Perspective Taking measures cognitive empathy and cognitive empathy facilitates interpersonal relationships with its perspective taking capability and lowers possibility of burnout as it was indicated. Thus, it is hypothesized that Perspective Taking will predict couple burnout in negative direction. Moreover, emotional empathy is measured by Empathic Concern and high emotional load is expected to increase couple burnout level. Personal Distress is measuring tension in tense situations and negatively associated with social functioning. In that sense, Personal Distress will be expected to be associated with couple burnout in positive direction.

Finally, sociodemographic variables which were gender, age, marital status, having children, and frequency of meeting were thought to have contribution to couple burnout. To sum up, it was hypothesized that while Personal Distress and Empathic Concern will predict couple burnout positively, and Perspective Taking will predict couple burnout negatively. Secondly, in terms of facial emotion recognition, it is expected that emotion recognition will predict couple burnout negatively. Finally, it is hypothesized that trait anxiety will predict couple burnout in positive direction. Moreover, results will be questioned in terms of gender differences.

Hypothesis 1: Higher levels of Personal Distress is associated with higher levels of couple burnout.

Hypothesis 2: Higher levels of Perspective Taking is associated with lower levels of couple burnout.

Hypothesis 3: Higher levels of Empathic Concern is associated with higher levels of couple burnout.

Hypothesis 4: Higher levels of facial emotion recognition is associated with lower levels of couple burnout.

Hypothesis 5: Higher levels of trait anxiety is associated with higher levels of couple burnout.



## CHAPTER 2

### METHOD

#### 2.1. Participants

The present study was conducted with 112 participants (112 men and 112 women) from Bursa and Istanbul. The age range of the couples were determined as 25-50. In addition, the participants that participated to the present study were collected from couples who have been sustaining a romantic relationship for a year.

The information about gender, age, marital status, relationship duration, number of children and frequency of meeting variables were obtained from demographic form. In this respect, 50.2% of the participants were male and 49.8% of the participants were female; 73% of the participants were married and 27% were unmarried; 53% of the participants had children and 47% had not children; finally, 77% of the participants were met every day and 23% less than 3 days in a week.

**Table 2.1. Demographic Statistics of Sample**

Variables	<i>N</i>	%
<b>Gender</b>		
Female	110	49.8
Male	111	50.2
<b>Marital Status</b>		
Married	163	73.8
Unmarried	58	26.2
<b>Having Children</b>		
Yes	118	53.4
No	103	46.6
<b>Frequency of Meeting</b>		
Everyday	171	77.4
Less than 3 Days in a Week	50	22.6

## **2.2. Measures**

In the present study, demographic form which is containing gender, age, marital status, relationship duration, having children, frequency of meeting variables was placed before the measures. Afterwards, demographic form (APPENDIX A) was followed by Couple Burnout Measure (see APPENDIX B), Interpersonal Reactivity Index (See APPENDIX C), Reading Minds in the Eyes Test (See APPENDIX D) and Trait Anxiety Scale (See APPENDIX E).

### **2.2.1. Couple Burnout Measure (CBM)**

The scale was developed by Ayala Malach Pines in 1996 (Pines, 1996). The scale was adapted to couples from Burnout Measure which was developed by Ayala Malach Pines, too. CBM is containing 21 items with 7-point Likert scale, '1' was referring to never and '7' is referring to always. Internal consistency of the original CBM was changed between .91 and .93 in different samples; test retest reliability was found between .89, .76 and .66 after 1, 2 and 4 month intervals.

Çapri (2008) made Turkish adaptation of the scale in doctoral thesis. The items of the CBM was translated to Turkish by 16 experts. Moreover, in analysis, internal consistency was found .94 and test-retest reliability was found .91 after 2 months interval. In the current study the Cronbach's alpha was found .73 for total CBM scores.

### **2.2.2. Interpersonal Reactivity Index (IRI)**

IRI was developed by Mark H. Davis in 1983 to measure empathy in multidimensional manner (Davis, 1983). IRI has four divisions with seven items in each scale. Firstly, Perspective Taking (PT) was developed to measure individuals' thinking abilities from others' viewpoint. Secondly, Fantasy Subscale (FS) was developed to measure proneness of individuals to associate themselves with characters in fictional situations like movies or novels. Thirdly, Empathic Concern (EC) division is measuring warmth, compassion and concern which is felt to the others and finally, personal distress (PD) division was developed to measure distress and discomfort which is emerging after detection of these feelings in others. For males, test-retest reliability was found  $r=.79$  in FS,  $r=.61$  in PT,  $r=.72$  in EC and  $r=.68$  in PD scale; for females, test-retest reliability was found  $r=.81$  in FS,  $r=.62$  in PT,  $r=.70$  in EC and  $r=.76$  in PD after 60 to 75 days. In addition, for males, internal consistency was found  $\alpha=.78$  in FS,  $\alpha=.75$  in PT,  $\alpha=.72$  in EC scale and  $\alpha=.78$  in PD; for females, internal consistency was found  $\alpha=.75$  in FS,  $\alpha=.78$  in PT,  $\alpha=.70$  in EC and  $\alpha=.78$  in PD.

Engeler & Yargıç (2007) made reliability and psychometric properties study of IRI. Internal consistencies of four divisions were found .76 for FS, .66 for EC, .73 for PT, and .60 for PD. In addition, test-retest correlations were between .66 and .80. For the present study, alpha coefficients were found .64 for FS, .66 for EC, .68 for PT and .68 for PD. In addition alpha coefficient was reported .55 for total IRI.

### **2.2.3. Reading Minds in the Eyes Test (RMET)**

The revised version of the test was developed by Simon Baron-Cohen and colleagues in 2001 (Baron-Cohen et al.2001). The test was comprising of thirty seven eye pictures with the same size (17 female and 19 male) and four emotion options for each eye picture. Participants need to select the correct emotion option. Totally, emotion recognition score increase with correct response to eye pictures.

Reliability investigation of the test was made by Yıldırım et al. (2011). Yıldırım et al. concluded that 32 pictures of the test are suitable to use in Turkey. Reliability analysis revealed that test-retest correlation is .82. In addition, in the current study, alpha coefficient was found .74 for total RMET.

### **2.2.4. Trait Anxiety Inventory (TAI)**

The scale was developed by Spielberger and colleagues in 1970 (Spielberg, Gorsuch & Lushene, 1970). The TAI is consisting of 20 items with 4-point Likert scale and measuring trait anxiety with 20 questions. In detail, in TAI, response options are 1 (almost never), 2 (sometimes), 3 (often) and 4 (almost always). Test-retest reliability was found between .73 and .86 and internal consistency was found between .83 and .92.

The Turkish adaptation of the scale was made by LeCompte & Öner (1975). Test-retest reliability of the scale is between .71 and .86; moreover, internal consistency of the scale is between .83 and .87. In addition, for the present study, alpha coefficient of the total TAI was found .70.

## **2.3. Procedure**

Demographic form, IRI, TAI, RMET and CBM was applied to 120 participants (120 men and 120 women) from Bursa and İstanbul. IRI, TAI, RMET and CBM were loaded to Google Drive Forms. The link address which was obtained from Google

Drive Forms distributed to participants online and the answers came to the online sheet automatically when all the questions answered by the participants. Total duration of the scales was approximately 20 minutes.

#### **2.4. Data Analysis**

Firstly, t-test and correlation was used to see differences which were stemming from demographic information. Independent Samples t-test was used to see group differences between gender (male and female), marital status (married and unmarried), having children (yes and no) frequency of meeting (every day and less than 3 days in a week) variables. In addition, correlation analysis was conducted to age and relationship duration variables. Following demographic variables, trait anxiety, facial emotion recognition and divisions of IRI (Empathic Concern, Perspective Taking and Personal Distress) were analyzed with Standard Multiple Linear Regression (SMLR) was performed for females and males separately. In addition, Hierarchical Regression Analysis was performed with age, gender, marital status and divisions of IRI (Empathic Concern, Perspective Taking and Personal Distress).

## **CHAPTER 3**

### **RESULTS**

Group comparisons were made using independent samples t-test for gender (female and male), marital status (married and unmarried), having children (yes and no) and frequency of meeting variables (every day and less than 3 days in a week). Pearson correlation analysis was conducted for age and duration of relationship variables. Additionally, Standard Multiple Linear Regression analysis was conducted with one dependent variable which was couple burnout and three independent variables which were trait anxiety, divisions of IRI (Empathic Concern, Perspective Taking and Personal Distress) and facial emotion recognition. Standard Multiple Linear Regression analysis was made with split file for all participants, female and male groups. Finally, Hierarchical Regression analysis was conducted in two steps in order to control the effects of gender, age and marital status.

Screening was made for every single variable for missing data, univariate and multivariate outliers. There was no missing variable in the whole data because of the fact that all questions were required questions. There was no univariate outliers. Moreover, 3 participants discarded after multivariate outlier analysis with 9.49 cutoff.

### 3.1. Descriptive Statistics

In the scope of the present study, measurement tools were analyzed with respect to means, standard deviations, minimum and maximum ranges (Table 3.1.)

**Table 3.1. Descriptive Information of the Scales**

Measures	<i>M</i>	<i>SD</i>	<i>Range</i>
CBM	2.31	0.77	1-5
RMET	24.24	3.63	11-31
EC	20.21	4.83	2-28
PT	16.20	4.42	3-25
PD	12.92	4.93	1-27
TAI	44.99	5.09	32-61

*Note:* TAI: Trait Anxiety Inventory, RMET: Reading Minds from Eyes Test, CBM: Couple Burnout Measure, EC: Empathic Concern, PT: Perspective Taking, PD: Personal Distress

### 3.2. Group Comparisons of Sociodemographic Variables

In order to find out the relationship between sociodemographic variables (gender, marital status, having children and frequency of meeting) and couple burnout, independent samples t-test was performed. Detailed results are shown in Table 3.2.

To start with gender (i.e., male and female), results showed that gender had no significant main effect on couple burnout  $t(219) = 1.51, p > .05$ .

Secondly, in the scope of marital status (married or unmarried), results revealed that marital status had significant main effect on couple burnout  $t(219) = 2.12, p < .05$ .

In addition, according to mean scores, married participants ( $M= 2.38, SD= .80$ ) had higher couple burnout scores than unmarried couples ( $M=.2.13, SD= .60$ ).

Thirdly results showed that having children variable had significant main effect on couple burnout ( $t (221) = 2.46, p<.05$ ). Moreover, mean scores indicated that participants with children ( $M= 2.43, SD= .82$ ) had higher couple burnout scores than participants with no children ( $M= 2.18, SD= .68$ ).

Finally, results revealed that frequency of meeting had significant main effect on couple burnout  $t (219) = 1.92, p<.05$ . Mean scores showed that participants who met their partners everyday ( $M= 2.36, SD= .79$ ) had higher couple burnout scores than participants who met their partners less than 3 days in a week ( $M= 2.13, SD=.67$ ).

### 3.2. Independent Samples t-test Results for Sociodemographic Variables

		<i>N</i>	<i>X</i>	<i>SD</i>	<i>T</i>	<i>p</i>
Gender	Female	110	2.39	.78	1.51	.13
	Male	111	2.23	.75		
Marital status	Married	163	2.38	.80	2.12*	.04
	Unmarried	58	2.13	.60		
Having Children	Yes	118	2.43	.82	2.46*	.02
	No	103	2.18	.68		
Frequency of Meeting	Everyday	171	2.36	.79	1.92*	.05
	Less than 3 days in a week	50	2.13	.67		

*p* < .05\*

#### 3.2.1. Differences of Gender on Empathy, Facial Emotion Recognition and Trait Anxiety

Multivariate Analysis of Variance (MANOVA) was conducted to analyze differences of gender (i.e., male and female) on IRI, facial emotion recognition and trait anxiety. Because of the fact that gender differences will be taken into account in the present study, effect of gender on independent variables analyzed.

To start with assumptions, homogeneity of variance assumption was met with the Box' M= 4.33. Then, with the use of Wilk's criterion, it was found that gender had statistically significant effect on combined empathy, facial emotion recognition and trait anxiety variables  $F(3,217) = 13.29, p < .05$ .

In the scope of MANOVA, effect of gender on IRI, facial emotion recognition and trait anxiety was detected separately. Gender had significant main effect on trait anxiety ( $F(1,221) = 21.52, p < .05$ ) and IRI ( $F(1,221) = 27.48, p < .05$ ). However, gender had no significant main effect on facial emotion recognition ( $F(1,221) = 1.65,$

$p > .05$ ). To explain, females have higher IRI scores ( $M = 2.36$ ,  $SD = 12.98$ ) than males ( $M = 61.21$ ,  $SD = 11.34$ ). In addition, females ( $M = 46.51$ ,  $SD = 5.13$ ) have higher trait anxiety scores than males ( $M = 43.48$ ,  $SD = 4.60$ ). Results are shown in Table 3.3.

**Table 3.3. Results for MANOVA between Gender and Independent Variables**

	Gender				<i>F</i>	<i>p</i>
	Female		Male			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
IRI	69.80	12.98	61.21	11.34	27.48**	.00
Facial Emotion Recognition	24.55	3.77	23.93	3.47	1.65	.20
Trait Anxiety	46.51	5.13	43.48	4.60	21.52**	.00

Note: IRI: Interpersonal Reactivity Index  
 \*\* $p < .01$ , \* $p < .05$

### 3.3. Correlations between Variables

In order to clarify relationship between IRI, divisions of IRI (i.e. Empathic Concern, Perspective Taking and Personal Distress), facial emotion recognition, trait anxiety and couple burnout, Pearson correlation analysis was conducted. It was found that there was significant positive correlation between trait anxiety and IRI scores  $r(221) = .34$ ,  $p < .01$ , trait anxiety scores and Empathic Concern scores  $r(221) = .20$ ,  $p < .01$ , trait anxiety scores and Personal Distress scores  $r(221) = .36$ ,  $p < .01$ . The results were shown that the trait anxiety scores increase as the IRI scores, Empathic Concern scores and Personal Distress scores increase. Moreover, correlation analysis revealed that there was significant positive correlation between, couple burnout scores and Personal Distress scores  $r(221) = .26$ ,  $p < .01$ . With an increase in Personal Distress scores, couple burnout scores increase. Finally, it was found that there was significant positive correlation between Personal Distress scores and IRI scores ( $r(221) = .54$ ,

$p < .01$ ). The results indicated that as the Personal Distress scores increase, IRI scores increase.

**Table 3.4. Correlation between Measures**

Measures	1	2	3	4	5	6	7
1. TAI							
2. RMET	.07						
3. IRI	.34**	.03					
4. CBM	.10	.05	.12				
5. EC	.20**	.02	.72**	-.07			
6. PT	.02	.03	.61**	.06	.45**		
7. PD	.36**	-.08	.54**	.26**	.12	.02	

*Note:* CBM: Couple Burnout Measure, EC: Empathic Concern, IRI: Interpersonal Reactivity Index, PD: Personal Distress, PT: Perspective Taking, RMET: Reading Minds from Eyes Test, TAI: Trait Anxiety Inventory  
 \*\* $p < .01$ , \* $p < .05$

In order to analyze relationship between age and all variables of the present study, Pearson correlation analysis was conducted. It was revealed that there was negative correlation between age and trait anxiety scores  $r(221) = -.25, p < .01$ , age and facial emotion recognition scores  $r(221) = -.16, p < .05$ , age and IRI scores  $r(221) = -.15, p < .05$ , age and Empathic Concern scores  $r(221) = -.12, p < .05$ . Results revealed that as the age increases, trait anxiety, facial emotion recognition, IRI and Empathic Concern scores decrease.

Relationship between duration of relationship and all variables of the present study were examined with Pearson correlation analysis. It was investigated that there was significant negative correlation between duration of relationship and trait anxiety

scores  $r(221) = -.17, p < .01$ , duration of relationship and facial emotion recognition scores  $r(221) = -.16, p < .01$ . Results showed that as the duration of relationship increase, trait anxiety and facial emotion recognition scores decrease.

**Table 3.5. Correlation between Age, Duration of Relationship and Measures**

Measures	Age	Duration of Relationship
TAI	-.25**	-.17**
RMET	-.16*	-.16**
CBM	.12*	.10
EC	-.12*	-.05
PT	.00	-.01
PD	.00	.03

*Note:* CBM: Couple Burnout Measure, EC: Empathic Concern, PD: Personal Distress, PT: Perspective Taking, RMET: Reading Minds from Eyes Test, TAI: Trait Anxiety Inventory

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

### 3.4. Multiple Regression Analysis between Measures

The prediction of couple burnout from divisions of IRI (Empathic Concern, Perspective Taking, and Personal Distress), trait anxiety and facial emotion recognition was analyzed with Standard Multiple Linear Regression.

According to results, the prediction model was statistically significant,  $F(5, 220) = 4.64, p < .05, R^2 = .10$  and adjusted  $R^2 = .08$  and accounted for 8% of the variance in couple burnout. In respect to results; two divisions of IRI which were Empathic Concern with  $\beta = -.17, t(220) = -2.29, p < .05$  and Personal Distress with  $\beta = .27, t(220) = 3.92, p < .05$  significantly predicted couple burnout. However, Perspective Taking with  $\beta = .13, t(220) = 1.75, p > .05$ , trait anxiety with  $\beta = .03, t(220) = 4.42, p > .05$  and facial emotion recognition with  $\beta = .06, t(220) = .98, p > .05$  did not significantly predict

couple burnout. While Empathic Concern has negative relationship, Personal Distress has positive relationship with couple burnout. In explanation, as the Empathic Concern level increase, there is a decrease in the couple burnout level. Moreover, as the Personal Distress level increase, there is an increase in the couple burnout level. Results were shown in Table 3.5.

**Table 3.6. Standard Multiple Regression Analysis**

	<i>B</i>	$\beta$	<i>C.I.</i>
TAI	.01	.03	-.02-.03
RMET	.01	.06	-.01-.04
EC	-.03	-.17*	-.05-.00
PT	.02	.13	.00-.05
PD	.04	.27**	.02-.06
<i>R</i> <sup>2</sup>	.10		
<i>F</i>	4.64**		

*Note:* EC: Empathic Concern, PD: Personal Distress, PT: Perspective Taking, RMET: Reading Minds from Eyes Test, TAI: Trait Anxiety Inventory  
 \*\* $p < .01$ , \* $p < .05$

### 3.5. Multiple Regression Analysis for Females and Males

Standard multiple regression analysis was conducted for females and males by grouping participants by gender with split file.

For females, results showed that R for regression was statistically different from zero,  $F(5, 109) = 5.50, p < .05, R^2 = .15$  and adjusted  $R^2 = .11$ . Results showed that Empathic Concern  $\beta = -.21, t(109) = -1.98, p < .10$  predicted couple burnout marginally significant. In addition, it was found that Personal Distress  $\beta = .32, t(109) = 3.17, p < .05$  is significant predictor of couple burnout in female group. However, Perspective Taking  $\beta = .14, t(109) = 1.33, p > .05$ , trait anxiety  $\beta = .09, t(109) = .09, p > .05$  and facial

emotion recognition  $\beta = .03$ ,  $t(109) = .28$ ,  $p > .05$  were not significant predictors of couple burnout.

**Table 3.7. Standard Multiple Regression Analysis for Females**

	<i>B</i>	<i>B</i>	<i>C.I.</i>
TAI	.01	.09	-.02-.04
RMET	.01	.03	-.03-.04
EC	-.04	-.21 <sup>t</sup>	-.07-.00
PT	.03	.14	-.01-.07
PD	.06	.32 <sup>**</sup>	.02-.09
<i>R</i> <sup>2</sup>	.15		
<i>F</i>	3.60 <sup>**</sup>		

*Note:* EC: Empathic Concern, PD: Personal Distress, PT: Perspective Taking, RMET: Reading Minds from Eyes Test, TAI: Trait Anxiety Inventory

<sup>\*\*</sup> $p < .01$ , <sup>\*</sup> $p < .05$ , <sup>t</sup> $p < .10$

For males, results revealed that the model was not significant,  $F(5, 110) = 1.34$ ,  $p > .05$ ,  $R^2 = .06$  and adjusted  $R^2 = .02$ . Results revealed that Empathic Concern  $\beta = -.15$ ,  $t(110) = -1.38$ ,  $p > .05$ , Perspective Taking  $\beta = .12$ ,  $t(110) = 1.13$ ,  $p > .05$ , Personal Distress  $\beta = .17$ ,  $t(110) = 1.72$ ,  $p > .05$ , trait anxiety  $\beta = -.07$ ,  $t(110) = -.70$ ,  $p > .05$  and facial emotion recognition  $\beta = .09$ ,  $t(110) = .94$ ,  $p > .05$  were not significant predictors of couple burnout.

**Table 3.8. Standard Multiple Regression Analysis for Males**

	<i>B</i>	$\beta$	<i>C.I.</i>
TAI	-.01	-.07	-.04-.02
RMET	.02	.09	-.02-.06
EC	-.02	-.15	-.06-.01
PT	.02	.12	-.01-.05
PD	.03	.17	.00-.06
$R^2$	.06		
<i>F</i>	1.34		

*Note:* EC: Empathic Concern, PD: Personal Distress, PT: Perspective Taking, RMET: Reading Minds from Eyes Test, TAI: Trait Anxiety Inventory  
 \*\* $p < .01$ , \* $p < .05$

### 3.6. Two Sets of Hierarchical Regression Analysis

Hierarchical Regression Analysis was conducted to investigate whether Empathic Concern and Personal Distress predict couple burnout when gender, age and marital status were controlled.

Analysis were conducted in two steps. In the first step, gender, age and marital status were put in order to control the effects of sociodemographic variables. It was found that the first model was significant and accounted for 4% variance in couple burnout,  $F(3, 220) = 2.93, p < .05, R^2 = .04$  and adjusted  $R^2 = .03$ . Results indicated marginally significant preference for gender with  $\beta = -.11, t(220) = -1.69, p < .10$  but not age  $\beta = .10, t(220) = 1.37, p > .05$  and marital status  $\beta = -.10, t(220) = -1.30, p > .05$ . In the second step, the model which contains divisions of IRI, i.e. Empathic Concern, Perspective Taking and Personal Distress, was statistically significant and accounted for 11% variance in couple burnout,  $F(6, 220) = 4.53, p < .05, R^2 = .11$  and adjusted  $R^2 = .09$ . Results showed that Empathic Concern  $\beta = -.16, t(220) = -2.07, p < .05$  and

Personal Distress  $\beta = .26$ ,  $t(220) = 3.65$ ,  $p < .05$  significantly predicted couple burnout but not Perspective Taking  $\beta = .12$ ,  $t(220) = 1.70$ ,  $p > .05$ . Moreover, after controlling the effect of gender, the divisions of IRI, i.e. Empathic Concern, Perspective Taking and Personal Distress, explained 7% of the variance in couple burnout,  $F_{change}(3, 214) = .593$ ,  $p < .05$  (see Table 3.9.). To sum up, results revealed that female participants with lower levels of Empathic Concern and higher levels of Personal Distress are more likely to experience couple burnout.

**Table 3.9. Hierarchical Regression Analysis**

	Step 1			Step 2		
	<i>B</i>	$\beta$	%95 C.I.	<i>B</i>	$\beta$	%95 C.I.
Gender	-.17	-.11 <sup>t</sup>	-.38-.03	-.05	-.03	-.27-.17
Age	.16	.10	-.07-.39	.12	.08	-.11-.34
Marital Status	-.17	-.10	-.42-.09	-.16	-.10	-.41-.09
EC				-.03	-.16*	-.05-.00
PT				.02	.12	.00-.05
PD				.04	.26*	.02-.06
$R^2$	.04			.11		
<i>F</i>	2.93			4.53		
$\Delta R^2$				.07		
$\Delta F$				5.93*		

Note: EC: Empathic Concern, PD: Personal Distress, PT: Perspective Taking,  
 \*\* $p < .01$  \* $p < .05$ , <sup>t</sup> $p < .10$

## CHAPTER 4

### DISCUSSION

#### 4.1. General Discussion

Considering the importance of romantic relationships in the occurrence of burnout, possible predictors of couple burnout studied in the current study to highlight the associations. In the scope of the present study, prediction of couple burnout from divisions of IRI (Empathic Concern, Perspective Taking, Personal Distress), facial emotion recognition and trait anxiety was analyzed. Moreover, analysis were performed with female and male groups separately.

The results of the present study showed that Empathic Concern and Personal Distress divisions predicted couple burnout in all and female participants. While Empathic Concern predicted couple burnout in negative direction, Personal Distress predicted burnout in positive direction. In the analysis which conducted for female and male groups separately, the model was significant for females but not for males. For females, prediction of couple burnout was significant for Personal Distress in positive

direction and marginally significant for Empathic Concern in negative direction. For males, the model was not significant. As a result, the hypothesis of the present study was confirmed for Personal Distress division of IRI. From the other side, it was hypothesized that Empathic Concern predicts couple burnout in positive direction; however, the results of the present study showed that there is a negative association. In the following part, results will be interpreted in the light of literature.

#### **4.2. Findings about Sociodemographic Variables and Couple Burnout**

According to results of the present study, marital status (married or not married), having children (yes and no) and frequency of meeting (every day and less than 3 days in a week) variables have significant group differences in terms of couple burnout. In addition, it was detected that there is positive relationship between age and couple burnout. To explain, firstly, married couples had higher burnout scores than not married couples. Secondly, couples with children reported higher burnout scores than couples without children. Thirdly, couples who meet every day had higher burnout scores than couples who meet less than 3 days in a week. Finally, it was detected that there is an increase in couple burnout scores as participants grow older. Considering the variables in relation, groups with higher couple burnout scores have more responsibilities than the lower ones, e.g. marriage and/or children. From the results, it might be stated that with the load of responsibilities, there is an increase in the couple burnout scores. Pamuk and Durmuş (2015) confirmed our results and found that couples who do not have children have lower burnout scores than couples with more than 5 children.

### **4.3. Findings about Divisions of IRI and Couple Burnout**

Peloquin and Lafontaine (2010) described that Personal Distress construct was classified as self-oriented; Empathic Concern and Perspective Taking constructs were placed in other-oriented divisions. This division was made due to the fact that Personal Distress is about the feelings about the self, although, Empathic Concern and Perspective Taking divisions are about feelings of other people. Our results showed that Personal Distress which is self-oriented and emotional side of IRI predicted couple burnout in positive direction; moreover, Empathic Concern that is other-oriented and emotional side of IRI predicted couple burnout in negative direction in all and female subjects while the results were not significant for male participants. Other division of IRI (Perspective Taking) did not predict couple burnout for both females and males.

In order to clarify difference between self and other-oriented facets of empathy, Davis (1983) associated IRI with Hoffman's (2000) suggestions about development of empathic reactions. According to Hoffman (2000), in the early stages of life, children perceive and experience other's distress as their own distress. However, in the developmental process, children start to be capable of differentiating themselves from the others, thus take perspective of the others and give response to others' distress with sympathy. From that point on, it might be suggested that increase in personal distress level with inadequate perspective taking abilities and without sympathy might lead to couple burnout in romantic relationships. In line with the suggestion, our results also highlighted the difference between self and other-oriented facets of empathy in terms of couple burnout.

Compassion Fatigue Theory (Figley, 2002) was taken into account while the hypothesis about Empathic Concern division was suggested in the present study.

Figley (2002) suggested that high empathizers who bear others' emotional distress might experience burnout. From that point, it was expected that the prediction of couple burnout from Empathic Concern is in positive direction. However, results were shown that the association is in negative direction. As it was indicated, Empathic Concern is used to assess individuals' understanding of other people who are in disastrous conditions (Peloquin & Lafontaine, 2010). It was suggested that high emotional load which come from the partner might lead to couple burnout. However, the hypothesis was not confirmed in romantic relationship domain and it might be due to the fact that the variables other than emotional empathy might have contribution to decrease emotional load of couples such as commitment, love and so on. As a result, as Hoffman (2000) suggested Empathic Concern might be end up with sympathy and do not give harm to romantic relationship.

Although not in romantic relationship domain, Bellini, Baime and Shea (2002) conducted an experiment with a group who was exposed to prolonged stress for 1 year as a confirmation to prediction of couple burnout from Personal Distress and Empathic Concern. They measured the group's Personal Distress, Empathic Concern and Perspective Taking level at four different times in a year and observe differences in the levels of Personal Distress, Empathic Concern and Perspective Taking over time with measurements. As a result, they concluded that in a stressful year, as the time passes personal distress scores increased while Empathic Concern scores decreased by the time. Therefore, it was suggested that Empathic Concern turns into Personal Distress along with the long run stressful situations. At the same time, an increase in anger and depressive symptoms was also observed during the year. Thus, as explained in the couple burnout model by Pines (1996), emotional exhaustion is an important predictor of couple burnout and stemming from excessive distress. In the continuum

of the romantic relationships, with responsibilities and stressful situations, Personal Distress might lead to excessive stress with reduction in Empathic Concern. From that point, the results of the present study become meaningful which found negative relationship between Empathic Concern and couple burnout; at the same time, positive relationship between Personal Distress and couple burnout.

According to results of the present study, there was no significant association between Perspective Taking and couple burnout. Perspective Taking division was developed by Davis (1983) to measure individuals' thinking abilities from others' viewpoint. In the definition of Perspective Taking, there is no place to emotions. From that point, results might be stemming from emotions' contribution to social and romantic relationships. For instance, facilitative and positive effect of emotions to interpersonal and romantic relationships was found in the literature (McKinnon & Greenberg, 2013; Greenberg, 1993). It might be concluded that without effect of emotions, perspective taking cannot be associated with couple burnout.

Additionally, the gender differences that our results showed might be explained over crossover process. Prediction of couple burnout from personal distress might also be linked to crossover process. The term crossover is used to explain transference of tension between partners (Liu and Cheung, 2015). In detail, Westman, Etzion and Danon (2001) stated that crossover process occurs between close partners that spend great amount of time together and are giving priority to each other. Thereby, in the crossover process, empathy plays a role to transfer stress or strain of one partner to another. In this regard, aforementioned empathy might be thought as self-oriented empathy which stimulate distress but not sympathy. As a relational construct, in relation with empathy, Hatfield et al (1993) explained the term emotional contagion as a psychophysiological, behavioral or social process that might occur as a response to

emotional stimuli which come from others. In detail, the emotions that are observed in the others might be expressed or experienced by individuals as a response. Considering prediction of couple burnout from personal distress, with transference of distress and strain in the long run, excessive distress might lead to emotional exhaustion and then couple burnout. Considering gender differences, Westman, Etzion and Danon (2001) concluded that there is one-way relationship between partners in crossover process. To explain, while there is crossover effect from husbands to wives, the opposite direction was not confirmed. In the present study, the prediction of couple burnout from personal distress is also justified only for females. Considering empathic tendencies of women, in romantic relationships, they might be more predisposed to experience stress of their partners in the relationship. Moreover, when women approach relationship with empathic concern, couple burnout level decrease.

#### **4.4. Findings about Facial Emotion Recognition and Couple Burnout**

Facial emotion recognition was taken into consideration in this study due to its predictive power on interpersonal relationships which was supported by the literature (Zhang & Parmley, 2015). Bölte and Poustka (2003) stated that deterioration of facial affect recognition ability leads to impaired interpersonal relationships in disorders such as autism, schizophrenia, or depression. In line with these findings, we have studied whether the facial emotion recognition has significant effect on couple burnout or not, regarding its essential association with interpersonal relationships.

As a result of our analysis, the present study revealed that non-verbal emotion recognition might need to be supported by means other than facial emotion recognition. Since, the results showed that couple burnout was not predicted by facial emotion recognition. The results were the same for both males and females. Indeed, this results might be stemming from the fact that non-verbal emotion recognition might

not be only limited to facial emotion recognition in the scope of romantic relationships. Although there is no study which search the link between facial emotion recognition and couple burnout, some findings might be shown from romantic relationship domain. To illustrate, Carton, Kessler and Pape (1999) stated that both facial expressions and voice tone associated with relationship quality. Based on this, it might be suggested that emotion recognition might be considered as a term which is composed of different divisions. Moreover, Blonder, Pettigrew and Kryscio (2012) found that both facial and prosodic emotion recognition is associated with marital satisfaction. In terms of couple burnout, related prediction might be inferred with different means of emotion recognition.

On the other hand, Yoo and Noyes (2016) stated that conflicts in relationships are important predictors of relationship quality. It was suggested that accurate recognition of emotions provide opportunity to behave in a constructive manner because of the fact that partners who detect negative emotions accurately are less prone to be in conflicting situations in romantic relationships, i.e. they feel more satisfaction. (Yoo & Noyes, 2016). In this regard, it might be assumed that although facial emotion recognition is important in terms of couple burnout, negative emotion recognition might be important predictor rather than general emotion recognition ability. Therefore, our findings regarding facial emotion recognition might not be sufficient enough to predict couple burnout alone.

Clark and Finkel (2005) stated that an individual's emotional expressions depend on the reaction that they receive from their partners. Partners have needs to be sure about couples' concerns regarding their emotions to be able to express themselves. Therefore, emotional expressions and recognition might decline bidirectionally in romantic relationships. It might be stated that expressions of

emotions also need to be taken into account to be able fully understand the association between facial emotion recognition and couple burnout.

#### **4.5. Findings about Trait Anxiety and Couple Burnout**

According to our results, trait anxiety did not predict couple burnout. At the same time, when the gender differences were considered, the results did not change different for both males and females. It was shown that trait anxiety did not predict couple burnout in all participants, female and male groups.

Association between trait anxiety and romantic relationships, in the literature there are studies which found that high levels of anxiety symptoms decrease quality of romantic relationships (Whisman, Uebelacker & Weinstock, 2004; Rehman et al., 2015) and variables of the present study was selected according to these studies. However, according to our results, trait anxiety did not predict couple burnout. Considering in relation with state anxiety, our results might be stemming from effect of situational anxiety in romantic relationships. To illustrate, Dehle and Weiss (2002) suggested that state anxiety in conflicting situations with cognitive and physiological arousal might be more important predictor of relationship quality rather than trait anxiety or anxiety disorders because of the fact that neutral signals might be seem negative in conflicting situations. In line with the suggestions, contextual model in romantic relationships was introduced by Bradbury and Fincham (1988) which explained that there are proximal, i.e. situational factors in the romantic relationship, and distal elements, i.e. general thoughts about romantic relationship, in the romantic relationships. It was found that proximal variables are more predictive in romantic relationships rather than distal variables (Bradbury and Fincham, 1988). To sum up, it

might be deduced that state anxiety in conflicting situations might be more likely to be the predictor of couple burnout rather than trait anxiety.

The results of the present study might be stemming from the link between depression and anxiety. The present study searched for the relationship between trait anxiety and couple burnout; however, the results were not significant. The comorbidity between depression and anxiety was justified in the literature (Ashraf & Najam, 2015). The results of the present study might be found due to the fact that depression has comorbidity with depression. To illustrate, in romantic relationship domain, Rehman et al. (2015) found that when depression is controlled, anxiety did not predict relationship quality. It was suggested that there might be shared vulnerable element between anxiety and depression which has effect on couples' relationship quality (Rehman et al., 2015). To conclude, comorbidity between anxiety and depression might be reason of the results of the present study. When depression will be taken into account, trait anxiety might become significant predictor of couple burnout.

#### **4.6. Limitations of the Present Study and Suggestions for Future Research**

It was found for the first time that Empathic Concern and Personal Distress divisions of IRI predicted couple burnout in all and female participants in the present study. The results of the present study were important for the literature; however, at the same time there are limitations. Examining sociodemographic variables, number of participants in marital status variable was in favor of married couples; however, distribution of the participants to unmarried couples was unbalanced. Moreover, the situation was the same for frequency of meeting variable. There were more participants in the group which meets every day than the group which meets less than 3 days in a

week. This limitation of the present study might be solved in future studies with balanced distribution of participants to all groups of sociodemographic variables.

There might be limitations about measures of the present study. For instance, internal consistency, i.e. alpha coefficient, was found smaller than .70 for total IRI scores and divisions of IRI (Empathic Concern, Perspective Taking and Personal Distress). This values might be explained with multidimensional nature of IRI. Because of the fact that IRI measure different dimensions, it might be difficult to determine high levels of internal consistency. In Turkish adaptation of IRI, alpha coefficients reported between .60 and .76 for divisions and results were attributed to question number of the divisions (Engeler & Yargıç, 2007). To sum up, the results might be effected by alpha coefficient of IRI in the present study and this might be taken into account in the future studies.

Considering insignificant results about facial emotion recognition, as it was indicated, other types of emotion recognition, such as voice tone, should be taken into account for future studies. In addition, couple burnout might be linked to conflicting situations. Yoo and Noyes (2016) explained the importance of recognition of negative emotions in conflicting situations. In this regard, negative emotion recognition should be analyzed in future studies to indicate association between negative facial emotion recognition and couple burnout.

In the present study, the link between trait anxiety and couple burnout was analyzed for the first time; however, the results were not significant. The participants were not selected from clinical population. Study might be replicated with clinical population, to see the results with clinical sample because of the fact that anxiety disorders might have effect on couple burnout. Moreover, considering comorbidity

between anxiety and depression, in the future studies, the association between anxiety, depression and couple burnout might be analyzed in order to see the shared effect of depression and anxiety on couple burnout.

Limitations of the present were explained and suggestions for future studies were indicated. In the future studies, limitations of the present study might be elevated. Moreover, future studies might be planned in the light of the limitations of the present study. At the same time, there are also contributions to literature. In the scope of the present study, association between subdivisions of IRI (Empathic Concern, Perspective Taking and Personal Distress), trait anxiety, facial emotion recognition and couple burnout was highlighted. We have shown for the first time, in Turkish sample, that high levels of Personal Distress and low levels of Empathic Concern predict couple burnout in all participants and female group. Moreover, the results were not significant in male group.

In clinical domain, the results might be used to have contribution to recovery process of couples' conflicts. Couple burnout is a construct which need to be taken into account in the couple therapy. Because of the fact that couple burnout have contribution to relationship problems, it might be analyzed in the treatment of couples. Based upon the results of the present study, in relation with couple therapy, prediction of couple burnout from low levels of Empathic Concern and high levels of Personal Distress might be used to enhance treatment procedure. It might be suggested that empathic abilities of the couples might be supported in the treatment procedure. In addition, Personal Distress level of the couples might be studied collaboratively in order to make romantic relationships more healthy. Gender differences might also be taken into account in the couple therapy. Treatment procedure might be adapted to gender differences.

The results of the present study might give opportunity to couple burnout prevention programs. As it was indicated, couple burnout give signals, i.e. physical, emotional and mental exhaustion. With the help of signals, prevention programs might be prepared for the couples and in the long run, romantic relationship problems can be solved. At the same time, treatment programs are available after the occurrence of couple burnout. Pines (1966) explained couple burnout workshops which give opportunity for couples to isolate themselves from the daily life and focus on their problems with other couples in a supportive environment. As a conclusion, it might be suggested that detection of couple burnout give way to concentrate on problems in the romantic relationship.

## REFERENCES

- Addington, J., Saeedi, H., & Addington, D. (2006). Facial affect recognition: A mediator between cognitive and social functioning in psychosis? *Schizophrenia Research*, 85, 142-150.
- Allsop, A., Vander Weele, C. M., Wichmann, R., & Tye, K. M. (2014). Optogenetic insights on the relationship between anxiety-related behaviors and social deficits. *Frontiers in Behavioral Neuroscience*, 8, 1-14.
- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders (5th ed.)*. Washington, DC: American Psychiatric Association.
- Angera, J. J., & Long, E. C. J. (2006). Qualitative and quantitative evaluations of an empathy training program for couples in marriage and romantic relationships. *Journal of Couple & Relationship Therapy*, 5(1), 1-26.
- Banziger, T., Didier, G., & Scherer, K. R. (2009). Emotion recognition from expressions in face, voice, and body: The Multimodal Emotion Recognition Test (MERT). *Emotion*, 9(5), 691-704.
- Baron-Cohen S., Jolliffe, T., Mortimore, C., & Robertson, M. (1997). Another advanced test of theory of mind: Evidence from very high functioning adults with autism or asperger syndrome. *Journal of Child Psychology and Psychiatry*, 38(7), 813-822.
- Baron-Cohen S., Wheelwright S., Hill J., Raste, Y., & Plumb, I. (2001) Reading the mind in the eyes test revised version: A study with normal adults, and adults

- with Asperger's syndrome or high functioning autism. *Journal of Child Psychology and Psychiatry*, 42(2), 241-251.
- Bayrami, M., Heshmati, R. & Karami, R. (2011). Anxiety: Trait/state, sensation seeking and marital satisfaction in married women. *Procedia - Social and Behavioral Sciences*, 30, 765-770.
- Blonder, L. X., Pettigrew, L. C., & Kryscio, R. J. (2012). Emotion recognition and marital satisfaction in stroke. *Journal of Clinical and Experimental Neuropsychology*, 34(6), 34-42.
- Bora, E., & Boysan, L. (2009). Psychometric features of Turkish version of empathy quotient in university students. *Bulletin of Clinical Psychopharmacology*, 19 (1), 39-47.
- Bölte, S., & Poustka, F. (2003). The recognition of facial affect in autistic and schizophrenic subjects and their first-degree relatives. *Psychological Medicine*, 33, 907-915.
- Bradbury, T. N., & Fincham, F. D. (1988). Individual difference variables in close relationships: A contextual model of marriage as an integrative framework. *Journal of Personality and Social Psychology*, 54, 713–721.
- Brattberg (2006). PTSD and ADHD: Underlying factors in many cases of burnout. *Stress and Health*, 22, 305-313.
- Campos, J. J., Campos, R. G., & Barrett, K. C. (1989). Emergent themes in the study of emotional development and emotion regulation. *Developmental Psychology*, 25, 394–402.

- Carton, J. S., Kessler, E. A., & Pape, C. L. (1999). Nonverbal decoding skills and relationship well-being in adults. *Journal of Nonverbal Behavior*, 23(1), 91-100.
- Caughlin, J. P., Huston, T. L., & Houts, R. M. (2000). How does personality matter in marriage? An examination of trait anxiety, interpersonal negativity, and marital satisfaction. *Journal of Personality and Social Psychology*, 78(2), 326-336.
- Chikovani, G., Babuadze, L., Iashvili, N., Gvalia, T., & Surguladze, S. (2015). Empathy costs: Negative emotional bias in high empathisers. *Psychiatry Research*, 229, 340-346.
- Clark, M. S., & Finkel, E. J. (2005). Willingness to express emotion: The impact of relationship type, communal orientation, and their interaction. *Personal Relationships*, 12, 169-180.
- Cooper, R. M., Rowe, A. C., & Penton-Voak, I. S. (2008). The role of trait anxiety in the recognition of emotional facial expressions. *Journal of Anxiety Disorders*, 22(7), 1120-1127.
- Cramer, D. (2003). Facilitativeness, conflict, demand for approval, self-esteem, and satisfaction with romantic relationships. *The Journal of Psychology*, 137(1), 85-98
- Çapri, B. (2008). *An investigation of the variables predicting couple burnout*. (Unpublished doctoral dissertation). Mersin University, Mersin.
- Darwin, C. R. (1872). *Expression of the emotions in man and animals*. London: John Murray.

- Davis, M. H. (1980). A Multidimensional approach to individual differences in empathy. *JSAS: Catalog of Selected Documents*, 10, 85-105.
- Davis M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality & Social Psychology*, 44, 113-126.
- Dehle, C., & Weiss R. L. (2002). Associations between anxiety and marital adjustment. *The Journal of Psychology*, 136(3), 328-338.
- Eisenberg, N, & Strayer, J. (1990). *Empathy and Its Development*. Australia: Press Syndicate.
- Ekman, P. & Cordaro, D. (2011). What is meant by calling emotions basic? *Emotion Review*, 3(4), 364-370.
- Ekman, P., & Friesen, W. V. (1978). Felt, false, and miserable smiles. *Journal of Nonverbal Behavior*,
- Engeler, A., & Yargıç, L. İ. (2007). Kişiler arası tepkisellik indeksi: Empatinin çok boyutlu ölçümü. *New Symposium Journal*, 45(3), 119-127.
- Epa, R. & Dudek, D. (2015). Theory of mind, empathy and moral emotion in patients with affective disorders. *Archives of Psychiatry and Psychotherapy*, 2, 49-56.
- Fernandez-Blazquez, M. A., Avila-Villanueva, M., Lopez-Pina, J. A., Zea-Sevilla, M. A., & Frades-Payo, B. (2015). Psychometric properties of a new short version of the state-trait anxiety inventory (STAI) for the assessment of anxiety in the elderly. *Neurologia*, 30(6), 352-358.
- Ferrari, V., Smeraldi, E., Bottero, G., & Politi, E. (2014). Addiction and empathy: A preliminary analysis. *Neurological Sciences*, 855(6), 855-859.

- Figley, C. E. (2002). Compassion fatigue: Psychotherapist's chronic lack of self-care. *JCLP/In Session: Psychotherapy in Practice*, 58(1), 1433-1441.
- Freudenberger, H. J. (1974). Staff burn-out. *Journal of Social Issues*, 30(1), 159-165.
- Gleichgerrcht, E., & Decety, J. (2013). Empathy in clinical practice: How individual dispositions, gender, and experience moderate empathic concern, burnout, and emotional Distress in physicians. *Plos One*, 8(4), 1-12.
- Greenberg, L. S., Ford, C. L., Alden, L. S., & Johnson, S. M. (1993). In-session change processes in emotionally focused therapy for couples. *Journal of Consulting and Clinical Psychology*, 61, 68-84.
- Hall, J. A. (1978). Gender effects in decoding nonverbal cues. *Psychological Bulletin*, 85(4), 845-857.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1993). Emotional contagion. *Current Directions in Psychological Science*, 2(3), 96-99.
- Hetu, S., Taschereau-Dumouchel, V., & Jackson, P. L. (2012). Stimulating the brain to study social interactions and empathy. *Brain Stimulation*, 5(2), 95-102.
- Heyman, R. E., Smithslep, A. M., Beach, S. R. H., Wamboldt, M. Z., Kaslow, N. J., & Reiss, D. (2009). Relationship problems and the DSM: Needed improvements and suggested solutions. *World Psychiatry*, 8(1), 7-14.
- Hoffman, M., L. (2000). *Implications for caring and justice* (ss. 63-92). Newyork: Cambrige University Press.
- Hojat, M., Vergare, M., Isenberg, G., Cohen, M., & Spandorfer, J. (2015). Underlying construct of empathy, optimism, and burnout in medical students. *International Journal of Medical Education*, 6, 12-16.

- Izard, C. E. (2002). Translating emotion theory and research into preventive interventions. *Psychological Bulletin*, 128(5), 796-824.
- Kelly, M. M., Forsyth, J. P., & Karekla, M. (2006). Sex differences in response to a panicogenic challenge procedure: An experimental evaluation of panic vulnerability in a non-clinical sample. *Behavior Research and Therapy*, 44(10), 1421-1430.
- Lacroix, A., Guidetti, M., Roge, B., & Reilly, J. (2014). Facial emotion recognition in 4- to 8-year-olds with autism spectrum disorder: A developmental trajectory approach. *Research in Autism Spectrum Disorders*, 8(9), 1146-1154.
- Lamothe, M., Boujut, E., Zenasni, F., & Sultan, S. (2014). To be or not to be empathic: the combined role of empathic concern and perspective taking in understanding burnout in general practice. *BMC Family Practice*, 15(15), 1-7.
- LeCompte, A., & Öner, N. (1975). Durumluk-sürekli kaygı envanterinin Türkçeye adaptasyon ve standardizasyonu ile ilgili bir çalışma. *IX. Milli Psikiyatri Nörolojik Bilimler Kongresi Çalışmaları Kitabı*, 457-462.
- Lee, W., Veach, P. M., MacFarlane, I. M., & LeRoy, B. S. (2015). Who is at risk for compassion fatigue? An investigation of genetic counselor demographics, anxiety, compassion satisfaction, and burnout. *Journal of Genetic Counseling*, 24, 358-370.
- Lingard, H. (2004). Work and family sources of burnout in the Australian engineering profession: Comparison of respondents in dual and single-earner couples, parents, and nonparents. *Journal of Construction Engineering and Management*, 130(2), 290-298.

- Liu, H., & Cheung, F. M. (2015). The moderating role of empathy in the work–family crossover process between Chinese dual-earner couples. *Journal of Career Assessment, 23*(3), 443-458.
- Marteau, T. M., & Bekker, H. (1992). Development of a six-item short form of the state scale of the Spielberger state-trait anxiety inventory (STAI). *British Journal of Clinical Psychology, 31*, 301-306.
- Maslach, C. & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior, 2*, 99-113.
- Maurage, P., Grynberg, D., Noel, X., Joassin, F., Philippot, P., Hanak, C., Verbanck, P., Luminet, O., Timary, P., & Campanella, S. (2011). Dissociation between affective and cognitive empathy in alcoholism: A specific deficit for the emotional dimension. *Clinical and Experimental Research, 35*(9), 1662-1668.
- McClure, E. B. (2000). A meta-analytic review of sex differences in facial expression processing and their development in infants, children, and adolescents. *Psychological Bulletin, 126*(3), 424-453.
- McKinnon, J. M., & Greenberg, L. S. (2013). Revealing underlying vulnerable emotion in couple therapy: Impact on session and final outcome. *Journal of Family Therapy, 35*(3), 303-319.
- Mclean, C. P., & Anderson, E. R. (2009). Brave men and timid women? A review of the gender differences in fear and anxiety. *Clinical Psychology Review, 29*, 496-505.
- Milfont, T. L., & Sibley, C. G. (2016). Empathic and social dominance orientations help explain gender differences in environmentalism: A one-year Bayesian mediation analysis. *Personality and Individual Differences, 90*, 85-88.

- Mitte, K. (2008). Memory bias for threatening information in anxiety and anxiety disorders: A meta-analytic review. *Psychological Bulletin*, 134(6), 886-911.
- Mogg, K., & Bradley, B. P. (2005). Attentional bias in generalized anxiety disorder versus depressive disorder. *Cognitive Therapy and Research*, 29(1), 29-45.
- Olivares-Faundez, V. E., Gil-Monte, P. R., & Fequeiredo-Ferraz, H. (2014). The mediating role of feelings of guilt in the relationship between burnout and the consumption of tobacco and alcohol. *Japanese Psychological Research*, 56(4), 340-348.
- Paiva-Silva, A. I., Pontes, M. K., Rocha-Aguiar, J. S., & Souza, W. C. (2016). How do we evaluate facial emotion recognition? *Psychology and Neuroscience*, 9(2), 153-175.
- Pamuk, M., & Durmuş, E. (2015). Investigation of burnout in marriage. *Journal of Human Sciences*, 12(1), 163-177.
- Pan, Y., Chen, S., Chen, W. J., & Liu, S. (2009). Affect recognition as an independent social function determinant in schizophrenia. *Comprehensive Psychiatry*, 50, 443-452.
- Peloquin, K. & Lafontaine, M. F. (2010). Measuring empathy in couples: Validity and reliability of the interpersonal reactivity index for couples. *Journal of Personality Assessment*, 92(2), 146-157.
- Perrone-McGovern, K. M., Oliveira-Silva, P., Simon-Dack, S., Lefdahl-Davis, E., Adams, D., McConnell, J., Howell, D., Hess, R., Davis, A., & Gonçalves, O. F. (2014). Effects of empathy and conflict resolution strategies on psychophysiological arousal and satisfaction in romantic relationships. *Applied Psychophysiology & Biofeedback*, 39, 19-25.

- Pines, A. M. (1996). *Couple burnout: Causes and cures*. New York/London: Routledge.
- Pines, A. M. (2004). Adult attachment styles and their relationship to burnout: A preliminary, cross-cultural investigation. *Work & Stress*, 18(1), 66-80.
- Pines, A. M. & Nunes, R. (2003). The relationship between career and couple burnout: Implications for career and couple counseling. *Journal of Employment Counseling*, 40, 50-64.
- Rehman, U. S., Evraire, L. E., Karimiha, G., & Goodnight, J. A. (2015). Actor-partner effects and the differential roles of depression and anxiety in intimate relationships: A cross-sectional and longitudinal analysis. *Journal of Clinical Psychology*, 71(7), 715-724.
- Rusbult, C. E., & Buunk, B. P. (1993). Commitment processes in close relationships: An interdependence analysis. *Journal of Social and Personal Relationships*, 10(2), 175-204.
- Saragnano, G., Arbiser, S., & Schneider, J. (2013). On 'Freud's Inhibitions, Symptoms and Anxiety'. In Rotemberg, H. (Eds.), *The correlation between anxiety and danger: vicissitudes of mental functioning* (pp. 103- 118). London: Karnac Books.
- Selye, H. (1950). Stress and the general adaptation syndrome. *British Medical Journal*, 1(4667), 1383-1392.
- Singer, T. (2006). The neuronal basis and ontogeny of empathy and mind reading: Review of literature and implications for future research. *Neuroscience and Biobehavioral Reviews*, 30(6), 855-863.

- Spielberger, C. D., Gorsuch, R.L., & Lushene, R. E. (1970). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Stanton, S. C. E., & Campbell, L. (2015). Can't get you off my mind: Relationship reflection creates cognitive load for more anxiously attached individuals. *Journal of Social and Personal Relationships*, 32(4), 441-455.
- Sternglanz, R. W., & DePaulo, B. M. (2004). Reading nonverbal cues to emotions: The advantages and liabilities of relationship closeness. *Journal of Nonverbal Behavior*, 28(4), 245-266.
- Surcinelli, P., Codispoti, M., Montebanocci, O., Rossi, N., & Baldaro, B. (2006). Facial emotion recognition in trait anxiety. *Journal of Anxiety Disorders*, 20(1), 110-117.
- Tei, S., Becker, C., Kawada, R., Fujino, J., Jankowski, K. F., Sugihara, G., Murai, T., & Takahashi, H. (2014). Can we predict burnout severity from empathy-related brain activity? *Translational Psychiatry*, 4, 1-7.
- Toker, S., Shirom, A., Shapira, I., Berliner, S., & Melamed, S. (2005). The association between burnout, depression, anxiety and inflammation biomarkers: C-reactive protein and fibrinogen in men and women. *Journal of Occupational Health Psychology*, 10(4), 344-362.
- Westman, M., Etzion, D., & Danon, E. (2001). Job insecurity and crossover of burnout in married couples. *Journal of Organizational Behavior*, 22, 467-481.
- Whisman, M. A., Uebelacker, L. A., & Weinstock, L. M. (2004). Psychopathology and marital satisfaction: The importance of evaluating both partners. *Journal of Consulting and Clinical Psychology*, 72(5), 830-838.

Yıldırım, E. A., Kaşar, M., Gdk, M., Ateş, E., Kkparlak, İ., & zalmete, E., O. (2011). Investigation of the reliability of the reading the mind in the eyes test in a Turkish population. *Turkish Journal of Psychiatry*, 22, 1-8.

Yoo, S. H., & Noyes, S. E. (2016). Recognition of facial expressions of negative emotions in romantic relationships. *Journal of Nonverbal Behavior*, 40, 1-12.

Zhang, F., & Parmley, M. (2015). Emotion attention and recognition of facial expressions among close friends and casual acquaintances. *Journal of Social and Personal Relationships*, 32(5), 633-649.



## APPENDICES

### APPENDIX A: DEMOGRAPHIC FORM

Yaş:

Cinsiyet:

Kadın ( ) Erkek ( )

Medeni Durumu:

Evli ( ) Bekâr ( )

İlişki Süresi:

Görüşme sıklığı:

## APPENDIX B: COUPLE BURNOUT MEASURE (CBM)

Bu bir kendini değerlendirme ölçeğidir. Eşinizle/kız-erkek arkadaş ilişkinizle ilgili aşağıdaki durumları ne sıklıkla yaşadığınızı belirtmeniz istenmektedir. Lütfen aşağıdaki her ifadeyi okuduktan sonra 7 dereceli ölçeği kullanarak her bir maddenin yanındaki boşluğa size en uygun olan rakamı yazın. **ÖRNEK: 5 1- YORGUN**

1	2	3	4	5	6	7
HİÇBİR ZAMAN	SADECE BİR DEFA	NADİREN	BAZEN	SIK SIK	ÇOĞUNLU KLA	HER ZAMAN

\_\_\_\_\_ 1- YORGUN.

\_\_\_\_\_ 2- ÇÖKMÜŞ.

\_\_\_\_\_ 3- NEŞELİ, KEYİFLİ.

\_\_\_\_\_ 4- FİZİKSEL OLARAK YORGUN(TÜKENMİŞ).

\_\_\_\_\_ 5- DUYGUSAL OLARAK YORGUN (TÜKENMİŞ).

\_\_\_\_\_ 6- MUTLU.

\_\_\_\_\_ 7- BİTKİN, DERMANI KALMAMIŞ.

\_\_\_\_\_ 8- YETER ARTIK, DAYANAMIYORUM.

\_\_\_\_\_ 9- MUTSUZ.

\_\_\_\_\_ 10- SAĞLIKSIZ.

\_\_\_\_\_ 11- KAPANA KISILMIŞ.

\_\_\_\_\_ 12- DEĞERSİZ.

\_\_\_\_\_ 13- BIKKIN.

\_\_\_\_\_ 14- KAFASI KARIŞMIŞ, SIKINTILI.

\_\_\_\_\_ 15- EŞ/İLİŞKİ İLE İLGİLİ HAYAL KIRIKLIĞINA UĞRAMIŞ VE GÜCENMİŞ.

\_\_\_\_\_ 16- ZAYIF.

\_\_\_\_\_ 17- UMUTSUZ.

\_\_\_\_\_ 18- REDDEDİLMİŞ.

\_\_\_\_\_ 19- İYİMSER.

\_\_\_\_\_ 20- ENERJİK.

\_\_\_\_\_ 21- KAYGILI.



## APPENDIX C: INTERPERSONAL REACTIVITY INDEX (IRI)

Aşağıdaki ifadeler sizin değişik durumlardaki düşüncelerinizi ve duygularınızı sorgulamaktadır. Her bir maddenin sizi ne kadar iyi tanımladığını sayfanın başındaki cetveldeki uygun harfleri seçerek belirleyiniz: A, B, C, D, veya E. Cevabınız üzerinde karara vardığınızda, soruların hemen altındaki harflerden birini daire içine alınız. CEVAP VERMEDEN ÖNCE HER BİR MADDEYİ DİKKATLİCE OKUYUNUZ. Olabildiğiniz kadar dürüstçe cevap verin. Teşekkürler.

CEVAP CETVELİ:

A	B	C	D	E
BENİ				BENİ
İYİ BİR ŞEKİLDE				ÇOK
TANIMLAMİYOR			İYİ BİR ŞEKİLDE	TANIMLIYOR

1. Başıma gelebilecek olan şeyler hakkında, zaman zaman hayaller ve fanteziler kurarım.  
A B C D E
2. Benden daha talihsiz insanlar için genellikle merhametli, alakalı hisler duyarım.  
A B C D E
3. Olayları “bir başka kişinin” bakış açısından görmeyi zor bulurum.  
A B C D E
4. Başka kimselerin problemleri olduğunda, onlar için fazla üzülmem.  
A B C D E
5. Bir romandaki karakterlerin duygularını gerçekten içimde hissedirim.  
A B C D E
6. Acil durumlarda, vesveseli ve rahatsız hissedirim.  
A B C D E
7. Bir piyes veya film izlerken genellikle tarafsızımdır ve sıklıkla kendimi ona tamamen kaptırmam.  
A B C D E
8. Bir karara varmadan önce diğerlerinin anlaşılamadığı yönlerden olaya bakmaya çalışırım.  
A B C D E
9. Birinden yararlandığımı gördüğümde, ona karşı koruyucu olduğumu hissedirim.  
A B C D E
10. Çok heyecanlı bir durumun içinde olduğumda çaresizlik hissedirim.  
A B C D E
11. Arkadaşlarımın bakış açısından olayların nasıl görüldüğünü gözümde canlandırarak onları daha iyi anlamaya gayret ederim.  
A B C D E
12. İyi bir kitaba veya filme son derece kapılmak benim için bir parça nadir bir durumdur.  
A B C D E
13. Birinin incindiğini gördüğümde, sakın kalma eğilimindeyimdir  
A B C D E
14. Başka kimselerin talihsizlikleri genellikle beni büyük ölçüde rahatsız etmez.  
A B C D E

15. Bir şeyde haklı olduğumdan eminsem, başkalarının fikirlerini dinleyerek fazla zaman harcamam.
16. Bir piyes veya filmi gördükten sonra, karakterlerden biriymişim gibi hissetmişimdir.  
A B C D E
17. Gergin duyguların olduğu bir ortamda olmak beni korkutur.  
A B C D E
18. Birine haksız davranıldığını gördüğümde, onlar için bazen çok fazla acıma hissetmem.  
A B C D E
19. Genellikle acil durumların üstesinden gelmede çok becerikliyimdir.  
A B C D E
20. Gördüğüm şeyler bana oldukça dokunur.  
A B C D E
21. Her sorunun iki yönü olduğuna inanırım ve her iki yönden de bakmaya çalışırım.  
A B C D E
22. Kendimi oldukça yumuşak kalpli bir kişi olarak tanımlarım.  
A B C D E
23. İyi bir film seyrettiğimde, kendimi çok kolaylıkla başkarakterin yerine koyabilirim.  
A B C D E
24. Acil durumlarda kontrolü kaybetmeye eğilimliyimdir.  
A B C D E
25. Birine kızdığımda, genellikle bir süre için kendimi onun yerine koymaya çalışırım.  
A B C D E
26. İlginç bir hikaye veya roman okuduğumda, hikyedeki olaylar benim başıma gelse neler hissedeceğimi gözümde canlandırırım.  
A B C D E
27. Acil bir durumda çok yardıma ihtiyacı olan birini gördüğümde, param parça olurum.  
A B C D E
28. Birilerini eleştirmeden önce, onların yerinde olsam nasıl hissedeceğimi gözümün önünde canlandırmaya çalışırım.

## APPENDIX D: READING MINDS IN THE EYES TEST (RMET)

Örnek Maddeler

Kıskanç

Paniklemiş



Kibirli

Nefret dolu

Neşeli

Teselli eden



Rahatsız

Sıkılmış

## APPENDIX E: TRAIT ANXIETY SCALE

YÖNERGE: Aşağıda kişilerin kendilerine ait duygularını anlatmada kullandıkları bir takım ifadeler verilmiştir. Her ifadeyi okuyun, sonra da o anda nasıl hissettiğinizi ifadelerin sağ tarafındaki parantezlerden uygun olanını işaretlemek suretiyle belirtin. Doğru ya da yanlış cevap yoktur. Herhangi bir ifadenin üzerinde fazla zaman sarf etmeksizin anında nasıl hissettiğinizi gösteren cevabı işaretleyin.

		Hemen hemen hiçbir zaman	Bazen	Çok zaman	Hemen her zaman
21	Genellikle keyfim yerindedir.	(1)	(2)	(3)	(4)
22	Genellikle çabuk yorulurum.	(1)	(2)	(3)	(4)
23	Genellikle kolay ağlarım.	(1)	(2)	(3)	(4)
24	Başkaları kadar mutlu olmak isterim.	(1)	(2)	(3)	(4)
25	Çabuk karar veremediğim için fırsatları kaçıırım.	(1)	(2)	(3)	(4)
26	Kendimi dinlenmiş hissediyorum.	(1)	(2)	(3)	(4)
27	Genellikle sakin, kendine hakim ve soğukkanlıyım.	(1)	(2)	(3)	(4)
28	Güçlüklerin yenemeyeceğim kadar biriktiğini hissedirim.	(1)	(2)	(3)	(4)
29	Önemsiz şeyler hakkında endişelenirim.	(1)	(2)	(3)	(4)
30	Genellikle mutluyum.	(1)	(2)	(3)	(4)
31	Her şeyi ciddiye alır ve endişelenirim.	(1)	(2)	(3)	(4)

32	Genellikle kendime güvenim yoktur.	(1)	(2)	(3)	(4)
33	Genellikle kendimi emniyette hissederim.	(1)	(2)	(3)	(4)
34	Sıkıntılı ve güç durumlarla karşılaşmaktan kaçınırım.	(1)	(2)	(3)	(4)
35	Genellikle kendimi hüzünlü hissederim.	(1)	(2)	(3)	(4)
36	Genellikle hayatımdan memnunum.	(1)	(2)	(3)	(4)
37	Olur olmaz düşünceler beni rahatsız eder.	(1)	(2)	(3)	(4)
38	Hayal kırıklıklarını öylesine ciddiye alırım ki hiç unutamam.	(1)	(2)	(3)	(4)
39	Aklı başında ve kararlı bir insanım.	(1)	(2)	(3)	(4)
40	Son zamanlarda kafama takılan konular beni tedirgin ediyor.	(1)	(2)	(3)	(4)