



T.C.

İSTANBUL AREL ÜNİVERSİTESİ  
SOSYAL BİLİMLER ENSTİTÜSÜ

Klinik Psikoloji Yüksek Lisans Programı

**REVISITING COGNITIVE DISTORTIONS AND  
PSYCHOPATHOLOGY RELATIONSHIP: TESTING  
MEDIATING ROLES OF MINDFULNESS AND NEGATIVE  
SELF-FOCUS USING STRUCTURAL EQUATION MODELING**

YÜKSEK LİSANS TEZİ

Duyunç KOÇÖZ

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Danışman: Doç. Dr. Ömer Faruk ŞİMŞEK

İstanbul, 2017



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MODELING**

Yüksek Lisans Tezi

Tezi Hazırlayan: **Duyunç KOÇÖZ**

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## YEMİN METNİ

Yüksek lisans tezi olarak sunduđum “Bilişsel Çarpıtmalar ile Psikopatoloji İlişkinde Farkındalık ve Kendine Olumsuz Odaklanma Düzeyinin Aracılık Etkilerinin Yapısal Eşitlik Modeli İle Test Edilmesi” başlıklı bu çalışmanın, bilimsel ahlak ve geleneklere uygun şekilde tarafımdan yazıldığını, yararlandığım eserlerin tamamının kaynaklarda gösterildiğini ve çalışmanın içinde kullanıldıkları her yerde bunlara atıf yapıldığını belirtir ve bunu onurumla doğrularım.

İstanbul, 2017

**Duyunç KOÇÖZ**

## ÖZET

### BİLİŞSEL ÇARPITMALAR İLE PSİKOPATOLOJİ İLİŞKİSİNDE FARKINDALIK VE KENDİNE OLUMSUZ ODAKLANMA DÜZEYİNİN ARACILIK ETKİLERİNİN YAPISAL EŞİTLİK MODELİ İLE TEST EDİLMESİ

Duyunç KOÇÖZ

Yüksek Lisans Tezi, Psikoloji Anabilim Dalı

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İrrasyonel düşünceler her insanda varolan bilişsel çarpıtmalardır. Zaman zaman artıp azalabilirler ve kişinin hayatına olan etkileri anlık ya da daha uzun vadeli olabilir. İrrasyonel düşüncelerin ruh sağlığı ile ilişkisi alanında yapılan çalışmalar sonucunda depresyon, anksiyete, bağımlılık, sosyal ilişkiler gibi birçok alanda olumsuz etkisi olduğu bulunmuştur. Araştırmalar genellikle ruh sağlığına olumlu ya da olumsuz etkisine odaklanmışlardır. Fakat irrasyonel düşüncelerin ruh sağlığını nasıl etkilediği yönünde araştırmalar kısıtlıdır. Bu çalışmanın amacı farkındalık ve öz-bilinçlilik kavramlarının irrasyonel düşüncelerin ruh sağlığına olan etkisinde aracı etkileri olup olmadığını araştırmaktır. Böylece, ruh sağlığını iyileştirmek amaçlı irrasyonel düşüncelere müdahale edilirken odaklanılabilecek kavramlar ortaya çıkacaktır.

Araştırmanın örneklemi gönüllü 288 katılımcıdan oluşmaktadır. Bireylerin bilişsel çarpıtmaları, depresyon, farkındalık, ruminasyon, olumsuz duygu ve mutlak gerçek ihtiyaç düzeyleri ölçülmüştür. Yapılan yapısal eşitlik modeli sonucunda irrasyonel düşüncelerin ruh sağlığı üzerinde etkisi olduğu, ayrıca farkındalık ve öz-bilinçlilik düzeylerinin irrasyonel düşünce ve ruh sağlığı ilişkisine aracılık ettiği/aracı bir rolünün olduğu bulunmuştur.

**Anahtar Sözcükler:** *Bilişsel Çarpıtma, Farkındalık, Kendine Olumsuz Odaklanma, Psikopatoloji, Ruminasyon, Mutlak Gerçek İhtiyacı.*

## ABSTRACT

### REVISITING COGNITIVE DISTORTIONS AND PSYCHOPATHOLOGY RELATIONSHIP: TESTING MEDIATING ROLES OF MINDFULNESS AND NEGATIVE SELF-FOCUS USING STRUCTURAL EQUATION MODELING

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All people have cognitive distortions which may increase and decline time to time and their influence can be momentary or long term. As a result of the studies which are conducted related to the relationship between cognitive distortions and psychopathology, influence on areas like depression, anxiety, addiction, social relations is supported. Researches, generally focus on negative and positive effect of cognitive distortions on mental health. However, there is a lack of studies related to how this influence occurs. The aim of the current study is to search whether mindfulness and negative self-focus have mediatory effect in the relationship between cognitive distortions and psychopathology. In this way, phenomena would arise which would be focused on the treatment of cognitive distortions in order to ameliorate psychopathology. Sample of the study consists of 288 voluntary participants. The degree of cognitive distortions, depression, mindfulness, rumination, negative affect and need for absolute truth is measured. In the consequence of structural equation model, it is found that cognitive distortions have influence on psychopathology and mindfulness and negative self-focus have mediatory effect/role in the relationship between psychopathology and cognitive distortions.

**Key Words:** Mindfulness, Cognitive Distortions, Irrational Thoughts, Psychopathology, Negative Self-focus

## ÖNSÖZ

Çalışmamın en başından itibaren her aşamasında bilgi birikimi ve deneyimleri ile desteğini esirgemeyen sayın tez hocam Doç. Dr. Ömer Faruk Şimşek'e geçirdiğim zor dönemde göstermiş olduğu anlayış, sabır, ayırmış olduğu zaman ve desteği için en içten teşekkürlerimi sunarım.

Bütün eğitim hayatım boyunca maddi ve manevi desteklerini her zaman yanımda hissettiğim kıymetli annem Şükran Alemdağ Koçöz ve babam Remzi Koçöz'e sonsuz teşekkürlerimi sunarım. Ayrıca hayatımın her aşamasında değerli destekleri ile yanımda olan Alemdağ ailesine en içten teşekkürlerimi sunarım.

Lisans ve yüksek lisans hayatımız boyunca aynı yolda yürüdüğümüz, birçok projede beraber yer aldığımız, tez yazım sürecinde de desteğini ve yoldaşlığını çok yakından hissettiğim değerli meslektaşım ve arkadaşım Gülşah Özgürler'e teşekkür ederim. Yüksek lisans ve çalışma hayatımda her zaman desteğini ve yoldaşlığını hissettiğim değerli meslektaşım ve arkadaşım Canan Ertürk'e teşekkür ederim. Kıymetli bilgi birikimi ve deneyimleri ile tez yazım sürecinde zorlandığım çoğu noktada yol gösteren değerli meslektaşım ve arkadaşım Aylın İpek Timur'a teşekkür ederim. Lise hayatımdan beri değerli dostluğu ve mesleki olarak farklı alanlardaki tez yazım aşamamızı aynı zamanda yürüttüğümüz Göksu Selçuk'a teşekkür ederim.

Duyunç KOÇÖZ

İstanbul, 2017

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# CHAPTER 1

## INTRODUCTION

### 1.1. Problem Case

Throughout history, thinking has been one of the main concern of philosophers and researchers. There are many discussions and writings as a result of this concern. It would be proper to begin with Descartes who defines thinking as a proof of human existence. He regards ideas as essential features of being human. In Montaigne (2011), philosopher says that the best mirror of our thoughts is the flow of our lives. He relates ideas and experiences as interactive life components. Another philosopher, Epipharmus claims that people see and hear through their thoughts. This notation implies the influence of ideas on our perception of reality.

People want to learn how thinking process performs or which thoughts are true about the world, people and etc. There are different kinds of thinking and perception style in literature. Cognitive distortions are information ingredients in our mind which mostly derive from mislearned experiences and lead us to make unfavorable inferences related to daily situations in many areas. Cognitive therapy which is developed by Beck (1967) emphasizes the relationship between cognitive processes and psychopathology. Beck (2011) classifies cognition which has negative influence on feelings as core beliefs and automatic thoughts. Core beliefs are defined as rooted notions about the world, self and the future. Automatic thoughts are coming from errors in reasoning as a result of damaged cognitive process and impact feelings through impairments in perception of reality in the moment. As a result of a study with depressive participants Beck et al., (1979) raise seven cognitive distortions. Then, Burns (1980) expands cognitive distortions especially in depression to 10 distortions which this study refers as types of cognitive distortions.

Cognitive distortions are automatic, involuntary, nonlogical, habitual and repetitive. They also have direct influence on psychopathology especially depression, anxiety and negative affect (Nieuwenhuijsen et al., 2010). Furthermore, cognitive distortions are found related to trauma (Hyland et al., 2014), distress (Visla et al., 2016), disruptions in physical health (Talaiei-Khoei al., 2017), problems in relationships (Lee et al., 2004), academic complications (Boyacıoglu and Kucuk,

2011), eating problems (Osberg and Eggert, 2012) and addiction problems (Camatta and Nagoshi, 1995; Walker, 1992).

There are factors which enhance or sustain the impact of cognitive distortions on psychopathology. Negative self-focus which attention is paid to inner world rather than environment would be given as one of the affectors. This focus is mostly about the discrepancy between the ideal and actual self (Teasdale, 1999). When the attention is recurrent and generally about unfavorable aspects of the self, complications related to psychopathology arise (Brown et al., 2007). According to Papageorgiou and Wells (2001), cognitive distortions are content of the mind and negative self-focus is a way of attention and perception of experiences. When cognitive distortions already exist in mind, the effects of negative self-focus increase. Then, implications from cognitive distortions provide a basis for further self-focused attention. This relationship maintains unless something breaks the chain like another way of attention or awareness of opportunity for change.

Brown et al. (2007) advocates that mindfulness is a way of attention in present moment which is impressed partly by Buddhist philosophy. Buddha claims that we are what we think of and we create our world by means of our thoughts. With these words, it is suggested that thoughts have most of the influence on how we perceive our experiences and ourselves. In mindfulness, it is tried to learn approaching thoughts as they are just thoughts and emotions as they are just emotions. In other words, there is an acceptance that thoughts do not have to be true all the time and people have a chance to stay in distance to their ideas and feelings. In this way, the impact of distorted thoughts reduces. Rather than repetitive occupation with the self and cognitive distortions about the world, self and others, awareness of current moment and its clues gives people chance to make healthy inferences. It is clear that the literature has been focused on the relationship between cognitive distortions and psychopathology. However, the dynamics or mechanisms behind this relationship have been ignored. Based on the literature mentioned above, this study argues that cognitive distortions have an impact on psychopathology via its effect on positive, i.e, mindfulness, or negative self-focus, i.e, rumination, reflection, and need for absolute truth about self.

## **1.2. The Aim of The Study**

The aim of this study is to find whether negative self-focus and mindfulness have mediatory effect in the relationship between cognitive distortions and psychopathology.

## **1.3. Significance of The Study**

The effect of cognitive distortions on psychopathology is supported by both correlational and experimental studies. However, there is a lack of study focusing on the mediatory factors which have an influence on the relationship between cognitive distortions and psychopathology.

There is almost no study about the relationship between mindfulness and cognitive distortions. Possible reason for this inadequacy would be that mindfulness is newly discovered phenomena. This present study and its results would give inspiration to researchers.

Need for absolute truth is a new phenomenon and it is needed to look at relationship with possible related variables. This current study contributes literature in this way.

## **1.4. Limitations of the study**

The sample of this study is limited to 288 participants from normal population. The inadequacy of literature related to certain relations obstructs discussion and inference of the results of the study.

## **CHAPTER 2**

### **THEORETICAL FOUNDATION AND RELEVANT STUDIES**

#### **2.1. Definition of Cognitive Distortions and Types of Cognitive Distortions**

##### **2.1.1. Cognitive Distortions**

Thinking abilities are the ones that differentiate human from other living beings. Thinking has many advantageous sides such as facilitating survival. However, there can be cognitive distortions which have negative effects on feelings and result in psychopathology like depression especially. Cognitive distortions exist in all people but psychopathology is determined according to the degree of these distortions.

According to Covin et al. (2011), similar concepts to cognitive distortions can be examined as irrational beliefs/thoughts, unrealistic thinking, nonlogical thinking in different research contexts. Mindreading, catastrophizing, all-or-nothing thinking, emotional reasoning, labeling, mental filter, overgeneralization, personalization, should statements and minimizing or disqualifying the positive are the types of cognitive distortions. Beck (1963) claims that cognitive distortions mostly drive from past experiences and meanings which people give to them. Even if there is no or low logical cause and effect relations in the formation of cognitive distortions, these thoughts seem reasonable to people. Therefore, people accept them without questioning. As they accept without questioning, the influence of the cognitive distortions on affections rises. Moreover, distortions generally come automatically without any reasoning priorily. Even if the person does not want to think that way or decides to stop it, distortions continue because of their involuntary nature. These thoughts also come routinely as a stereotype, therefore they have habitual characteristic.

##### **2.1.2. Types of Cognitive Distortions**

Nevertheless, meanings of cognitive distortions would be easily understood, it is beneficial to explain them briefly. According to Covin et al., (2011) there are 10 cognitive distortions which are defined below.

1. Mindreading is when a person supposes that someone has unfavorable thoughts about himself/herself even if this someone does not talk anything about him or her.
2. Catastrophizing means that expecting negative things to happen in coming days when there is no or enough proof for this inference.
3. If somebody interprets experiences as two opposite edges and there is no middles, it is called all or nothing thinking. It is like perceiving something good or bad.
4. When a person trusts his or her feelings for believing the reality of happenings, it is named as emotional reasoning. People may believe the trueness of the experience because they feel it that way.
5. When a person has a negative experience and labels himself or herself as certain kind of person with the influence of this experience, this person probably uses labeling.
6. Mental filtering means that when there are both unfavorable and favorable notions, centering upon just unfavorable one. Favorable information is generally ignored.
7. By the time someone experiences something negative, he or she believes that it is the beginning of future unfavorable events and there are more to come. This situation is called overgeneralization.
8. Some people feel responsible for bad experience like they are the reason why problem occurs even if they have no influence on. These people make personalization during interpreting situations.
9. Should statements mean believing that they should or must do something in precise way and other ways are not acceptable.
10. Sometimes people overpass favorable experiences they living and this behavior is classified as minimizing or disqualifying the positive, the last cognitive distortion.

### **2.1.3. The Relationship Between Cognitive Distortions and Psychopathology**

There are fields in life that automaticity and quickness would be beneficial. However, irrational base of cognitive distortions and related behavior reactions



produces undesirable outcomes (Brown & Ryan, 2003). As a result of existing studies, cognitive distortions sabotage mental health through spearheading unfavorable affections and incompatible attitudes. Rational Emotive Behavior Therapy emphasizes the importance of replacing irrational beliefs with rational ones (Turner, 2016). Out of starting blocks, irrational beliefs arise from their relationship with depression. Beck et al., (1979) argues that depression is related to strict and irrational thinking. There are studies in the literature that demonstrate the correlation between depression and cognitive distortions. Cognitive therapies have started with thought and feeling relationship. In cognitive therapy client formulation, there are some core beliefs which influence perception of people. These base beliefs would reveal themselves in daily life as automatic thoughts. These automatic thoughts have great effect on how people feel (Covin et al., 2011). Despite the fact that all people have automatic thoughts, it is the extremeness of these thoughts which determines the effect on psychopathology (Gündüz, 2013). According to Beck's cognitive therapy of depression, people who are depressed have a deformation in perception of self, world and aftertime. Their reasoning is irrational and unrealistic.

In addition to cognitive aspect, behavioral aspect of the human psychology has attracted the attention of theoreticians. Ellis (1980) who is the institutor of Rational Emotive Behavior Therapy advocates that thoughts, feelings and behaviors reciprocally have influence on each other. At the same time, Ellis suggests that irrational beliefs are causes underlying negative changes in mental health like depression or anxiety. He suggests that people try to make connections between their negative emotions and their negative experience. Thereafter, unfavorable feelings are stimulated irrationally but experience is forgotten. Ellis mentions the influence of catastrophizing and should statements which are two of cognitive distortions in the study.

As it is mentioned above, in the first place the relationship between depression and cognitive distortions has been addressed. Later on, relationship with other kinds of psychopathologies like anxiety and trauma is started to be searched. Furthermore, the effect of cognitive distortions in human relationships and daily activities become issues of concern.

Cognitive distortions are found related to distress in health conditions and different psychopathologies. They are found rightly relevant with distress (Visla, et al.,2016). According to Podina et al., (2015) there is a connection between affective distress and cognitive distortions and during elevated affective distress cognitive distortions are more notable. There is a study (Komasi et al., 2016) which looks into connection between pain and cognitive distortions. It is suggested that patients with high non-cardiac chest pain have more cognitive distortions than ones with lower pain. It is said that people with cognitive distortions do not try to accomodate themselves to reality. Therefore, they experience distress, their performance decreases and they eventually feel discommodity, suffering. Moreover, researchers suggest that health-care providers need to keep cognitive distortions in their mind as a probable distress/pain source. According to Stanculete et al. (2015), in chronic illnesses, as a result of stress which is experienced, cognitive distortions come in sight. Cognitive distortions would be realized and included in order to achieve healthy treatment. Ellis (1980) also advocates that because irrational beliefs stimulate affective distress, in order to reduce emotional distress changing irrational beliefs with rational is needed.

There are studies in the literature which is conducted with depressive, anxious and comorbid patients in order to understand the influence of cognitive distortions on psychopathology. In a study (Nieuwenhuijsen et al., 2010), it is found that comorbidity group who are diagnosed with both depression and axiety at the same time, have more cognitive distortions than patients who have just depression or anxiety diagnosis. When it is looked at the level of cognitive distortions among depression and anxiety patients, it is observed that anxious ones have more cognitive distortions

There is a research (Kuehner et al., 2009) which is about cognitive distortions and their relations with stress reactions. Researchers aim to look at relevance of depression and cognitive distortions. They assume that in long-continued depression people have continous cognitive distortions. Then, these thoughts have influence on depression susceptibility. Ciesla and Roberts (2007) bear depression susceptibility of people who have constant cognitive distortions out. They advocate that people who make dysfunctional ascribing or holding unfavorable notions are at high risk of

depression. Beside depression predisposition, feelings of helplessness and hopelessness that have been symptoms of depression are found related to cognitive distortions (Ulusoy & Duy, 2013).

According to Coelho et al. (2007), generally in depression treatment, reduction or termination of cognitive distortions are missions. Therapies which have cognitive background like cognitive therapies and mindfulness based therapies try to deal with cognitive distortions. In mindfulness based cognitive therapy study, it is observed that there is a positive relation between experienced depressive episodes and reappearance of cognitive distortions. In a study (Muran et al., 1989) which is conducted between university students with no diagnosis and patients from mental health services, it is provided that differently from other psychopathologies, patients with excess depressive scores have more maladaptive thinking than non-diagnosed participants with slightly depressive scores.

In a study (Marcotte, 1996), researchers look into depressive symptoms and their relevance with cognitive distortions in adolescence with participants who are between 11-18 ages. Although the level of depressive symptoms differs between girls and boys, there is no difference in the amount of maladaptive thinking. Students with excessive depressive scores are more prone to dramatize matters. It would be associated that those students especially use one of cognitive distortions, catastrophizing. It would be given as a relation between depression and catastrophizing situations. It is also found that adolescents who have excessive depressive scores concurrently have higher scores on the category which is named as "self directed should". To put it more explicitly, students in depression have expectancies from themselves that they cannot satisfy. Thus, it is seen as a connection between "Should statements" cognitive distortion and depression.

According to general model of anxiety, it is claimed that negative thoughts sustain anxiety reactions. These thoughts are related to threat or vulnerability and cognitive behavioral therapy deals with these thoughts in general anxiety disorder (Hollon, 2010). Nolen-Hoeksema (2004) suggests that in the cognitive treatment of obsessive compulsive disorder it is crucial to aim at automatic thoughts. When people experience anxiety, problems in brain related to perception of the stimulus occur. Additionally, overgeneralizations are made related to dangerous matters. Even

if they are in a safe environment, people with anxiety overgeneralise more than ones who are not anxious. On this basis, it would be claimed that there is a relation between one of the cognitive distortions, overgeneralization and anxiety. In a study (Hart & Hittner, 1991) which supports the influence of irrational thinking on social relationships, it is claimed that anxiety would be the underlying cause for lower perception of social support. Researchers suggest that perceived social support and irrational thinking are negatively correlated. Because cognitive distortions make irrational conclusions related to experiences, it would be suggested that cognitive distortions have influence on social relationships.

In addition to its correlation with anxiety, overgeneralization is found related to general psychological state. There is a study in which participants score their unfavorable self beliefs and self critical thoughts. As a result, clinical participants use excessive overgeneralization in regard to control participants and overgeneralization rises as mood decreases (Thew et al., 2017). Overgeneralization is also found related to post traumatic stress disorder. There is a research (Ready et al., 2015) which is conducted with two post traumatic stress disorder groups of participants: Patients who have overgeneralized thoughts and congruent thoughts. It is observed that overgeneralization sets forth symptom rise, more assimilated symptoms even after treatment especially in younger participants and lower progress with treatment.

According to Nolen-Hoeksema (2004), post traumatic stress disorder is one of the psychopathologies which cognitive distortions have influence on. Traumatized person overgeneralize the event to life, heightens its chance to reoccur and perceives world as dangerous constantly. Using cognitive distortion, overgeneralization is a common effect of trauma. In a study which looks into cognitive distortions in participants who have PTSD, anxiety and depression. In results, traumatized people score more cognitive distortions than other clinical groups and non-clinical groups (Muran & Motta, 1993). Hyland et al., (2014) study the relationship between cognitive distortions and trauma with participants from law enforcement, military and alike emergency personnels. Outcomes suggest that irrationality has negative influence on traumatic symptoms whereas rationality acts as a guardian.

People contact with each other everyday. According to Lemay and Razzak (2016), in these relations there are both accepted and rejected memories. Cognitive

distortions use these experiences to make statements about relationships. Sometimes, these memories are generalized to unrelated situations, relationships. If it is made excessively, it would damage relationships. Its influence in romantic relationships is that people with overgeneralization look their relationships from this perspective and their behaviors change unfavorably.

Come to think of the correlation between cognitive distortions and relationships, there are studies which search the influence of cognitive distortions on different kinds of relationships such as social, romantic and marital. In a study (Lee et al., 2004) which looks into social acceptance and cognitive distortions among Korean peers in high school, participants score their peers as mentally healthy or not. It is assumed that chosen ones as mentally are accepted by their peers. These accepted students score less cognitive distortions than non-accepted participants. Mahoney (1999) look into alienation and irrationality in students at college. According to results of the study, participants with excessive alienation rates have elevated scores on Irrational Beliefs Scale. Möller & Beer (1998) conduct a study about disagreements in marriage and irrational beliefs that partners have. As a result, problem situations are found linked to irrational thinking rather than rationality and irrationality is one of the main features of cognitive distortions.

There are researches which look into influence of established thoughts on academic aspect. In a study (Ulusoy & Duy, 2013) which is related to effects of learned helplessness on school grades among middle school students, cognitive distortions are found underlying the learned helplessness. When students with school failures experience unfavorable situations, they approach these experiences as they have an inner and constant reason for their happening. Students with higher grades do not have that much dysfunctional cognitions. Boyacıoğlu and Küçük (2011) conduct a research with primary school students to probe the probability of cognitive distortions to foresee exam anxiety. Researchers suggest that there is a positive correlation between dysfunctional cognitions and anxiety for exam by looking at the study results. There is another study related to exam stress and it looks into the influence of cognitive distortions and response expectations on the distress experiencing. As a result, both cognitive distortions and expectations for response are precursors for exam related distress (Montgomery et al., 2007).

There are studies about the influence of cognitive distortions on conditions related to disruptions in physical health. People with musculoskeletal illness experience difficulties in their everyday life because of the pain. When looking at the cognitive factors behind the perceived pain, catastrophic thoughts are found to be effectual (Talaei-Khoei et al., 2017). There is a study which is conducted with teenage participants who have asthma and their ages are between 12 and 18. As a result, participants with moderate and severe asthma have both psychopathological symptoms like anxiety, depression, hostility and dysfunctional cognitions (Silverglade et al., 1994). Cognitive distortions also have effects related to fears about having problems in physical health. Fulton et al (2011) suggests that there is a relationship between health anxiety and dysfunctional cognitions.

There are studies that look into effects of cognitive distortions on eating disorders and perception of the body. Osberg and Eggert (2012) search for the impacts of cognitive distortions to bulimic symptoms by taking irrational food beliefs into consideration. Irrational food beliefs are dysfunctional cognitions related foods. In consequences, stress coming from irrational beliefs have influence on eating disorders. Another study which searches irrational food beliefs also finds the relationship between irrational beliefs and bulimic disorder. Moreover, dysfunctional cognitions are found correlated to excessive weight loss and continuation of this loss (Osberg et al., 2008). There is a study (Tomotake et al., 2002) which conducts with Japanese university women students in order to check up on the tie between irrational cognitions and dysfunctional eating rituals. According to results, it is claimed that irrational beliefs are behind maladaptive eating habits and these beliefs should be targeted in treatment. Möller and Bothma (2001) perform a study with based on the Rational Emotive Behavior Therapy with women who either have excessive body dissatisfaction or eating disorder. Their aim is to understand whether irrational beliefs is influential or not. As a result, participants with high body dissatisfaction have more scores on expectations from the self and participants with eating disorders use catastrophic thinking more than other groups.

There are studies that aim at discovering effects of dysfunctional cognitions on possible dependency fields. Camatta and Nagoshi (1995) conduct a research with university participants who have alcohol issues in order to find the underlying

motives behind alcohol problems. As a result, it is found that originating from depression participants experience stress and irrational beliefs have indicative role in the influence of depression on alcohol problems. There is a research (Kallmen et al., 2008) about the predisposition of having irrational beliefs and depressive feelings among people with pathological gambling. In consequence, it is found that excessive gamblers have more depressive mood and irrational beliefs than the control group. In order to discover whether gamblers have excessive irrational beliefs or not, Walker (1992) chooses participants from slot machine playing. Sample is chosen from slot machine player because it is suggested that these group of gamblers express their irrational beliefs more than others during game. When researchers analyze the statements of participant, highly correlation is found with irrational beliefs. It would be claimed that cognitive distortions indirectly have influence on dependency fields.

When the literature is examined, the relationship between psychopathology and cognitive distortions is supported. Generally this relationship is discussed as cognitive distortions directly affect psychopathology. However, there would be mediatory factors in the relationship between cognitive distortions and psychopathology. Mindfulness would be one of these mediatory factors.

## **2.2. The Relationship Between Mindfulness and Cognitive Distortions**

Cognitive distortions contain dysfunctions in cognitively perception of the real situation. On the other hand, there are also different ways of awareness in situations. Mindfulness is a salient term which has caught many researchers and therapists' attentions. It has its roots from mainly Buddhist psychology and then other philosophical and psychological traditions like existentialism and ancient Greek philosophy (Hölzel et al., 2011). Brown and Ryan (2007) identifies mindfulness as being aware of what is taken place in the present moment and experience and attending it receptively. This moment also includes what person thinks, feels, senses and the actions. This person perceives thoughts as just thoughts, sees emotions as reactions to thoughts. Then the influence of thoughts and emotions which are subjective and do not derived from empirical links reduces on this person (Brown, Ryan & Creswell, 2007). In mindfulness, people do not try to make sense out of their thoughts, they just allow thoughts to come and pass (Bohecker et al., 2016). Mindful

point of view approaches situations as they have unique characteristics. Therefore, it does not try to identify events with each other (Weick & Sutcliffe, 2006).

When examining the literature about mindfulness and cognitive distortions, there are crucial connections between these two phenomena. It would be claimed that pre-existence of cognitive distortions reduces mindful way of attention. It would be proper to examine the literature in order to understand how cognitive distortions impair mindfulness. While mindfulness focuses on here and now, cognitive distortions rooted in the past. Ruedy and Schweitzer (2010) suggest that notions and concerns about the past and the future that come routinely, prevent people from focusing on the present experience. In mindfulness, it is important to stay in the moment and catch the clues of this moment. Focusing solely here and now is one of the crucial phases in mindful attention techniques (Hayes & Plumb, 2007). However, cognitive distortions are mostly collection of mislearned information from early experiences. Mindfully focused attention does not extremely engage in lived experiences and possible experiences of coming days (Horowitz, 2002). Watkins and Teasdale (2001) also suggest that emotions and thoughts which derive from present experience help mindful person to overcome difficulties. Mindfulness is used in many areas in life other than psychology and in these areas past experiences are not also taken into consideration. In a study which searches effects of organizational mindfulness in business schools, it is found that mindful people abstains from past notions and focus on novel probabilities (Ray et al., 2011). According to the literature, it would be suggested that both mindfulness and existence of cognitive distortions have impact on how we perceive present moment. However, when a person has prejudgements from learned experiences related to his/her cognitive distortions, they show up and reduce the chance of mindful focus. Therefore, cognitive distortions obstruct attention in the moment which is an essential aspect of mindfulness.

Mindful attention focuses on what the situation is whereas cognitive distortions mostly considers learned information from past experience instead of examining current situation. These past informations generally do not derive from logical connections that has proper cause-effect relationship. In a study, Brown et al., (2007) explores relations between the mindfulness and other types of attention. They



suggest that when attention is impressed by cognitive schemas, former experience and previous memories which is found related to the current situation, it prevents people from perceive the reality as it is. Therefore, there are distortions and lacks in the derivations coming from this changed reality. Researchers suggest related to mindfulness unlike cognitive distortions which are related to cognitive schemas, that mindful attention straight-forwardly get in touch with the experience in the current moment. For that matter, mindfulness only regards findings which are beheld. Argote (2006) claims that mindful and less mindful thinking complete one another. However, less mindful thoughts are defined as they mostly derive from former routines and does not rely on cognitive phases. Because cognitive distortions come from routines and miss objective clues, it may be considered as less mindful. According to Langer (1989), mindlessness is seen as a way of categorical thinking which restricts reasoning and is prone to stereotyping. In mindless situation, people are defined as looking from just one point of view, without measuring their thoughts and look like in the control of autopilot. These automatic and stereotypic nature of mindlessness is so similar with cognitive distortions which also obscure logical point of view (Hick & Furlotte, 2009). Therefore, it would be suggested that cognitive distortions decrease mindful thinking through limiting logical thinking.

Irrational thoughts basically have abstract roots. However, mindfulness is about concreteness. In a study (Weick & Sutcliffe, 2006), it is suggested that there is a continuous motion in mind and some constant points are tried to hold on to. While doing this, thoughts and feelings are regarded as having durable roots. However, they do not. The sources of cognitive distortions are these feelings, thoughts and past experiences. These sources are not concrete and they do not have a stable nature which is the same in all context. However, in mindfulness the experience is given importance and abstract aspects are tried to be avoided. Through attention to abstract data, cognitive distortions inhibit the chance of concrete thinking which is one of the main features of mindfulness.

One of the main features of mindfulness is being aware of the moment, feelings, thoughts and physical symptoms without being besotted with them (Hölzel et al. 2011). Cognitive distortions are accepted without questioning and unlike mindfulness they are not seen as just thoughts. Cognitive distortions cannot be seen

as just thoughts and cannot be perceived as external. In mindful state of mind, people can give some space between their thoughts and perceiving the situation (Ruedy & Schweitzer, 2010). Taking cognitions externally gives chance to see the outer connections of them. Therefore, people do not look for inner reasons which they found themselves responsible. When irrational thoughts are triggered, people perceive many things personally and do not seek for their external connections (Hick & Furlotte, 2009). In mindfulness based therapies, people are tried to learn keeping this distance to their thoughts in order to reduce their influence (Baer, 2007). It would be claimed that because cognitive distortions accept thoughts as true without reasoning, mindful attention becomes difficult which emphasizes to draw some boundaries to thoughts.

In mindfulness, people are aware of the situation but cognitive distortions come automatically without permission or desire of the person. In a study (Ruedy and Schweitzer, 2010), researchers examine different explanations of mindfulness. Even if there are some variations in definitions, absence of automaticity is common. However, automaticity is one of the main features of cognitive distortions. It is also an important reason why people cannot block these thoughts. While there is not such awareness in cognitive distortions, mindfulness has consciousness in its nature. Moreover, when people are not conscious about their actions or they act without awareness, mindfulness is precluded (Brown & Ryan, 2003). Langer (1989) also regards automatic acts as one of the representative examples of mindlessness. To this respect, it would be suggested that due to automaticity feature of cognitive distortions like mindlessness, mindfulness decreases.

Cognitive distortions contain judgements about people and incidents. However, Brisbon and Lowery, (2011) claim that incidents, thoughts, emotions are perceived nonjudgementally in mindfulness. In order to truly understand the present moment and what is really happening with its all aspects, non-judging attention is seen as a necessary component. It is what mindfulness tries to achieve. However, cognitive distortions contain judgements which come from former experiences and their meanings for people. Non-judging attitude enables to accept the situation as it is without making any connection to previous memories which gives further meanings

to it (Bohecker et al., 2016). Making judgements of cognitive distortions is an obstruction for mindfulness to perceive the moment objectively.

There is a habitual nature of the cognitive distortions. To be more precise, they come routinely, over and over again as it is a ritual. In a study (Im and Folette, 2016) which is conducted with trauma survivors, it is found that people who have more mindful attention think over and over less. It reduces the trauma effect. In another study (Brown et al., 2007), it is indicated that the mindful attention brings about more objectively produced mental and motional reactions. At the beginning, mind automatically matches situations with other similar ones. Then thinking becomes habitual after a while. However, mindful attention tries to break the chain, focuses original features of the experience (Weick and Sutcliffe, 2006). Habitually coming thoughts hinder mindfulness.

According to the literature, mindfulness is obstructed when cognitive distortions exist. Therefore, therapies which are based on mindful point of view aim to switch off cognitive distortions in order to enhance mental health. There are many therapeutic techniques that are used in the treatment of psychological problems. In recent years, the notion of mindfulness has come into therapy. Reducing the effects of cognitive distortions is one of the main objectives in mindfulness based cognitive therapy techniques. These techniques aim at replacing automatic thoughts which are felt as inalterable and accepted free from examination with more accommodative thoughts. It has been found useful in the treatment of unfavorable automatic thoughts (Nolen-Hoeksema, 2004). Cognitive distortions are also automatic and accepted without questioning. Therefore, mindfulness based cognitive therapies tries to enhance mental health by decreasing cognitive distortions. According to these therapies, it is believed that if cognitive distortions are treated, mindful attention becomes easier to apply. In this way, mindfulness mediates between mental health and cognitive distortions.

The alterative influence of mindfulness techniques has been observed in many studies, especially with patients who have depressive symptoms (Teasdale et al., 2000). According to Nolen-Hoeksema (2004), when it comes to how mindful techniques help people to reduce the effects of their cognitive distortions, it basically tries to make people learn looking from an external perspective. People believe that

they have no personal power on these intrusive thoughts. When they are able to be in a more objective point of view, they have a chance to decline coming thoughts and replace them with more applicable ones. Hick and Furlotte, (2009) claim that there is an indicator when these automatic thoughts come. It is important to realize when it comes. In the second place, it is crucial to remember that cognitive distortions are just thoughts, they do not have to be accurate and people have a chance to attend to them or not. Undoubtedly, it needs practice. According to Hayes and Plumb, (2007) with time, people learn to observe feelings and thoughts. If an example of mindful techniques would be given, saying loudly the thought would be given. If a person has “I am no good” thought, he is encouraged to say it loudly as “I have a thought that I am no good”. In this way, the intensity of the “I am no good” thought would be declined. With time, this person would realize that it is the thought saying that he is no good. The effect of the thought would also reduce. With the help of these techniques, it is believed that if cognitive distortions are limited, a mindful way of attention comes to light. Therefore, cognitive distortions are correlated to psychopathology with the help of a mediatory effect of mindfulness.

### **2.3. The Relationship Between Negative Self-focus and Cognitive Distortions**

In addition to a mediatory effect of mindfulness, negative self-focus would be another mediatory factor which increases as cognitive distortions elevate. Differently from mindfulness, there is another type of attention: Self focus. According to Martin and Debus (1999), in self focus people turn their attention to themselves rather than environment. One can draw his/her attention to self privately or publicly. Private self focus means that attention drives from inside, from own point of view. Public self focus is seeing self from external perspective. Regarding increased self knowledge, private self focus may be expected to have positive relations with psychological health. However, researches show positive relations with psychopathology (Trapnell & Campbell, 1999). If self focus is divided as negative and positive, negative self focus can be defined as attention toward differences between present and idealized features of the self (Teasdale, 1999). In the literature, there are two components which have possible effects on the negative relationship between psychological health and self focus. These are rumination and self-reflection. In addition to these

factors, Şimşek (2012) conducts research on a new phenomenon, need for absolute truth as a type of negative self focus.

Self-reflection is one of the self-focus styles which is an interest to know own thoughts, feelings, experiences, approaches and values further (Morin, 2002). Şimşek (2013) claims that the attention is shifted from outside to inside especially to negative emotions and their sources. Self-reflection is generally expected to have positive effect on psychology. However, research results are controversial. Self-reflection is found inversely related to certain phenomena such as self-esteem and self-concept clarity. Moreover, positive correlation is found with depression. According to research results, people who use self reflective focus also uses self rumination as well rather than positive self focus (Grant,2001).

According to Nolen-Hoeksema et al. (2008), ruminative self-focus is another self-focus component which is generally examined in studies jointly with self-reflection. Rumination means a repetitive and passive response to bothering situations. Passivity means that person does not try to find or conduct any solution. In this response, main focus is symptoms, their reasons and results. Person also focuses on his emotions passively. In other words, in ruminative self focus people direct their attention to what they experience as a symptom and how they feel. These symptoms and feelings are generally negative and people do not take any action regarding these focus such as making an attempt for relief (Nolen-Hoeksema, 1991). In ruminative self-focus, when people focus their attention to their feelings and thoughts, they are worried about what they might find out (Morin, 2002).

Additional to ruminative and reflective self focus, Şimşek (2013) does research about a novel term, need for absolute truth that is another category of negative self focus. As a result of this study, it is claimed that self-rumination and need for absolute truth are suppressor variables of the relationship between mental health and self-reflection. Therefore, it would be necessary to consider two suppressor phenomena in order to understand influence of self-reflection on mental health. Self-reflection, rumination and need for absolute truth are categories of negative self-focus which have correlations with cognitive distortions. Need for absolute truth might be defined as searching for a certain knowledge about the self.

This knowledge is expected to be the same in all contexts which might be generalized to all conditions. This truth is always expected to represent the person.

When people use negative self-focus repetitively and ignore most of the positive aspects, this approach may bring problems related to psychopathology (Brown et al., 2007). If the impact of negative self focus on mental health is concerned, as a beginning the cognitive theory of Beck about depression would be looked at. According to the theory, it is suggested that people with depression have deformations in their perception of the world, themselves and oncoming. Therefore, focusing unfavorable aspects of the self may bring on depressive feelings and thoughts (Beck, 1967). Besides depression, excessive amount of negative self focus is also found related to low self-esteem (Haaga et al.,1991). There is a study (Penn & Witkin, 1994) which is conducted with both nonclinical and clinical adolescent participants in order to understand the nonadaptive influence of self-focus. According to the study, it is suggested that self- focus has positive correlations with many psychopathological problems such as alcohol abuse, depression, anxiety, eating disorders, suicide and loneliness.

There are significant connections between cognitive distortions and negative self-focus which are related to the characteristics of these phenomena and their relationships with psychopathology. The repetitive nature of the cognitive distortions and perseverative pattern of the negative self focus which brings depression and other kinds of psychopathologies seem one of the common features of these two phenomena. Takano and Tanno (2008) describe self-focus as having abstract, ideational and evaluative properties. Cognitive distortions are also discrete and people make criticisms about the self and the others when engaging with their maladaptive cognitions.

One of the main features of cognitive distortions is that they come automatically and without permission of people (Covin et al., 2011). There exists a study (Verplanken et al., 2007) which examines the effects and habitual nature of negative self thinking on self-worth feelings of participants with depression and anxiety. Furthermore, whether habitually focusing on these negative notions affects the impressiveness of unfavorable self-thoughts or not is expected to be discovered. In this study, cognitive distortions are accepted as negative self thoughts. Researchers

describe unfavorable self-thoughts as constantly happening, are triggered without awareness of a person, having influence on mental processes, uncontrollable and mostly about the self. As a consequence of the study, it is claimed that negative self thoughts have estimative influence on the continuity of the symptoms and feelings of low self-worth. Moreover, habitually self-focusing on these unfavorable opinions has crucial impact on this self-evaluation mechanism.

In addition to automatic and involuntary pattern of the cognitive distortions, they are also unrestrainable. Even if people want to change their point of view related to an event at this moment, it is difficult to be achieved (Covin et al., 2011). Penn & Witkin (1994) advocate that shifting attention in negative self-focus is also tough to manage. They suggest that in everyday life, people need to focus their attention on internal or external clues according to requirements of circumstances. However, according to results of the study if a person cannot shift his or her focus from self to external world, there would be unfavorable consequences with regard to psychopathology and psychosocial well-being. The difficulty of taking attention from inner world to external world and its consequences would be seem common feature of irrational beliefs and negative self-focus. Therefore, cognitive distortions would set ground for attention to inner world for negative self-focus.

Carver & Scheier (1981), Gofman (1959) and Duval and Wicklund (1972) search for the influence of constant self-focus and attention to inner processes on personal relationships and mental health. It is commonly found that habitual self-focus detracts people from environment and people begin to regard events from their inner experiences, thoughts and perceptions. It is suggested that focusing excessively on inner knowledge and processes causes detriments in mental health (Takano et al., 1023). In irrational thoughts, people also approach issues from their previous learned point of view. Therefore when occupied with inner world, they miss the clues from outer world and misperceive the situations. Generally, these misperceptions are to their disadvantage.

Mental filter and personalization are two of the cognitive distortions which share common features with negative self-focus more particularly among all of the irrational cognitions. As it is defined in the beginning (Covin et al., 2011), mental filter is that in when there is both positive and negative incidents, only focalising on

negative one and disregarding the positive aspect. Pyszczynski and Greenberg (1987) conduct a study with participants who have depressive self-focusing style. Researchers aim to test the hypothesis that people with depression use more self-focus than people without depression after an a defailment whereas people with depression perform self-focus less than people without depression after an achievement. According to their results, it is found that people with depressive self-focus turn their attention to themselves after they experience an unfavorable event. However, when these people confront a favorable situation, they focus on the self less. Lischetzke and Eid (2003) examine adaptive and maladaptive effects of self-focus. Congruently with Pyszczynski and Greenberg (1987), they assume that maladaptive self-focus is not capable of revealing attention on favorable aspects through supressing unfavorable elements. These studies would show the shared property of mental filter and negative self-focus. Both phenomena turn the attention to unfavorable experiences and ignore the favorable ones. It would be suggested that using mental filter makes easier to focus on negative aspects of the self.

Like mental filter, personalization would be claimed to naturally bring about negative self-focus. People who use personalization would be prone to search for a reason related to themselves and therefore unfavorably focus on the self. When a negative experience occurs, some people instantly feel that they have influence on the situation or they are the reason of this event even if there is no realistic clue for making this inference. This type of cognitive distortion is personalization. Duval and Wicklund (1973) make research related to circumstances which induce the consciousness to make the self an object and perform self-focus. Participants are put in front of the mirror and told favorable and unfavorable presumptive scenarios. As a consequence, it is found that self-focused participants feel more responsible for both negative and positive events when they are in front of the mirror. Fenigstein and Levine (1984) also execute a study which they found the attribution of responsibility to self is changed according to whether focus is on the self or on the external causes. They suggest that at the beginning if the formation of a story is not an other-referent but self-referent, people perceive the responsibility as their own. To take events personally and attribute responsibility to the self without enough or proper information would be seem a common feature of personalization and negative self-focus. Therefore, personalization gives a ground for negative self-focus.



Considering how negative self-focus mediates to the relationship between cognitive distortions and psychopathology, it would be more explanatory to understand the relationship between cognitive distortions and types of self-focus.

Sedikides and Skowronski (1995) examine 4 studies related to self-knowledge in order to understand what are the sources behind self-knowledge. According to their search, in social relationships self-reflection is defined as a process which people project their own judgements from previous experiences. Moreover, people believe that their judgements are true without questioning. Cognitive distortions are also learned from past experiences and form present perceptions instead of collecting and synthesizing clues from the moment. One of the cognitive distortions, mindreading has also similar properties with projecting own notions to others. Mindreading is when a person supposes that someone has unfavorable thoughts about himself/herself even if this someone does not talk anything about him or her. If people project their own cognitions to others and behave accordingly as they know the thoughts, intentions and feelings of others, it is claimed that they would use mindreading cognitive distortion in their interactions (Dimaggio et al., 2008). Therefore, there would be a connection between over attribution of this kind of self-reflection process and mindreading. Based on the similar nature of mindreading and self reflection related to projecting personal judgements, it would be claimed that people who use mindreading may also self-reflect.

To continue in view of similar characteristics of cognitive distortions and self-reflection, automaticity would be drawn the attention. Most of the time, cognitive distortions come automatically and automaticity is regarded as a main aspect of cognitive distortions. Ekman (1992) claims that people may perform self-reflection automatically without any effort. Another common speciality between cognitive distortions and self-reflection would be repeating. Nolen-Hoeksema et al., (2008) suggests that self-reflection becomes maladaptive because of its perseverative nature about the difference between ideal and actual self. Cognitive distortions are also defined as repetitive at the beginning of this study.

There is a study (Kidd and Marshall, 1982) which looks into the influence of self-reflection on helpfulness. Researchers want to learn whether excessive

occupation with the self reduces desire for help or not. As a consequence, negative correlation between self-reflection and helpfulness is found. Researchers attribute the effect of self-reflection on helpfulness to decreased attention to the environment. They claim that people with self-reflection focus their attention to their inner world instead of outer one and this way of attention limit their helpfulness. Cognitive distortions are also defined as introspective at the beginning of this study. Therefore, attending inner world would be suggested a common characteristic of cognitive distortions and self-reflection. According to this study results, it would be suggested that because cognitive distortions focus attention of people from outside to inside, their probability for self-reflection increases.

There exists a study (Conway et al., 1993) with dysphoric and non-dysphoric participants which aims to examine whether dysphoric people have a tendency for performing self-reflection or not. As a result of the study, researchers advocate that participants with dysphoria self-reflect especially as they have failures even related to successful experiences. It would be suggested that self-reflection and minimizing or disqualifying the positive which is one of the cognitive distortions has a common feature. Both phenomena ignore favorable experiences such as success and minimalise their value. Based on the study results related to rise of self-reflection in failure experiences, it would be claimed that when someone disqualify or minimize the favorable experiences, he or she probably self-reflect.

When it comes to how self-reflection mediates the relationship between psychopathology and cognitive distortions, the findings of a study which is conducted by Ciesla and Roberts (2007) would be beneficial. Researchers test the response styles theory which claims the relationship between depression predisposition and rumination. As a result of the study, it is advocated that there is a connection between the content of the thought and negative influence of self-reflection. It is found that the more cognitive distortions exist in mind, the more maladaptive influence of self-reflection occurs. Starting from this suggestion, it would be said that if one already has cognitive distortions in his/her mind, the effect of self-reflection becomes negative. Verplanken et al., (2007) supports this assumption through their study. The study claims that habitual reflection about negative self thoughts has an impact on unfavorable effect of self-evaluations.

Considering the executed studies, according to Nolen-Hoeksema et al., (2008), there would be common characteristics between self-rumination and cognitive distortions and there is a way which these two phenomena differ from each other is that irrational beliefs are about the content of thoughts but self-rumination is related to thinking pattern. However, the content of rumination is claimed as negative like thoughts which come automatically as cognitive distortions. It would be suggested that pre-occurrence of cognitive distortions has impact on the development of self-rumination. Treynor et al., (2003) conducts a research related to the relationship between depression and rumination. In this study, rumination is defined as an abstract, evaluative and focused on negative contents especially. Cognitive distortions are also identified as abstract and having attention on unfavorable aspects (Covin et al., 2011). When cognitive distortions are explained at the beginning of this study, it is claimed that cognitive distortions are recursive and attention is on the problem not the solution. Congruently, Nolen-Hoeksema (1991) defines self-rumination as passive and repetitive focus on unfavorable emotions. Smith and Alloy (2009) also mentions self rumination as maladaptive and repetitive thinking. Segerstrom et al.,(2003) conduct a study about the nature of repetitive thoughts and researchers regard repetition as a common feature between cognitive distortions and rumination. People report that they cannot cease their cognitive distortions even if they want and try. Morin (2002) defines self-rumination as inability to turn off self related thinking. The feature which cognitive distortions come involuntarily would be another shared notion with self-rumination. While Campbell et al., (1996) makes a search about definitions, stability and consistency of self-beliefs, self-rumination is considered as performed without intention. When it is looked at the common features of these two phenomena, cognitive distortions are related to the content of thinking and give self-ruminative thinking pattern a ground.

When examining the relationship between psychopathology and self-rumination in regard to the impact of cognitive distortions, it would be claimed that cognitive distortions have influence on self-rumination. According to Ciesla and Roberts, (2007), if it is explored in terms of depression, there are already cognitive distortions and rumination increase the effect of these thoughts on depression. Therefore, rumination impacts the relationship between depression and negative thinking. It would be said that rumination elevates cognitive distortions and their

influence on psychopathology mediately. Nolen-Hoeksema (1991) suggests that rumination is an attitude and thinking pattern. Papageorgiou and Wells (2001) claims that cognitive distortions take short time when it is compared to rumination which consists of longer period of repetitive, damaging, circular thoughts related to the self. Researchers also advocate that rumination would be a reaction to primary existing cognitive distortions. Therefore, it would be suggested that cognitive distortions have impact on the occurrence of rumination and then negatively affect mental health. In another study of Papageorgiou and Wells (2004), researchers claim that rumination sustains affective symptoms related to psychopathology such as worry in anxiety disorders. Researchers introduce possession of intrusive thoughts as one of the determinance factor in the impression level of rumination. In accordance with the results, the more cognitive distortions people have, the more self-rumination they make.

Brosschot et al., (2006) aims to examine effects of perseverative cognitions on physiological and mental health. As a result, the physiological impacts are found related to stress affect and stress is related to mental representations such as unfavorable mental state and maladaptive negative considerations. Watkins (2008) also claims that when ruminative processes step in the affect of cognitive debilities such as dysfunctional attitudes elevates. On this basis, it would be suggested that cognitive distortions have effect on ruminative thinking and then impact on mental health.

Considering possible common specialities between cognitive distortions and need for absolute truth, in the first instance overgeneralization would be attracted the attention. Overgeneralization is one of the cognitive distortions which is defined as by the time someone experiences something negative, he or she believes that it is the beginning of future unfavorable events and there are more to come. In need for absolute truth, people also look for a trait, behavior or characteristic which they can overgeneralize to all contexts. According to Şimşek (2013), people who has need for absolute truth excessively predispose to overgeneralization. Intensely occupation with finding generalized, superordinate and constantly valid information about self obstructs to evaluate experiences in full manner. Likewise, cognitive distortions block assesing given situation because of attention on dysfunctional thoughts. Therefore, both of the phenomena miss real clues from the current moment and are

unable to find solutions which this moment requires. Another feature which both cognitive distortions and need for absolute truth shares is an abstractness. Their focus and content are abstract variables. Overgeneralization, passive focus and abstractness would be regarded as in common.

When the relationship between types of self-focus and cognitive distortions is examined, it would be claimed that cognitive distortions give negative self-focus a ground to occur and increase. Consequently, cognitive distortions influence psychopathology with the mediatory effect of negative self-focus.

## CHAPTER 3

### METHOD

In this section of the study; there are explanations respectively related to model of the study, population and sample, data collection tools and data analysis.

#### **3.1. Model of the Study**

This study aims to measure level of mindfulness, cognitive distortions, negative self-focus, psychopathology and determine the relationship among these phenomena.

#### **3.2. Population and Sample**

For the test of the models, 288 participants were selected using convenient sampling method. There are 195 women (67,7 %) and 93 (32,3 %) men in the sample. Voluntary attendance of the participants is taken as a basis.

For the use of test-retest analysis, 50 participants are performed an application. Sample is selected from normal population who are 34 women (68%) and 16 men (32%). Voluntary attendance of the participants is taken as a basis.

#### **3.3. Procedure**

Before the implementation, participants are informed briefly about the study and told that there is voluntary attendance. Volunteer participants are given personal information form with informed consent form and information in front. It is stayed

connected to the conception of Covin and friends related to replacing the name of the scale as “ The Types of Dysfunctional Thoughts Scale” for preventing potential bias. The time between first pretest and post test is determined as three weeks.

Participants are also applied Brief Symptom Inventory Depression Subscale, Mindful Attention Awareness Scale, Brief Symptom Inventory Anxiety Subscale, Negative Affection Scale, Rumination Scale and Need for Absolute Truth Scale. The forms which are incomplete or incorrectly filled are excluded from evaluation.

### **3.4. Data Collection Tools**

#### **3.4.1. Personal Information Form:**

Personal information form consists of two sections. In the first section, there is an informed consent form which presents the researcher and content of the study and also indicates voluntary participation. In the second section, there are personal informations about participants such as age, gender, education and occupation. There is given an example of personal information form which is used in the study in Appendix1.

#### **3.4.2. Cognitive Distortions Scale (CDS) (The Types of Thinking Scale):**

The original form of the scale is developed for researchers and clinicians in order to evaluate 10 main cognitive distortions by R. Covin and D. Dozois (2011). The Turkish form of this scale which is adapted in Turkish by Ö. F. Şimşek and P. Ardanıç (2017) as “Bilişsel Çarpıtmalar Ölçeği” is conducted in the study. Scale consists 20 items which there is two items related to all of 10 cognitive distortions. It is prepared as a likert scale, answer options varies between 1 “Never” and 7 “Always”. It is given participant as “The Types of Thinking Scale” to reduce the possible prejudgement effect that would cause defense response. The sample consists of 288 participants from normal population which women are predominant in number (67,7%). As a result of internal consistency reliability, Cronbach alpha value is found to be .88.

### **3.4.3. Mindful Attention Awareness Scale (MAAS) :**

It is constituted by Brown and Ryan in 2003 and adjusted in Turkish by Özyeşil and friends (2011) as “Bilinçli Farkındalık Ölçeği”. The scale which is likert type has 15 items in total. In likert, 6 means “Almost always” and 1 means “almost anytime”. The scale is measured as single factorial structure and higher scores indicates higher mindful attention awareness. In confirmatory factor analysis single factor is confirmed ( $\chi^2/df=1.69$ , RMSAE=0.57, TLI=0.88, CFI=0.90) and Cronbach Alpha reliability value is calculated to be 0.82.

### **3.4.4. Brief Symptom Inventory (BSI) Depression Subscale:**

Brief symptom inventory (BSI) is applied for psychopathological evaluation. It is self evaluative and Likert type of inventory and developed by Derogotis (1992). It is brief form of SCL-90-R and emerged as a result of searches with SCL-90-R. There are 90 items in SCL-90-R which contains nine factors. Fifty three items having the highest factor loadings are selected from all 90 items and similar type of inventory is developed which would be applied in 5-10 minutes. BSI contains nine subscale, additional items and three global indexes.

Subscales are respectively named as “Somatization”, “Obsessive-Compulsive Disorder”, “Interpersonal Sensitivity”, “Depression”, “Anxiety Disorder”, “Hostility”, “Fobic Anxiety”, “Paranoid Thoughts”, “Psikotizm”. In the Turkish version which is adapted by Şahin and Durak (1994) BSI contains five factors: “Anxiety”, “Depression”, “Somatization”, “Negative Self” and “Hostility”.

Inventory evaluate depression with 12 items which are 9, 14, 16, 17, 18, 19, 20, 25, 27, 35, 37 and 39. Studies are conducted in order to evaluate the reliability of BSI. Cronbach Alpha internal consistency coefficients from total score of three different studies vary between .96 and .95 and coefficients for subscales vary between .55 and .86 (Savaşır and Şahin,1997).

### **3.4.5. Rumination Scale (RS):**

This scale which has 24 items is developed by Trapnell&Campbell (1999) in aim to measure rumination and reflection level of participants. Internal consistency coefficient is found as .90 and .91 for reflection. In a study (Şimşek, 2013) internal consistency coefficient is .87 for rumination and .78 for reflection.

#### **3.4.6. Negative Affect Subscale:**

Watson and friends (1988) developed this scale which has two subscales as positive and negative affect. In this study only negative subscale which has 10 items is applied. Negative affect subscale is likert type and scored as 1 “very few or never” through 5 “too much”. Internal consistency coefficient for negative affect is found to be .85 in the original scale. However, in Turkish form which is adapted by Gençöz (2000) coefficient is found to be .86. As a result of criterion referenced validity with Beck Depression Scale and Beck Anxiety Scale, correlations are found to be .51 and .47 in order.

#### **3.4.7. Need for Absolute Truth Scale:**

Need for absolute truth scale is developed by Şimşek (2013) and its aim is to measure the need for absolute knowledge related to the self of the participants. It is a five-point Likert-type scale and scored as 1 “not at all true” and 5 “very true”. There are 5 items in the scale and scores are accumulated. Higher scores state higher level of NAT. As a result of analysis internal consistency value is found to be .78.

### **3.5. Data Analysis**

Structural equation modeling is a multivariate strategy of analysis, including the test of measurement and structural models. Before a structural model is tested, a confirmatory factoranalysis is conducted to examine whether the measurement model provides an acceptable fit to the data. In this study, the measurement model was estimated using the maximum-likelihood method in the LISREL 8.5 program (Joreskog & Sorbom, 1993). The measurement model specified the relations of the observed variables to their underlying constructs allowed to intercorrelate freely. Four latent variables were used in the structural equation model testing: Cognitive distortions, self-consciousness, psychopathology, and mindfulness. The measurement model was created using parcels only for the mindfulness latent construct since the measure used for this latent variable was one-dimensional. Item parceling is a method which normalizes the distribution of observed variables and increases the reliability of these indicators. Three parcels were created for this latent variable by rank-ordering items by the size of the item-total correlation and summing sets of items to obtain equivalent indicators for mindfulness construct. Sum scores of sub-



factors or some measures were used to define other latent constructs: 10 factors of CDS for cognitive distortions, sum scores of anxiety, depression and negative affect scales for psychopathology, and sum scores of reflection, rumination and the NAT scales for negative self-focus.

## CHAPTER 4

### FINDINGS

#### 4.1. The Measurement Model Results

##### 4.1.1. Correlations Between Observed Variables

**Table 1:** Means, Standard Deviations of 18 Observed Variables

Variables	M	SD
<b>CD</b>		
<b>MINDR</b>	8.32	2.49
<b>CATAST</b>	6.46	2.62
<b>ALLORNO</b>	5.89	2.81
<b>EMOTION</b>	6.46	2.34
<b>LABEL</b>	5.80	2.62
<b>MENTFILT</b>	5.97	2.62
<b>OVERGEN</b>	6.07	2.82
<b>PERSONAL</b>	5.88	2.33
<b>SHOULD</b>	6.59	2.95
<b>MINIMIZE</b>	5.81	2.58
<b>NSF</b>	5.81	2.58
<b>NAT</b>	13.96	4.69
<b>RUM</b>	36.80	9.82
<b>REF</b>	40.28	8.19
<b>PSYPATH</b>		
<b>ANX</b>	29.09	9.22
<b>DEP</b>	29.81	10.09
<b>NA</b>	19.98	8.36
<b>MIND</b>		
<b>MINDP1</b>	14.56	4.53
<b>MINDP2</b>	14.16	4.48
<b>MINDP3</b>	14.86	4.79

*Notes.* N:288. CD: Cognitive Distortions; MINDR: Mindreading; CATAST: Catastrophizing; ALLORNO: All-or-nothing Thinking; EMOTION: Emotional Reasoning; LABEL: Labeling; MENTFILT: Mental Filter; OVERGEN: Overgeneralization; PERSONAL: Personalization; SHOULD: Should Statements; MINIMIZE: Minimizing or Disqualifying the Positive; NSF: Negative Self-focus; NAT: Need for Absolute Truth; RUM: Rumination; REF: Reflection; PSYPATH: Psychopathology; ANX: Anxiety; DEP: Depression; NA: Negative Affect; Mind: Mindfulness.

**Table 2: Correlations Between Observed Variables**

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
<b>1.Mindr</b>	1																			1
<b>2.Catast</b>	.486*	1																		
<b>3.Allorno</b>	.208*	.208*	1																	
<b>4.Emotion</b>	.275*	.275*	.263*	1																
<b>5.Label</b>	.209*	.209*	.200*	.451*	1															
<b>6.Mentfilt</b>	.223*	.223*	.240*	.439*	.491*	1														
<b>7.Overgen</b>	.227*	.227*	.312*	.439*	.472*	.523*	1													
<b>8.Personal</b>	.264*	.264*	.290*	.385*	.329*	.461*	.409*	1												
<b>9.Should</b>	.165*	.165*	.364*	.391*	.344*	.330*	.362*	.362*	1											
<b>10.Minimize</b>	.150*	.150*	.262*	.379*	.377*	.412*	.435*	.408*	.431*	1										
<b>11.Nat</b>	.237*	.237*	.108	.237*	.256*	.234*	.342*	.094	.218*	.216*	1									
<b>12. Anx</b>	.279*	.279*	.398*	.290*	.232*	.255*	.351*	.277*	.280*	.248*	.364*	1								

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Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
<b>14.Na</b>	.99	.99	.229**	.257**	.149*	.211**	.300**	.130*	.190**	.194**	.291**	.638*	.649**	1					
<b>15.Rum</b>	.324**	.324**	.267**	.244**	.197**	.198**	.264**	.180**	.228**	.191**	.314**	.414*	.402*	.248*	1				
<b>16.Ref</b>	.171**	.111	-.031	.080	.120*	.125*	.164**	-.044	.096	.102	.494**	.084	.202*	.055	.354*	1			
<b>17.Mindp1</b>	.141*	.141*	.291**	.254**	.266**	.293**	.352**	.257**	.279**	.301**	.286**	.536**	.383*	.443*	.272*	.016	1		
<b>18.Mindp2</b>	.162**	.162**	.248**	.236**	.280**	.271**	.313**	.250**	.233**	.240**	.236**	.525*	.414*	.425*	.311*	.059	.734*	1	
<b>19.Mindp3</b>	.212**	.212**	.309**	.269**	.335**	.305**	.372**	.265**	.258**	.294**	.362**	.541*	.446*	.461*	.319*	.138	.694*	.684*	1

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Notes. N:288. **CATAST: Catastrophizing; ALLORNO: All-or-nothing Thinking; EMOTION: Emotional Reasoning; LABEL: Labeling; MENTFILT: Mental Filter; OVERGEN: Overgeneralization; PERSONAL: Personalization; SHOULD: Should Statements; MINIMIZE: Minimizing or Disqualifying the Positive; NAT: Need for Absolute Truth; RUM: Rumination; REF: Reflection; ANX: Anxiety; DEP: Depression; NA: Negative Affect; Mind: Mindfulness.**  
(In all correlations significant level \*p<0.05, \*\*p<0.01)

Table 2 indicates correlations which vary between .094 and .734 among observed variables in the study. The lowest correlation (.016) is found between Reflection variable which is an observed variable of Negative Self-focus and Mindp1 variable which is an observed variable of Mindfulness. The highest correlation (.734) is found between Mindp1 and Mindp2 which are observed variables of Mindfulness latent variable.

#### 4.1.2. Goodness of Fit Statistics for The Measurement Model

**Table 3:** Goodnes of Fit Statistics for The Measurement Model

Compliance Measure	Good Fit	Acceptable Adaptability	Value	Comment
$\chi^2$			384.37	
Df			146	
$\chi^2/df$	2	5	2.63	Acceptable Fit
RMSEA	0<RMSEA<.05	.05<RMSEA<.10	.075	Acceptable
SRMR	0<RMSEA<.05	.05<RMSEA<.08	.066	Acceptable
NFI	.95<NFI<1	.90<NFI<.95	.85	Inadequate Compliance
CFI	.95<CFI<1	.90<CFI<.95	.90	Acceptable
GFI	.95<GFI<1	.90<GFI<.95	.88	Inadequate Compliance

Notes. N:288.

According to these results, it is understood that the measurement model does not adapt to the data at sufficient level. When recommodations which LISREL program produces are examined, as a result of addition of relevant corrections, goodness of fit statistics is observed as getting better. (Table 4)

**Table 4:** Goodnes of Fit Statistics for The Revised Measurement Model

Compliance Measure	Good Fit	Acceptable Adaptability	Value	Comment
$\chi^2$			341.82	
Df			145	
$\chi^2/df$	2	5	2.36	Good Fit
RMSEA	0<RMSEA<.05	.05<RMSEA<.10	.069	Acceptable
SRMR	0<RMSEA<.05	.05<RMSEA<.08	.060	Acceptable
CFI	.95<CFI<1	.90<CFI<.95	.91	Acceptable

Notes. N:288.

As it is seen in table, conducted revision leads to positive improvement in goodness of fit statistics of the model. In order to determine whether this influence of conducted revision on goodness of fit statistics is significant or not, chi-square different test is calculated and the result is found as significant (42.55, 1:  $p < .05$ ).

#### 4.1.3. Parameter Values for the Measurement Model

**Table 5:** Factor Loadings, Standard Errors and T-Values for the Measurement Model

Latent and Observed Variables	Nonstandardized Factor Load Values	SE	T	Standardized Factor Load Values
<b>Cd</b>				
Mindr	1.05	0.15	7.21*	0.44
Catast	1.80	0.15	12.38*	0.68
Allorno	1.29	0.17	7.43*	0.45
Emotion	1.33	0.12	10.71*	0.61
Label	1.68	0.15	11.29*	0.63
Mentfilt	1.81	0.14	12.57*	0.69
Overgen	2.13	0.15	14.11*	0.75
Personal	1.45	0.14	10.72*	0.61
Should	1.52	0.18	8.52*	0.50
Minimize	1.47	0.15	9.70*	0.56
<b>Nsf</b>				
Nat	2.98	0.30	9.94*	0.51
Rum	7.12	0.59	12.09*	0.78
Ref	4.62	0.53	8.78*	0.43
<b>Psypath</b>				
Na	6.20	0.44	14.00*	0.74
Anx	7.41	0.47	15.66*	0.81
Dep	8.95	0.52	17.05*	0.86
<b>Mind</b>				
Mindp1	3.84	0.22	17.21*	0.85
Mindp2	3.87	0.22	17.52*	0.86
Mindp3	4.20	0.24	17.55*	0.86

Notes. N:288.

\*  $p < .05$

As it would be understood from the table, standardized factor load values vary between .43 and .86 and they are found as statistically significant.

Therefore, relevant statistics are presented as a demonstration that observed variables in the measurement model are reliable indicators of their latent variables.

#### 4.1.4. Correlations between Latent Variables

**Table 6:** Correlations between Latent Variables in Measurement Model

Latent Variable	Cd	Nsf	Psypath	Mind
1 Cognitive Distortions	-			
2 Negative Self-focus	0.59*	-		
3 Psychopathology	0.51*	0.76*	-	
4 Mindfulness	-0.56*	0.54*	- 0.68*	-

*Notes.* N:288.

It would be seen in Table 6 that there are medium and strong level correlations between latent variables. The highest level correlation is observed between negative self-focus (.76) and psychopathology and then between psychopathology and mindfulness (.68). Other correlations would be seen as possessed approximate values.

## 4.2. Examination of Structural Model

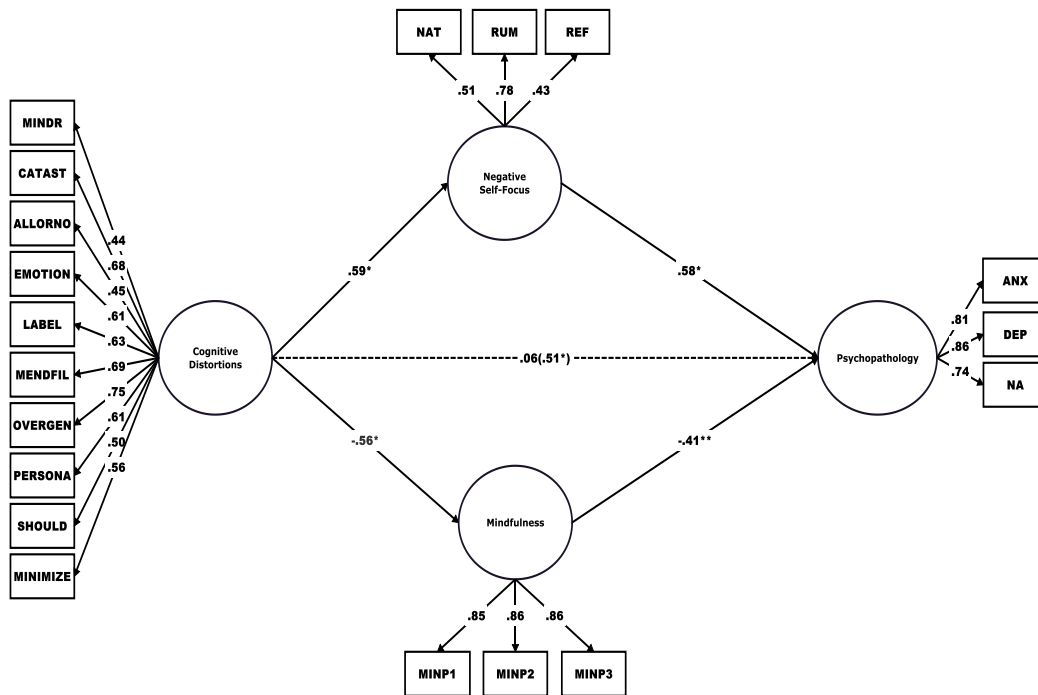
### 4.2.1. Goodness of Fit Statistics of Structural Model

**Table 7:** Goodness of Fit Statistics of Structural Model

Compliance Measure	Good Fit	Acceptable Adaptability	Value	Comment
$\chi^2$			341.81	
Df			145	
$\chi^2/df$	2	5	2.36	Good Fit
RMSEA	0<RMSEA<.05	.05<RMSEA<.10	.069	Acceptable
SRMR	0<RMSEA<.05	.05<RMSEA<.08	.060	Acceptable
CFI	.95<CFI<1	.90<CFI<.95	.91	Acceptable

*Notes.* N: 288.

**Figure 1: Standardized Parameter Estimates of the Structural Model**



**4.2.2. Analysis Values Related to Structural Model**

Obtained data as a result of the study is analyzed structurally with LISREL and Table 7 gives analysis values. When the diagram is examined in Figure 1, the correlation between cognitive distortions and psychopathology was -0.06 at the beginning and it is found as increasing to 0.51 in the last analysis. All of the effect of cognitive distortions on psychopathology is through mindfulness and negative self-focus. In conclusion, the relationship between cognitive distortions and psychopathology was fully mediated by mindfulness and negative self-focus.

In conclusion, the variance accounted for in endogenous variables by exogenous variables is presented in Table 8.



**Table 8:** Variance accounted for endogenous variables by the structural model.

	%
Nsf	35
Psypath	69
Mind	31

*Notes.* N:288. Nsf: Negative self-focus; Psypath: Psychopathology; Mind: Mindfulness.

As a result of the model examination, this model explains 35% of variance in negative self-focus, 69% of variance in psychopathology and 31% of variance in mindfulness.

## CHAPTER 5

### DISCUSSION AND IMPLICATIONS

#### 5.1. Discussion

The present study examined the relationship among cognitive distortions, negative self-focus, mindfulness and psychopathology. Additionally, mediatory effect of mindfulness and negative self-focus in the relationship between cognitive distortions and psychopathology is observed. In this section, results acquired from statistical analysis of the study will be examined through the literature and conducted studies.

In the current study, medium and strong level of correlations are found among phenomena which are cognitive distortions, mindfulness, negative self-focus and psychopathology. Studies which support the relationship among these phenomena exist.

Cognitive distortions generally arise from past experiences and how people approach and perceive these experiences. Cognitive distortions are difficult to be changed even if a person wants to. They are mostly automatic, habitual and without logical reasoning (Beck, 1963). In the first place, cognitive distortions step in researches as related to their relationship with depression. The influence of thoughts on emotions is discovered and the intensity and consistency of these thoughts are found related to existence of psychopathology (Gündüz, 2013). Ellis (1980) supports the relationship between depression and cognitive distortions and further advocates relationship with anxiety as well. Hollon (2010) also claims that in general anxiety disorder, it is dealt with cognitive distortions in treatment. Visla et al. (2016) finds in their study that cognitive distortions affect distress and physical conditions at second hand related to distress. Stanculate et al., (2015) supports this relationship with a study related to influence of cognitive distortions on chronic illness patients. Nolen-Hoeksema (2004) claims the relationship between trauma and cognitive distortions. Cognitive distortions also affect daily relationships (Lemay and Razzak, 2016).

The current study finds significant correlation between cognitive distortions and psychopathology. Furthermore, the study model is found

explaining more than half of variance in psychopathology. Based on the relevant studies it would be said that present study results show parallelism with the literature and there is a correlation between psychopathology and cognitive distortions.

Despite the fact that extensive literature supports the relationship between psychopathology and cognitive distortions, there are insufficient studies related to how cognitive distortions have influence on psychopathology. In the current study mindfulness is examined as a mediator factor which affects this relationship. The correlation between mindfulness and cognitive distortions would be discussed from the point that these two phenomena are different ways of attention to existing situation and have unlike influence on psychopathology.

Mindfulness would be explained in brief as being aware of what is taken place in the present moment experience and attending it receptively (Brown and Ryan, 2007). When relevant studies and literature are looked through, there would be seen important connections between mindfulness and cognitive distortions. While cognitive distortions focus attention to past experiences, mindfulness draws attention to current moment (Ruedy and Sweitzer, 2010). In the consequence of inability to focus on the moment, cognitive distortions hinder mindful attention. Mindfulness gives emphasis on realistic connections in order to perceive the situation whereas cognitive distortions mostly make nonlogical judgements (Brown et al., 2007). Cognitive distortions are irrational inferences related to experiences reduce chance for mindfulness. Cognitive distortions derives from abstract roots whereas concrete thinking is crucial in mindfulness (Weick and Sutcliffe, 2006). Discrete nature of cognitive distortions limit concrete thinking which is an important feature of mindfulness. Automaticity, judgemental approach and habitual thinking are features of irrational thoughts. However, mindful approach just perceive the situation nonjudgementally and tries to question automatic and habitual notions (Boecker et al., 2016). When there are already cognitive distortions in mind which are automatic, judgemental and habitual, it is difficult to drive a mindful attention.

In the present study, significant correlation is found between cognitive distortions and mindfulness. Additionally, mediatory effect of mindfulness in

the relationship between psychopathology and cognitive distortions is found. Based on the relevant studies, mindfulness aims an open, nonjudgemental, present-focused perception of reality. Therefore, reduction of cognitive distortions would be regarded as an aim of mindfulness. Inference from the literature supports the correlation between cognitive distortions and mindfulness.

According to the current study results, significant correlation was found between mindfulness and psychopathology. When the relevant studies related to mindfulness are examined, the influence on psychopathology is supported. Brown and Ryan (2003) claim that mindfulness contributes favorable psychological mood and stress regulation. Mindfulness based therapies are found effective in anxiety, depression, eating disorders, obsessive compulsive disorder and physical illnesses (Ruedy and Schweitzer, 2010). When the literature related to mindfulness and mental health is examined, it would be seen that these therapy techniques target cognitive distortions in treatment. In order to reduce cognitive distortions, mindfulness therapies try to make people realize that thoughts are just thoughts, they are not always true and people actually have power to reject them or be impressed by them. With the aid of practice to distant point of view, cognitive distortions are approached more objectively (Hick and Furlotte, 2009).

The present study results show that mindfulness takes a mediatory role in the relationship between psychopathology and cognitive distortions. Relevant studies about mindfulness based therapies support findings of this study. Therefore, it would be claimed that study results are parallel with literature.

Second factor which is examined as a mediatory variable in the present study is negative self-focus. This phenomenon is accepted as negative self-focus from place to place in the present study. In negative self-focus, the attention is focused on the self not the environment. If the self-focus is negative rather than positive, mostly the discrepancy between ideal and current self is drawn attention. When the literature related to the relationship between cognitive distortions and negative self-focus is examined, crucial connections

between these two phenomena would be seen. There are common characteristics of cognitive distortions and negative self focus. In a study (Verplanken et al., 2007), the connection between cognitive distortions and negative self-focus is made in a way that cognitive distortions are about the content of thinking and negative self-focus is a manner of thinking form. In this study, cognitive distortions are defined as negative self thoughts which are existing before unfavorable self-focus and have influence on the effect of negative self-focus on mental health. Therefore, it would be claimed that cognitive distortions have impact on the birth of unfavorable self-focus. Witkin (1994) gives emphasis on the automatic and involuntary nature of the negative self focus which are crucial components of cognitive distortions as well. When there are already cognitive distortions which are involuntary and automatic, they give a ground for negative self-focus to occur because they have the same thinking characteristics. In a study, Takano and Tanno (2008) define negative self-focus as an abstract and evaluative process which are mostly used in explanation of cognitive distortions. Takano et al., (2013) claims that habitual self-focus affects perception of reality through giving emphasis on inner experiences in approaching situations. Cognitive distortions also apply inner experiences and learned patterns in order to evaluate conditions. When attention is turned from environment to the self, occurrence of negative self-focus becomes easier.

The present study results show significant correlation between cognitive distortions and negative self-focus. Relevant studies in the literature show parallelism with this study results.

As a result of the present study, significant correlation is found between negative self-focus and psychopathology. Literature also supports the relationship between psychopathology and negative self-focus. Brown et al., (2007) emphasizes unfavorable influence of repetitive self-focus on psychopathology. According to cognitive theory related to depression, as a result of the deformations in reality perception people focus their attention to unfavorable course of self and it brings depressive emotions and thoughts (Beck, 1967). Penn and Witkin (1994) conduct a study with both clinical and nonclinical samples in order to search for the unfavorable effect of self focus on mental health. Results of the study show influence of negative self focus on

depression, anxiety, alcohol abuse, eating disorders, suicide and feeling of loneliness. The existence of cognitive distortions increases effectiveness of unfavorable focus on self. Through existing cognitive distortions, rumination and constant self-reflection are activated (Ciesla and Roberts, 2007). In relevant studies, cognitive distortions are seen as a starting point for negative self-focus and also maintenance factor (Papageorgiou and Wells, 2004; Ciesla and Roberts, 2007).

The current study results indicate that cognitive distortions have mediatory parameters which are mindfulness and negative self-focus in its relationship with psychopathology. Literature supports study results.

## **5.2. Implications**

There are different kinds of intervention techniques for cognitive distortions. Cognitive therapy which regards cognitive processes as a crucial factor in psychological problems, targets maladaptive thoughts and thinking styles in treatment (Hollon, 2010). Rational Emotive Behavior Therapy claims that maladaptive responses are derived from irrational thoughts rather than external sources. The aim of the therapy model is replacement of irrational beliefs with rational ones (Turner, 2016). In a study (Karataş and Gökçakan, 2009) which aims aggression in adolescent students, cognitive behavior therapy and psychodrama are concurrently applied. Cognitive distortions which are underlying aggressive reactions are targeted in the treatment.

The current study shows the mediatory role of mindfulness and negative self-focus in the relationship between psychopathology and cognitive distortions. It would be claimed that cognitive distortions proceed through mindfulness and negative self-focus. Therefore, the intervention process of cognitive distortions would contain both mindfulness and negative self-focus. Mindfulness based cognitive therapy aims cognitive distortions and it is proved to be effective according to relevant studies (Coelho et al., 2007). On the contrary, it would be beneficial to focus on mindfulness during the treatment of cognitive distortions. Enhancement in mindful attention reduces the effect of cognitive distortions on mental health. People learn how to approach their notions as they are just product of mind and not absorb themselves in thoughts. In therapy sessions, after cognitive distortions and their influence are detected,

it would be useful to increase mindful awareness. Therefore, patients learn keep their objectivity against their thoughts and emotions when cognitive distortions come to mind. Mindful attention practices would be conducted in groups, couples or in individual sessions.

In the present study, self consciousness consists of three phenomena which are self-rumination, self-reflection and need for absolute truth. Each of them would be targeted in therapy sessions in order to reduce influence of cognitive distortions. Because negative self-focus is a thinking pattern which enhances the influence of cognitive distortions on mental health, it would be efficient to intervene these phenomenon in the treatment of cognitive distortions.

People need to know the connection among thoughts, emotions and behaviors. They also need to be informed about how much their notions have effect on their life, choices, feelings and daily difficulties. There is a lack of awareness related to these connections. It would be beneficial to teach people question their thoughts, give attention to occurrence of these thoughts, what resources that they use for inference. Because thoughts are automatically accepted in cognitive distortions, most of the people suppose that thoughts are true just because of they think or taught this way. However, so many ideas come to mind in a normal day and their accuracy should be examined. Even if it is difficult to question them at the beginning, practicing would be helpful. If probable preventive steps are considered, early years of life and especially education system would be targeted. Mindfulness as a way of approaching experiences would be taught in schools. There would be lessons related to mindful focus of attention or it would be included as a subject to other lessons. When children are more open to learn and perceive the world, it would be easier to teach them that thoughts are just thoughts and it is valuable to stay in the present to live awarely or make accurate judgements.

Yoga and other meditational techniques are labeled as spiritual or intellectual in Turkey. Most of the people avoid these practices because of their prejudice from society. However, in the philosophy of this techniques, the importance of here and now, coping problem effectively without getting lost in them are given. Like sport and music lessons there would be meditational techniques as lessons or practices in schools. Therefore, more children would

be reached. In this way, more children would have a chance to look at different perspectives of perceiving what is taken place in the moment.

If societal self-focus is examined in Turkey, it would be attracted the attention that search for mistake is commonly used in problem situations rather than finding solutions. People mainly focus on negative aspects of the experiences and minimize their successes. Generally, searching for mistake is not applied for acceptance and improvement but rise of unfavorable self-focus. Methods of child raising mostly involve teaching what is right without giving children enough chance to try. Therefore, parents are alert to mistakes of children in order to show them correct ways. With time, children internalise this unfavorable focused of viewpoint and they perform it naturally on their own. For that matter, negative way of self focus is inherited from generation to generation. This chain should be broken through interventions in child rearing approaches and instruction of healthy self-focus for children. In therapy sessions, this learned and internalised self-focus pattern would be targeted.



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## APPENDIX

### Appendix 1. Personal Information Form

#### KİŞİSEL BİLGİ FORMU

Bu çalışma, İstanbul Arel Üniversitesi, Sosyal Bilimler Enstitüsü Psikoloji Ana Bilim Dalı Yüksek Lisans Tez çalışması kapsamında yapılmaktadır. Önemle belirtmem gerekir ki yapılan bu çalışma tamamen akademik amaçlıdır, “Kişi ismi verilmeksizin” elde edilen cevaplar toplu olarak analiz edilecek ve gizliliğe özen gösterilecektir.

Göstermiş olduğunuz ilgi ve ayırdığınız değerli zamanınız için teşekkür ederiz.

İstanbul Arel Üniversitesi  
Sosyal Bilimler Enstitüsü  
Psikoloji Ana Bilim Dalı

#### Çalışmaya Katılma Onayı:

Yukarıda yer alan açıklamayı okudum ve sözlü olarak dinledim. Yapılan tüm açıklamaları anlamış bulunmaktayım. Çalışmaya katılmayı isteyip istemediğime karar vermem için bana yeterli zaman verildi.

Bu koşullar altında, bana ait bilgilerin gözden geçirilmesi, transfer edilmesi ve işlenmesi konusunda araştırma yürütücüsüne yetki veriyor ve söz konusu araştırmaya ilişkin bana yapılan katılım davetini hiçbir zorlama ve baskı olmaksızın gönüllülük içerisinde kabul ediyorum.

Evet

İmza

#### 1.Cinsiyetiniz:

( ) Kadın ( ) Erkek

2. Doğum Tarihiniz (Gün/ Ay/ Yıl): ...../...../.....

#### 3. Medeni Durumunuz:

( ) Evli ( ) Bekar ( ) Boşanmış

#### 4.Eğitim Durumunuz:

( ) Okul öncesi ( ) İlkokul ( ) Orta okul ( ) Lise ( ) Üniversite  
( ) Lisans üstü

5. Mesleğiniz: .....

## Appendix.2. Cognitive Distortions Scale (Types of Thinking Style Scale)

### DÜŞÜNME TÜRLERİ ÖLÇEĞİ (BİLİŞSEL ÇARPITMALAR ÖLÇEĞİ)

**Yönerge:** Bu kısımda, kullandığımız farklı düşünme türleri hakkında bilgi edinmek istemekteyiz. İzleyen kısımda, 10 tür düşünme türü okuyacaksınız. Size her bir düşünme türünün açıklaması verilecektir. Ayrıca düşünme türünü açıklamaya yardımcı olacak iki vaka örneği de okuyacaksınız. Biri sosyal ilişkilere (arkadaşlar, eşler ya da aile gibi) ve diğeri kişisel başarılarla değinen (bir testi geçme ya da işle ilgili bir görevde başarısız olma gibi) iki vaka örneği her bir düşünce türü için verilecektir. Bu örnekler, her bir düşünme türünün gerçek hayat senaryosu içinde nasıl görüldüğünü anlamanızda size yardımcı olmak amacıyla kullanılmıştır.

Sizden istenen, açıklanan düşünme türünü anlamaya çalışmanızdır. Daha sonra sizden bu düşünme türünü ne sıklıkla kullandığınızı değerlendirmeniz beklenmektedir. Daha önce açıklanan iki alanda (sosyal ilişkiler ve başarı) bu düşünme türünü ne sıklıkta kullandığınızı konusunda düşünmeniz istenecektir. Lütfen cevaplarınızı iyice düşündükten sonra veriniz.

#### 1- ZİHİN OKUMA

İnsanlar bazen başkalarının onlar hakkında olumsuz düşündüğünü varsayarlar. Bu durum, diğer kişi olumsuz herhangi bir şey söylemediğinde bile ortaya çıkabilir. Bu, bazen, zihin okuma olarak adlandırılır. Aşağıdaki pasajlar bu durumu örneklerle açıklamak için verilmiştir:

- 1. Ayşe, erkek arkadaşı Kerem ile kahve içmektedir. Kerem durgundur ve Ayşe ters giden bir şeyin olup olmadığını sorar. Kerem ‘iyi’ olduğunu söyler. Ayşe ona inanmaz. Kerem’in kendisiyle mutsuz olduğunu düşünür.**

Lütfen, bu örnekte olduğu gibi, sosyal durumlarda (örneğin arkadaşlar, eşler ve aile ile olduğunuzda) ne sıklıkla zihin okuma yaptığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

- 2. Mert, haftalardır bir proje üzerinde çalışmaktadır. Sonunda patronuna projenin bitmiş halini testlim eder. Patronunun projesi konusunda ne düşündüğünü merak etmektedir. Birkaç gün geçtikten sonra Mert, patronunun onun beceriksiz olduğunu düşünüyor olmasından endişe etmeye başlar.**

Lütfen, bu örnekte olduğu gibi başarı durumlarında (okul ya da iş gibi) ne sıklıkla zihin okuma yaptığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

#### 2- FELAKETLEŞTİRME

İnsanlar gelecek hakkında olumsuz öngörülerde bulunabilirler. Bu öngörüler için yeterli kanıt olmadığında, bu durum Felaketleştirme olarak adlandırılır. Aşağıdaki pasajlar bu durumu örneklerle açıklamak için verilmiştir:

1. Enis'in üniversitedeki ilk yılıdır. Biyoloji sınavından 70 almıştır. Hemen, dersi düşük bir derece ile tamamlayacağına ve mezun olmakta çok zorlanacağına dair endişe etmeye başlar.

Lütfen, başarı durumlarında (okul ya da iş gibi) ne sıklıkla Felaketleştirme yaptığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

2. Duygu'nun erkek arkadaşı, ona ilişkileri hakkında bazı geribildirimler verir. Duygu'ya kendi arkadaşları ile biraz daha fazla zaman geçirmek istediğini söyler. Onun bu ifadelerine dayanarak Duygu, uzaklaşacaklarını ve sonunda ayrılacaklarını düşünmeye başlar.

Lütfen, sosyal durumlarda (örneğin arkadaşlar, eşler ve aile ile olduğunuzda) ne sıklıkla Felaketleştirme yaptığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

### 3- İKİ UÇLU (YA HEP YA HIÇ) BİÇİMİNDE DÜŞÜNME

İnsanlar değerlendirmeler yaptığında, olayları “ya...ya...” olarak görürler. Örneğin, bir konser iyi ya da kötü olarak düşünülür. Diğer taraftan, insanlar değerlendirme yaparken grinin tonlarını da görebilirler. Örneğin, bir konserin bazı olumsuz yönleri olabilir, ama genel olarak oldukça iyi olarak değerlendirilebilir. Bir kişinin herhangi bir şeyi iyi ya da kötü olarak görmesine Ya hep - ya hiç biçiminde düşünme diyoruz. Aşağıdaki pasajlar bu durumu örneklerle açıklamak için verilmiştir:

1. Baran, bir sınavdan B alır. Hayal kırıklığına uğramış hisseder, çünkü notu A değildir. O, sınavlardaki başarıyı şu şekilde görme eğilimindedir : “Bir iş ya yapılır ya da başarısızlıktır.”

Lütfen, başarı durumlarında (okul ya da iş gibi) ne sıklıkla Ya hep- Ya hiç düşünme biçimini kullandığınızı değerlendiriniz.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

2. Emel, birinden ya hoşlanan ya da ondan nefret eden tarzda bir kişidir. Ya onun “İyi Kitabı”ndasınız ya da değilsinizdir.

Lütfen, sosyal durumlarda (örneğin arkadaşlar, eşler veya aile ile olduğunuzda) ne sıklıkla “Ya hep- Ya hiç” düşünme biçimini kullandığınızı değerlendiriniz.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

### 4- DUYGUDAN SONUCA ULAŞMA

İnsanlar öyle “hissettikleri” için bir şeyin doğru olduğuna inanabilirler. Aşağıdaki pasajlar bu durumu örneklerle açıklamak için verilmiştir:

1. Filiz'in arkadaşları, herkes için yeterli bilet alamadıkları için, onun kendileri ile birlikte konsere gelemeyeceğini söylerler. Filiz, onların kendisini bilerek dışlamadığını bilse de, kendisini reddedilmiş hissetmektedir. Bu nedenle, bir tarafı reddedildiğine inanmaktadır.

Lütfen, sosyal durumlarda (örneğin arkadaşlar, eşler veya aile ile olduğunuzda) ne sıklıkla Duygusal Mantık Yürütme biçimini kullandığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

- 2- Patronu Selim'e şirketteki performansının iyi olduğunu söyler. Yine de Selim daha iyi yapıp yapamayacağını merak etmektedir. Aslında, kendisini başarısız hissetmektedir. Sonuç olarak, başarısız olduğuna inanmaya başlar.**

Lütfen başarı durumlarında (okul ya da iş gibi) ne sıklıkla Duygusal Mantık Yürütme biçimini kullandığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

## 5- ETİKETLEME

İnsanlar kendilerini *belli bir tür insan* olarak etiketleyebilirler. Bu durum, kötü bir şey meydana geldikten sonra ortaya çıkarsa Etiketleme olarak adlandırılır. Aşağıdaki pasajlar bu durumu örneklerle açıklamak için verilmiştir:

- 1. Bir sosyal etkinlik sırasında Selim, bir kadını dansa kaldırmak ister. Kadın onu geri çevirir. Sonuç olarak, Selim kendini başarısız biri olarak görür.**

Lütfen, sosyal durumlarda (örneğin arkadaşlar, eşler veya aile ile olduğunuzda) ne sıklıkla Etiketleme yaptığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

- 2. Ders esnasında, Nihal'in öğretmeni sorunun cevabını bilen var mı diye sorar. Nihal el kaldırır ve bir cevap verir. Öğretmeni: "Maalesef, yanlış cevap. Cevabı bilen başka biri var mı?" diye sorar. Nihal kendi kendisine bir *salak* olduğunu söyler.**

Lütfen başarı durumlarında (okul ya da iş gibi) ne sıklıkla Etiketleme yaptığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

## 6- ZİHİNSEL FİLTRELEME

İnsanlar bazen, bilgi için filtre kullanırlar. Olumlu ve olumsuz bilgi olduğunda, onlar sadece olumsuz odaklanırlar. Bu durum, Zihinsel Filtreleme olarak adlandırılır. Aşağıdaki pasajlar bu durumu örneklerle açıklamak için verilmiştir:

1. **Aslı, erkek arkadaşı Furkan'a kulak misafiri olur. Furkan, arkadaşlarına kendisinden bahsetmektedir. Furkan: "Evet, şu ana kadar her şey mükemmel gidiyor. O, gerçekten akıllı ve eğlenceli biri. Çok ortak yönümüz var. Bazen, biraz talepkar olabiliyor ama sorun yok." Demektedir. Furkan'ın daha çok olumlu şeyler söylemesine rağmen, Aslı olumsuz yorum üzerinde durur ve kendini kötü hisseder.**

Lütfen, sosyal durumlarda (örneğin arkadaşlar, eşler veya aile ile olduğunuzda) ne sıklıkla Zihinsel Filtreleme yaptığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

2. **Burak, bir lise öğrencisidir. Son denemesi ile ilgili öğretmenin yorumlarını okumaktadır. Öğretmeni: "Düşüncelerini ifade etmede mükemmel bir tarzın var. Yazım tarzını gerçekten çok beğeniyorum. Ancak, bir fikirden diğerine geçerken daha iyi geçişler yapmaya çalışmalısın." yazmıştır. Burak, iyi bir performans sergilemiş olmasına rağmen, sadece bu küçük eleştiriyi düşünmekte ve kendisini yetersiz hissetmektedir.**

Lütfen başarı durumlarında (okul ya da iş gibi) ne sıklıkla Zihinsel Filtreleme yaptığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

## 7- AŞIRI GENELLEME

Olumsuz bir olay meydana geldiğinde, insanlar daha kötü şeylerin olacağını varsayarlar. Bir örüntünün başlangıcı olarak olumsuz olayı görürler. Aşağıdaki pasajlar bu durumu örneklerle açıklamak için verilmiştir:

1. **Sibel ve erkek arkadaşı yeni ayrılmışlardır. Sibel kendi kendine : "Asla istikrarlı bir ilişki içine girmeyeceğim" şeklinde düşünür.**

Lütfen, sosyal durumlarda (örneğin arkadaşlar, eşler veya aile ile olduğunuzda) ne sıklıkla Aşırı Genelleme yaptığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

2. **Volkan yakın zamanda matematik sınavında başarısız olmuştur. Kendi kendine: "Herhalde diğer derslerin sınavlarında da başarısız olacağım" şeklinde düşünür.**

Lütfen başarı durumlarında (okul ya da iş gibi) ne sıklıkla Aşırı Genelleme yaptığınızı değerlendirin.

1 2 3 4 5 6 7  
Asla çok nadir ara sıra Bazen sık oldukça sık Her zaman

## 8- KİŞİSELLEŞTİRME

İnsanlar, öyle olmasa bile, olumsuz şeylerden kendilerinin sorumlu olduğuna inanabilirler. Diğer bir deyişle, olumsuz bir olayı ele alıp, bunun nedeninin kendileri olduğunu varsayabilirler. Bu durum, Kişiselleştirme olarak adlandırılır. Aşağıdaki pasajlar bu durumu örneklerle açıklamak için verilmiştir:

1. Selen'in şirketi önemli bir anlaşmayı gerçekleştirmeyi başaramaz. Buna rağmen birçok insan, bu proje üzerinde çok sıkı çalışmıştır. Selen bunun, kendi hatası olduğunu varsaymaktadır.

Lütfen başarıyla ilgili durumlarında (okul ya da iş gibi) ne sıklıkla Kişiselleştirme yaptığınızı değerlendirin.

1	2	3	4	5	6	7
Asla	çok nadir	ara sıra	Bazen	sık	oldukça sık	Her zaman

2. Tolga'nın en iyi arkadaşı son zamanlarda kötü bir ruh hali içindedir ve onunla ilişki kurmak zor bir hal almıştır. Tolga, arkadaşının bu şekilde davranmasına neden olacak yanlış bir şey yaptığını sanmaktadır.

Lütfen, sosyal durumlarda (örneğin arkadaşlar, eşler veya aile ile olduğunuzda) ne sıklıkla Kişiselleştirme yaptığınızı değerlendirin.

1	2	3	4	5	6	7
Asla	çok nadir	ara sıra	Bazen	sık	oldukça sık	Her zaman

## 9- ZORUNLULUK İFADELERİ (...MELİ, ...MALİ)

İnsanlar bazen olayların *belli bir şekilde* olması gerektiği veya kendilerinin belli niteliklere sahip olmak zorunda olduğunu düşünürler. Aşağıdaki pasajlar bu durumu örneklerle açıklamak için verilmiştir:

1. Bülent, sınavdan 85 aldığı için üzgündür, çünkü en azından 90 alması *gerektiğini* düşünmektedir. Birçok şey hakkındaki bu düşünceleri sık sık ortaya çıkmaktadır (örneğin, futbol oynarken asla pas kaçırmaması *gerektiğini*; odasının sürekli belli bir şekilde düzenlenmesi *gerektiğini* hissetmektir).

Lütfen başarı durumlarında (okul ya da iş gibi) ne sıklıkla Zorunluluk ifadeleri kullandığınızı değerlendirin.

1	2	3	4	5	6	7
Asla	çok nadir	ara sıra	Bazen	sık	oldukça sık	Her zaman

2. Melis, sosyal ortamlarda komik ve ilgi çekici olması gerektiğine inanmaktadır.

Lütfen, sosyal durumlarda (örneğin arkadaşlar, eşler veya aile ile olduğunuzda) ne sıklıkla Zorunluluk ifadeleri kullandığınızı değerlendirin.

1	2	3	4	5	6	7
Asla	çok nadir	ara sıra	Bazen	sık	oldukça sık	Her zaman

## 10- OLUMLUYU AZIMSAMA veya YOK SAYMA

İnsanlar bazen başlarına gelen olumlu şeyleri yok sayabilirler. Bu durum, "Olumluyu Azımsama veya Yok Sayma" olarak adlandırılır. Aşağıdaki pasajlar bu durumu örneklerle açıklamak için verilmiştir:

1. **Büşra, bir emlakçı olarak çalışmaktadır. Patronu ona, son satışta harika bir iş çıkardığını söyler. Büşra, başarısını görmezden gelir, çünkü ona göre kendisi muhtemelen ‘sadece şanslıdır’.**

Lütfen başarı durumlarında (okul ya da iş gibi) ne sıklıkla Olumluyu küçültme veya Yetersiz Bulma düşünme biçimini kullandığınızı değerlendirin.

1	2	3	4	5	6	7
Asla	çok nadir	ara sıra	Bazen	sık	oldukça sık	Her zaman

2. **Can kız arkadaşıyla ilk buluşması için hazırlanmaktadır. Arkadaşları kendisine iyi göründüğünü söylerler. Can, onların iltifatını görmezden gelir, çünkü sadece nazik olmaya çalıştıklarını düşünmektedir.**

Lütfen, sosyal durumlarda (örneğin arkadaşlar, eşler veya aile ile olduğunuzda) ne sıklıkla Olumluyu küçültme veya yetersiz bulma düşünme biçimini kullandığınızı değerlendirin.

1	2	3	4	5	6	7
Asla	çok nadir	ara sıra	Bazen	sık	oldukça sık	Her zaman

**Appendix.3. Brief Symptom Inventory Depression Sub-scale:**

**KISA SEMPTOM ENVANTERİ (KSE) DEPRESYON ALT ÖLÇEĞİ:**

Lütfen aşağıdaki her bir belirtinin sizde <b>BUGÜN DÂHİL SON BİR HAFTADIR</b> ne kadar var olduğunu değerlendiriniz.	Hiçbir zaman	Çok nadiren	Arasıra	Sık sık	Her zaman
1.Yaşantınıza son verme düşünceleri.	1	2	3	4	5
2. Başka insanlarla beraberken bile yalnızlık hissetmek.	1	2	3	4	5
3. Hüzünlü, kederli hissetmek.	1	2	3	4	5
4. Hiçbir şeye ilgi duymamak.	1	2	3	4	5
5. Ağlamaklı hissetmek.	1	2	3	4	5
6. Kolayca incinebilmek, kırılmak.	1	2	3	4	5
7. Uykuya dalmada güçlük.	1	2	3	4	5
8. Karar vermede güçlükler.	1	2	3	4	5
9. Yalnız hissetmek.	1	2	3	4	5
10. Gelecekle ilgili umutsuzluk duyguları.	1	2	3	4	5
11. Bedenin bazı bölgelerinde zayıflık, güçsüzlük hissi.	1	2	3	4	5
12. Ölme ve ölüm üzerine düşünceler.	1	2	3	4	5



#### Appendix.4. Mindful Attention Awareness Scale:

### BİLİNÇLİ FARKINDALIK ÖLÇEĞİ:

Aşağıda sizin günlük deneyimlerinize ilgili bir dizi durum verilmiştir. Lütfen her bir maddenin sağında yer alan 1 ile 6 arasındaki ölçeği kullanarak her bir deneyimi ne kadar sık veya nadiren yaşadığınızı belirtiniz.	Hemen hemen hiçbir zaman	Oldukça seyrek	Nadiren	Bazen	Çoğu zaman	Hemen hemen her zaman
1. Belli bir süre farkında olmadan bazı duyguları yaşayabilirim.	1	2	3	4	5	6
2. Eşyaları özensizlik, dikkat etmeme veya başka bir şeyleri düşündüğüm için kırarım veya dökerim.	1	2	3	4	5	6
3. Şu anda olana odaklanmakta zorlanırım.	1	2	3	4	5	6
4. Gideceğim yere, yolda olup bitenlere dikkat etmeksizin hızlıca yürüyerek gitmeyi tercih ederim.						
5. Fiziksel gerginlik ya da rahatsızlık içeren duyguları, gerçekten dikkatimi çekene kadar fark etmeme eğilimim vardır.	1	2	3	4	5	6
6. Bir kişinin ismini, bana söylendikten hemen sonra unuturum.	1	2	3	4	5	6
7. Yaptığım şeyin farkında olmaksızın otomatiğe bağlanmış gibi yapıyorum.	1	2	3	4	5	6
8. Aktiviteleri gerçekte ne olduklarına dikkat etmeden acele ile yerine getiririm.	1	2	3	4	5	6
9. Başarmak istediğim hedeflere öyle çok odaklanırım ki o hedeflere ulaşmak için şuan ne yapıyor olduğumun farkında olmam.	1	2	3	4	5	6
10. İşleri veya görevleri ne yaptığımın farkında olmaksızın otomatik olarak yaparım.	1	2	3	4	5	6
11. Kendimi bir kulağımla birini dinlerken; aynı zamanda başka bir şeyi de yaparken bulurum.	1	2	3	4	5	6
12. Gideceğim yerlere farkında olmadan gidiyor, sonra da oraya neden gittiğime şaşırıyorum.	1	2	3	4	5	6
13. Kendimi gelecek veya geçmişle meşgul bulurum.	1	2	3	4	5	6
14. Kendimi yaptığım işlere dikkatimi vermemiş bulurum.	1	2	3	4	5	6
15. Ne yediğimin farkında olmaksızın atıştırıyorum.	1	2	3	4	5	6

## Appendix.5. Rumination Scale:

### RUMİNASYON ÖLÇEĞİ

Aşağıdaki her bir ifadenin sizi ne ölçüde tanımladığını değerlendiriniz.	Bana hiç uygun değil	Bana çok az uygun	Bana uygun	Bana oldukça uygun	Bana tamamen uygun
1. Dikkatimi çoğu zaman hayatımın artık düşünmek istemediğim taraflarına yoğunlaştırırım.	1	2	3	4	5
2. Son zamanlarda söylediğim veya yaptığım şeyleri sürekli A tekrar ettiğimi görüyorum.	1	2	3	4	5
3. Kendimle ilgili düşünmekten vazgeçmek bazen zor geliyor.	1	2	3	4	5
4. Bir tartışma ya da anlaşmazlığın üzerinden çok zaman geçse bile, düşüncelerim beni sürekli o ana geri götürür.	1	2	3	4	5
5. Başıma gelen şeyleri aklımda çok uzun bir süre evirip çeviririm.	1	2	3	4	5
6. Olup bitmiş olaylar üzerine tekrar düşünerek zaman harcamam.	1	2	3	4	5
7. Hafızamı sıklıkla geri sarıp, geçmişte bir durumda nasıl davrandığımı düşünürüm.	1	2	3	4	5
8. Kendimi çoğu zaman yaptığım bir şeyi yeniden irdelerken bulurum.	1	2	3	4	5
9. Asla kendimle ilgili çok uzun süre düşünüp taşınmam.	1	2	3	4	5
10. İstenmeyen düşünceleri zihnimden atmak benim için kolaydır.	1	2	3	4	5
11. Hayatımın şu anda kafamı meşgul etmemesi gereken bölümleri ile ilgili sıklıkla düşünürüm.	1	2	3	4	5
12. Yaşamış olduğum utandırıcı veya moral bozucu olayları oldukça uzun bir süre düşünürüm.	1	2	3	4	5
13. Felsefi veya soyut düşünce bana çok hitap etmez.	1	2	3	4	5
14. Çok fazla düşüncelere dalan biri değilimdir.	1	2	3	4	5
15. Kendi “iç” benliğimi keşfetmekten hoşlanırım.	1	2	3	4	5
16. Olaylara ve olgulara ilişkin tavrım ve duygularım beni etkisi altına alır.	1	2	3	4	5
17. İçime bakmayı ve kendim üzerine düşünmeyi çok fazla önemsemem.	1	2	3	4	5
18. Beni bir şeyler yapmaya iten nedenleri analiz etmeyi severim.	1	2	3	4	5
19. İnsanlar çoğu zaman “derin” ve kendi üzerine düşünen birisi olduğumu söylerler.	1	2	3	4	5
20. Kendini çok fazla analiz etme yanlısı birisi değilimdir.	1	2	3	4	5
21. Doğam gereği kendini çok sorgulayan biriyimdir.	1	2	3	4	5
22. Doğa ve şeylerin anlamı üzerine kafa yormaktan hoşlanırım.	1	2	3	4	5
23. Hayatıma felsefi bir şekilde bakmaktan çoğunlukla zevk alırım.	1	2	3	4	5
24. Kendimle ilgili düşünmek benim için eğlenceli bir iş değildir.	1	2	3	4	5

## Appendix.6. Negative Affect Scale:

### NEGATİF DUYGU ÖLÇEĞİ

Aşağıda bir takım duygu ifadeleri bulunmaktadır. Lütfen her bir duyguyu, <b>SU AN</b> ne kadar yoğun yaşadığınızı yandaki derecelendirmeyi dikkate alarak belirtiniz.	Hiç yoğun değil	Biraz yoğun	Orta	Oldukça yoğun	Çok fazla yoğun
1. Sıkıntılı	1	2	3	4	5
2. Mutsuz	1	2	3	4	5
3. Suçlu	1	2	3	4	5
4. Ürkmüş	1	2	3	4	5
5. Düşmanca	1	2	3	4	5
6. Asabi	1	2	3	4	5
7. Utanmış	1	2	3	4	5
8. Sinirli	1	2	3	4	5
9. Tedirgin	1	2	3	4	5
10. Korkmuş	1	2	3	4	5

## Appendix.7. Need for Absolute Truth Scale:

### 5 MADDELİK MUTLAK GERÇEK İHTİYACI ÖLÇEĞİ

Kendi üzerinize düşündüğünüz zamanları dikkate aldığınızda, aşağıdaki her bir ifadenin sizi ne ölçüde tanımladığını değerlendiriniz.

	Bana Hiç Uygun Değil	Bana Çok Az Uygun	Bana Uygun	Bana Oldukça Uygun	Bana Tamamen Uygun
01.Hep kendimle ilgili “gerçekleri” bulmak isterim.	1	2	3	4	5
02.Yaşadığım benle gerçek benim farklı olduğunu düşünürüm.	1	2	3	4	5
03.Bir gün gerçekten kim olduğumu keşfedeceğimi umut ederim.	1	2	3	4	5
04.Hep kendimle ilgili “gerçeklerin” ne olduğuna kafa yorarım.	1	2	3	4	5
05.Yaşadıklarımın çok onların gerçekten ne anlama geldiklerini anlamaya çalışırım.	1	2	3	4	5