TWO SIDES OF THE SAME COIN: THE IMPACT OF SOCIAL COMPARISON ON SOCIAL ANXIETY THROUGH COGNITIVE BIASES

BESTE İÇAĞASI

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ABSTRACT

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İçağası, Beste

Master's Program in Clinical Psychology

Advisor: Asst. Prof. Dr. Yasemin Meral Öğütçü

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One of the most important maintaining mechanisms in social anxiety is negative self-evaluation, especially when comparing oneself to others. An individual's self-evaluation is influenced by social comparison process. The cognitive model assumes that anxiety disorders result from distorted thoughts and dysfunctional self-beliefs held by the individual. These thoughts and beliefs lead individuals to negatively evaluate social relationships and perceive the social environment as dangerous. While there are studies that examine the relationship between social anxiety and cognitive distortions, there is no study that does so within the framework of social comparison theory. Thus, the present study examines the mediating role of cognitive distortions and dysfunctional social self-beliefs in the relationship between social comparison orientation and social anxiety. The sample consists of 208 participants aging between 20-68 years. A total of seven scales were used, namely the Participant Information Form, Liebowitz Social Anxiety Scale, Iowa-Netherlands Comparison Orientation Measure, Upward Comparison Scale, Downward Comparison Scale, Cognitive

Distortions Scale, and Social Thoughts and Beliefs Scale. Indeed, results suggest that both cognitive distortions and dysfunctional social self-beliefs significantly mediate the association between social comparison orientation and social anxiety. It is though that the present work contributes to the literature by demonstrating the mediating role of cognitive distortions and dysfunctional social self-beliefs in the impact of social comparison orientation on social anxiety. It is anticipated that the insights gained in this study will provide a new perspective to existing cognitive-behavioral approaches and will be useful to clinicians in treatment planning.

Keywords: social anxiety, social comparison, upward comparison, downward comparison, cognitive distortions, social thoughts and beliefs

ÖZET

MADALYONUN İKİ YÜZÜ: SOSYAL KARŞILAŞTIRMANIN SOSYAL KAYGI ÜZERİNDEKİ ETKİSİNİN BİLİŞSEL YANLILIKLAR ARACILIĞIYLA İNCELENMESİ

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Sosyal kaygının en önemli sürdürücü faktörlerinden biri, kişilerin kendilerini başkalarıyla karşılaştırırken, olumsuz öz değerlendirmelerde bulunmasıdır. Bireyin kendini değerlendirmesi sosyal karşılaştırma sürecinden etkilenir. Bilişsel model, kaygı bozukluklarının, bireyin sahip olduğu çarpık düşüncelerden ve işlevsiz benlik inançlarından kaynaklandığını varsayar. Bu düşünce ve inançlar, bireyleri sosyal ilişkileri olumsuz değerlendirmeye ve sosyal çevreyi tehlikeli olarak algılamaya yöneltmektedir. Sosyal kaygı ve bilişsel çarpıtmalar arasındaki ilişkiyi inceleyen çalışmalar varken, bunu sosyal karşılaştırma kuramı çerçevesinde yapan bir çalışmaya rastlanmamıştır. Bu tez çalışmasında sosyal karşılaştırma yönelimi ile sosyal kaygı arasındaki ilişkide bilişsel çarpıtmaların ve işlevsel olmayan sosyal inançların aracı rolü incelenmektedir. Çalışmanın örneklemini 20-68 yaş arası 208 katılımcı oluşturmaktadır. Katılımcı Bilgi Formu, Liebowitz Sosyal Kaygı Ölçeği, Iowa-Netherlands Sosyal Karşılaştırma Yönelimi Ölçeği, Yukarı Yönlü Sosyal

Karşılaştırma Ölçeği, Aşağı Yönlü Sosyal Doğru Karşılaştırma Ölçeği, Bilişsel Çarpıtmalar Ölçeği ve Sosyal Düşünceler ve İnançlar Ölçeği olmak üzere toplam yedi ölçek kullanılmıştır. Sonuçlar hem bilişsel çarpıtmaların hem de işlevsel olmayan sosyal inançların sosyal karşılaştırma yönelimi ile sosyal kaygı arasındaki ilişkiye önemli ölçüde aracılık ettiğini göstermektedir. Bu bağlamda, sosyal karşılaştırma yöneliminin sosyal kaygı üzerindeki etkisinde bilişsel çarpıtmaların ve işlevsel olmayan sosyal inançların aracı rolünü ortaya koyan bu çalışmanın literatüre önemli bir katkı sunacağı düşünülmektedir. Bu çalışmada elde edilen bulguların mevcut bilişsel-davranışçı yaklaşımlara yeni bir bakış açısı sağlayacağı ve tedavi planlama sürecinde terapistlere faydalı olacağı öngörülmektedir.

Anahtar Sözcükler: sosyal kaygı, sosyal karşılaştırma, yukarı yönlü sosyal karşılaştırma, aşağı yönlü sosyal karşılaştırma, bilişsel çarpıtmalar, sosyal düşünceler ve inançlar

Dedicated to my family…

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CHAPTER 1: INTRODUCTION

"No man is an island, entire of itself; every man is a piece of the continent, a part of the main." (Donne, 1987).

Human beings have a universal motivation to establish and maintain stable, genuine, and positive relationships with their environment. Participation in various social activities and contact with others is one of the most important mechanisms for promoting psychological, social, and physical well-being (Baumeister and Leary, 1995). The need to establish and maintain social relationships can lead one to worry about how one will be evaluated by others, whether one will be loved or cared for, what impression one will leave, and in turn, experience anxiety. Anxiety-related social situations that may prevent a person from participating in social activities and maintaining healthy social relationships is called social anxiety. The conflict between the need to connect with others to establish satisfying relationships and the belief that one is unable to do so can undermine opportunities for positive experiences (Kashdan and Breen, 2008). People who suffer from social anxiety have a couple of mostly unfavorable social relationships throughout their lives (Alden and Taylor, 2004). One of the most important maintenance mechanisms in social anxiety is negative self-evaluation, especially in evaluating oneself in comparison to others (Mitchell and Schmidt, 2014).

Comparing oneself to others is another universal human motive. Social comparison is an important part of human coexistence (Buunk and Gibbons, 2007). Social comparison theory was developed in the 1950s to systematically examine how individuals evaluate themselves in terms of their abilities and opinions (Festinger, 1954). People's self-evaluation and social relations are affected by the comparison process (Corcoran, Crusius and Mussweiler, 2011). If a person's self-evaluations are not reasonable, then it will be impossible to obtain accurate results when making social comparisons (Teközel, 2007). Consequently, social comparison is a crucial factor for negative self-evaluation (Suls, Martin and Wheeler, 2002; Wood, 1996), which is one of the maintaining factors in social anxiety.

The cognitive model assumes that anxiety disorders, like all mental disorders, result from distorted or dysfunctional thoughts of the individual (Beck, 2011). From a cognitive perspective, the underlying mechanism in social anxiety is the desire to make a positive impression on the social environment and the distrust of the possibility of this happening (Clark and Wells, 1995). For example, socially anxious people have a distorted thought that they will misbehave in a social setting, which will result in rejection, criticism, loss of value, and failure. (Clark, 1999). Thus, they report many negative and few positive automatic thoughts (Lucock and Salkovskis, 1988). Furthermore, there are certain thoughts and beliefs that socially anxious people develop about themselves and their social environment that lead them to feel threatened in social situations. These thoughts and beliefs cause them to evaluate social relationships negatively and perceive the social environment as dangerous.

The hypothesis that social comparison plays a critical role in negative self-evaluation is frequently tested in the literature. However, research has largely focused on depressed individuals, with data suggesting that social comparison may be one of the maintaining or reinforcing factors for negative self-evaluation associated with depression (Antony et al., 2005). As is known, social anxiety and depression share many common cognitive features, including negative self-evaluation (Clark, Beck and Alford, 1999). For this reason, it is natural to predict a relationship between social anxiety and social comparison. There are studies that examine the relationship between social anxiety and cognitive distortions. However, there is no study that examines this relationship within the framework of social comparison processes. Therefore, the aim of this thesis is to examine the mediating role of cognitive distortions and dysfunctional social self- beliefs in the relationship between social anxiety and social comparison.

1.1. Social Anxiety Disorder

In this section, the history, definition, signs, symptoms, and diagnostic criteria, epidemiology, etiology, and cognitive models of social anxiety disorder are reviewed in detail.

1.1.1. History of Social Anxiety Disorder

Social anxiety dates back a long time. In 400 B.C., Hippocrates delineated an extremely shy man as the one who "loves darkness as life" and "thinks each person observes him." In the 1870s, symptoms indicative of social anxiety were systematically outlined with other phobias (Marks, 1985). In the 1900s, the term "social neurosis" began to be used for severely shy patients. Janet coined the term "social phobia" in 1903 to identify those who fear being observed while doing something in the presence of others. Over the past 50 years, the scientific and self-help literature on social anxiety has grown tremendously (Hoffman and DiBartolo, 2014). The focus on shyness in social psychology (e.g., Zimbardo, 1977), studies by Marks and other researchers (Marks and Gelder, 1966; Marks, 1970), and the inclusion of social phobia as a specific disorder in the DSM-III (APA, 1980) and later revisions might be considered reference points for the relevant literature.

The diagnostic criteria for social anxiety have undergone various changes. Marks and Gelder (1966) defined social anxiety under the heading of phobic disorders as the fear of excessive scrutiny and evaluation by others in situations requiring performance or social interaction, which in return produces anxiety or avoidance behavior. In subsequent years, this definition formed the basis of explanations for social anxiety. Social phobia-like symptoms were included in the category of phobic neurosis in the first (APA, 1952) and second editions (APA, 1968) of the DSM. Social phobia was first included as a distinct disorder in the DSM-III (APA, 1980). However, researchers have noted that the diagnostic criteria for social phobia lack the empirical research support necessary for an appropriate diagnosis (Hidalgo, Barnett and Davidson, 2001; Heimberg et al., 2014). The following clinical research has shown that the number of social situations in which some people experience anxiety and fear is very large (Liebowitz et al., 1985). In response to various criticisms, the DSM-III -R (APA, 1987) expanded the definition and added a generalized specifier for people who suffer from intense anxiety and fear in *many* social settings. However, this has led to other criticisms because there is uncertainty about the content of the word -*many*- (Heimberg et al., 2014; Hidalgo, Barnett and Davidson, 2001). In the DSM-IV (1994) and DSM-IV-TR (2000), the term "social phobia" was changed to "social anxiety disorder" and diagnostic criteria were detailed (Bögels et al., 2010). After research for the latest edition of the DSM, social anxiety disorder was grouped under the rubric of anxiety

disorders in the DSM-5 (APA, 2013). The previous classification was abandoned, and individuals began to be rated on a spectrum according to the severity of their symptoms (Bögels et al., 2010).

1.1.2. Definition of Social Anxiety Disorder

Social anxiety disorder is defined as a marked anxiety or fear of social situations in which a person is evaluated by others, including social interactions, social performance, or observation situations (APA, 2013). According to Liebowitz (2005), social anxiety is associated with a profound and constant fear of being negatively evaluated in interpersonal interactions or when one must perform in front of others. Schlenker and Leary's (1982) definition of social anxiety includes probable or actual evaluation in real or imagined social settings. From an evolutionary perspective, social anxiety can be derived from competitive anxiety which is triggered when people perceive themselves to be at the bottom of a status hierarchy of desirable traits or when they risk losing status (and control over social resources such as approval, help, or support) if they are perceived as having undesirable traits (Gilbert, 2001).

1.1.3. Signs, Symptoms, and Diagnostic Criteria of Social Anxiety Disorder

People with social anxiety disorder vary remarkably in severity, intensity, and social situations of anxiety (Butcher, Mineka and Hooley, 2014). Typical social situations involve meeting new people, speaking up in a group, starting conversations, communicating with authority figures, working, eating, or drinking under observation, attending classes, going shopping, appearing in public, using public restrooms, and speaking in public (National Collaborating Centre for Mental Health, 2013). Such situations trigger fear of being humiliated or socially rejected. Physical symptoms such as sweating, blushing, palpitations, and trembling of the hands may accompany the anxiety. In addition, socially anxious people fear that the signs of their anxiety may be noticed by others. Therefore, they avoid participating in social settings (Morrison, 2016).

The DSM-5 (APA, 2013) remarks that the state of fear, anxiety, or avoidance in social situations must last six months or longer and result in impaired functioning for a person to receive a diagnosis of social anxiety disorder. In addition, the fear or anxiety

experienced by the person should be out of proportion to the person's sociocultural environment. Heimberg et al. (2014) pointed out the importance of obtaining information about the environment in which the individual lives in order to make an accurate diagnosis. Clinicians should report situations in which anxiety is limited to speaking in front of a crowd or performing an action "only while performing an action" (APA, 2013). The current diagnostic criteria of social anxiety disorder listed in the DSM-5 are presented in the following table (Table 1).

Table 1. The Diagnostic Criteria of Social Anxiety Disorder (Source: American Psychiatric Association, 2013).

A.	Marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others. Examples include social interactions (e.g., having a conversation, meeting unfamiliar people), being observed (e.g., eating or drinking), and performing in front of others (e.g., giving speech).
B.	The individual fears that he or she will act in a way or show anxiety symptoms that will be negatively evaluated (i.e., will be humiliating or embarrassing: will lead to rejection or offend others).
C.	The social situations almost always provoke fear or anxiety. **Note:** In children, the fear or anxiety may be expressed by crying, tantrums, freezing, clinging, shrinking, or failing to speak in social situations.
D.	The social situations are avoided or endured with intense fear or anxiety.
E.	The fear or anxiety is out of proportion to the actual threat posed by the social situation and to the sociocultural context.
F.	The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.
G.	The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
H.	The fear, anxiety, or avoidance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.
İ.	The fear, anxiety, or avoidance is not better explained by the symptoms of another mental disorder, such as panic disorder, body dysmorphic disorder, or autism spectrum disorder.

Table 1. The Diagnostic Criteria of Social Anxiety Disorder (Continued).

J. If another medical condition (e.g., Parkinson's disease, obesity, disfigurement from bums or injury) is present, the fear, anxiety, or avoidance is clearly unrelated or is excessive.
Specify if:
Performance only: If the fear is restricted to speaking or performing in public.

1.1.4. Epidemiology of Social Anxiety Disorder

This part of the study will address the epidemiology of social anxiety disorder and examine factors such as onset, prevalence, gender differences, comorbidity, and treatment utilization.

Onset

There are numerous epidemiological studies on social anxiety disorder in the literature. These studies have revealed that social anxiety disorder occurs at an early age (Stein and Stein, 2008; Fehm et al., 2008), ranging from 13 to 24 years of age (Rapee, 1995). The results suggest that social anxiety disorder usually occurs in childhood or adolescence. Most socially anxious people report showing symptoms with an average age of 10-13 years (Nelson et al., 2000). The early years of childhood and adolescence, when social interaction occupies an important place, are considered critical developmental periods for the onset of symptoms (Rapee and Spence, 2004; Hofmann, Gutner and Fang, 2012). Nevertheless, a small percentage of people develop social anxiety disorder later in life. Some people may describe a specific time which is associated with a specific event. Hamilton et al. (2016) suggested that interpersonal stressors such as peer bullying and parental emotional abuse may predict the later development of symptoms in adolescents. Others state that they have always been shy and cannot recall a time when they do not experience social anxiety (National Collaborating Centre for Mental Health, 2015).

Prevalence

Furmark (2002) noted that the results of prevalence studies of social anxiety disorder are inconsistent because of the different diagnostic criteria, measurement instruments, and assessment methods used in these studies. Nevertheless, social anxiety disorder is

one of the most prevalent anxiety disorders. To illustrate, Judd (1994) reported a lifetime prevalence rate of 13.3% in the United States. According to Lecrubier (1998), social anxiety disorder is among the most prevalent mental disorders with a lifetime prevalence rate of 14.4%. Kessler et al. (2005) documented that social anxiety disorder has a lifetime prevalence rate of 12% compared to other mental disorders (e.g., 7% for post-traumatic stress disorder, 6% for generalized anxiety disorder, 5% for panic disorder, and 2% for obsessive-compulsive disorder). In addition, social anxiety disorder was found to be the most prevalent mental disorder after major depressive disorder, alcohol dependence, and specific phobia. Using rigorous criteria and personal assessments, the lifetime and annual prevalence statistics in the United States reduced to 5% and 3%, respectively (Grant et al., 2005).

In a study by Ruscio et al. (2008), the lifetime and 12-month prevalence rates of social anxiety disorder were 12.1% and 7.1%, respectively. 25% of participants noted at least one lifetime social fear. Speaking in a group is one of the most common fears, while using a restroom outside one's home and writing, eating, or drinking under observation were the least common fears. A study conducted in the Australian general population found a 12-month prevalence rate of 4.2% and a lifetime prevalence rate of 8.4% for social anxiety disorder (McEvoy, Grove and Slade, 2011). According to Wittchen et al. (2011), prevalence rates of social anxiety in community studies ranged from 0.6% to 7.9%.

However, most studies on the epidemiology of social anxiety disorder have been conducted with participants living in high-income Western countries. By using the World Mental Health Research Initiative data, Stein et al. (2017) conducted a study to examine the prevalence, course, exacerbation, sociodemographic characteristics, comorbidity, and treatment of social anxiety disorder in high-, middle-, and low-income countries around the world. Prevalence rates for 30-day, 12-month, and lifetime prevalence ranged from 1.3% to 4.0% across geographic areas. This study showed that social anxiety disorder was less common in countries with low-income levels than in countries with high-income levels. In addition, participants from Africa and the Eastern Mediterranean are least likely to have social anxiety disorder, while this rate is highest in the Americas and the Pacific West (Stein et al., 2017). The prevalence rate of social anxiety disorder is higher in certain sociodemographic

characteristics such as younger age, female gender, single status, lower education level, and lower-income. Although there are obvious differences in prevalence rates across countries, there are several common patterns, including early-onset, persistence, impairment across domains, and similar psychiatric comorbidities (Acarturk et al., 2008; Stein et al., 2017).

In the Turkish population, the incidence of social anxiety disorder was found to be 1.8% (Erol et al., 1998; as cited in Soykan, Özgüven and Gençöz, 2003). Another study of Turkish college students aged 17 years and older found that the lifetime prevalence rate of social anxiety disorder was 9.6% (İzgic et al., 2000). Demir et al. (2013) examined the prevalence rate of social anxiety disorder and its psychosocial factors in a Turkish children and adolescents and found a prevalence rate of 3.9%.

Gender Differences

Gender differences in the prevalence of social anxiety disorder led to conflicting results due to differences in community and clinical studies. In community samples, females have higher social anxiety scores than males (Schneier et al., 1992; Furmark, 2002; Fehm et al., 2008; Xu et al., 2012 Asher and Aderka, 2018). In clinical samples, Turk et al. (1998) found no difference in prevalence between males and females but some differences in the level of anxiety in specific situations. Fear of attending a party was reported more by females than males, while fear of urinating in a public restroom was reported more by males than females. The gender differences could be examined in the context of traditional gender roles. Xu et al. (2012) found that females are more anxious in professional situations such as job interviews, communicating with an authority figure, and speaking in a group, while males are more anxious in dating. On the other hand, there are also studies that found females in all age groups had a higher prevalence rate than males (Ruscio et al. 2008; Kessler et al., 2012). In the Turkish population, social anxiety is more common in females. The lifetime prevalence rate is 9.8% in females and 9.4% in males. In the last year, the prevalence was 8.9% in females and 7.1% in males (İzgic et al., 2000).

Comorbidity

Social anxiety disorder rarely occurs in its pure form in adulthood showing comorbidity of 70-80% with at least one mental disorder, most commonly depression (Lecrubier et al.,

2000). Individuals with social anxiety disorder are most likely to have other anxiety disorders (up to 70%), mood disorders (up to 65%), nicotine addiction (27%), and substance abuse (about 20%) (Fehm et al., 2008; Grant et al., 2005). In clinical samples, individuals with social anxiety disorder have avoidant personality disorder, panic disorder, and generalized anxiety disorder (Farevelli et al., 2000), which is associated with depression in almost half of them. Depressive symptoms are more likely in individuals with high levels of social anxiety, even if they are not at a diagnostic level (Beesdo et al., 2007). Social anxiety is more likely to increase the risk of substance abuse (Regier et al., 1998) and nicotine addiction (Sonntag et al., 2000). The increase in nicotine addiction is explained by the fact that nicotine leads to relief in cases where anxiety increases (Sonntag et al., 2000). In addition, social anxiety may be a risk factor for Internet addiction in individuals (Weinstein et al., 2015).

Treatment Utilization

Few people with social anxiety seek treatment. These people usually receive support long after the onset of this disorder (Nelson et al., 2000; Tillfors, 2004; Wang et al., 2005; Fehm et al., 2008). The age at which treatment is sought is usually around 30 years, 15-20 years after the onset of the disorder. The delay in seeking treatment can be explained by a number of reasons: (1) social anxiety is not recognized as a treatable disorder; and (2) it is accepted as an innate and immutable personality trait (Schneier et al., 1992; Davidson et al., 1993). Patients with other acute mental disorders (e.g., depression or suicidality) are more likely to have undiagnosed social anxiety, which should not be disregarded because it may contribute to symptom remission. Furthermore, social anxiety may be the cause of depression or suicidal symptoms in some patients (Wiltink et al., 2010; Pöhlmann et al., 2009). Social anxiety symptoms that are not treated early impair the individual's quality of life. This represents a risk factor as functionality deteriorates in various areas such as school, work, family, social environment, etc. (Aderka et al., 2012; Kessler, 2003) and other psychopathologies that may develop in later processes (Hofmann, Gutner and Fang, 2012).

1.1.5. Etiology of Social Anxiety Disorder

Prominent models of social anxiety disorder focus on the biological, psychological, and environmental factors that increase the risk of social anxiety (Clark and Wells, 1995; Rapee and Heimberg, 1997; Hofmann, 2007; Heimberg et al., 2010). However,

the origin of symptoms is not well understood (Tillfors, 2004; Wong and Rapee, 2016). For this reason, it is important to understand the etiology of social anxiety disorder (Hudson and Rapee, 2000). To better understand the development of social anxiety disorder, intrinsic and extrinsic factors for its etiology are discussed below.

Intrinsic Factors

To determine the effects of genetic factors causing psychopathologies, numerous family, twin, and adoption studies have been conducted to date. Family studies of social anxiety disorder have shown that people with first-degree relatives who have social anxiety disorder are at higher risk than those who do not. The likelihood of being socially anxious is higher in children with parents who have social anxiety disorder (Fyer et al., 1993; Mancini et al., 1996; Stein et al., 1998; Lieb et al., 2000; Tillfors et al., 2001). Twin studies provide further evidence for a genetic predisposition to social anxiety disorder. The concordance rate is higher in identical twins than in fraternal twins. If one twin is affected, the probability that the other is also affected is higher in monozygotic twins than in dizygotic twins (Kendler et al., 1992). In addition, the findings are similar to results from twin and adoption studies of shyness and social fears (Rose and Ditto, 1983; Daniels and Plomin, 1985).

The predisposition to social anxiety disorder is thought to be due to temperament, which is understood as "the shaping of a person's internal patterns of behavior by environmental influences." (Sanson et al., 1987). Therefore, temperament traits have genetic and biological bases (Saudino, 2005). Behavioral inhibition in children is thought to be a risk factor for the development of social anxiety later in life (Hayward et al., 1998). If a child's response to novel stimuli or situations is characterized by persistent excessive sympathetic arousal and behavioral withdrawal, then s/he may exhibit behavioral inhibition as a temperamental trait. Examples of behavioral inhibition include interruption of ongoing activities, avoidance, withdrawal, isolation, and delay in making contact with new people or objects (Mick and Telch, 1998). In a study conducted by Essex et al. (2010), the temperament characteristics of children aged 1 to 9 years were examined. It was found that 50% of children with chronic high behavioral inhibition developed social anxiety disorder in adolescence. Adolescents with high behavioral inhibition had more social anxiety than their peers with low inhibition (Hayward et al., 1998). In another study, the incidence of social anxiety

disorder was found to be higher in parents of children with behavioral inhibition than in other parents (Rosenbaum et al., 1991).

Although behavioral inhibition is thought to be an antecedent of anxiety disorders (especially social anxiety), the nature of this relationship has not been fully elucidated (Tillfors, 2004). In addition, family, twin, and adoption studies suggest that heredity is a significant risk factor for social anxiety and related traits. However, the extent to which these factors have an influence remains unclear. Thus, heredity is thought to interact with other conditions. In other words, genetic predisposition interacts with various environmental factors at different stages of development and becomes a determining factor in the amplification or attenuation of symptoms (Tillfors, 2004; Ollendick and Hirshfeld-Becker, 2002).

Extrinsic Factors

Given that social anxiety usually develops in late childhood and early adolescence, environmental factors during this period are critical to the etiology of social anxiety disorder. Before school enrollment, children spend almost all their time at home with their parents and other family members. After school enrollment, their peers and teachers are also among the people they spend time with. For this reason, relationships with their parents, other family members, teachers, and peers have a great impact on them (Rapee and Spence, 2004).

Parental attitudes and parenting styles are one of the most important factors in the development of social anxiety disorder. Parental attitudes such as control, overprotectiveness, rejection, neglect, emotional distance, insensitivity, criticism, and behavioral rigidity are risk factors (Bruch et al., 1989; Bruch and Heimberg, 1994; Caster, Inderbitzen and Hope, 1999; Neal and Edelmann, 2003; Chavira and Stein, 2005). Individuals with social anxiety disorder reported that their parents were dismissive, overprotective, and emotionally distant and used shame as a disciplinary tool (Arrindell et al., 1983; Arrindel et al., 1989; Bruch and Heimberg, 1994; Hudson and Rape, 2000; Lieb et al., 2000). In other respects, socially anxious parents may teach their children, through modeling, that social situations are harmful and should be avoided. Children who are prevented from forming relationships with peers and

acquiring appropriate social skills (Hudson and Rape, 2000) may develop anxiety and fear of their environment (Brook and Schmidt, 2008).

Peer relationships, on the other hand, are considered a potential predictor of the onset of social anxiety disorder (Hudson and Rapee, 2000). Children or adolescents who are rejected, isolated, teased, intimidated, or ridiculed by peers are more likely to show signs of social anxiety (Vernberg et al., 1992; La Greca et al., 1988; Levinson, Langer and Rodebaugh, 2013; Tillfors et al., 2012). Moreover, when the negative social interaction between the bully and the victim is considered, a violent and traumatic bullying experience becomes a risk factor, especially for social anxiety (Brook and Schmidt, 2008). In addition, Rapee and Melville (1997) reported that adults diagnosed with social phobia have fewer childhood friends than others.

Early traumatic experiences are also critical for the development of social anxiety disorder. Research has shown that 44% of people with social anxiety reported a traumatic event that coincided with the onset or exacerbation of their symptoms (Stemberger et al., 1995). Traumatic experiences cited in that study included speaking in class, speaking in public, meeting a date for the first time, behaving inappropriately at a party, and having others laugh at them. Bandelow et al. (2004), on the other hand, found that there were more traumatic childhood memories such as domestic violence, separation from parents, sexual abuse, and childhood illnesses in the group diagnosed with social anxiety than in the healthy group.

Biological, behavioral, and cognitive models have been developed to understand the underlying mechanism of social anxiety disorder (Dilbaz, 2000). Theoretical models put forward on social anxiety disorder and its clinical occurrence have so far focused on the role of the cognitive process in maintaining this disorder (Hofmann, 2007). For this reason, the cognitive theory of social anxiety disorder has been discussed in-depth to understand its etiology.

1.1.6. Cognitive Theory of Social Anxiety Disorder

Theoretical models of social anxiety disorder and its clinical presentation have focused on the role of the cognitive process in the maintenance of this disorder (Hofmann, 2007). The cognitive models of social anxiety assume that dysfunctional social beliefs,

biases in processing social information, safety behaviors, and avoidance of anxiety-provoking social situations are at the root of the disorder (Rapee and Spence, 2004). When reviewing the literature, it is noticeable that while the theoretical foundations on which researchers build their models are similar, their explanations differ somewhat. Due to the large number of models in the relevant literature, more comprehensive models are presented (e.g., Clark and Wells, 1995; Rapee and Heimberg, 1997), and the parts of the models that overlap with the variables in this thesis (i.e., dysfunctional social self- beliefs, cognitive distortions, comparisons of any kind) are examined in detail below.

Clark and Wells (1995) hypothesize that an automatic fear program comes into play when socially anxious individuals perceive the threat of negative evaluation. The model consists of two parts: (1) the first part revolves around what happens when socially anxious individuals enter a social environment in which they are anxious; (2) and the second part relates to what they experience before entering and after leaving the social environment. According to this model, when socially anxious individuals enter a feared social situation, a set of dysfunctional assumptions about themselves, others, and the world are activated based on their past experiences.

Dysfunctional assumptions lead socially anxious individuals to perceive the social situation as dangerous, which enhances self-focused attention and detailed self-monitoring (i.e., attentional inward bias). Self-focused attention is defined as the tendency to focus attention on close observation of oneself rather than on features of the environment (Jakymin and Harris, 2012). Following self-focused attention and detailed self-monitoring, cognitive, emotional, and physical symptoms emerge. The fear that others may notice the symptoms contributes to the formation of further dysfunctional assumptions. Over time, the use of internal data and the diminished ability to process external social cues creates a distorted, negative image of one's observable self. To create a self-image of how one appears to others, three forms of distorted internal data are used that lead to a negative self-image (Table 2). In this way, socially anxious individuals enter a vicious cycle in which supporting evidence for their anxieties is self-generated and the non-confirming evidence is either unavailable or ignored. Another point Clark and Wells (1995) highlight in the context of the cognitive model of social anxiety is safety-seeking behavior. Many safety-seeking

activities are internal mental processes, even though they are referred to behaviors. By using safety behaviors, people reduce or prevent the state of anxiety that they view as a catastrophe. Safety behaviors are beneficial in the short term, but they reinforce anxiety symptoms and reduce social interaction in the long term (Clark and Wells, 1995; Clark, 2001).

Table 2. Types of Distorted Internal Information (Source: Clark, 2001).

Feeling anxious is equated with looking anxious	A person may feel an extreme tremor and believe that others see a violent tremor, although others may perceive only a slight tremor or no tremor at all.
The image represents the fears of themselves, not what the viewer would see	A person who feared looking foolish when participating in a conversation with colleagues felt a distinct tension around her lips before she spoke. The tension triggered a distorted image of herself as looking like a "village idiot."
Felt sense	A person with a distorted image also felt "different and isolated" from the other people in her place with whom she wanted to converse. This "felt" feeling further contributed to her belief that she looked stupid and uninterested.

The second part of the model describes the experiences of individuals with social anxiety disorder before entering and after leaving social situations. In this context, individuals think in detail about what might happen before they enter a social situation. They recall their past failures and believe they will perform poorly and be rejected by others. These ruminations can sometimes lead them to avoid the situation completely. This process is called pre-event processing. After leaving the social situation, the individual's anxiety level decreases, but the experience is detailed and negatively evaluated. Because of this, the individual's beliefs about her or his social inadequacies become stronger and long-term ruminations occur. This process is called post-event processing (Clark, 2001).

The cognitive model of social anxiety developed by Clark and Wells (1995) is shown in Figure 1. To illustrate, the Clark and Wells (1995) model is explained with an example (Figure 2).

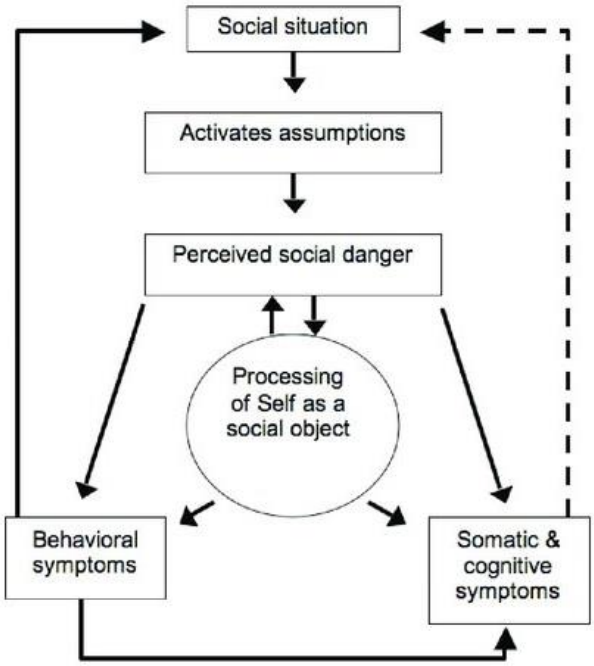

Figure 1. The cognitive model of social anxiety (Source: Clark, 2001).

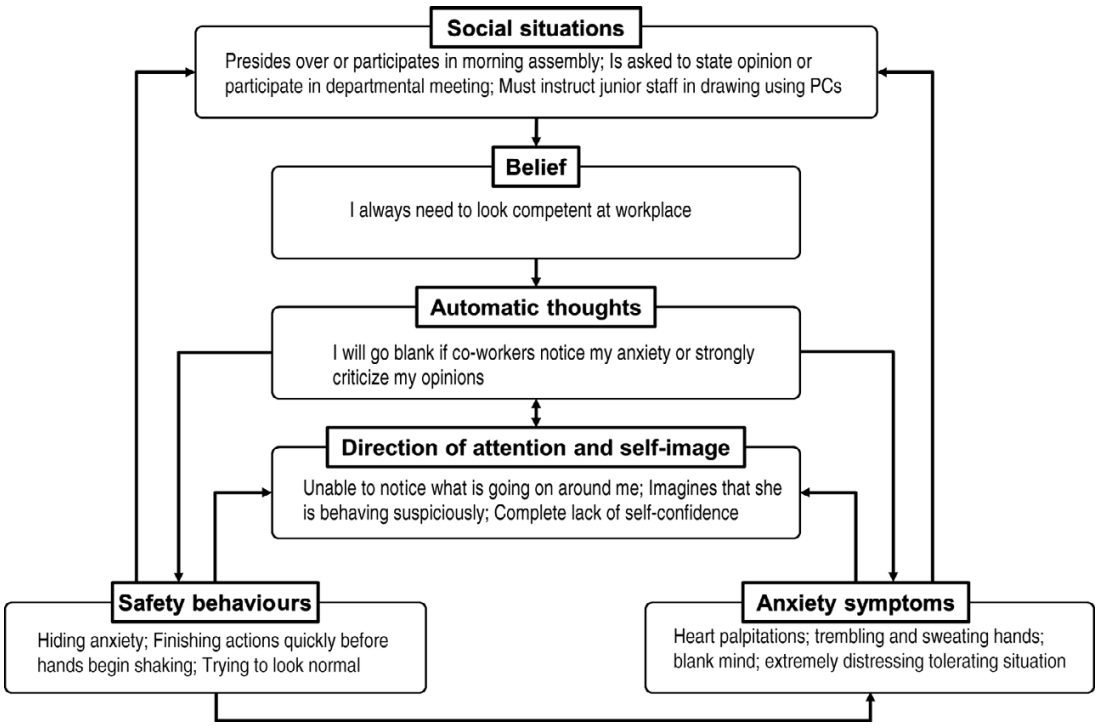

Figure 2. Illustration of Clark and Well's model (Source: Yoshinaga et al., 2013).

The cognitive-behavioral model developed by Rapee and Heimberg (1997) is similar to Clark and Wells' (1995) model. Nevertheless, this model is based on the premise that socially anxious people place great value on being evaluated positively by anyone, even though they believe that any evaluation would be by definition negative. In social situations, socially anxious individuals generate a mental representation of themselves based on memories of past experiences, internal cues such as physiological anxiety symptoms, and external cues such as perceived indicators of negative evaluation. In contrast to the self-focused attentional process in social anxiety (Clark and Wells, 1995), Rapee and Heimberg (1997) contend that attentional resources of socially anxious individuals are used simultaneously to examine self-image and potential external indicators of threat. The comparison between the mental representation of the self and the perceived standards of the audience is presented as the main dysfunctional process in the model. Socially anxious individuals assume that others have extraordinarily high standards when evaluating their performance. The greater the discrepancy between self-image and perceived standard, the more likely they are to predict unfavorable social outcomes in terms of probability and cost, leading to anxiety-related behaviors, cognitive symptoms, and physical symptoms. Anxiety-related symptoms and perceived external indicators provide negative feedback about mental self-representation and contributing to the perpetuation of social anxiety by creating a vicious cycle. Therefore, it is not unexpected that people with social anxiety often avoid or flee feared situations, as this appears to be a break in the vicious cycle (Rapee and Heimberg, 1997; Heimberg, Brozovich and Rapee, 2010). The cognitive-behavioral model of social anxiety proposed by Rapee and Heimberg (1997) is shown in Figure 3.

Theoretical models of social anxiety emphasize the role of cognitive processes in the maintenance of this disorder. Accordingly, dysfunctional social beliefs and biases in social information processing are the basis of this disorder. For this reason, in the next section, the emergence of cognitive biases will be discussed through cognitive theory.

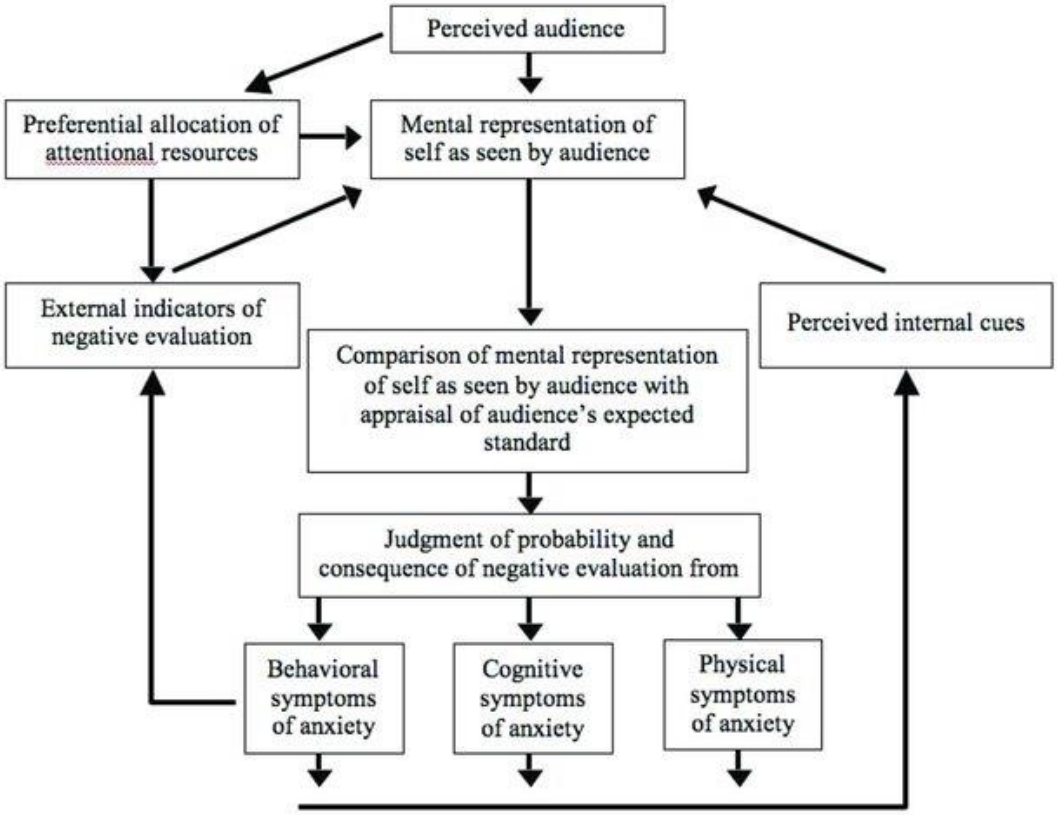

Figure 3. The cognitive-behavioral model of social anxiety (Source: Rapee and Heimberg, 1997).

1.2. Cognitive Biases

1.2.1. Cognitive Structures

The cognitive theory states that psychopathological conditions are severe or abnormal forms of normal cognitive, affective, and behavioral functioning (Southam-Gerow et al., 2011). There are three basic structures that the cognitive model emphasizes in cognitive therapy, namely automatic thoughts, intermediate beliefs, and core beliefs. Cognitive therapy aims to rationally and/or functionally adjust cognitions at these three levels (Beck, 2011). Initially, negative automatic thoughts arise at a superficial level and trigger sudden emotional reactions. The second level comprises intermediate beliefs, which consist of rules, attitudes, assumptions, and strategies regarding the inner and outer world. The last level includes core beliefs that emerge at the deepest levels of cognition and generate long-term and unconditional cognitive structures that can influence information processing (Beck, 1983). These will be explained in detail on the following pages.

Automatic Thoughts

Beck (1991) found that depressed people had negative attitudes and sudden negative automatic cognitions toward themselves. After developing the cognitive theory, he also observed automatic thoughts in his patients with anxiety disorders and found that these patients were preoccupied with the thought that they could not prevent dangers, risks, and negative situations. He also noted that a patient with avoidant personality disorder had thoughts such as “Nobody likes me” and “If I go to a party, people will reject me” (Beck, 1991). The flow of cognitions that occurs without direct deliberation or volition is called automatic thoughts. They arise contextually when external stimuli or internal emotional states activate a person's core belief system. Automatic thoughts are more superficial than other levels of cognition, but they depend on the individual's core beliefs and schemas and are considered byproducts of activated schemas (Dozois and Beck, 2008). Automatic thoughts are generally negative cognitions that arise from the effect of environmental events on maladaptive schemas (Wright and Beck, 1983). Usually, the individual is not aware of these thoughts, but they are aware of the emotions associated with these thoughts. The examination of a negative automatic thought reveals the bias that led to that thought. For example, if a student thinks, “He thinks I am stupid,” while talking to his teacher, he is interpreting someone else's thought in his own way, even though there is no evidence to support it. This shows that there is a bias in cognitive processing that cognitive therapists call mind reading (Covin et al., 2011).

Intermediate Beliefs

Intermediate beliefs are rules, attitudes, and assumptions about self, others, and personal life (Beck, 2011). Core beliefs influence the development of intermediate beliefs. The relationship between core beliefs and automatic thoughts occurs through intermediate beliefs. Intermediate beliefs can be changed more easily than core beliefs, although not as quickly as automatic thoughts. The formation of intermediate beliefs usually occurs in childhood, but their development continues throughout life. They are not innate but learned. These beliefs are unrealistic and unreasonable, generalized and have a negative effect on the individual. Individuals who question their automatic thoughts can uncover intermediate beliefs by questioning the beliefs behind them. They are more profound compared to automatic thoughts (Beck, 2011).

Core Beliefs

Core beliefs are defined as the general, rigid evaluations and judgments that people develop about themselves, others, and their world since childhood. These beliefs are shaped by first experiences with others and the world. They are enduring and deeply held. Individuals accept these beliefs without questioning them. A core belief may be active in certain situations or throughout most of a person's life. During this active period, it is easier for a person to find data that supports that belief, even when evidence suggests otherwise. Beck divided negative core beliefs into two distinct categories, namely helpless and unlovable core beliefs. Later, Judith S. Beck discovered the belief of worthlessness as a third category (Beck, 2011).

1.2.2. Cognitive Distortions

One of the most important principles of the cognitive model, derived from cognitive theory, is that the emotions and behaviors of a person are influenced by their thoughts, or vice versa. In other words, thoughts, feelings, and behaviors are interconnected. Because an individual's emotional and behavioral responses to events are influenced by the mechanisms by which information is processed, negatively biased cognitive processes can lead to maladaptive emotional and behavioral consequences (Dozois and Beck, 2008). Negatively biased thought processes are called cognitive distortions. According to Robins and Hayes (1993), cognitive distortions are the connections between maladaptive schemas and automatic thoughts. New information is often distorted during its cognitive processing to fit the existing schema. Negative automatic thoughts are not based on evidence and do not reflect reality in a functional way. Cognitive distortions have been associated with a number of psychopathologies, including depression (Beck, 1976), panic (Clark, 1986), hypochondriasis (Warwick et al., 1996), eating disorders (Garner and Bemis, 1982), and obsessive-compulsive disorder (Freeston and Rheaume and Ladouceur, 1996). Beck et al. (1979) in their seminal work outlined 7 cognitive distortions that are characteristic of depressed individuals. Burns (1980) then expanded this number to 10. Typical cognitive distortions are given below (Table 3).

Table 3. Typical Cognitive Distortions (Source: Beck, 2011).

Type of cognitive distortion	Description
Mindreading	You think you know what others think without considering other, more likely possibilities.
Catastrophizing	You make a negative prediction about the future without considering other, more likely outcomes.
All-or-nothing thinking	Instead of looking at a situation as a continuum, you see it in two categories.
Emotional reasoning	You think something to be true because you "feel it deeply," even if there is evidence to the contrary.
Labeling	You give yourself or others a fixed, global label without considering that the evidence might reasonably lead to a less fatal conclusion.
Mental filter	Instead of looking at the big picture, you focus too much on one negative aspect.
Overgeneralization	You come to a sweeping negative conclusion that is much more general than the current circumstance.
Personalization	You think that others are behaving negatively because of you, even though there are other likely explanations for their actions.
Should statements	You have a very clear idea of how you or others should behave, and you exaggerate how terrible it is when those expectations are not met.
Minimizing the positive	You irrationally tell yourself that positive experiences, actions, or characteristics do not matter.

Cognitive Distortions about Social Situations

Distortions in processing social information are a hallmark of social anxiety disorder. Thoughts, attitudes, and beliefs trigger and maintain socially anxious emotions and behaviors (Clark and Wells, 1995; Rapee and Heimberg, 1997; Schlenker and Leary, 1982; Trower and Gilbert, 1989). Socially anxious individuals evaluate the behavior of themselves and others in the social environment negatively, to their detriment, and

often fall into thoughts accompanied by distortions, such as everyone observing, evaluating, criticizing, and rejecting them. Individuals with high social anxiety used more distortions and had more irrational beliefs (Ahmadi and Bagheri, 2014; Cartwright-Hatton, Tschernitz and Gomersall, 2005).

Arkowitz (1977) proposed some cognitive biases observed in social anxiety:

1. Socially anxious people make more negative attributions related to social relationships.
2. Socially anxious people tend to underestimate their own social behavior.
3. Socially anxious people are negatively selective about themselves. Positive situation or events about them are ignored, while negative situations or events are heeded.
4. Socially anxious people look for the reasons for negative events in themselves, while they look for external explanations of positive situations in social relationships.

Clark and McManus (2002) made an important contribution to the literature on cognitive processes in social anxiety. They argued that social anxiety is driven by a loop of cognitive biases in the following areas: interpreting social events, recognizing negative reactions from others, balancing attention between internal and external processing, using internal information to make inferences about how one appears to others, retrieving negative information about one's perceived observable self. Retrospective studies of adults with social anxiety have shown that negative childhood experiences may have an impact on the development of social anxiety. These individuals frequently recalled criticism, humiliation, bullying, and other negative social experiences (Hackmann, Clark and McManus, 2000; Hackmann, Surawy and Clark, 1998; Hope, Heimberg and Klein, 1990). In addition, adults with social anxiety placed special emphasis on being positively evaluated by others and perceived others as critical and constantly negatively evaluative (Rapee and Heimberg, 1997).

The study by Stopa and Clark (1993) in which they investigated cognitive processes in individuals with social anxiety also brought important and new information to the literature. In this study, it was shown that socially anxious people evaluate themselves more negatively than individuals with other anxiety disorders and the individuals in

the control group. However, the thoughts of individuals with social anxiety that others evaluate themselves negatively were not different from individuals with other anxiety disorders and individuals in the control group. This finding shows that the thoughts of individuals with social anxiety focus on their self-evaluation rather than the evaluations of others. In addition, socially anxious people evaluated their social abilities as much more limited and inadequate than individuals with other anxiety disorders and the individuals in the control group. Socially anxious individuals' evaluations of their own social abilities are more negative than others' evaluations of their social abilities. Stopa and Clark (1993) confirmed the hypothesis that socially anxious individuals have both lower social skills and underestimate their own social performance. Thus, a double impasse exists for these individuals. First, their social performance is actually worse than that of other people. Second, their perception of their own social behavior is distorted, leading to increased negative thoughts and anxiety and further deterioration in their social performance (Bögels et al., 2002; Christensen, Stein and Means-Christensen, 2003; Voncken and Bögels, 2008; Voncken et al., 2010).

1.2.3. Dysfunctional Social Self-Beliefs

Social relationships are important for everyone. All people need to relate and communicate with others throughout their lives. The way social events and relationships are interpreted and evaluated seems to have a critical role in the development and maintenance of social anxiety. Extremely rigid, exaggerated, and dysfunctional thoughts about the nature of social relationships affect how people behave in social situations (Ellis, 1986). In this context, it is useful to identify the cognitions and beliefs specific to social anxiety. According to Clark and Wells (1995), entering a feared social situation triggers a set of dysfunctional assumptions in socially anxious individuals. These dysfunctional assumptions are divided into three categories: high standards, conditional beliefs, and unconditional beliefs (Table 4).

Table 4. Categories of Assumptions (Source: Clark, 2001).

Excessively high standards for social performance	I must not appear weak I must always appear wise and fluent

Table 4. Categories of Assumptions (Source: Clark, 2001) (Continued).

	I should speak only when others are silent
	I should always be able to say something fascinating
Conditional beliefs concerning the consequences of performing in a certain way	If I differ from others, they will reject me
	If my hands shake, I sweat, or show other symptoms of anxiety
	Others will think I am uninteresting if I am silent
	Others will not like me when they get to know me
Unconditional negative beliefs about the self	I am odd/different
	I am unlikeable/unacceptable
	I am boring
	I am stupid
	I am different

Socially anxious individuals act on the assumption that a social threat is imminent. The situations in which they are confronted with their fears (e.g., fear of being negatively evaluated, being the center of attention, and being seen as weak) or situations they assume they will encounter may become a social threat. Any mistake, poor performance, or inappropriate behavior may cause them to be discredited or unaccepted by others. In cases where the high goals, expectations, and strict rules they impose on themselves are not met, the belief of being vulnerable is triggered (Beck, Emery and Greenberg, 2005). Individuals who develop excessive arousal and sensitivity to any cue that appears to pose a social threat tend to evaluate themselves negatively relative to others (Stopa and Clark, 1993; 2000). It is possible that evaluations centered on social comparison and social inadequacy, that others are more socially competent, that the person acts strangely in public, and appears anxious in front of others explain the development and maintenance of social anxiety (Turner et al., 2003). Social avoidance and negative social consequences negatively impact

psychosocial development and perpetuate the assumption that social events will lead to negative consequences (Banerjee and Henderson, 2001).

Kim (2005) conducted an experiment to examine the effect of reduced safety behaviors on social anxiety and negative automatic thoughts. Results showed that exposure to reduced safety behaviors under cognitive rationality led to significantly greater reductions in anxiety levels and negative thoughts of feared consequences. Iancu et al. (2015) examined the relationship between social anxiety and automatic thoughts and found that negative automatic thoughts were lower in individuals in the control group than in the social anxiety group. A study by Rheingold, Herbert and Franklin (2003) examined the effects of cognitive biases in adolescents on levels of social anxiety. The finding of this study was that cognitive biases have a negative impact on adolescents' social anxiety. Even when the anxiety level of adolescents with social anxiety is reduced, exaggeration and negative evaluation of social events were found to be higher at baseline than in less anxious adolescents.

As can be seen from the cognitive models of social anxiety and the studies conducted in this context, situations in which one compares oneself to others and believes others to be more competent than oneself can also contribute to the formation of these dysfunctional social self-beliefs. For this reason, the social comparison theory will be discussed in the next section.

1.3. Social Comparison

1.3.1. The History of Social Comparison

Social comparison is an important process in social influence among humans and even among other species (Buunk and Gibbons, 2007). Research on social comparison dates back to Sheriff's (1936) autokinetic illusion studies. Hyman (1942) also addresses the importance of social comparison in assessing one's financial and academic position. Social comparison has been extensively researched in psychology, beginning with the study of Festinger (1954). He argued that people are naturally inclined to evaluate their opinions and abilities, that they look for objective criteria to make these evaluations, that they use others as criteria when objective criteria do not exist or cannot be obtained, and referred to the process of comparing one's opinions and abilities with those of others as social comparison. Festinger's (1954) early theory was extended by

the development of research on the social comparison (e.g., Schachter, 1959; Gruder, 1971; Wills, 1981). The fear- affiliation theory was posited by Schachter (1959), who argued that people facing real-life difficulties are more likely to associate with similar people and share emotionally similar experiences to alleviate their stress. As a result, individuals' tendency to make social comparisons increases, especially during times of anxiety and stress.

1.3.2. Classical Social Comparison Theory

Social comparison theory emerged in the 1950s as a theory that attempts to understand the phenomenon of individual self-evaluation. According to Festinger (1954), people have an innate drive to evaluate their opinions and abilities. These evaluations should be objective, otherwise they will lead to negative consequences. For this reason, people first look to physical standards for evaluation. If possible, they try to make their evaluations based on non-social criteria. However, it is not always possible to obtain objective information. In the absence of objective standards, people obtain the information they need by comparing their own opinions and abilities with those of others. This process is called the social comparison process, and the information obtained is called social comparison information (Festinger, 1954).

Festinger (1954) suggested that people who evaluate their opinions and abilities choose similar others as comparison targets. Comparison target with very high or low ability cannot provide information about the actual ability level of people that make comparison. Similarly, comparison target with a completely different character cannot provide accurate information about one's own opinion. In other words, the greater the differences in opinions and abilities between people and the target of comparison, the less people are motivated to compare themselves with that target. However, because individual achievement is paramount, people in Western cultures tend to compare their abilities, but not their opinions, with others who are slightly better than themselves (i.e., unidirectional drive upward).

Even though persuasion might influence opinions, Festinger notes that ability change is restrained by non-social variables. Improving one's ability is not an immediate source of conviction that one should do it. It requires a significant investment of time and effort. Consequently, a gap between the person and the comparison target

motivates either to improve performance and change one's position to approximate the slightly better other, or to stop comparing oneself with others in the group. Social comparison can lead to increased hostility and devaluation if the comparison is not pleasant. Aggression can be observed when people compare themselves with people whose opinions are not comparable, since a disagreement can lead to exclusion. However, people probably stop comparing when it comes to abilities.

1.3.3. Targets in Social Comparison

According to Festinger (1954), people tend to compare themselves with similar others. If one wants to get correct results as a result of the comparison, the compared people should have similar properties. Choosing a chess master as a rival for a beginner in chess is not a correct evaluation criterion. Similarly, choosing a rival who is in a worse situation than oneself will not provide accurate information about one's position. The most correct rival to evaluate one's playing ability is someone who has similar characteristics to oneself (Teközel, 2007).

Taylor, Wayment and Carillo (1996) believe that the tendency of people to make social comparisons is based on the need for self-evaluation, self-improvement, self-enhancement, and affiliation. The need that triggers the comparison process plays an important role in determining the comparison target. When comparison is triggered by the need for self-enhancement, e.g., when one's self-esteem is in question, the comparison should focus on someone who is worse off (e.g., Hakmiller, 1966; Friend and Gilbert, 1973; Crocker et al., 1987; Smith and Insko, 1987; Wills, 1981; 1987; Wood, Taylor and Lichtman, 1985). In cases where the comparison process is motivated by the need for self-evaluation and self-improvement, people compare themselves to those who are better than they are (e.g., Wheeler, 1966; Wheeler et al., 1969; Gruder, 1971; Wilson and Benner, 1971).

Research has examined the conditions under which people compare themselves to similar others (i.e., lateral social comparisons), to those who are better than themselves (i.e., upward social comparisons), or to those who are worse than themselves (i.e., downward social comparisons) (Taylor and Lobel, 1989; Wills, 1981). To illustrate, in the Mr. Clean and Mr. Dirty experiment by Morse and Gergen (1970), it was observed that subjects' emotional states changed depending on who entered the

environment. In this experiment, the researchers created an environment for a job interview. Subjects filling out job application forms are made to meet with Mr. Clean or Mr. Dirty just as they are about to measure their self-worth. The results of the study show that the subjects who met Mr. Clean made an upward social comparison, while those who met Mr. Dirty made a downward social comparison.

Downward Social Comparison

Downward social comparison was first brought into focus by Thornton and Arrowood (1966) and Hakmiller (1966) and refers to the mechanism by which individuals compare themselves to those they believe are worse-off in some aspect. Subsequently, researchers found that individuals whose self-esteem is threatened are reluctant to hear about superior others (Friend and Gilbert, 1973). Some researchers have emphasized the hedonistic value of downward social comparisons over their informative or diagnostic value, arguing that comparisons with dissimilar individuals serve individuals' hedonistic interests rather than the need to obtain accurate information (Hakmiller, 1966; Brickman and Bulman, 1977; Wills, 1981; Taylor and Brown, 1988; Wood and Taylor, 1991).

According to Brickman and Bulman (1977), upward social comparison can be stressful and avoided, so inferior others are selected for comparative information. They suggested that individuals maintain a hedonic balance when making social comparisons and, in this context, tend to avoid painful comparisons with people who are superior to them. According to them, there is a constant conflict between the adaptive value and the hedonic value of the information obtained from social comparisons, and people seek a balance in terms of the benefits and costs they pay for social comparisons. Hakmiller (1966) claimed that social comparisons can be made not only for evaluation but also for self-improvement and self-enhancement. Wills (1981) argued that people can protect and/or enhance their subjective well-being by making comparisons with people who are worse-off than themselves. Wills (1981) extended the downward social comparison theory, which contrasts with the unidirectional drive upward, and showed that negative affect and low subjective well-being trigger a downward social comparison process that leads to self-enhancement.

The discovery that people who have experienced adversity tend to feel better when they compare themselves to those who are worse-off has led to a focus on studies of patient and victim groups, particularly those suffering from chronic, painful, or terminal illness (Taylor, Wood and Lichtman, 1983; Affleck and Tennen, 1991; Gibbons and Gerard, 1991; Tennen and Affleck, 1997; Wood and VanderZee, 1997). Tennen, McKee and Affleck (2000) reviewed 23 studies and found that patients with severe illness often make downward social comparisons. Taylor, Wood and Lichtman (1983) conducted a study with breast cancer patients and observed that despite their poor fate, they believed they could cope with the disease better than other patients. The findings suggest that thinking about how fortunate they are compared to others helps women cope better with the disease. These results are also confirmed by studies with arthritis patients (DeVellis et al., 1991).

Upward Social Comparison

Upward social comparison refers to the processes by which people evaluate themselves in comparison to those perceived to be better off on a particular dimension. People often compare themselves to others to improve their performance because others who are better than they are provide them with helpful information. (Guyer and Vaughan-Johnston, 2018). Researchers have claimed that assimilation with the target leads to self-improvement in upward social comparison (Taylor and Lobel 1989; Wood 1989; Collins 1996). Positive affect is associated with the recognition of similarities (assimilation) between oneself and the target of upward social comparison. On the other hand, people may feel uncomfortable when they are inferior to the comparison targets because it counteracts what Festinger (1954) called the "drive upward," i.e., the urge to achieve the highest level of performance attainable.

How the upward social comparison affects the individual depends on the way the comparison information is processed (Muller and Fayant, 2010). A comparative evaluation can be viewed in the same way as a hypothesis testing. Individuals may assume either a dissimilarity or a similarity hypothesis while comparing themselves to a standard. Contrast effects (i.e., a shift in self-evaluation away from the reference value) result from the first hypothesis testing, whereas assimilation effects (i.e., a shift in self-assessment toward the reference value) result from the second (Collins, 1996; Mussweiler, 2003). Strict standards contribute to contrast effects (Morse and Gergen,

1970), whereas less strict standards contribute to assimilation effects (Mussweiler, Rüter and Epstude, 2004a, b).

According to social comparison theorists, being inferior to another is stressful and triggers negative affect (Brickman and Bulman, 1977; Tesser, 1991). Self-report studies have shown that upward social comparison elicits less pleasure and greater discomfort (Gastorf and Suls, 1978; Pleban and Tesser, 1981; Pyszczynski, Greenberg and LaPrelle, 1985) and more negative affect (Testa and Major, 1990; Major, Sciacchitano and Crocker, 1993; Kulik and Gump, 1997; Tyler and Feldman, 2005) than downward social comparison. To prevent social desirability, researchers have used a variety of assessment methods, such as evaluating videotaped facial expressions. In contrast to downward social comparison, some studies found that facial expressions of people in upward social comparison are sadder and less pleasant (Carlson and Masters, 1986; Masters, Carlson and Rahe, 1985). Studies using physiological parameters confirmed these findings. According to fMRI research, upward social comparison activates the anterior insula, whereas downward social comparison does not (Zink et al., 2008). This is particularly interesting because previous research has shown that this area is active and acts as an alarm system during emotional stress, the same affective state that occurs after social isolation (Eisenberger, Lieberman and Williams, 2003).

The self-evaluation threat hypothesis states that failure to meet standards triggers ruminative thoughts (Muller and Butera, 2007). Upward comparison-and the self-threat it contains-leads to ruminative thoughts because it is widely used as a standard. According to Muller and Butera (2007), these ruminative thoughts consume attentional resources and can be considered distractions when they occur during current activity. A phenomenon of attentional focusing would occur to manage both the task and the thoughts associated with self-threat: Stimuli that are only peripherally related to the accomplishment of the task are ignored (Geen, 1976). Thus, when these peripheral stimuli interfere with information processing, this attentional focus should improve performance. On the other hand, if peripheral stimuli are useful in addition to stimuli that are completely essential to mastering the task (i.e., central stimuli), attentional focusing should degrade performance.

1.3.4. Social Comparison Orientation

Individuals constantly encounter others who are superior or inferior to them in some areas. But not everyone is interested in such indications. Some people ignore the fact that they are superior or inferior to others, while some people are concerned about their place in relation to others (Buunk et al., 2003; Goodman, 1977). Numerous theorists suggest that some people are more inclined to social comparison than others (e.g., Gilbert, Giesler and Morris, 1995). People with high social comparison orientation have a persistent sensitivity to and awareness of others, and their self-concepts are more insecure and unstable (Gibbons and Buunk, 1999; Buunk and Gibbons, 2006). Gibbons and Gerrard (1995) first addressed social comparison orientation in their study of adolescent risk behavior. The study found that not only the favorability of an adolescent drinker's prototype, but also social comparison orientation of the participant determined the effect of the risk image. Researchers have concluded that there are certain differences in individuals' propensity to engage in social comparisons (White et al., 2006).

Personality traits influence social comparison processes in terms of orientation and direction (Diener and Fujita, 1997). Buunk and Gibbons (2007) identified a comparator archetype that is consistent with several personality traits. First, negative self-activation is strongly associated with a stronger social comparison orientation (Stapel and Tesser, 2001). Second, social comparison orientation involves a high preference for social interaction and having an interdependent self characterized by high levels of empathy, concern for the feelings of others, and sensitivity to the needs of others (Swap and Rubin, 1983). Finally, research indicates that negative affect and uncertainty about the self, indicative of low self-esteem, depression, and neuroticism, are associated with a greater tendency toward social comparison (Gilbert, Giesler and Morris, 1995; Gibbons and Buunk, 1999). People with low self-esteem appear to be more likely to compare themselves to others (Campbell, 1990). Individuals with depression are more prone to social comparison because of uncertainty about the self (Ahrens and Alloy, 1997). In a study measuring social comparison orientation, adolescents who had a higher tendency to make social comparisons exhibited risky behaviors such as alcohol use (Litt, Stock and Gibbons, 2015).

Recent studies in the relevant literature often show the relationship between social comparison orientation and social media use. Social network sites provide a suitable environment for social comparisons. People seem to be very interested in learning more about others on social network sites, as one of the most popular networking activities is to look at other users' profiles without any social interaction (Pempek, Yermolayeva and Calvert, 2009). In addition, people reported that they use social network sites to make social comparisons, especially when looking at the posts and photos of others (Lee, 2014). In a study measuring the relationship between social comparison orientation and Facebook use, high social comparison orientation was associated with higher Facebook use (Vogel et al., 2015). In another study, users with high social comparison orientation engage in upward social comparisons during the interaction, the more typical type of social comparison on social network sites (Yang, 2016). Moreover, Yang, Park and Song (2016) revealed a negative correlation between social comparison orientation on Facebook and mental health.

1.3.5. Constructive Social Comparison

The term constructive social comparison has been used to describe social comparisons that use information that is either irrelevant or only partially or incompletely consistent with reality, as opposed to realistic social comparison (Goethals, Messick and Allison, 1991; Goethals and Klein, 2000). Realistic social comparison refers to self-evaluations based on the use and analysis of actual information about social reality, whereas constructive social comparison refers to self-evaluations based on one's own thoughts, assumptions, beliefs, or reasoning about social reality. Constructive comparisons are usually self-serving and motivational (Goethals and Klein, 2000). While there is no absolute rule, constructive social comparisons are often biased rather than objective. Such social comparisons are cognitive constructs of social reality (Goethals, Messick and Allison, 1991).

Klein (1997) conducted an experiment with a false guideline to determine the aesthetically superior person by presenting pairs of photographs. Half of the participants were convinced that they had found the aesthetically superior one in 12 out of 20 photographs, and they were successful, while the other half believed that they had found the aesthetically superior one in 8 photographs, and they were unsuccessful. Looking at the group averages, some of the subjects who believed that they were

successful in 12 out of 20 photos were told that the average was 9.6, and the other part was told that the average was 14.4. Thus, some of the subjects are considered as successful, and some as unsuccessful according to the group norm. This experiment was used to investigate whether the objective or relative positions of the subjects were effective in self-evaluation. As a result, when participants rated their satisfaction with their own performance, it was found that their relative position, not their objective position, was effective (Teközel, 2007).

In a study conducted by Stapel and Blanton (2004), various photographs were shown over a very short period of time. As a result of the study, participants who saw the photo of a baby rated themselves as older than those who saw the photo of an older person. Participants who saw the photo of Albert Einstein rated themselves as less intelligent than those who saw the photo of a person with mental disabilities. Participants who saw the photo of Hitler indicated that they were friendlier than those who saw the photo of Gandhi. These studies show that social comparisons occur without the person being consciously involved. It appears that no extra effort is made for social comparison. It appears that comparisons occur automatically, i.e., spontaneously, and the person puts the main effort into overcoming the emotions experienced after the comparison.

1.3.6. Studies about Social Comparison and Social Anxiety

Social anxiety results from self-evaluations in real or imagined social situations (Schlenker and Leary, 1982). Previous research has shown that social comparison might trigger social anxiety. For example, Gilbert (2000) noted that upward social comparison might lead to increased social anxiety. Other researchers, on the other hand, proposed that socially anxious people compare themselves upward (Antony et al., 2005; Trower and Gilbert, 1989). They believe they are inferior to others (Roberts et al., 2011; Trower and Gilbert, 1989), which can lead to a self-perception that they lack a certain trait (Antony et al., 2005). Besides, some individuals are ranked lower than others, which can enhance mental access to negative self-evaluation and self-imagery in relationships with others and lead to greater social anxiety (Stein, 2015). Intense self-consciousness brought on by social comparisons can contribute to the thoughts of oneself as socially inept and even fearful of social situations (American Psychiatric Association, 2013). Although some studies have been reported a positive

relationship between social comparison and social anxiety, the number of studies directly examining the relationships between social comparison and social anxiety is very limited. Studies in this area are summarized below.

Although it did not focus directly on the relationship between social comparison and social anxiety and did not use the term social comparison, the study by Mahone, Bruch and Heimberg (1993) can be considered the first study to draw attention to this relationship. This study examined the extent to which perceptions of the other person contribute to social anxiety when engaging with a stranger. To do this, thought listing method was used in which participants had to list their thoughts for themselves and an interaction partner separately. Undergraduate male students performed two thought-listing protocols after seeing a picture of their partner in an upcoming contact and then having a 5-minute conversation with an attractive female confederate. The number of negative self-thoughts was negatively related to self-efficacy scores obtained before and during the dialog and positively related to anxiety after the dialog. The results support the idea that focusing on the positive attributes of others can increase social anxiety beyond that caused by negative thoughts about oneself.

One of the pioneering studies of social comparison processes in social anxiety disorder was conducted by Antony et al. (2005). The social comparison processes of 59 patients with social anxiety disorder and 58 non-clinical controls were examined using diaries. A modified version of the Rochester Social Comparison Diary (Wheeler and Miyake, 1992) was used, with the addition of questions about social anxiety and post-comparison reactions. For two weeks, all participants noted every social comparison they made in their daily lives. Participants with social anxiety disorder reported a higher percentage of upward social comparisons and a lower percentage of downward social comparisons than non-clinical controls. For each comparison, participants recorded all dimensions in which they compared themselves to others. Participants with social anxiety disorder compared themselves mainly in terms of personality (e.g., “I am boring” or “I am not coo”) and social skills (Moscovitch, 2009). Moreover, participants in the social anxiety group had more changes in affect as a result of social comparisons than participants in the control group. To illustrate, upward comparisons tended to increase anxiety and depression, especially in the socially anxious participants.

Cunha, Soares and Pinto-Gouveia (2008) examined the role of social comparison, in addition to inhibition, attachment, and parenting style, on social anxiety disorder in adolescents. The isolated effect of the individual variables was examined by comparing two clinical groups (i.e., social anxiety and other anxiety disorders) and a control group. The Social Comparison Scale, developed by Allan and Gilbert in 1995, was used in this study to assess how people compare themselves to others in their relationships and interactions. This scale focuses on social comparison considering its adaptive role in creating dominance and group cohesion hierarchies. Results indicate that social comparison has a significant impact on social anxiety, suggesting that socially anxious participants differ from other groups (healthy and other anxiety disorders) in their tendency to compare themselves negatively with others.

Aderka et al. (2009) examined social anxiety from an evolutionary perspective. The aim of the study was to determine the contribution of social rank and attachment to social anxiety and depression. A total of 102 subjects participated in the study. Self-report measures were used. The social comparison scale (Allan and Gilbert, 1995) was used to determine one's social rank in comparison to others. Results suggest that participants with high social anxiety engaged less favorable social comparisons.

Weisman et al. (2011) replicated the findings of Aderka et al. (2009) by examining perceptions of social rank and affiliation in a clinical sample. Participants with social anxiety disorder were compared to participants with other anxiety disorders and healthy controls. Perceived social rank relative to others was measured using the Social Comparison Scale (Allan and Gilbert, 1995). Results suggest that participants with social anxiety disorder were more likely to make unfavorable social comparisons and less likely to make favorable social comparisons.

Jiang and Ngien (2020) examined the impact of social media use on social anxiety with a cross-sectional online survey study in Singapore. There were 388 participants in this study. The Iowa Netherlands Comparison Orientation Measure was used to assess social comparison (Gibbons and Buunk, 1999). Results showed that Instagram use did not lead to an increase in social anxiety. Social comparison and self-esteem, on the other hand, served as mediators.

Goodman et al. (2021) aimed to explore the dynamics of everyday social comparisons in the context of social anxiety, analyzing 8.396 different records from 273 participants in two experience sampling studies. In Study 1, college students participated in a 3-week diary study, whereas in Study 2, a clinical sample of individuals diagnosed with social anxiety disorder and a mentally healthy comparison group participated in a 2-week ecological momentary assessment study. Results suggest that social anxiety was linked to fewer favorable and more unstable social comparisons. Also, favorable social comparisons were linked to stronger positive affect and reduced negative affect and social anxiety.

Mitchell and Schmidt (2014) conducted the only experimental study in this field. The aim of the study is to examine the relationship between self-appraisal, social anxiety, and social comparison. The study involved 105 undergraduate students. They were randomly assigned to read reports of high-performing or average-performing hypothetical classmates. Then, they placed a check mark on a line to rate themselves in comparison to him/her. They rated themselves on personality traits and anxiety symptoms. The middle of the line on the scale is titled "Student you read about." The anchor on the right half of the line was titled "Better than the student you read about." The anchor on the left half of the line was titled "Worse than the student you read about." On a given dimension, a mark to the left of the center indicates a more negative assessment of oneself compared to classmates in reports. The degree of positive or negative self-assessment on a dimension was expressed in centimeters by the distance of the checkmark from the center. In all situations, social anxiety symptoms were associated with more negative appraisals of their own personality than the classmates in the reports. Individuals with high levels of social anxiety tended to make less favorable social comparisons. Higher levels of social anxiety were associated with a more negative appraisal of one's own personality compared to the personality of the classmates in the report. Participants with high levels of social anxiety were more inclined to make negative social comparisons.

A conclusion can be drawn from this literature review. There are few studies that directly address the relationship between social comparison processes and social anxiety. Almost half of these studies have discussed the relationship between social comparison and social anxiety from an evolutionary perspective, emphasizing the

adaptive role of social comparison (e.g., Cunha, Soares, and Pinto-Gouveia, 2008; Aderka et al., 2009; Weisman et al., 2011). In some of these studies, researchers discovered the role of social comparison even by accident when they examined the relationship of social anxiety to various other concepts. For example, Mahone, Bruch, and Heimberg (1993) found that more negative self-evaluations and positive attributes of others increase social anxiety. Here, focusing on the positive attributes of others relative to themselves could be related to upward social comparison processes. Again, in the study conducted by Jiang and Ngien (2020), the main aim was to examine the relationship between social media and social anxiety. Social comparison orientation was used as a mediator variable. Thus, there was no direct research between social comparison and social anxiety. However, this study is important because it is the only known study that uses the social comparison orientation in social anxiety so far. Some studies have measured social comparison processes using diaries (e.g., Antony et al., 2005; Goodman et al., 2021) or experimental methods (e.g., Mitchell and Schmidt, 2014). However, these studies did not report results related to participants' social comparison orientations, but rather assessed the content of social comparisons.

Social comparison orientation involves a high preference for social interaction (Swap and Rubin, 1983). Also, research indicates that negative affect and uncertainty about the self, indicative of low self-esteem, depression, and neuroticism, are associated with a greater tendency toward social comparison (Gilbert, Giesler, and Morris, 1995; Gibbons and Buunk, 1999). Therefore, the relationship between social comparison orientation and social anxiety was examined in this thesis. In this aspect, this study adds new data to the literature regarding the measurement of the social comparison process via social comparison orientation, as the above studies have addressed either the content or direction of social comparisons.

1.4. Aim of the Present Study

Social anxiety disorder is characterized by a strong fear of being negatively evaluated by others in one or more social situations, including social interactions, social performance, or observation situations (APA, 2013). In addition to being negatively evaluated by others, negative self-evaluation also plays an important role in the maintenance of social anxiety disorder (Clark and Wells, 1995; Rapee and Heimberg, 1997). Social comparison is thought to play a key role in negative self-evaluation

(Suls, Martin and Wheeler, 2002; Wood, 1996). In social comparison theory, Festinger (1954) proposed that people who are uncertain of their own opinions and/or abilities compare themselves to others in order to evaluate their own situation. The direction of comparison, i.e., whether one is compared with those who are better-off (upward social comparison) or worse-off (downward social comparison), forms the basis of the theory (Latané, 1966).

People with social anxiety have some dysfunctional thoughts and beliefs about their own behavior and the way others evaluate that behavior. This situation causes these individuals to make cognitive errors (Beck, Emery and Greenberg 2005). Cognitive distortions are cognitive structures that are driven by a person's important beliefs or schemas and occur when information processing is ineffective or inaccurate (Beck, 2011). For example, people with high social anxiety tend to underestimate the quality of their performance (Stopa and Clark, 1993; Bögels et al., 2002; Christensen, Stein and Means-Christensen, 2003; Voncken and Bögels, 2008; Voncken et al., 2010) and appear to show a positive bias when evaluating the performance of others (Alden and Wallace, 1995).

The idea that social comparison processes may play a role in the tendency to evaluate oneself negatively is not new. However, such attention has focused almost exclusively on individuals with depressed mood. There is evidence that social comparison processes may serve to maintain or even reinforce the negative self-evaluation associated with dysphoric mood (Antony et al., 2005). Previous studies have shown the relationship between social comparison and depression (Swallow and Kuiper, 1990; 1992). Social anxiety has much in common with depression and dysphoric mood, which is associated with social comparison processes. To illustrate, social anxiety and depression share cognitive features, including negative self-evaluation (Clark, Beck and Alford, 1999) and perfectionistic thinking tendencies (Antony et al., 1998). For this reason, it is quite plausible to expect a relationship between social anxiety and social comparison processes.

Humans are naturally inclined to connect with others. As a social being, interaction with others is important to both the physical and mental health of the individual. Nevertheless, studies in the general population show that the lifetime prevalence of

social anxiety disorder ranges from 4% to 13% (Morrison, 2019), and considering these numbers, social anxiety disorder is the most common anxiety disorder (Stein and Stein, 2008). In this context, examining the relationship between social anxiety and social comparison processes is the main goal of this thesis. Research suggests a positive correlation between social comparison and cognitive distortions. Also, a distorted self-image is considered one of the maintaining factors for social anxiety (Schreiber and Steil, 2003). Therefore, the mediating role of cognitive distortions and dysfunctional social self-beliefs in relation between social comparison orientation and social anxiety will be also examined. Moreover, it is anticipated that the knowledge gained through this study will provide a new perspective to existing cognitive-behavioral approaches and will benefit clinicians in treatment planning.

1.5. Research Questions

1. Is there a mediating role of cognitive distortions in the relationship between social comparison processes and social anxiety?
2. Is there a mediating role of dysfunctional social self-beliefs in the relationship between social comparison processes and social anxiety?

1.6. Hypotheses

1. Participants with high social anxiety will have higher scores than participants with low social anxiety on social comparison orientation scale, upward social comparison scale, cognitive distortions scale, and dysfunctional social thoughts and beliefs scale.
2. Participants with high social anxiety will have lower scores than participants with low social anxiety on downward social comparison scale.
3. Participants will have higher scores on upward social comparison scale than downward social comparison scale.
4. There is a significant positive relationship between social anxiety and social comparison orientation, cognitive distortions, and dysfunctional social self-beliefs.
5. Cognitive distortions will significantly mediate the relationship between social anxiety and social comparison orientation.
6. Dysfunctional social self-beliefs will significantly mediate the relationship between social anxiety and social comparison orientation.

CHAPTER 2: METHOD

This chapter consists of four main parts: participants, measurements, procedure, and statistical analysis, respectively.

2.1. Participants

In this thesis project, a total of 208 participants (105 females and 103 males) were included by using the convenience sampling technique. There were two inclusion criteria: 1) being voluntary for participation; and 2) being 18 years old and above. The age range of the participants was between 20 and 68 years (M = 39.86, SD = 14.31).

For the level of education variable, one participant graduated from primary school (0.5%); one participant graduated from secondary school (0.5%); seven participants graduated from high school (3.4%). One hundred and eleven participants had bachelor's degrees (53.4%); 76 participants had master's degrees (36.5%); and 12 participants had doctoral degrees (5.8%).

For the employment status variable, 133 participants reported themselves as being working (63.9%), while 75 did not (36.1%). For the socioeconomic status variable, 22 participants had income below 3000₺ (10.6%); 43 participants between 3001-5000₺ (20.7%); 31 participants between 5001-7000₺ (14.9%); 35 participants between 7001-10.000₺ (16.8%); 77 participants above 10.001₺ (37.0%).

For the marital status variable, 43 participants did not have a relationship (20.7%); 50 participants had a relationship (24.0%); 107 participants were married (51.4%); seven participants were separated (3.4%); and one participant was widowed (0.5%).

Finally, 38 participants had a physical disorder (18.3%), while 170 participants did not (81.7%). 30 participants had a psychiatric disorder (14.4%), while 178 participants did not (85.6%). 25 participants used medication (12.0%), while 183 did not (88.0%). 38 participants had a psychotherapy experience (18.3%), while 170 did not (81.7).

Demographic characteristics of participants (level of education, employment status, socioeconomic status, marital status, whether they have a physical disorder or not,

whether they have a psychiatric disorder or not, whether they use medication or not, whether they have a psychotherapy experience or not) were summarized in Table 5.

Table 5. Demographic Characteristics of the Participants.

Study Variables		*N*	%
Gender	Female	105	50.5
	Male	103	49.5
Level of education	Primary school	1	0.5
	Secondary school	1	0.5
	High school	7	3.4
	Bachelor's degree	111	53.4
	Master's degree	76	36.5
	Doctoral degree	12	5.8
Employment status	Working	133	63.9
	Not working	75	36.1
Socioeconomic status	Below 3000₺	22	10.6
	3001 - 5000₺	43	20.7
	5001 - 7000₺	31	14.9
	7001 – 10.000₺	35	16.8
	Above 10.001	77	37.0
Marital status	In a relationship	50	24.0
	Not in a relationship	43	20.7
	Married	107	51.4
	Separated	7	3.4
	Widow	1	0.5
Physical disorder	Yes	38	18.3
	No	170	81.7
Psychiatric disorder	Yes	30	14.4
	No	178	85.6
Medication use	Yes	25	12.0
	No	183	88.0
Psychotherapy experience	Yes	38	18.3
	No	170	81.7

2.2. Measurements

A total of six scales and a Participant Information Form were employed in this study. The scales are, Liebowitz Social Anxiety Scale, Social Comparison Orientation Scale, Upward Comparison Scale, Downward Comparison Scale, Cognitive Distortions Scale, and Social Thoughts and Beliefs Scale. An Informed Consent Form (Appendix B) was also presented to inform the participants about the study and take their consent. In this section, all these scales will be introduced in detail.

2.2.1. Participant Information Form

The Participant Information Form was created by the researcher to obtain detailed information about the demographic characteristics of the participants. The form is composed of several questions about participants' age, gender, level of education, employment status, socioeconomic status, marital status, physical and/or psychiatric disorder, family psychopathology, medication use, therapy experience, smoking, alcohol, and substance use (Appendix C).

2.2.2. Liebowitz Social Anxiety Scale

Liebowitz Social Anxiety Scale was employed to determine the social anxiety levels of the participants (Appendix D). Liebowitz Social Anxiety Scale, developed by Liebowitz (1987), aims to determine the situations in which individuals with social anxiety symptoms exhibit fear/anxiety and/or avoidance behaviors. Liebowitz Social Anxiety Scale consists of twenty-four items, of which 11 items refer to social interaction situations and the rest of them to about performance situations. The participant is asked to evaluate the level of fear/anxiety and frequency of avoidance behavior for each item, illustrating a situation that has been experienced or assumed to have been experienced, and to fill on a four-point Likert scale (Fear/Anxiety: 0 = none, 1 = mild, 2 = moderate, 3 = severe; Avoidance: 0 = never, 1= occasionally, 2 = often, 3 = usually). A total score is calculated by the sum of all scores obtained from the fear/anxiety and avoidance subscales. The total score can range from 0 to 144. Higher scores indicate that participants have high levels of social anxiety. Heimberg et al. (1999) examined the psychometric properties of the scale. Accordingly, the Cronbach's alpha coefficient values for all items and subscales were found to vary between .81 and .92.

Soykan, Özgüven and Gençöz (2003) carried out the validity and reliability study of the Turkish adaptation of the Liebowitz Social Anxiety Scale. The Cronbach's alpha coefficient was found to be 0.98 for the whole scale. The Cronbach's alpha coefficients of the fear/anxiety and avoidance subscales were found to be 0.96 and 0.95, respectively. The test-retest reliability coefficients of the whole scale and the subscales were found to be 0.97. Interrater reliability coefficients were found to be 0.96 for the whole scale and fear/anxiety subscale and 0.95 for the avoidance subscale. The cut-off scores were determined as 25 for the fear/anxiety and avoidance subscales and 50 for the total scale. This study showed that the Turkish version of the Liebowitz Social Anxiety Scale is a highly valid and reliable measurement tool. In this study, the Cronbach alpha value of the scale was found to be .94.

2.2.3. Iowa-Netherlands Comparison Orientation Measure

Iowa-Netherlands Comparison Orientation Measure was employed to determine the social comparison tendencies of the participants (Appendix E). Based on Festinger's (1954) social comparison theory, Iowa-Netherlands Comparison Orientation Measure was developed by Gibbons and Buunk in 1999. The scale aims to determine individual differences in social comparison tendency, which means the frequency of comparing oneself with others. The Iowa-Netherlands Comparison Orientation Measure consists of eleven items and two factors, namely comparison of the abilities and comparison of the opinions. There are two reverse items in each subscale. The participant is asked to evaluate the tendency of self-comparisons with others, and to fill on a five-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree). A total score is calculated by the sum of all scores. The total score can range from 11 to 55. Higher scores indicate that participants have high level of social comparison orientation. The Cronbach's alpha coefficient values for all items and subscales were found to vary between .77 and .85.

Teközel (2000) performed the validity and reliability study of the Turkish adaptation of the Iowa-Netherlands Comparison Orientation Measure. In adaptation studies of the scale, the correlations between the Turkish and English forms were found to be .87 ($p < .000$). The Cronbach's alpha coefficient was found to be 0.82 for the whole scale. The Exploratory Principal Component Analysis using the Varimax Rotation Method revealed two factors, which explained .37 and .14 of the total variances, respectively.

The item-total correlations ranged between .26 and .65. In line with the above, it may be concluded that the Turkish adaptation of the scale is a reliable measurement tool to assess social comparison orientation. In this study, the Cronbach alpha value of the scale was found to be .83.

2.2.4. Upward Social Comparison Scale and Downward Social Comparison Scale

In the literature, there are not any measurement tools specifically assessing upward and/or downward social comparisons. The initial attempt of the Iowa-Netherlands Comparison Orientation Measure yielded 34 items, with seven upward and seven downward comparisons (Gibbons and Buunk, 1998). Gibbons and Buunk (in preparation) developed but did not publish an upward and downward social comparison scale. In this thesis, these Upward Social Comparison Scale and Downward Social Comparison Scale are employed to assess the direction of social comparison (Appendix F). Both scales consist of six items. The participant is asked to rate the items on a five-point Likert scale, anchoring from 1 “strongly disagree” to 5 “strongly agree” as in Iowa-Netherlands Comparison Orientation Measure. The scale scores are calculated by summing and averaging all scores. Higher scores indicate that the participant has either more upward or downward social comparisons.

Teközel (2000) performed the validity and reliability study of the Turkish adaptation of both scales. For the Upward Social Comparison Scale, the Cronbach's alpha coefficient was found to be 0.83. The item-total correlations ranged between .52 and .70. The Exploratory Principal Component Analysis revealed a single factor, which explained .55 of the total variances. In this study, the Cronbach alpha value of the scale was found to be .89. For the Downward Social Comparison Scale, the Cronbach's alpha coefficient was found to be 0.85. The item-total correlations ranged between .50 and .67. The Exploratory Principal Component Analysis revealed a single factor, which explained .56.8 of the total variances. In this study, the Cronbach alpha value of the scale was found to be .91.

2.2.5. Cognitive Distortions Scale

The Cognitive Distortions Scale was employed to detect how frequently participants use cognitive distortions (Appendix G). This scale was developed by Covin and

Dozois (2011) so that researchers and clinicians evaluate 10 important cognitive distortions. Covin and Dozois named the scale “Types of Thinking Scale”, which was a more neutral expression, to minimize the possibility of creating a defensive reaction by creating prejudice in participants. It is composed of small stories describing cognitive distortions in a way that participants can easily understand.

Cognitive distortions (mindreading, catastrophizing, all-or-nothing thinking, emotional reasoning, labeling, mental filter, overgeneralization, personalization, should statements, minimizing the positive) are evaluated under interpersonal and achievement dimensions in the scale. The participant is asked to evaluate how often they tend to use these distortions on a 7-point Likert scale (1 = Never, 7 = All the time). The Cronbach's alpha coefficient was found to be 0.85 for the whole scale. The Cronbach's alpha coefficient for the interpersonal subscale was found to be 0.75; it was found to be .79 for the achievement subscale. A total score is calculated by the sum of all scores. The total score can range from 20 to 140. Higher scores indicate that participants have a high tendency to use cognitive distortions.

Ardanıç (2017) carried out the validity and reliability study of the Turkish adaptation of the Cognitive Distortions Scale. The Cronbach's alpha coefficient was found to be 0.88 for the whole scale. The Cronbach's alpha coefficients of the interpersonal and achievement subscales were found to be 0.75 and 0.79, respectively. The test-retest reliability coefficients of the whole scale and the subscales were found to be 0.92. In this study, the Cronbach alpha value of the scale was found to be .95.

2.2.6. Social Thoughts and Beliefs Scale

The Social Thoughts and Beliefs Scale was used to examine the underlying thoughts and beliefs of social anxiety (Appendix H). Turner et al. (2003) developed the Social Thoughts and Beliefs Scale to evaluate the presence of distinct dysfunctional cognitions in social anxiety. The scale consists of twenty-one items and two subscales, namely social comparison and social ineptness. The participant is asked to rate the degree of the particular thought or belief during a social encounter, and to fill on a five-point Likert scale (1 = Never characteristic, 2 = rarely characteristic, 3 = sometimes characteristic, 4 = often characteristic, 5 = always characteristic). A total score is calculated by the sum of all scores together and subtracting 21 from the total.

The final score can range from 0 to 84. Higher scores mean that participant has more dysfunctional social thoughts and beliefs. Cronbach's alpha coefficient for the total score was found to be .96. Cronbach's alpha coefficients for two subscales were found to be .95 and .93 for social comparison and social ineptness, respectively.

Doğan and Totan (2010) carried out the validity and reliability study of the Turkish adaptation of Social Thoughts and Beliefs Scale. The Cronbach's alpha coefficient was found to be 0.90 for the whole scale. The Cronbach's alpha coefficients of social comparison and social ineptness subscales were found to be 0.88 and 0.77, respectively. The test-retest reliability coefficients of the whole scale and the subscales were found to be between 0.77 and 0.88. The item-total correlations ranged between .11 and .66. In this study, the Cronbach alpha value of the scale was found to be .95.

2.3. Procedure

The study began after ethics committee approval by the Scientific Research and Publication Ethics Committees of the Izmir University of Economics. Due to the Covid-19 pandemic, face-to-face data collection was considered to be risky. Therefore, each scale was converted into an online survey format, and the study was conducted online via Google Forms. Participants were reached through different social media platforms such as Instagram, Facebook, Twitter, WhatsApp, and e-mail groups. Participation criteria included being a volunteer for participation, being over the age of 18, and being a native Turkish language.

At the beginning of the study, individuals were informed about the aim of the thesis, procedure and length of the study, voluntary participation, confidentiality, anonymity, and right to withdraw. Then, those who consented to participate were included in the study as participants. The participants were required to fulfill the scales in the following order: Participant Information Form, Liebowitz Social Anxiety Scale, Iowa-Netherlands Comparison Orientation Measure, Upward Social Comparison Scale, Downward Social Comparison Scale, Cognitive Distortions Scale, and Social Thoughts and Beliefs Scale. The study took approximately twenty minutes.

2.4. Statistical Analysis

G*Power analyses were performed to determine the required number of participants. According to the results of different G*Power analyses conducted for several statistical tests, the maximum number of participants that should be reached was determined as 128.

The Statistical Package for Social Sciences (SPSS) version 20 and PROCESS v3.5 (Hayes, 2013) were run for the statistical analyses. The whole data were screened to check if there were any missing data. Before the main analyses, preliminary analyses were conducted. Preliminary analyses included descriptive statistics and normality analyses for all continuous variables, and reliability analyses of the scales.

For descriptive statistics, mean, standard deviation, percentage, and frequency scores were calculated. Normality was checked through skewness and kurtosis values. In this study, all values, both for skewness and kurtosis, fell between (-1.50) and (+1.50) which are the critical values for normality (Tabachnick and Fidell, 2007). Reliability analyses were examined via Cronbach's Alpha and all scales showed high reliability for this sample.

In order to examine the relationships among study variables (i.e., social anxiety, social comparison, cognitive distortions, and dysfunctional social self- beliefs), correlation analyses were performed. For group differences, independent and dependent *t*-test analyses were conducted. Finally, mediation analyses were employed to investigate the mediating roles of cognitive distortions and dysfunctional social self-beliefs. The mediation model used in the study is presented Figure 1.

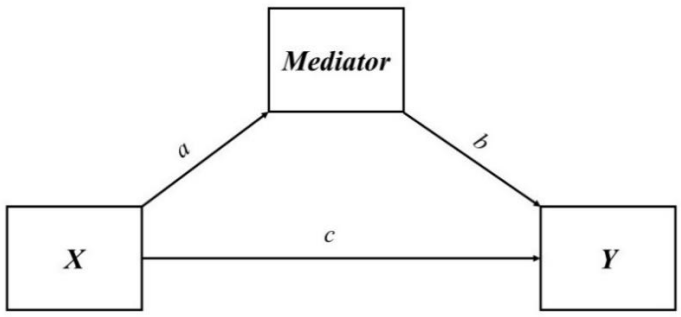

Figure 4. The mediation model used in the study.

CHAPTER 3: RESULTS

This chapter consists of two main parts: Preliminary analyses and main analyses, respectively. Preliminary analyses include reliability tests, normality checks, and descriptive statistics. Main analyses include group differences in study variables, relationships among study variables, and simple mediation analyses.

3.1. Preliminary Analyses

3.1.1. Reliability Tests

In order to measure the reliability of the scales used in this study, Cronbach's Alpha values were calculated. All scales had high Cronbach's Alpha values, indicating that the items had considerable high internal consistency (Table 6).

Table 6. Cronbach's Alpha Values of All Scales Used in This Study.

Scales	α
Liebowitz Social Anxiety Scale	.94
Anxiety	.91
Avoidance	.89
Social Comparison Orientation Scale	.83
Ability	.82
Opinions	.66
Upward Social Comparison Scale	.89
Downward Social Comparison Scale	.91
Cognitive Distortions Scale	.95
Interpersonal	.90
Personal Achievement	.90
Social Thoughts and Beliefs Scale	.95
Social Comparison	.91
Social Ineptness	.90

3.1.2. Normality

In order to check the normality of the study variables, skewness and kurtosis values were calculated (Table 7). All variables provided skewness and kurtosis values fell

between (-1.50) and (+1.50) which are the critical values for normality (Tabachnick and Fidell, 2007).

Table 7. Skewness and Kurtosis Values of All Variables Used in This Study.

Variables	Skewness	Kurtosis
Social Anxiety	0.566	-0.117
Social Comparison Orientation	-0.286	0.105
Upward Social Comparison	-0.116	-0.334
Downward Social Comparison	0.444	-0.109
Cognitive Distortions	0.836	0.453
Dysfunctional Social Self-Beliefs	1.060	1.384

3.1.3. Descriptive Statistics

In order to obtain the descriptive statistics of the study variables, means (*M*), standard deviations (*SD*), maximum (*Max*), and minimum (*Min*) scores were calculated (Table 8).

Table 8. Descriptive Statistics of the Study Variables.

Variables	*M*	*SD*	*Max*	*Min*
Social Anxiety	34.07	19.52	96	0
Anxiety	20.53	11.87	63	0
Avoidance	13.53	9.64	48	24
Social Comparison Orientation	35.92	7.17	51	15
Abilities	17.62	4.99	30	6
Opinions	18.30	3.16	24	5
Upward Social Comparison	3.05	0.90	5	1
Downward Social Comparison	2.33	0.82	5	1
Cognitive Distortions	54.00	21.44	121	21
Interpersonal	28.38	11.28	63	11
Personal Achievement	25.60	10.80	59	10
Social Thoughts and Beliefs	19.90	13.57	67	0
Social Comparison	19.60	7.13	46	10

Table 8. Descriptive Statistics of the Study Variables (Continued).

Social Ineptness	21.31	7.05	47	11

3.2. Main Analyses

3.2.1. Between-Group Differences

Gender

Independent samples *t*-tests were conducted to compare the scores of social anxiety, social comparison orientation, upward social comparison, downward social comparison, cognitive distortions, and social thoughts and beliefs in female and male participants (Table 9). Female and male participants showed similar social anxiety scores. There was not a significant difference in social anxiety scores for female and male participants; $t(206) = -0.11$, $p > .05$. On the other hand, there was a significant difference in social comparison orientation scores for female participants ($M = 37.47$, $SD = 6.72$) and male participants ($M = 34.34$, $SD = 7.29$); $t(206) = 3.21$, $p < .05$, $d = .45$. The upward social comparison scores for female participants ($M = 3.23$, $SD = 0.85$) and male participants ($M = 2.87$, $SD = 0.92$) are significantly different, $t(206) = 2.93$, $p < .05$, $d = .34$. There was a significant group difference for downward social comparison, showing that female participants female participants ($M = 2.50$, $SD = 0.86$) reported higher scores than male participants ($M = 2.16$, $SD = 0.74$); $t(202.65) = 3.02$, $p < .05$, $d = .42$. There was a significant difference in cognitive distortions scores for female participants ($M = 61.22$, $SD = 22.50$) and male participants ($M = 46.59$, $SD = 17.55$); $t(196.12) = 5.23$, $p < .05$, $d = .73$. The social thoughts and beliefs scores for female participants ($M = 22.56$, $SD = 14.35$) were significantly higher than male participants ($M = 17.19$, $SD = 12.22$); $t(206) = 2.90$, $p < .05$, $d = .40$. In brief, results indicated that female participants had higher scores than male participants in all study variables except social anxiety.

Table 9. Independent Samples T-Tests Results Regarding Study Variables and Gender.

Variables	Female Participants		Male Participants			
	M	*SD*	*M*	*SD*	*t*	*d*
Social Anxiety	33.92	19.11	34.21	20.03	-0.11	.02
Social Comparison Orientation	37.47	6.72	34.34	7.29	3.22*	.45

Table 9. Independent Samples T-Tests Results Regarding Study Variables and Gender Continued).

Upward Social Comparison	3.23	0.85	2.87	0.92	2.93*	.34
Downward Social Comparison	2.50	0.86	2.16	0.74	3.02*	.42
Cognitive Distortions	61.22	22.50	46.59	17.55	5.23*	.73
Social Thoughts and Beliefs	22.56	14.35	17.19	12.22	2.90*	.40

*$p < .05$

Participants with Low and High Social Anxiety

Participants were divided into two groups (i.e., low anxiety group vs. high anxiety group) regarding their social anxiety scores. A cut-off score (50) suggested by Soykan, Özgüven, and Gençöz (2003) was used. First, independent samples *t*-tests were conducted to compare the scores of social comparison orientation, cognitive distortions, and social thoughts and beliefs in participants with low and high social anxiety (Table 10). There was not a significant difference in social comparison orientation scores for participants with low and high social anxiety scores; t(206) = -1.44, p > .05. However, there was a significant difference in cognitive distortions scores for participants with low (M = 51.72, SD = 20.18) and high (M = 63.17, SD = 24.12) social anxiety scores, $t(206) = -3.13$, $p < .05$, $d = .52$. Participants with high social anxiety used cognitive distortions more frequently than participants with low social anxiety. There was also a significant difference in social thoughts and beliefs scores for participants with low (M = 17.13, SD = 10.58) and high (M = 31.20, SD = 18.05) social anxiety scores, $t(46.96) = -14.06$, $p < .05$, $d = .95$. Participants with high social anxiety had more dysfunctional thoughts and beliefs in social situations than participants with low social anxiety.

Table 10. Independent Samples T-Tests Results Regarding Study Variables and Social Anxiety Scores.

Variables	Low Social Anxiety (N = 167)		High Social Anxiety (N = 41)			
	M	*SD*	*M*	*SD*	*t*	*d*
Social Comparison Orientation	35.56	6.92	37.37	8.04	-1.44	.24
Cognitive Distortions	51.72	20.18	63.17	24.12	-3.13*	.52

Table 10. Independent Samples T-Tests Results Regarding Study Variables and Social Anxiety Scores (Continued).

Social Thoughts and Beliefs	17.13	10.58	31.20	18.05	-14.06*	.95

*$p < .05$

3.2.2. Within-Group Differences

Paired samples *t*-test was conducted to compare the direction of the comparisons (i.e., upward social comparison and downward social comparison) (Table 11). There was a significant difference in scores for upward social comparison ($M = 3.05$, $SD = 0.90$) and downward social comparison ($M = 2.33$, $SD = 0.82$); $t(207) = 11.21$, $p < .05$, $d = .92$. Participants more frequently compared themselves to people who they think they were in superior positions.

Table 11. Paired Samples T-Tests Results Regarding Comparison Directions.

Direction of Comparison	Upward Social Comparison		Downward Social Comparison			
	M	*SD*	*M*	*SD*	*t*	*d*
	3.05	0.90	2.33	0.82	11.21*	.92

*$p < .05$

3.2.3. Correlation Analyses

Pearson product-moment correlation coefficients were calculated to assess the relationship among age, social anxiety, social comparison, cognitive distortions, and social thoughts and beliefs (Table 12). There was not a correlation between age and social anxiety, $r = -.06$, $p > .05$. On the other hand, there were weak correlations between age and social comparison, $r = -.30$, $p < .05$; age and cognitive distortions, $r = -.39$, $p > .05$; age and social thoughts and beliefs, $r = -.24$, $p < .05$. As age increases, the social comparison, cognitive distortions, and social thoughts and beliefs decrease. There were weak positive correlations between social anxiety and social comparison orientation, $r = .20$, $p < .05$; social anxiety and cognitive distortions, $r = .24$, $p < .05$; and a moderate positive correlation between social anxiety and social thoughts and beliefs, $r = .53$, $p < .05$. As social anxiety increases, social comparison, cognitive distortions, and social thoughts and beliefs also increase. There were moderate positive correlations between social comparison and cognitive distortions, $r = .52$, $p < .05$; and

social comparison and social thoughts and beliefs, $r = .42$, $p < .05$. As social comparison increases, cognitive distortions and social thoughts and beliefs increase. There was a strong positive correlation between cognitive distortions and social thoughts and beliefs, $r = .63$, $p < .05$. As cognitive distortions increase, social thoughts and beliefs increases.

Table 12. Pearson Correlation Coefficients Among Variables.

	Social Anxiety	Social Comparison Orientation	Cognitive Distortions	Social Thoughts and Beliefs
Social Anxiety	1			
Social Comparison Orientation	.20*	1		
Cognitive Distortions	.28*	.52*	1	
Social Thoughts and Beliefs	.53*	.42*	.63*	1

*$p < .05$

3.2.4. Mediation Analyses

Mediation analysis was conducted to investigate the mediating role of cognitive distortions and dysfunctional social self-beliefs in relation between social comparison and social anxiety. Simple Mediator Analysis suggested by Hayes (2013) was run through PROCESS Model 4. In this analysis, social comparison was predictor variable, social anxiety was outcome variable, and cognitive distortions and social thoughts and beliefs were mediators. The significance of the mediating variables was determined by 5000 bootstrap samples and a 95% confidence interval.

The Mediating Role of Cognitive Distortions in Relation Between Social Comparison Orientation and Social Anxiety

The first mediation analysis was performed to examine the mediating role of cognitive distortions in relation between social comparison orientation and social anxiety. The mediation model was given in Figure 5.

The results indicated that social comparison orientation significantly predicted cognitive distortions, b = 1.54, t = 8.65, p < .05. Social comparison orientation explained 27% of the variance in cognitive distortions, and the positive b value indicated a positive relationship. As social comparison orientation increased, cognitive distortions increased. Social comparison orientation did not significantly predict social anxiety, with the presence of cognitive distortions in the model, b = 0.21, t = 1.00, p > .05. However, cognitive distortions significantly predicted social anxiety, b = 0.22, t = 3.09, p < .05. This model explained 8% of the variance in social anxiety, and since the b value was positive, there was a positive relationship. As cognitive distortions increase, social anxiety also increases. When cognitive distortions were not in the model, social comparison orientation significantly predicted social anxiety, b = 0.55, t = 2.97, p < .05, explaining 4% of the variance in social anxiety. The variance explained by the model when the mediator involved was more than the model in which the predictor existed only. There was a significant indirect effect of social comparison orientation on social anxiety through cognitive distortions, b = 0.34, 95% BCa CI [.005, .029]. For the standardized indirect effect, b = 0.13, 95% BCa CI [.038, .211]. Bootstrapped confidence intervals do not include zero. Therefore, cognitive distortions played a mediator role in relation between social comparison orientation and social anxiety. As a conclusion, high social comparison tendencies predicted high levels of social anxiety when mediated by cognitive distortions.

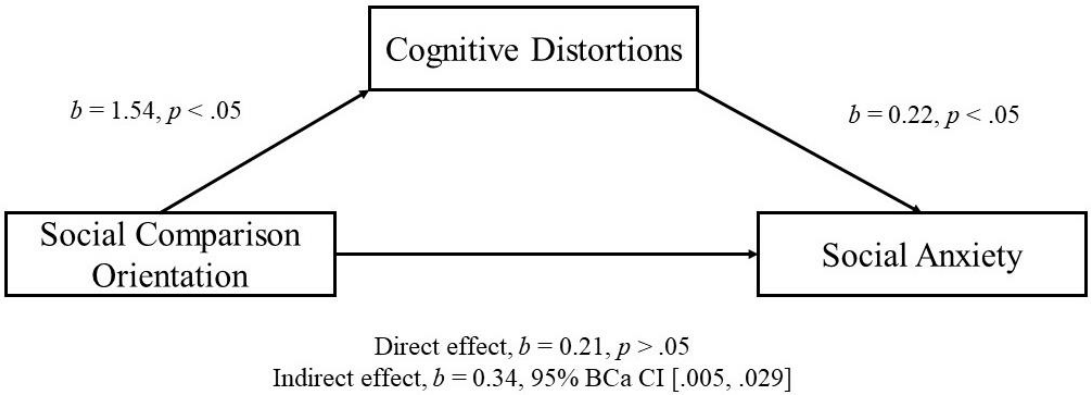

Figure 5. The mediation pathway for the relationship among social comparison orientation and social anxiety, mediated by cognitive distortions.

The Mediating Role of Dysfunctional Social Self-Beliefs on the Relationship Between Social Comparison and Social Anxiety

The second mediation analysis was performed to examine the mediating role of dysfunctional social self-beliefs in relation between social comparison orientation and social anxiety. The mediation model was given in Figure 6.

Social comparison significantly predicted social thoughts and beliefs, $b = 0.80$, $t = 6.71$, $p < .05$. There was a positive relationship. Social comparison explained 18% of the variance in social thoughts and beliefs, and the positive b value indicated a positive relationship. As social comparison increased, social thoughts and beliefs increased. Social comparison did not significantly predict social anxiety, with the presence of social thoughts and beliefs, $b = -0.07$, $t = -0.37$, $p > .05$. However, social thoughts and beliefs significantly predicted social anxiety, $b = 0.77$, $t = 8.16$, $p < .05$. This model explained 28% of the variance in social anxiety, and since the b value was positive, there was a positive relationship. As social thoughts and beliefs increased, social anxiety also increased. When social thoughts and beliefs were not in the model, social comparison significantly predicted social anxiety, $b = 0.55$, $t = 2.97$, $p < .05$. When the mediator was not in the model, social comparison explained 4% of the variance in social anxiety. The variance explained by the model when the mediator involved was more than the model in which the predictor existed only. There was a significant indirect effect of social comparison on social anxiety through cognitive distortions, $b = 0.62$, 95% BCa CI [.387, .854]. For the standardized indirect effect, $b = 0.23$, 95% BCa CI [.144, .308]. Bootstrapped confidence intervals do not include zero. Therefore, social thoughts and beliefs played a mediator role in relation between social comparison and social anxiety. As a conclusion, high social comparison tendencies predicted high levels of social anxiety when mediated by social thoughts and beliefs.

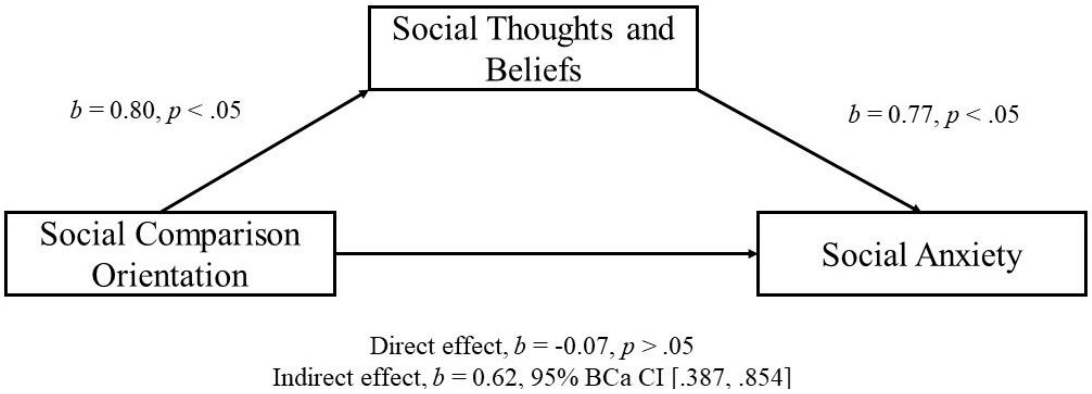

Figure 6. The mediation pathway for the relationship among social comparison orientation and social anxiety, mediated by social thoughts and beliefs.

CHAPTER 4: DISCUSSION

The purpose of this study was to examine the mediating role of cognitive distortions and dysfunctional social self-beliefs in the relationship between social comparison processes and social anxiety. First, the gender differences between groups in social anxiety, social comparison orientation, upward social comparison, downward social comparison, dysfunctional social self-beliefs, and cognitive distortions will be discussed. Results showed that females scored higher than males on all measures except social anxiety. In addition, results demonstrated that participants with high social anxiety scored higher than participants with low social anxiety on all measures, although not significantly on all of them. Second, differences within groups in the direction of social comparison (i.e., upward comparison and downward comparison) will be discussed. Results suggested that study participants tended to make more upward comparisons than downward comparisons. Third, the relationships between social anxiety and social comparison orientation, cognitive distortions, and dysfunctional social self-beliefs will be highlighted. There is a significant relationship between all variables. Finally, the mediating role of cognitive distortions and dysfunctional social self-beliefs in the relationship between social comparison orientation and social anxiety will be discussed. The mediating role of two variables proved to be significant.

4.1. Between-Group Differences

4.1.1. Gender

The results suggest that social comparison orientation, upward comparison, downward comparison, dysfunctional social self-beliefs, and cognitive distortions differ significantly by gender. In contrast, there were no significant gender differences in social anxiety.

Female participants scored higher than male participants on all measures related to social comparison. In other words, female participants compare themselves to others more frequently in each direction of comparison. These results are consistent with the literature (e.g., Gibbons and Buunk, 1999; Guimond et al., 2007; Keech, Papakroni, and Podoshen, 2020). In both the United States and the Netherlands, Gibbons and Buunk (1999) discovered a small but significant gender effect, with females showing

greater interest in social comparisons than males. Gibbons and Buunk's (1999) findings have been confirmed and extended in cross-cultural research on social comparison processes. Guimond et al. (2007) also discovered a strong gender effect on social comparison orientation among individuals from France, Belgium, and Malaysia, as well as the Netherlands and the United States. There may be several reasons for this result. First, the results suggest that people who have a strong social comparison orientation also have a strong communal orientation. This is consistent with the finding that the social comparison orientation scale is positively correlated with the communal orientation scale (Clark et al., 1987, Gibbons and Buunk, 1999). Cross and Madson (1997) reported that females have a stronger interpersonal/communal orientation than males. According to Gibbons and Buunk (1999), "the prototypical image of a person with a strong comparison orientation describes a person who is interpersonally rather than introspectively oriented and attentive to the reactions of others." Therefore, one of the reasons why females are more prone to social comparison processes is due to differences in self-construal between females and males. It is well known that concern for others, referred to as interdependent, communal, collectivistic, or relational self-construal is considered typical of females (Holland et al., 2004). On the other hand, concern for self and lack of concern for others, labelled independent, individualistic, separate, or agency self-construal seems to be more typical of males (Josephs, Markus, and Tafarodi, 1992; Smith et al., 2020). Therefore, one might expect that gender differences in social comparison orientation could be explained by differences in self-construal. In addition, social comparison orientation correlates positively and most strongly with neuroticism in the Five-Factor Model of Personality (John, Naumann, and Soto, 2008). Thus, it may not be unexpectable that females scored higher than males on social comparison, considering that studies suggest that females have higher neuroticism than males (Costa, Terraciano, and MaCrae, 2001; Schmitt et al., 2008, Lippa, 2010, Weisberg, Deyoung, and Hirsh, 2011; Mac Giolla and Kajonius, 2018).

Female participants scored higher than male participants on all measures related to cognitive biases. More clearly, female participants had more dysfunctional social self-belief and cognitive distortions. In the literature, Thomas and Fletcher (2003) found that cognitive distortions, particularly mindreading, are more common in females and showed that females think more about what is going on others' minds whom they have

a relationship. Similarly, Kılıç and Sevim (2005) found that females had more cognitive distortions than males. Females' tendency to be relationship-oriented and to think about relationships increases mindreading. Roberts (2015) also found a difference in the frequency and intensity of cognitive distortions in another community sample, with females reporting cognitive distortions significantly more intense and more frequently. In another study, Maurya, Sharma, and Asthana (2016) examined gender differences in cognitive distortions and depression. That study showed that cognitive distortions and depression are influenced by gender and that females have higher levels of cognitive distortions and depression than males. However, Oliver and Baumgart (1985) examined gender differences in dysfunctional attitudes and their results indicated no significant gender differences. The conflicting results of the studies are most likely due to the use of different measures of cognitive distortions (by simply writing what they believed their partners were thinking or feeling, Interpersonal Cognitive Distortions Scale, Dysfunctional Attitudes Scale, Cognitive Distortions Scale). From another perspective, it has been hypothesized that gender differences may be related to males ignoring psychological symptoms in order to conform to societal expectations of masculinity. As clinical and community-based samples have shown, symptom underreporting may be influenced by social desirability factors related to masculinity norms (Smith et al., 2018). Although men reported greater cognitive distortions and stressful life changes in Sowa and Lustman's (1984) study, women reported greater effects of their stressors and higher rates of depression. Women's perception of stress and their greater openness in expressing affective symptoms may lead to higher rates of depression among them. In the same study, the frequency of cognitive distortions was even three times more likely to predict depressed mood in women than in men (Sowa and Lustman, 1984).

The results showed that there was no significant difference between male and female participants in terms of social anxiety. When examining the relevant literature, one finds that there is no clear answer to the question of whether social anxiety changes as a function of gender. The Epidemiologic Catchment Area (ECA) study, which surveyed 18.572 people, found more modest rates of social phobia—2.3 percent in males and 3.2 percent in females (Bourdon et al., 1988). The National Comorbidity Survey (NCS), which surveyed 8.098 individuals, found social anxiety was the most common anxiety disorder, with a lifetime prevalence of 15 percent in females and 11

percent in males (Kessler et al., 1994). The rates in both studies show a gender ratio of 1 to 1.4. Several reports have described features of social anxiety disorder. Neither the NCS nor the ECA study reported gender differences in the specific fears associated with social anxiety, although the frequency of fears is generally higher in females (Bourdon et al., 1988; Curtis et al., 1998). In some clinical cohorts (Turk et al., 1998), but not all (Edelmann, 1985), females reported higher severity of social anxiety and, in particular, higher severity of various performance-related anxieties. Few studies have examined possible gender differences in a clinical course. One epidemiologic study found no differences between males and females in the onset of social anxiety or duration of illness (Bourdon et al., 1988).

In brief, a number of studies found that social anxiety disorder is more prevalent in females than in males (e.g., Schneier et al., 1992; Wittchen, Stein, and Kessler, 1999; Furmark, 2002; DeWit et al., 2005; Fehm et al., 2008; Lee et al., 2009; Xu et al., 2012 Asher and Aderka, 2018), while some population studies do not find any significant gender differences in social anxiety disorder (e.g., Bourdon et al., 1988; Lee, Lee, and Kwok, 2005). In clinical samples, social anxiety disorder appears to be as prevalent in males as in females (e.g., Turk et al., 1998; Yonkers, Dyck, and Keller, 2001). As mentioned above, researchers consider various variables such as prevalence, onset, pattern of comorbidity, severity, degree of impairment, treatment readiness, clinical presentation (i.e., number of social fears, type of fears), and remission rates when examining gender differences in social anxiety. While the result of one study report prevalence, another study could represent the tendency to seek treatment. This could be one of the reasons for the inconsistency of gender differences. However, gender differences were prominent in the types of social situations that males and females fear. Compared to males, females are more likely to fear professional situations such as job interviews, talking to an authority figure, and appearing in a meeting. Females were also more likely than males to fear an important exam and eating and drinking in front of others. Males, on the other hand, were more likely to fear dating (Xu et al., 2012). Perhaps the lack of difference between males and females may be due to the fact that the measurement instruments for social anxiety equally give place these different domains. The difference could be due to the differentiation of the social situations that the measurement instruments predominantly capture, and the fact that the proportions of the different social situations are weighted according to one gender.

Furthermore, because the study sample was not a clinical sample, it may have been difficult to detect a gender difference in terms of social anxiety. If the same study is repeated with participants diagnosed with social anxiety disorder, it may be possible to detect a gender difference.

4.1.2. Level of Social Anxiety

At the beginning of the study, it was hypothesized that participants with high social anxiety would have higher scores on the social comparison orientation scale, the upward social comparison scale, the cognitive distortions scale, and the dysfunctional social thoughts and beliefs scale than participants with low social anxiety. It was also expected that participants with high social anxiety would have lower scores on the downward social comparison scale than participants with low social anxiety. The results, however, suggested that there were no significant differences in social comparison orientation and upward comparison in relation to social anxiety. In contrast, downward comparison, dysfunctional social self-beliefs, and cognitive distortions differ significantly by social anxiety.

Participants with high social anxiety scored higher on the downward comparison than participants with low social anxiety, in contrast to the upward comparison. Because Clark and Wells (1995) argue that socially anxious people have unrealistically high standards, participants with high social anxiety were expected to make more upward comparisons than participants with low social anxiety in this study. Therefore, this result is contrary to the expectations. This result also contradicts the findings of Antony et al. (2005), who found that participants with social anxiety disorder reported a higher percentage of upward comparisons and a lower percentage of downward comparisons than nonclinical controls. However, theories of self-enhancement assume that people compare themselves to lower-status targets in order to feel better about their current situation (Wills, 1981; Wood, Taylor, and Lichtman, 1985). Wills (1981) argued that negative affect and low subjective well-being trigger a downward comparison process that leads to self-enhancement. High negative affect and low positive affect are indispensable aspects social anxiety (Hofmann et al., 2012). The discovery that people who have experienced adversity tend to feel better when they compare themselves to those who are worse-off has led to a focus on studies of patient and victim groups, particularly those suffering from chronic, painful, or terminal illness (Taylor, Wood,

and Lichtman, 1983; Affleck and Tennen, 1991; Gibbons and Gerard, 1991; Tennen and Affleck, 1997; Wood and VanderZee, 1997). Upward and downward comparison theory explains the relationship between social comparison and mental health. As mentioned in introduction part, downward social comparison is comparing oneself to someone who is performing worse in relation to the object of comparison. The perception that one is better off reduces anxiety and boosts self-esteem (Wills, 1981). Upward social comparison is comparison along a comparison object with someone who performs better. Comparing oneself to someone who is more competent can deflate the ego and negatively affect mental health (Dijkstra et al., 2008). According to Brickman and Bulman (1977), upward social comparison may be stressful and avoided, so that worse-off others are selected for comparative information. Cheng et al. (2008) found that downward social comparison among 205 older individuals lowered depression rates. These results were confirmed by Wheeler (2000), who added that low self-esteem has a stronger negative effect on upward social comparison. Buunk et al. (2007) reported that upward social comparison leads to a significant decrease in life satisfaction and downward social comparison leads to an improvement in life satisfaction. Moreover, the fact that the downward social comparison score is significantly higher for individuals with high social anxiety than for individuals with low social anxiety could be related to the safety behaviors in social anxiety. Many safety-seeking activities are internal mental processes, even though they are referred to as behaviors. People reduce or prevent the state of anxiety through safety behaviors (Clark and Wells, 1995; Clark, 2001). Similarly, Goodman et al. (2021) suggested that downward social comparisons may be a form of coping with stressors, referred to as "at least" statements (e.g., "at least I am not as impaired as these people").

Although the tendency for social comparison (i.e., social comparison orientation) was higher in participants with high social anxiety than in participants with low social anxiety, this difference did not prove to be significant. Social comparison orientation is the general tendency to compare oneself with others (Buunk et al., 2007). There are individual differences in social comparison orientation, as some people do not care how they perform in comparison to others, while other people value evaluating their performance relative to others. Social comparison orientation is the degree of social comparison used in daily life, regardless of the object of comparison. The impact of social comparison on mental health can be influenced by a person's personal level of

social comparison orientation. There are studies in the literature that show that frequent social comparison behavior has a negative correlation with mental health (Tessar, Millar, and Moore, 2000; Thwaites and Dagnan, 2004; White et al., 2006; Steers, Wickham, and Acitelli, 2014). Buunk et al. (2007) examined the effect of social comparison orientation on individuals' social lives in terms of their satisfaction with their relationships. Participants were randomly assigned to either the upward or downward comparison condition. Then, social comparison orientation was measured. Participants who were presented with a comparison subject with a very unsatisfactory social life rated their own social life better than participants who were presented with a comparison subject with a very satisfactory social life. However, this effect was only observed in individuals who exhibited a high social comparison orientation. This suggests a moderating effect, as the relationship between upward or downward social comparison and satisfaction differs depending on the degree of social comparison orientation. In summary, numerous studies consistently find a relationship between social comparison orientation and mental health outcomes. Therefore, social comparison orientation is expected to have a negative impact on mental health outcomes. One of the reasons that the differences between groups in this study did not reach the significance level could be self-report measures. People are reluctant to admit that they make social comparisons (Brickman and Bulman, 1977; Hemphill and Lehman, 1991). Another reason could be related to automaticity (Gilbert, Giesler, and Morris, 1995), as people may not be aware that they are making social comparisons. In short, it may be because some people self-report social comparisons, others refuse to pay attention to clues about their own social comparison, and others are unaware of this information. Indeed, this tendency in itself explains individual differences in social comparison orientation.

Participants with high social anxiety had more dysfunctional social self-beliefs and cognitive distortions than participants with low social anxiety. This is not unexpected, as cognitive theories of anxiety disorders point to key features, such as cognitive schemas or beliefs, that cause people to process information with biases, focus all their attention on threats, and catastrophically misinterpret ambiguous cues (Clark and Beck, 2011; Beck, Emergy, and Greenberg, 2005). Specifically, numerous cognitive theories (e.g., Clark and Wells, 1995; Rapee and Heimberg, 1997; Heimberg, Brozovich, and Rapee, 2010) explaining the development and maintenance of social

anxiety disorder typically emphasize dysfunctional social self-beliefs (Wong and Rapee, 2016). People with high levels of social anxiety have certain distorted thoughts and beliefs about their own behavior and about how others judge them. This type of interpretation leads to cognitive errors (Beck, 2005). Thus, the finding of this study is consistent with the literature. For instance, in both nonclinical (Wong and Moulds, 2011; Wong, Moulds, and Rapee, 2014; Wong et al., 2017) and clinical samples (Wong et al., 2017), numerous researchers have highlighted positive relationships between dysfunctional social self-beliefs and social anxiety. In addition, people with anxiety disorders were found to have higher cognitive distortions than healthy individuals (Clark and Beck, 2011). To illustrate, Schwartz and Maric (2015) found that mindreading and underestimation of coping skills were predictors of anxiety. A study conducted with nonclinical undergraduates showed that cognitive distortions appeared to be highly associated with social anxiety scores (Morrison et al., 2015). Tairi, Adams, and Zilikis (2016) found that overgeneralization was the strongest predictor of anxiety.

In conclusion, the results showed that participants with high social anxiety tended to make more social comparisons (upward, downward, and in general) and to think in a biased manner.

4.2. Within Group Differences

It was hypothesized that participants (overall) would have higher scores on the upward social comparison scale than on the downward social comparison scale. The results indicate that study participants had a tendency to make more upward comparisons than downward comparisons, which is consistent with the literature. Researchers have spent a great deal of time trying to determine the normative direction of social comparisons. According to that study, people compare themselves with others who have similar but slightly higher abilities than themselves (Wood, 1989). This is what Festinger (1954) called unidirectional drive upward. For example, participants in an achievement test wanted to know the scores of others who ranked one or two places higher after they learned their own scores (Wheeler et al., 1969). People who compare themselves in "real" dimensions with "real" targets also choose to make upward comparisons. When asked to choose individuals with whom they would compare themselves in a range of playing conditions, bridge players named peers with objectively better performance

than their own (Nosanchuk and Erickson, 1985). There are some explanations for this finding as well. When people identify others who perform better than they do, it can provide useful information that helps them improve their own performance. Self-enhancement through assimilation to the target can also be achieved through upward comparisons (Collins 1996; Taylor and Lobel 1989; Wood 1989). Recognizing similarities (assimilation) between oneself and the target of an upward comparison has been associated with positive affect.

4.3. Correlations

As hypothesized, the results suggested a positive correlation between social anxiety and social comparison orientation. As social comparison orientation increased so did social anxiety. Although no significant difference was found between participants with high and low social anxiety, it has been proven that increased social comparison orientation is associated with heightened social anxiety. As far as known, there is no study that directly examines the relationship between social comparison orientation and social anxiety. However, considering studies that found a negative relationship between frequency of social comparison and mental health (Tesser, Millar, and Moore, 2000; Thwaites and Dagnan, 2004; White et al., 2006; Steers, Wickham, and Acitelli, 2014), the present finding is not surprising. There is also a growing literature on the relationship between frequent social comparison and negative affect (Van der Zee, Buunk, and Sanderman, 1996; Lyubomirsky and Ross, 1997; Lyubomirsky, Tucker, and Kasri, 2001). Researchers have indicated that high negative affect plays a central role in both social anxiety and depressive disorders (Hofmann et al., 2012). Another explanation could be related to the fact that socially anxious people tend to evaluate themselves negatively and there has been considerable research on the relationship between negative self-evaluation and social comparison processes (Antony et al., 2005).

In line with the literature, the results of the study also revealed a positive correlation between social anxiety and cognitive distortions. Participants who had higher cognitive distortions also reported higher levels of social anxiety. This is an expected finding, as cognitive models of social anxiety suggest that people with social anxiety have distorted beliefs about 1) the threat that exists in their social world and their ability to perform in that world, 2) the likelihood of negative consequences in social

situations, and 3) the high cost of such consequences when they occur. In a correlational study, female university students completed a series of tests assessing irrational beliefs, social anxiety and avoidance behaviors, and performance anxiety. Findings of the study revealed a positive relationship between distorted beliefs and interpersonal anxiety, test anxiety, and public speaking anxiety (Goldfried and Sobocinski, 1975). According to Johnson (1989), highly socially anxious people selected a higher percentage of distorted responses on the Cognitive Distortion Questionnaire than less socially anxious people. In the study conducted by Kuru et al., (2017), compared to healthy controls, patients with social anxiety disorder exhibited more cognitive distortions. Also, research shows that socially anxious people may have distortions in evaluating social information. As a result of such distortions, their anxiety levels increase (Kaczkurkin and Foa, 2022). Schwartz and Maric (2015) found a link between anxiety and cognitive distortions also in children and adolescents.

The results also confirmed the hypothesis that social anxiety and dysfunctional social self-beliefs are positively correlated. All theories that deal with social anxiety from a cognitive perspective assume that negative thoughts and dysfunctional cognitive schemas are in the background of experienced anxiety and fear. When socially anxious people have to perform in front of others, they are intensely confronted with the thought of not being able to meet the expectations of the audience, being humiliated, and being ridiculed, which increases their level of anxiety (Doğan and Sapmaz, 2008). Stopa and Clark's (1993) study examining cognitive processes in social phobia provided important information. In that study, patients with social anxiety disorder were compared with patients with obsessive-compulsive disorder, other anxiety disorders (e.g., panic disorder, generalized anxiety disorder, and simple phobia), and healthy controls. The results of the study can be summarized as follows: Socially anxious patients evaluate themselves more negatively than patients with other anxiety disorders and healthy controls. Contrary to the expected, socially anxious patients' beliefs that they will be negatively evaluated by others did not differ from those of patients with other anxiety disorders and healthy control subjects. This finding indicates that socially anxious patients' thoughts focus on their self-evaluation and not on the evaluation of others. Socially anxious patients have more negative thoughts than healthy controls, but there is no difference between patients with other anxiety disorders and socially anxious patients in the frequency of negative thoughts and the

strength of their belief in those negative thoughts. Socially anxious patients consider their social skills to be much more limited and inadequate than patients with other anxiety disorders and healthy subjects. Others also rate the social skills of socially anxious patients as more inadequate than the social skills of patients with other anxiety disorders and normal subjects. Socially anxious patients also rate their own social skills more negatively than others rate their social skills.

4.4. Mediation Analyses

The first mediation analysis was conducted to investigate the mediating role of cognitive distortions in the relationship between social comparison orientation and social anxiety. These results suggest that there was a significant indirect effect of social comparison orientation on social anxiety through cognitive distortions. In other words, cognitive distortions played a mediating role in the relationship between social comparison orientation and social anxiety. The implication is that high social comparison tendencies predict high levels of social anxiety when mediated by cognitive distortions.

The second mediation analysis was conducted to investigate the mediating role of dysfunctional social self-beliefs in the relationship between social comparison orientation and social anxiety. These results revealed that there was a significant indirect effect of social comparison orientation on social anxiety through dysfunctional social self-beliefs. In other words, participants who reported higher levels of social comparison orientation reported more dysfunctional social self-beliefs, which in turn, related to higher levels of social anxiety. The implication is that high social comparison tendencies predict high levels of social anxiety when mediated by dysfunctional social self-beliefs.

Festinger (1954) noted that people with social anxiety disorder make unfavorable social comparisons. An evolutionary ethological approach to social anxiety assumes that social anxiety arises from a particular form of social comparison (Trower and Gilbert, 1989). Goodman et al. (2021) suggested that social comparisons are important for the phenomenology of social anxiety. A growing body of research suggests a link between social anxiety and negative self-evaluation. One of the social-cognitive mechanisms involved in mediating this relationship is social comparison (Antony et

al., 2005). Although negative self-evaluations play a large role in cognitive models of social anxiety (Clark and Wells, 1995; Hofmann, 2007; Rapee and Heimberg, 1997), empirical research on social comparison is sparse. Not much is known about how socially anxious people evaluate themselves relative to others, or how these evaluations evolve over time or relate to daily emotional experiences (Goodman et al., 2021). Preliminary evidence comes from a small research group. Aderka et al. (2009) reported that characteristics of social anxiety symptoms were associated with less favorable social comparisons. These findings were confirmed by Weisman et al. (2011), who found that people with social anxiety disorder made less favorable social comparisons than people with other anxiety disorders or mentally healthy individuals. In an experimental study, college students were randomly assigned to read (false) reports from either high-performing or moderate-performing classmates (Mitchell and Schmidt, 2014). In all situations, social anxiety symptoms were associated with more negative appraisals of their own personality than the profile in the study. Individuals with high levels of social anxiety tended to make less favorable social comparisons. Antony et al. (2005) asked participants with social anxiety disorder and nonclinical controls to note every social comparison they made in their daily lives for two weeks, using an ecological momentary assessment method. Participants with social anxiety disorder reported a higher percentage of upward comparisons and a lower percentage of downward comparisons than non-clinical control subjects. For each comparison, participants recorded all dimensions in which they compared themselves to others. The main areas in which people with social anxiety disorder made comparisons were their personality (e.g., “I am boring” or “I am not cool”) and their social skills (Moscovitch, 2009), which look like either an automatic thought or a core belief. In this study, the relationship between social comparison orientations and social anxiety was revealed. Therefore, this study adds new data to the literature regarding the measurement of the social comparison process via social comparison orientation, because the studies mentioned above have addressed either the content (performance and ability) or direction (upward and downward) of social comparisons.

Social comparison processes have been identified as possible key links between self-evaluation and social environment. Individuals can gain a lot of important information from social comparisons, but they can also be very harmful in some situations. Therefore, several aspects of the social comparison process can lead to chronically

poor self-evaluations (Swallow and Kuiper, 1988). Of course, not everyone who makes social comparisons has a chronically negative self-evaluation. In this context, the hypothesis that cognitive distortions or dysfunctional social self-beliefs have mediating roles could be considered. In a study with a sample of 230 individuals, Iskric (2019) found a significant positive correlation between socio-emotional comparisons and cognitive distortions. A distorted self-image is considered one of the maintaining factors for social anxiety (Schreiber and Steil, 2003). Moscovitch (2009) suggested that the main fear of people with social anxiety disorder is revealing their own attributes, which they perceive as inferior compared to other people. In other words, people with social anxiety primarily worry about traits that they perceive as deficient or that conflict with perceived social expectations or norms. Certain social cognitions and perceptions are thought to be able to create and maintain distorted view of self (Swallow and Kuiper, 1988). There seems to be a vicious circle between cognitive distortions and social anxiety. It is like two phenomena that are mutually dependent.

Cognitive biases distort fear of evaluative information in ways that reinforce and maintain social anxiety symptoms and extend the cognitive-behavioral model of social anxiety disorder (Rapee and Heimberg, 1997; Heimberg et al., 2010). When individuals experience fear of social evaluation, it triggers thought patterns associated with evaluation. When these thought patterns involve a stronger expectation of social threat, individuals are more likely to filter out their positive social outcomes, which in turn contributes to social anxiety symptoms that go beyond fear of judgment (Weeks and Howell, 2012). According to Clark and Wells (1995), social anxiety is associated with three types (i.e., high standard, conditional, and unconditional beliefs) of pervasive maladaptive self-beliefs that cause the person to view social and performance circumstances as threats that trigger anxiety. People with marked social anxiety have certain dysfunctional thoughts and beliefs about their own behavior and about how others judge them (Beck, 2005). As a result of dysfunctional beliefs and cognitive distortions in different situations, different clinical images may emerge (Clark and Beck, 2011; Beck, Emery, and Greenberg, 2005).

Thus, the results of the study indicate that social comparison is a critical factor in the experience of social anxiety and should be considered in treatment. From this

perspective, the study of cognitive biases resulting from the comparison process seems to be useful when working on social anxiety symptoms during the therapeutic process.

4.5. Limitations and Future Suggestions

In addition to the contributions the study makes to the literature and clinical practice, it also has some limitations. When reviewing the results of the study, it is important to consider these limitations.

The sample of the study consists of 208 people reached by the technique of convenience sampling, and did not show an even distribution in terms of people with high and low social anxiety. It appears that participants with low social anxiety outnumbered those with high social anxiety. It is believed that conducting future studies with a sample that has a relatively even distribution of social anxiety will increase generalizability. Therefore, it is concluded that the research findings are of limited generalizable in terms of differences between groups in social anxiety.

In this study, social comparison processes were measured using self-reports. However, it is well known that people are reluctant to admit that they make social comparisons (Brickman and Bulman, 1977; Hemphill and Lehman, 1991). Moreover, it is an automatic process (Gilbert, Giesler, and Morris, 1995) because people may not be aware that they are making social comparisons. People may also be concerned about their self-presentation (Wood, 1996). Moreover, some people easily disclose their social comparisons, while others prefer not to report them for reasons of social desirability. Moreover, some people are not even aware of this kind of information since the social comparison is usually an automatic process. Perhaps a different type of measurement, such as experimental methods (e.g., Mitchell and Schmidt, 2014), can override the reluctance of participants to articulate these tendencies that occur with self-report and make the automatic process more easily discernible.

This study was conducted with nonclinical participants. Although most hypotheses are confirmed, an examination of these variables with individuals suffering from social anxiety disorder would provide more reliable results. Future studies should therefore be conducted with the clinical population, investigating differences between clinical

and control groups for a better understanding of the nature of social anxiety disorder, social comparison, dysfunctional social self-beliefs, and cognitive distortions.

In this study, it was hypothesized that social comparison predicts social anxiety. However, the result that high socially anxious participants were more likely to make downward social comparisons leads to the assumption that downward social comparison could be a particular type of safety behaviors. Therefore, it might be considered that high social anxiety would predict downward social comparisons. For this reason, a future study examining the relationship between social anxiety and downward social comparison can contribute the related literature.

It is also suggested that the Covid-19 pandemic may be influencing this study. The study data were collected at a time when people stayed at home and seclude themselves from others to protect themselves for two years. Over the past two years, people with severe social anxiety have been able to avoid everyday tasks related to socialization that they may have found difficult. Some may feel that their anxiety has decreased significantly during this time because they have had a major break due to the pandemic. This could be the reason for the large difference in the number of participants in terms of social anxiety. This fact should be taken into account when interpreting data collected under pandemic conditions.

CHAPTER 5: CONCLUSION

The present study was the first to examine the mediating role of dysfunctional social self-beliefs and cognitive distortions in the relationship between social comparison orientation and social anxiety. It also compares upward and downward comparisons, indicating the direction of comparison.

In summary, this study shows that dysfunctional social self-beliefs and cognitive distortions have a significant mediating role in the relationship between social comparison orientation and social anxiety. In addition, it was found that while the general sample of the study had a tendency toward upward comparison, individuals with high social anxiety had a tendency toward downward comparison.

Thus, the study highlights that the tendency to social compare is associated with the experience of social anxiety and that this relationship is mediated by dysfunctional social self-beliefs and cognitive distortions. Consistent with the models explaining social anxiety disorder, the findings of the present study, also reveals that a distorted view of self plays a significant role in social anxiety.

Overall, the findings provide a critical and better understanding of concepts related to social comparison processes in social anxiety and contribute to the literature and clinical practice.

5.1. Clinical Implications

With the increase and severity of anxiety, irrational thoughts and dysfunctional self-beliefs are typical. Those suffering from anxiety often overestimate a threat or event and fear that something terrible will happen. This type of thinking often leads to the feeling that the event will be the “end of the world” and that they will not be able to handle it when it actually occurs. This combination is commonly referred to as irrational thinking, in which logical thinking is overridden catastrophized thinking. For some people, irrational thoughts are the root cause of their anxiety. The finding that social comparison processes affect social anxiety through dysfunctional social self-beliefs and cognitive distortions provides a new direction for research aiming to improve the treatment of social anxiety disorder.

There are numerous studies in the literature that examine the relationship between social comparison and depression. On the other hand, there are few studies that examine the relationship between social comparison and social anxiety. In fact, social anxiety has much in common with depression and dysphoric moods associated with social comparison processes. For this reason, it is quite plausible to expect a relationship between social anxiety and social comparison processes. Although there are studies that examine the relationship between social anxiety and cognitive distortions, there is no study that examines this within the framework of social comparison theory. This work is therefore intended to make an important contribution to the literature. It is anticipated that the knowledge gained with this study will add a new perspective to existing cognitive-behavioral approaches and will be useful to clinicians in treatment planning.

REFERENCES

Acarturk, C., de Graaf, R., van Straten, A., Have, M. T. and Cuijpers, P. (2008) *Social phobia and number of social fears, and their association with comorbidity, health-related quality of life and help seeking: a population-based study.* Social Psychiatry and Psychiatric Epidemiology, Vol. 43, No. 4, pp. 273-279.

Aderka, I. M., Hofmann, S. G., Nickerson, A., Hermesh, H., Gilboa-Schechtman, E. and Marom, S. (2012) *Functional impairment in social anxiety disorder.* Journal of Anxiety Disorders, Vol. 26, No. 3, pp. 393-400.

Aderka, I. M., Weisman, O., Shahar, G. and Gilboa-Schechtman, E. (2009) *The roles of the social rank and attachment systems in social anxiety.* Personality and Individual Differences, Vol. 47, No. 4, pp. 284-288.

Affleck, G. and Tennen, H. (1991) *Social comparison and coping with major medical problems.* 1st edition. In J. Suls and T. A. Wills (Eds.), Social comparison: Contemporary theory and research (pp. 369-93). Hillsdale, NJ: Lawrence Erlbaum Associates.

Ahmadi, M. and Bagheri, M. (2014) *Mediating role of cognitive distortions in the relationship of adolescents' body image with social anxiety.* International Journal of Behavioral Sciences, Vol. 7, No. 4, pp. 321-329.

Ahrens, A. H. and Alloy, L. B. (1997) *Social comparison processes in depression.* 1st edition. In B. P. Buunk and F. X. Gibbons (Eds.), Health, Coping, and Well-being: Perspectives From Social Comparison Theory (pp. 389-410). Mahwah, NJ: Erlbaum.

American Psychiatric Association. (1952) *Diagnostic and statistical manual of mental disorders.* 1st edition. Washington, DC: American Psychiatric Association.

American Psychiatric Association. (1968) *Diagnostic and statistical manual of mental disorders.* 2nd edition. Washington DC: American Psychiatric Association.

American Psychiatric Association. (1980) *Diagnostic and statistical manual of mental disorders*. 3rd edition. Arlington: American Psychiatric Publishing.

American Psychiatric Association. (1987) *Diagnostic and statistical manual of mental disorders*. 3rd edition., rev. Arlington: American Psychiatric Publishing.

American Psychiatric Association (1994) *Diagnostic and statistical manual of mental disorders*. 4th edition. Arlington: American Psychiatric Publishing.

American Psychiatric Association. (2000) *Diagnostic and statistical manual of mental disorders.* 4th edition., text rev. Arlington: American Psychiatric Publishing.

American Psychiatric Association (2013) *Diagnostic and statistical manual of mental disorders*. 5th edition. Arlington: American Psychiatric Publishing.

Alden, L. E. and Taylor, C. T. (2004) *Interpersonal processes in social phobia.* Clinical Psychology Review, Vol. 24, No. 7, pp. 857-882.

Alden, L. E. and Wallace, S. T. (1995) *Social phobia and social appraisal in successful and unsuccessful social interactions.* Behaviour Research and Therapy, Vol. 33, pp. 497-505.

Antony, M. M., Purdon, C. L., Huta, V. and Swinson, R. P. (1998) *Dimensions of perfectionism across the anxiety disorders.* Behaviour Research and Therapy, Vol. 36, pp. 1143-1154.

Antony, M.M., Rowa, K., Liss, A., Swallow, S.R. and Swinson, R.P. (2005) *Social comparison processes in social phobia.* Behavior Therapy, Vol. 36, pp. 65-75.

Ardanıç, P. (2017). *Bilişsel Çarpıtmalar Ölçeği'nin Türçeye uyarlanması geçerlik ve güvenirlik çalışması*. Unpublished Master's Thesis, İstanbul Arel Üniversitesi.

Arkowitz, H. (1977) *Measurement and modification of minimal dating behavior.* 1st edition. In Hersen, M., Eisler, R. M., and Miller, P. M. (Eds), Progress in Behavior Modification, 5. New York: Academic Press.

Arrindell, W.A., Emmelkamp, P.M.G., Monsma, A. and Brilman, E. (1983) *The role of perceived parental rearing practices in the aetiology of phobic disorders: a controlled study.* British Journal of Psychiatry, Vol. 143, No. 2, pp. 183-187.

Arrindell, W. A., Kwee, M. G. T., Methorst, G. J., van der Ende, J., Pol, E. and Morştz, B. J. (1989) *Perceived parental rearing styles of agoraphobic and socially phobic in-patients.* British Journal of Psychiatry, Vol. 155, No. 4, pp. 526-535.

Asher, M., and Aderka, I. M. (2018) *Gender differences in social anxiety disorder.* Journal of Clinical Psychology, Vol. 74, No. 10, pp. 1730-1741.

Bandelow, B., Torrente, A. C., Wedekind, D., Broocks, A., Hajak, G. and Rüther, E. (2004) *Early traumatic life events, parental rearing styles, family history of mental disorders, and birth risk factors in patients with social anxiety disorder.* European Archives of Psychiatry and Clinical Neuroscience, Vol. 254, No. 6, pp. 397-405.

Banerjee, R. and Henderson, L. (2001) *Social-cognitive factors in childhood social anxiety: A preliminary investigation.* Social Development, Vol. 10, No. 4, pp. 558-572.

Beck, A.T. (1976) *Cognitive therapy and the emotional disorders.* 1st edition. New York: International Universities Press.

Beck, A.T. (1983) *Cognitive therapy of depression: New perspectives.* 1st edition. In P. J. Clayton, and J. E. Barett (Eds.), Treatment of depression. Old controversies and new approaches (pp 265-284). New York: Raven Press.

Beck, A. T. (1991) *Cognitive therapy: A 30-year retrospective.* American Psychologist, Vol. 46, No. 4, pp. 368-375.

Beck, A. T., Emery, G. and Greenberg, R. L. (2005) *Anxiety disorders and phobias: A cognitive perspective.* 20th edition. New York: Basic Books.

Beck, A. T., Rush, A., Shaw, B. and Emery, G. (1979) *Cognitive Therapy of Depression.* 1st edition. New York: The Guilford Press.

Beck, J. S. (2011) *Cognitive behavior therapy: Basics and beyond*. 2nd edition. New York: Guilford Publications.

Beesdo, K., Bittner, A., Pine, D. S., Stein, M. B., Höfler, M., Lieb, R. and Wittchen, H. U. (2007) *Incidence of social anxiety disorder and the consistent risk for secondary depression in the first three decades of life.* Archives of General Psychiatry, Vol. 64, No. 8, pp. 903-912.

Bögels, S. M., Alden, L., Beidel, D. C., Clark, L. A., Pine, D. S., Stein, M. B. and Voncken, M. (2010*) Social Anxiety Disorder: Questions and Answers for the DSM-V*. Depression and Anxiety, Vol. 27, No. 2, pp. 168-189.

Bögels, S. M., Rijsemus, W. and De Jong, P. J. (2002) *Self-focused attention and social anxiety: The effects of experimentally heightened self-awareness on fear, blushing, cognitions, and social skills.* Cognitive Therapy & Research, Vol. 26, No. 4, pp. 461-472.

Brickman, P. and Bulman, R. J. (1977) *Pleasure and pain in social comparison.* 1st edition. In J. M. Suls and R. L. Miller (Eds.), Social comparison processes: Theoretical and empirical perspectives (pp. 149-186). Washington, DC: Hemisphere.

Brook, C. A. and Schmidt, L. A. (2008) *Social anxiety disorder: A review of environmental risk factors.* Neuropsychiatric Disease and Treatment, Vol. 4, No. 1, pp. 123-143.

Bruch, M. A. and Heimberg, R. G. (1994) *Differences in perceptions of parental and personal characteristics between generalized and nongeneralized social phobics*. Journal of Anxiety Disorders, Vol. 8, No. 2, pp. 155-168.

Bruch, M. A., Heimberg, R. G., Berger, P. and Collins, T. M. (1989) *Social phobia and perceptions of early parental and personal characteristics.* Anxiety Research, Vol. 2, No. 1, pp. 57-65.

Burns D. D. (1980) *Feeling good: The new mood therapy.* 1st edition. New York: Signet.

Butcher, J. N., Mineka, S. and Hooley, J. M. (2014) *Abnormal psychology.* 16th edition. Boston: Pearson.

Buunk, A. P. and Gibbons, F. X. (2006) *Social comparison orientation: A new perspective on those who do and those who don't compare with others.* 1st edition. In S. Guimond (Ed.), Social comparison and social psychology: Understanding cognition, intergroup relations, and culture (pp. 15-32). Cambridge: Cambridge University Press.

Buunk, A. P. and Gibbons, F. X. (2007) *Social comparison: The end of a theory and the emergence of a field.* Organizational Behavior and Human Decision Processes, Vol. 102, No. 1, pp. 3-21.

Buunk, A.P., Groothof, H.A.K. and Siero, F.W. (2007) *Social comparison and satisfaction with one'ssocial life.* Journal of Social and Personal Relationships, Vol. 24, No. 2, pp. 197-205.

Buunk, B. P., Zurriaga, R., Gonzalez-Roma, V. and Subirats, M. (2003) *Engaging in upward and downward comparisons as a determinant of relative deprivation at work: A longitudinal study.* Journal of Vocational Behavior, Vol. 62, No. 2, pp. 370-388.

Campbell, J. D. (1990) *Self-esteem and the clarity of the self-concept.* Journal of Personality and Social Psychology, Vol. 59, No. 3, pp. 538-549.

Carlson, C. R. and Masters, J. C. (1986) *Inoculation by emotion: Effects of positive emotional states on children's reactions to social comparison.* Developmental Psychology, Vol. 22, No. 6, pp. 760-765.

Cartwright-Hatton, S., Tschernitz, N. and Gomersall, H. (2005) *Social anxiety in children: social skills deficit, or cognitive distortion?* Behaviour Research and Therapy, Vol. 43, No. 1, pp. 131-141.

Caster, J. B., Inderbitzen, H. M. and Hope, D. (1999) *Relationship between youth and parent perceptions of family environment and social anxiety.* Journal of Anxiety Disorders, Vol. 13, No. 3, pp. 237-251.

Chavira, D. A. and Stein, M. B. (2005) *Childhood social anxiety disorder: from understanding to treatment.* Child and Adolescent Psychiatric Clinics, Vol. 14, No. 4, pp. 797-818.

Cheng, S. T., Fung, H. H. and Chan, A. C. (2008) *Living status and psychological well-being: Social comparison as a moderator in later life.* Aging and Mental Health, Vol. 12, No. 5, pp. 654-661.

Christensen, P. N., Stein, M. B. and Means-Christensen, A. (2003) *Social anxiety and interpersonal perception: A social relations model analysis.* Behaviour Research and Therapy, Vol. 41, No. 11, pp. 1355-1371.

Clark, D.M. (1999) *Workshop on cognitive therapy for social phobia & PTSD*. EABCT'99, Dresden.

Clark, D. M. (2001) *A cognitive perspective on social phobia.* 1st edition. In W. R. Crozier and L. E. Alden (Eds.), *International handbook of social anxiety: Concepts, research and interventions relating to the self and shyness* (pp. 405-430). New York: John Wiley & Sons Ltd.

Clark, D. A. and Beck, A. T. (2011). *Cognitive therapy of anxiety disorders: Science and practice.* 1st edition. New York: Guilford Press.

Clark, D. A., Beck, A. T. and Alford, B. A. (1999) *Scientific foundations of cognitive theory and therapy of depression.* 1st edition. Chichester, UK: Wiley.

Clark, D. M., and McManus, F. (2002) *Information processing in social phobia.* Biological Psychiatry, Vol. 51, No. 1, pp. 92-100.

Clark, D.M. and Wells, A. (1995) *A cognitive model of social phobia*. 1st edition. In R.G. Heimberg, M.R. Liebowitz, D.A. Hope and F.R. Schneier (Eds.), Social phobia: Diagnosis, assessment, and treatment (pp. 69-93). New York: Guilford Press.

Collins, R. L. (1996) *For better or worse: The impact of upward social comparison on self- evaluations.* Psychological Bulletin, Vol. 119, No. 1, pp. 51-69.

Corcoran, K., Crusius, J. and Mussweiler, T. (2011) *Social comparison: Motives, standards, and mechanisms.* 5th edition. In D. Chadee (Ed.), Theories in social psychology (pp. 119–139). New York: Wiley Blackwell.

Costa, P. T., Jr., Terracciano, A. and McCrae, R. R. (2001) *Gender differences in personality traits across cultures: Robust and surprising findings.* Journal of Personality and Social Psychology, Vol. 81, pp. 322–331.

Covin, R., Dozois, D. J., Ogniewicz, A. and Seeds, P. M. (2011) *Measuring cognitive errors: Initial development of the Cognitive Distortions Scale (CDS).* International Journal of Cognitive Therapy, Vol. 4, No. 3, pp. 297-322.

Cross, S. E. and Madson, L. (1997) *Models of the self: Self-construals and gender.* Psychological Bulletin, Vol. 122, No. 1, pp. 5-37.

Cunha, M., Soares, I. and Pinto-Gouveia, J. (2008) *The role of individual temperament, family and peers in social anxiety disorder: A controlled study.* International Journal of Clinical and Health Psychology, Vol. 8, No. 3, pp. 631-655.

Daniels, D. and Plomin, R. (1985) *Origins of individual differences in infant shyness.* Developmental Psychology, Vol. 21, No. 1, pp. 118-121.

Davidson, J. R., Krishnan, K. R. R., Charles, H. C. and Boyko, O. (1993) *Magnetic resonance spectroscopy in social phobia: preliminary findings.* The Journal of Clinical Psychiatry. Vol. 54, No. 12, pp. 19-25.

Demir, T., Karaçetin, G., Demir, D. E. and Uysal, O. (2013) *Prevalence and some psychosocial characteristics of social anxiety disorder in an urban population of Turkish children and adolescents.* European Psychiatry, Vol. 28, No. 1, pp. 64-69.

DeVellis, R. F., Blalock, S. J., Holt, K., Renner, B. R., Blanchard, L. W. and Klotz, M. L. (1991) *Arthritis patients' reactions to unavoidable social comparisons.* Personality and Social Psychology Bulletin, Vol. 17, No. 4, pp. 392-399.

Diener, E. and Fujita, F. (1997) *Social comparisons and subjective well-being.* 1st edition. In B. P. Buunk and F. X. Gibbons (Eds.), Health, coping, and well-being: Perspectives from social comparison theory (pp. 329-357). Mahwah NJ: Lawrence Erlbaum Associates Publishers.

Dijkstra, P., Kuyper, H., Van der Werf, G., Buunk, A. P. and van der Zee, Y. G. (2008) *Social comparison in the classroom: A review.* Review of Educational Research, Vol. 78, No. 4, pp. 828-879.

Dilbaz, N. (2000) *Sosyal anksiyete bozukluğu: tanı, epidemiyoloji, etiyoloji, klinik ve ayırıcı tanı.* Klinik Psikiyatri Dergisi, Vol. 3, No. 2, pp. 3-21.

Doğan, T. and Sapmaz, F. (2008) *Sosyal Anksiyete Bozukluğunun (Sosyal Fobi) Doğası: Bir Gözden Geçirme.* 17. Eğitim Bilimleri Kongresi, Sakarya Üniversitesi Eğitim Fakültesi, Sakarya.

Donne, J. (1987) *Devotions upon emergent occasions*. Oxford University Press on Demand.

Dozois, D. J. and Beck, A. T. (2008) *Cognitive schemas, beliefs, and assumptions.* 1st edition: In K. S. Dobson and D. J. A. Dozois (Eds.), Risk Factors in Depression (pp. 119-143). Oxford, UK: Elsevier.

Dritschel, B. H., Williams, K. and Cooper, P. J. (1991) *Cognitive distortions amongst women experiencing bulimic episodes.* International Journal of Eating Disorders, Vol. 10, No. 5, pp. 547-555.

Eisenberger, N. I., Lieberman, M. D. and Williams, K. D. (2003) *Does rejection hurt? An fMRI study of social exclusion.* Science, Vol. 302, No. 5643, pp. 290-292.

Ellis, A. (1986) *Rational-emotive therapy applied to relationship therapy.* Journal of Rational Emotive Therapy, vol. 4, No. 1, pp. 4-21.

Emmelkamp, P. M. and Aardema, A. (1999) *Metacognition, specific obsessive–compulsive beliefs and obsessive–compulsive behaviour.* Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice, Vol. 6, No. 2, pp. 139-145.

Essex, M. J., Klein, M. H., Slattery, M. J., Goldsmith, H. H. and Kalin, N. H. (2010) *Early risk factors and developmental pathways to chronic high inhibition and social anxiety disorder in adolescence.* American Journal of Psychiatry, Vol. 167, No. 1, pp. 40-46.

Faravelli, C., Zucchi, T., Viviani, B., Salmoria, R., Perone, A., Paionni, A., Scarpato, A., Vigliaturo, D., Rosi, S., D'adamo, D., Bartolozzi, D., Cecchi, C. and Abrardi, L. (2000) *Epidemiology of social phobia: a clinical approach.* European Psychiatry: The Journal of the Association of European Psychiatrists, Vol. 15, No. 1, pp. 17-24.

Fehm, L., Beesdo, K., Jacobi, F. and Fiedler, A. (2008) *Social anxiety disorder above and below the diagnostic threshold: prevalence, comorbidity, and impairment in the general population.* Social Psychiatry and Psychiatric Epidemiology, Vol. 43, No. 4, pp. 257-265.

Festinger, L. (1954) *A theory of social comparison processes*. Human Relations, Vol. 7, pp. 117-140.

Fitzsimmons-Craft, E. E., Harney, M. B., Brownstone, L. M., Higgins, M. K. and Bardone-Cone, A. M. (2012) *Examining social physique anxiety and disordered eating in college women. The roles of social comparison and body surveillance.* Appetite, Vol. 59, No. 3, pp. 796-805.

Friend, R. M. and Gilbert, J. (1973) *Threat and fear of negative evaluation as determinants of locus of social comparison.* Journal of Personality, Vol. 41, No. 3, pp. 328-340.

Furmark, T. (2002) *Social phobia: overview of community surveys.* Acta Psychiatrica Scandinavica, Vol. 105, No. 2, pp. 84-93.

Fyer, A. J., Mannuzza, S., Chapman, T. F., Liebowitz, M. R. and Klein, D. F. (1993) *A direct interview family study of social phobia.* Archives of General Psychiatry, Vol. 50, No. 4, pp. 286-293.

Gastorf, J. W. and Suls, J. (1978) *Performance evaluation via social comparison: Performance similarity versus related-attribute similarity.* Personality and Social Psychology Bulletin, Vol. 41, pp. 297-305.

Geen, R. G. (1976) *Test anxiety, observation, and range of cue utilization.* British Journal of Social and Clinical Psychology, Vol. 15, No. 3, pp. 253-259.

Southam-Gerow, M. A., McLeod, B. D., Brown, R. C., Quinoy, A. M., Avny, S.B. (2011) *Cognitive-Behavioral Therapy for Adolescents.* 1s^{t} edition. In Brown, B. B. and Prinstein, M. J. (Eds.), Encyclopedia of Adolescence (pp. 100-108). Cammbridge: Academic Press.

Gibbons, F. X. and Buunk, B. P. (1999). *Individual differences in social comparison: Development of a scale of social comparison orientation.* Journal of Personality and Social Psychology, Vol. 76, No. 1, pp. 129-142.

Gibbons, F. X. and Gerrard, M. (1991) *Downward comparison and coping with threat.* 1st edition. In J. Suls and T. A. Wills (Eds.), Social comparison: Contemporary theory and research (pp. 317-346). Hillsdale, NJ: Erlbaum.

Gibbons, F. X. and Gerrard, M. (1995). *Predicting young adults' health risk behavior.* Journal of Personality and Social Psychology, Vol. 69, No. 3, pp. 505-517.

Gibbons, F. X., Lane, D. J., Gerrard, M., Reis-Bergan, M., Lautrup, C. L., Pexa, N. A., and Blanton, H. (2002) *Comparison-level preferences after performance: Is downward comparison theory still useful?* Journal of Personality and Social Psychology, Vol. 83, No. 4, pp. 865-880.

Gilbert, P. (2001) *Evolution and social anxiety: The role of attraction, social competition, and social hierarchies.* Psychiatric Clinics, Vol. 24, no. 4, pp. 723-751.

Gilbert, D. T., Giesler, R. B. and Morris, K. A. (1995) *When comparisons arise.* Journal of Personality and Social Psychology, Vol. 69, No. 2, pp. 227-236.

Gilbert, N. and Meyer, C. (2003) *Social anxiety and social comparison: Differential links with restrictive and bulimic attitudes among nonclinical women.* Eating Behaviors, Vol. 4, No. 3, pp. 257-264.

Giordano, C., Wood, J. V. and Michela, J. L. (2000) *Depressive personality styles, dysphoria, and social comparisons in everyday life.* Journal of Personality and Social Psychology, Vol. 79, No. 3, 438-451.

Goldfried, M. R. and Sobocinski, D. (1975) *Effect of irrational beliefs on emotional arousal.* Journal of Consulting and Clinical Psychology, Vol. 43, No. 4, pp. 504-510.

Goodman, P. (1977) *Social comparison processes in organizations.* 1st edition. In B. M. Staw and G. R. Salancik (Eds.), New directions in organizational behavior (pp. 97-132). Chicago: St. Clair Press.

Goodman, F. R., Kelso, K. C., Wiernik, B. M. and Kashdan, T. B. (2021) *Social comparisons and social anxiety in daily life: An experience-sampling approach.* Journal of Abnormal Psychology, Vol. 130, No. 5, pp. 468-489.

Grant, B. F., Stinson, F. S., Hasin, D. S., Dawson, D. A., Chou, S. P., Ruan, W. J. and Huang, B. (2005) *Prevalence, correlates, and comorbidity of bipolar I disorder and axis I and II disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions.* The Journal of Clinical Psychiatry, Vol. 66, No. 10, pp. 1205-1215.

Gruder C. L. (1971) *Determinants of social comparison choices.* Journal of Experimental Social Psychology, Vol. 7, No. 5, pp. 473-489.

Guimond, S., Branscombe, N. R., Brunot, S., Buunk, A. P., Chatard, A., Désert, M., ... and Yzerbyt, V. (2007). *Culture, gender, and the self: variations and impact of social comparison processes.* Journal of Personality and Social Psychology, Vol. 92, No. 6, pp. 1118-1134.

Guyer, J. and Vaughan-Johnston, T. (2018) *Upward and downward social comparisons: A brief historical overview.* Encyclopedia of Personality and Individual Differences. New York: Springer International Publishing.

Hackmann, A., Clark, D. M. and McManus, F. (2000) *Recurrent images and early memories in social phobia.* Behaviour Research and Therapy, Vol. 38, No. 6, pp. 601-610.

Hackmann, A., Surawy, C. and Clark, D. M. (1998) *Seeing yourself through others'eyes: A study of spontaneously occurring images in social phobia.* Behavioural and Cognitive Psychotherapy, Vol. 26, No. 1, pp. 3-12.

Hakmiller, K. L. (1966) *Threat as a determinant of downward comparison.* Journal of Experimental Social Psychology, Vol. 1, pp. 32-39.

Hamilton, J. L., Potter, C. M., Olino, T. M., Abramson, L. Y., Heimberg, R. G. and Alloy, L. B. (2016) *The temporal sequence of social anxiety and depressive symptoms following interpersonal stressors during adolescence.* Journal of Abnormal Child Psychology, Vol. 44, No. 3, pp. 495-509.

Hayward, C., Killen, J. D., Kraemer, H. C. and Taylor, C. B. (1998) *Linking self-reported childhood behavioral inhibition to adolescent social phobia.* Journal of the

American Academy of Child & Adolescent Psychiatry, Vol. 37, No. 12, pp. 1308-1316.

Heimberg, R. G., Brozovich, F. A. and Rapee, R. M. (2010) *A cognitive behavioral model of social anxiety disorder: Update and extension.* 1st edition. In Social anxiety (pp. 395-422). Cambridge: Academic Press.

Heimberg, R. G., Hofmann, S. G., Liebowitz, M. R., Schneier, F. R., Smits, J. A., Stein, M. B., Hinton, D. E. and Craske, M. G. (2014) *Social anxiety disorder in DSM-5.* Depression and Anxiety, Vol. 31, No. 6, pp. 472-479.

Hemphill, K. J. and Lehman, D. R. (1991) *Social comparisons and their affective consequences: The importance of comparison dimension and individual difference variables.* Journal of Social and Clinical Psychology, Vol. 10, No. 4, pp. 372-394.

Hidalgo, R. B., Barnett, S. D. and Davidson, J. R. T. (2001) *Social anxiety disorder in review: two decades of progress.* International Journal of Neuropsychopharmacology, Vol. 4, pp. 279-298.

Hofmann, S. G. (2007) *Cognitive factors that maintain social anxiety disorder: A comprehensive model and its treatment implications.* Cognitive Behaviour Therapy, Vol. 36, No. 4, pp. 193-209.

Hofmann, S. and DiBartolo, P. M. (2014) *Social Anxiety: Clinical, Developmental, and Social Perspectives.* 3rd edition. New York: Academic Press.

Hofmann, S. G., Gutner, C. A. and Fang, A. (2012) *Social anxiety disorder.* 1st edition. Burlington, MA: Academic Press.

Hofmann, S. G., Sawyer, A. T., Fang, A. and Asnaani, A. (2012) *Emotion dysregulation model of mood and anxiety disorders.* Depression and Anxiety, Vol. 29, No. 5, pp. 409-416.

Holland, R. W., Roeder, U. R., van Baaren, R. B., Brandt, A. C. and Hannover, B. (2004) *Don't stand so close to me: The effects of self-construal on interpersonal closeness.* Psychological Science, Vol. 15, pp. 237-242.

Hope, D. A., Heimberg, R. G. and Klein, J. F. (1990) *Social anxiety and the recall of interpersonal information.* Journal of Cognitive Psychotherapy, Vol. 4, No. 2, pp. 185-195.

Hudson, J. L. and Rapee, R. M. (2000) *The Origins of Social Phobia.* Behavior Modification, Vol. 24, No. 1, pp. 102-129.

Huppert, J. D., Roth, D. A. and Foa, E. B. (2003) *Cognitive-behavioral treatment of social phobia: new advances.* Current Psychiatry Reports, Vol. 5, No. 4, pp. 289-296.

Hyman, H. (1942) *The psychology of subjective status.* Psychological Bulletin, Vol. 39, pp. 473-474.

Iancu, I., Bodner, E., Joubran, S., Lupinsky, Y. and Barenboim, D. (2015) *Negative and Positive Automatic thoughts in Social Anxiety Disorder.* The Israel Journal of Psychiatry and Related Sciences, Vol. 52, No. 2, pp. 129-135.

Iskric, A. J. (2019) *The Impact of Cognitive Distortions on Negative Social Comparisons and Depressive Symptoms: Six-Month Longitudinal Study.* Unpublished doctoral dissertation. University of Regina.

Jang, K., Park, N. and Song, H. (2016) *Social comparison on Facebook: Its antecedents and psychological outcomes.* Computers in Human Behavior, Vol. 62, pp. 147-154.

Jiang, S. and Ngien, A. (2020) *The effects of Instagram use, social comparison, and self-esteem on social anxiety: A survey study in Singapore.* Social Media + Society, Vol. 6, No. 2 [Online]. Available at https://journals.sagepub.com/doi/full/10.1177/2056305120912488 (Accessed 6 May 2020).

John, O. P., Naumann, L. P. and Soto, C. J. (2008) *Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues.* 1st edition. In O. P. John, R. W. Robins, and L. A. Pervin (Eds.), Handbook of personality: Theory and research (pp. 114-158). New York: The Guilford Press.

Izgiç, F., Akyüz, G., Dogan, O. and Kugu, N. (2000) *Üniversite ögrencilerinde sosyal fobi yayginligi/The prevalence of social phobia in university student population.* Anadolu Psikiyatri Dergisi, Vol. 1, No. 4, pp. 207-214.

Jakymin, A. K. and Harris, L. M. (2012) *Self-focused attention and social anxiety.* Australian Journal of Psychology, Vol. 64, No. 2, pp. 61-67.

Josephs, R. A., Markus, H. R. and Tafarodi, R. W. (1992) *Gender and self-esteem.* Journal of Personality and Social Psychology, Vol. 63, pp. 391-402.

Judd, L. L. (1994) *Social phobia: A Clinical Overview.* Journal of Clinical Psychiatry, Vol. 54, No. 12, pp. 5-9.

Kaczkurkin, A. N. and Foa, E. B. (2022) *Cognitive-behavioral therapy for anxiety disorders: an update on the empirical evidence.* Dialogues in clinical neuroscience, Vol. 17, No. 3, pp. 337-346.

Kashdan, T. B. and Breen, W. E. (2008) *Social Anxiety and Positive Emotions: A Prospective Examination of a Self-Regulatory Model with Tendencies to Suppress or*

Express Emotions as a Moderating Variable. Behavior Therapy, Vol. 39, No. 1, pp. 1-12.

Keech, J., Papakroni, J. and Podoshen, J. S. (2020) *Gender and differences in materialism, power, risk aversion, self-consciousness, and social comparison.* Journal of International Consumer Marketing, Vol. 32, No. 2, pp. 83-93.

Kendler, K. S., Neale, M. C., Kessler, R. C., Heath, A. C. and Eaves, L. J. (1992) *The genetic epidemiology of phobias in women: The interrelationship of agoraphobia, social phobia, situational phobia, and simple phobia.* Archives of General Psychiatry, Vol. 49, No. 4, pp. 273-281.

Kessler, R. C. (2003) *The impairments caused by social phobia in the general population: implications for intervention.* Acta Psychiatrica Scandinavica, Vol. 108, pp. 19-27.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R. and Walters, E. E. (2005) *Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication.* Archives of General Psychiatry, Vol. 62, No. 6, pp. 593-602.

Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M. and Wittchen, H. U. (2012) *Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States.* International Journal of Methods in Psychiatric Research, Vol. 21, No. 3, pp. 169-184.

Kılıç, H. and Sevim, S. (2005) *Loneliness and Cognitive Distortions Among Adolescents.* Ankara University Journal of Faculty of Educational Sciences (JFES), Vol. 38, No. 2, pp. 69-88.

Kim E. J. (2005) *The effect of the decreased safety behaviors on anxiety and negative thoughts in social phobics.* Journal of Anxiety Disorders, Vol. 19, no. 1, pp. 69-86.

Klein, W. M. (1997) *Objective standards are not enough: Affective, self-evaluative, and behavioral responses to social comparison information.* Journal of Personality and Social Psychology, Vol. 72, No. 4, pp. 763-774.

Kulik, J. A. and Gump, B. B. (1997) *Affective reactions to social comparison: The effects of relative performance and related attributes information about another person.* Personality and Social Psychology Bulletin, Vol. 23, No. 5, pp. 452-468.

Kuru, E., Safak, Y., Özdemir, İ., Tulacı, R. G., Özdel, K., Özkula, N. G. and Örsel, S. (2018) *Cognitive distortions in patients with social anxiety disorder: Comparison of a*

clinical group and healthy controls. The European Journal of Psychiatry, Vol. 32, No. 2, pp. 97-104.

Latane, B. (1966) *Studies in social comparison: Introduction and overview.* Journal of Experimental Social Psychology, pp. 1-5.

Lecrubier, Y. (1998) *Comorbidity in social anxiety disorder: Impact on disease burden and management.* Journal of Clinical Psychiatry, Vol. 59, No. 17, pp. 33-37.

Lecrubier, Y., Wittchen, H., Faravelli, C., Bobes, J., Patel, A. and Knapp, M. (2000) *A European perspective on social anxiety disorder.* European Psychiatry, Vol. 15, No. 1, pp. 5-16.

Lee, S. Y. (2014) *How do people compare themselves with others on social network sites?: The case of Facebook.* Computers in Human Behavior, Vol. 32, pp. 253-260.

Lieb, R., Wittchen, H. U., Höfler, M., Fuetsch, M., Stein, M. B. and Merikangas, K. R. (2000) *Parental psychopathology, parenting styles, and the risk of social phobia in offspring: a prospective-longitudinal community study.* Archives of General Psychiatry, Vol. 57, No. 9, pp. 859-866.

Liebowitz, M. R., Gorman, J. M., Fyer, A. J. and Klein, D. F. (1985) *Social phobia: Review of a neglected anxiety disorder.* Archives of General Psychiatry, Vol. 42, No. 7, pp. 729-736.

Liebowitz, M. R., Gelenberg, A. J. and Munjack, D. (2005) *Venlafaxine extended-release vs placebo and paroxetine in social anxiety disorder.* Archives of General Psychiatry, Vol. 62, No. 2, pp. 190-198.

Lippa, R. A. (2010) *Sex differences in personality traits and gender-related occupational preferences across 53 nations: Testing evolutionary and social-environmental theories.* Archives of Sexual Behavior, Vol. 39, No. 3, pp. 619-636.

Litt, D. M., Stock, M. L. and Gibbons, F. X. (2015) *Adolescent alcohol use: Social comparison orientation moderates the impact of friend and sibling behaviour.* British Journal of Health Psychology, Vol. 20, No. 3, pp. 514-533.

Lucock, M. P. and Salkovskis, P. M. (1988) *Cognitive factors in social anxiety and its treatment.* Behaviour Research and Therapy, Vol. 26, No. 4, pp. 297-302.

Lyubomirsky, S. and Ross, L. (1997) *Hedonic consequences of social comparison: a contrast of happy and unhappy people.* Journal of Personality and Social Psychology, Vol. 73, No. 6, pp. 1141-1157.

Lyubomirsky, S., Tucker, K. L. and Kasri, F. (2001) *Responses to hedonically conflicting social comparisons: Comparing happy and unhappy people.* European Journal of Social Psychology, Vol. 31, No. 5, pp. 511-535.

Mahone, E. M., Bruch, M. A. and Heimberg, R. G. (1993) *Focus of attention and social anxiety: The role of negative self-thoughts and perceived positive attributes of the other.* Cognitive Therapy and Research, Vol. 17, No. 3, pp. 209-224.

Major, B., Sciacchitano, A. M. and Crocker, J. (1993) *In-group versus out-group comparisons and self-esteem.* Personality & Social Psychology Bulletin, Vol. 19, No. 6, pp. 711-721.

Mancini, C., van Ameringen, M., Szatmari, P., Fugere, C. and Boyle, M. (1996) *A high-risk pilot study of the children of adults with social phobia.* Journal of the American Academy of Child and Adolescent Psychiatry, Vol. 35, pp. 1511-1517.

Marks, I. M. and Gelder, M. G. (1966) *Different ages of onset in varieties of social phobia.* American Journal of Psychiatry, Vol. 123, pp. 218-221.

Marks, I. M. (1970) *The classification of phobic disorders.* British Journal of Psychiatry, Vol. 116, pp. 377-386.

Marks, I. M. (1985) *Behavioral treatment of social phobia.* Psychopharmacology Bulletin, Vol. 21, pp. 615-618.

Masters, J. C., Carlson, C. R. and Rahe, D. F. (1985) *Children's affective, behavioral, and cognitive responses to social comparison.* Journal of Experimental Social Psychology, Vol. 21, No. 5, pp. 407-420.

Maurya, A. K., Sharma, P. and Asthana, H. (2016, March) *Role of Gender in Cognitive Distortions and Depression among Adolescents.* International Conference on Psychosocial Perspectives on Health and Well-being, Jamia Millia Islamia New Delhi.

Mac Giolla, E. and Kajonius, P. (2018) *Sex differences in personality are larger in gender equal countries: Replicating and extending a surprising finding.* International Journal of Psychology, Vol. 54, No. 6, pp. 705-711.

McEvoy, P. M., Grove, R. and Slade, T. (2011) *Epidemiology of anxiety disorders in the Australian general population: findings of the 2007 Australian National Survey of Mental Health and Wellbeing.* Australian & New Zealand Journal of Psychiatry, Vol. 45, No. 11, pp. 957-967.

McNally, R. J., Amir, N., Louro, C. E., Lukach, B. M., Riemann, B. C. and Calamari, J. E. (1994) *Cognitive processing of idiographic emotional information in panic disorder.* Behaviour Research and Therapy, Vol. 32, No. 1, pp. 119-122.

Mick, M. A. and Telch, M. J. (1998) *Social anxiety and history of behavioral inhibition in young adults*. Journal of Anxiety Disorders, Vol. 12, No. 1, pp. 1-20.

Morrison, J. (1995) *DSM-IV made easy: The clinician's guide to diagnosis.* 1st edition. New York: Guilford Press.

Morrison, J. (2019). DSM 5'i Kolaylaştıran Klinisyenler İçin Tanı Rehberi (Çev. M. Şahin). Ankara: Nobel Akademik Yayıncılık.

Morrison, A. S., Potter, C. M., Carper, M. M., Kinner, D. G., Jensen, D., Bruce, L., ... and Heimberg, R. G. (2015) *The cognitive distortions questionnaire (CD-Quest): Psychometric properties and exploratory factor analysis.* International Journal of Cognitive Therapy, Vol. 8, No. 4, pp. 287-305.

Morse, S. and Gergen, K. J. (1970) *Social comparison, self-consistency, and the concept of self.* Journal of Personality and Social Psychology, Vol. 16, No. 1, pp. 148-156.

Muller, D. and Butera, F. (2007) *The focusing effect of self-evaluation threat in coaction and social comparison.* Journal of Personality and Social Psychology, Vol. 93, No. 2, pp. 194-211.

Muller, D. and Fayant, M. P. (2010) *On being exposed to superior others: Consequences of self-threatening upward social comparisons.* Social and Personality Psychology Compass, Vol. 4, No. 8, pp. 621-634.

Mussweiler, T. (2003) *Comparison processes in social judgment: Mechanisms and consequences.* Psychological Review, Vol. 110, No. 3, pp. 472-489.

Mussweiler, T., Rüter, K. and Epstude, K. (2004a) *The man who wasn't there: Subliminal social comparison standards influence self-evaluation.* Journal of Experimental Social Psychology, Vol. 40, No. 5, pp. 689-696.

Mussweiler, T., Rüter, K. and Epstude, K. (2004b) *The ups and downs of social comparison: Mechanisms of assimilation and contrast.* Journal of Personality and Social Psychology, Vol. 87, No. 6, pp. 832-844.

National Collaborating Centre for Mental Health (UK). (2013) *Social Anxiety Disorder: Recognition, Assessment and Treatment*. UK: British Psychological Society.

Neal, J. A. and Edelmann, R. J. (2003) *The etiology of social phobia: Toward a developmental profile.* Clinical Psychology Review, Vol. 23, No. 6, pp. 761-786.

Nelson, E. C., Grant, J. D., Bucholz, K. K., Glowinski, A., Madden, P. A. F., Reich, W. and Heath, A. C. (2000) *Social phobia in a population-based female adolescent*

twin sample: co-morbidity and associated suicide-related symptoms. Psychological Medicine, Vol. 30, No. 4, pp. 797-804.

Nosanchuk, T. A. and Erickson, B. H. (1985) *How high is up? Calibrating social comparison in the real world.* Journal of Personality and Social Psychology, Vol. 48, No. 3, pp. 624-634.

Oliver, J. and Baumgart, E. P. (1985) *The Dysfunctional Attitude Scale: Psychometric properties and relation to depression in an unselected adult population.* Cognitive Therapy and Research, Vol. 9, No. 2, pp. 161-167.

Ollendick, T. H. and Hirshfeld-Becker, D. R. (2002) *The developmental psychopathology of social anxiety disorder.* Biological Psychiatry, Vol. 51, No. 1, pp. 44-58.

Pempek, T. A., Yermolayeva, Y. A. and Calvert, S. L. (2009) *College students' social networking experiences on Facebook.* Journal of Applied Developmental Psychology, Vol. 30, No. 3, pp. 227-238.

Pleban, R. and Tesser, A. (1981) *The effects of relevance and quality of another's performance on interpersonal closeness.* Social Psychology Quarterly, Vol. 44, pp. 278-285.

Pöhlmann, K., Döbbel, S., Löffler, S., Israel, M. and Joraschky, P. (2009) *Social phobia-the blind spot: infrequently diagnosed, highly complex, and a predictor for unfavourable therapy outcomes?* Zeitschrift fur Psychosomatische Medizin und Psychotherapie, Vol. 55, No. 2, pp. 180-188.

Pyszczynski, T., Greenberg, J. and LaPrelle, J. (1985) *Social comparison after success and failure: Biased search for information consistent with a self-serving conclusion.* Journal of Experimental Social Psychology, vol. 21, No. 2, pp. 195-211.

Rapee, R. M. (1995) *Descriptive psychopathology of social phobia.* 1st edition. In Heimberg, R. G., Liebowitz, M. R., Hope, D. A. and Schneier, F. R. (Eds), Social phobia: Diagnosis, assessment and treatment, New York: The Guilford Press.

Rapee, R. M. and Heimberg, R.G. (1997) *A cognitive-behavioral model of social anxiety in social phobia.* Behaviour Research and Therapy, Vol. 35, pp. 741-756.

Rapee, R. M. and Melville, L. F. (1997) *Recall of family factors in social phobia and panic disorder: Comparison of mother and offspring reports.* Depression and Anxiety, Vol. 5, No. 1, pp. 7-11.

Rapee, R. M. and Spence, S. H. (2004) *The etiology of social phobia: Empirical evidence and an initial model.* Clinical Psychology Review, Vol. 24, pp. 737-767.

Regier, D.A., Narrow, W.E., Kaelber, C.T. and Schatzberg, A.F. (1998) *Prevalence of anxiety disorders and their comorbidity with mood and addictive disorders.* The British Journal of Psychiatry, Vol. 173, No. 34, pp. 24-28.

Rheingold, A. A., Herbert, J. D. and Franklin, M. E. (2003) *Cognitive bias in adolescents with social anxiety disorder.* Cognitive Therapy and Research, Vol. 27, No. 6, pp. 639-655.

Rief, W., Hiller, W. and Margraf, J. (1998) *Cognitive aspects of hypochondriasis and the somatization syndrome.* Journal of Abnormal Psychology, Vol. 107, No. 4, pp. 587-595.

Roberts, K. E., Hart, T. A., Coroiu, A. and Heimberg, R. G. (2011) *Gender role traits among individuals with social anxiety disorder.* Personality and Individual Differences, vol. 51, No. 8, pp. 952-957.

Roberts, M. B. (2015) *Inventory of cognitive distortions: Validation of a measure of cognitive distortions using a community sample*. Unpublished doctoral dissertation. Philadelphia College of Osteopathic Medicine.

Robins, C. J. and Hayes, A. M. (1993) *An appraisal of cognitive therapy.* Journal of Consulting and Clinical Psychology, Vol. 61, No. 2, pp. 205-214.

Rose, R. J. and Ditto, W. B. (1983) *A developmental-genetic analysis of common fears from early adolescence to early adulthood. Child Development,* Vol. 54, No. 2*,* pp. 361-368.

Rosenbaum, J. F., Biederman, J., Hirshfeld, D. R., Bolduc, E. A. and Chaloff, J. (1991) *Behavioral inhibition in children: a possible precursor to panic disorder or social phobia.* The Journal of clinical psychiatry, 52 Suppl, pp. 5-9.

Ruscio, A. M., Brown, T. A., Chiu, W. T., Sareen, J., Stein, M. B. and Kessler, R. C. (2008) *Social fears and social phobia in the USA: results from the National Comorbidity Survey Replication.* Psychological Medicine, Vol. 38, No. 1, pp. 15-28.

Sanson, A., Prior, M., Garino, E., Oberklaid, F. and Sewell, J. (1987) *The structure of infant temperament: Factor analysis of the Revised Infant Temperament Questionnaire*. Infant Behavior and Development, Vol. 10, No. 1, pp. 97-104.

Saudino, K. J. (2005) *Behavioral genetics and child temperament.* Journal of Developmental and Behavioral Pediatrics: JDBP, Vol. 26, No. 3, pp. 214.

Schachter, S. (1959) *The psychology of affiliation: Experimental studies of the sources of gregariousness*. 1st edition. California: Stanford University Press.

Schlenker, B. R. and Leary, M. R. ([1]982) *Social anxiety and self-presentation: A conceptualization model.* Psychological Bulletin, Vol. 92, No. 3, pp. 641-669.

Schmitt, D. P., Realo, A., Voracek, M. and Allik, J. (2008) *Why can't a man be more like a woman? Sex differences in Big Five personality traits across 55 cultures.* Journal of Personality and Social Psychology, Vol. 94, No. 1, pp. 168-182.

Schneier, F. R., Johnson, J., Hornig, C. D., Liebowitz, M. R. and Weissman, M. M. (1992) *Social phobia: Comorbidity and morbidity in an epidemiologic sample.* Archives of General Psychiatry, Vol. 49, No. 4, pp. 282-288.

Schreiber, F. and Steil, R. (2013) *Haunting self-images? The role of negative self-images in adolescent social anxiety disorder.* Journal of Behavior Therapy and Experimental Psychiatry, Vol. 44, No. 2, pp. 158-164.

Schwartz, J. S. and Maric, M. (2015) *Negative cognitive errors in youth: Specificity to anxious and depressive symptoms and age differences.* Behavioural and Cognitive Psychotherapy, Vol. 43, No. 5, pp. 526-537.

Sherif, M. (1936) *The psychology of social norms.* Oxford, England: Harper.

Smith, D. T., Mouzon, D. M. and Elliott, M. (2018) *Reviewing the assumptions about men's mental health: An exploration of the gender binary.* American Journal of Men's Health, Vol. 12, No. 1, pp. 78-89.

Smith, P. B., Easterbrook, M. J., Al-Selim, H., Lun, V. M. C., Koc, Y., Gul, P., ... and Chobthamkit, P. (2020) *Sex differences in self-construal and in depressive symptoms: Predictors of cross-national variation.* Journal of Cross-Cultural Psychology, Vol. 51, No. 7-8, pp. 616-635.

Sonntag, H., Wittchen, H. U., Höfler, M., Kessler, R. C. and Stein, M. B. (2000) *Are social fears and DSM-IV social anxiety disorder associated with smoking and nicotine dependence in adolescents and young adults*? European psychiatry: the journal of the Association of European Psychiatrists, Vol. 15, No. 1, pp. 67-74.

Sowa, C. J. and Lustman, P. J. (1984) *Gender differences in rating stressful events, depression, and depressive cognition.* Journal of Clinical Psychology, Vol. 40, No. 6, pp. 1334-1337.

Soykan, Ç., Özgüven, H. D. and Gençöz, T. (2003) *Liebowitz social anxiety scale: the Turkish version.* Psychological Reports, Vol. 93, pp. 1059-1069.

Stapel, D. A. and Blanton, H. (2004) *From seeing to being: subliminal social comparisons affect implicit and explicit self-evaluations.* Journal of Personality and Social Psychology, Vol. 87, No. 4, pp. 468-481.

Stapel, D. A. and Tesser, A. (2001) *Self-activation increases social comparison.* Journal of Personality and Social Psychology, Vol. 81, No. 4, pp. 742-750.

Steers, M. N., Wickham, R. E. and Acitelli, L. K. (2014) *Seeing everyone else's highlight reels: How Facebook usage is linked to depressive symptoms.* Journal of Social and Clinical Psychology, Vol. 33, pp. 701-731

Stein, M. B., Chartier, M. J., Hazen, A. L., Kozak, M. V., Tancer, M. E., Lander, S., Furer, P., Chubaty, D. and Walker, J. R. (1998) *A direct-interview family study of generalized social phobia.* The American Journal of Psychiatry, Vol. 155, No. 1, pp. 90–97.

Stein, D. J., Lim, C. C., Roest, A. M., De Jonge, P., Aguilar-Gaxiola, S., Al-Hamzawi, A., ... and Scott, K. M. (2017) *The cross-national epidemiology of social anxiety disorder: Data from the World Mental Health Survey Initiative.* BMC Medicine, Vol. 15, No. 1, pp. 1-21.

Stein, M. B. and Stein, D. J. (2008) *Social Anxiety Disorder.* Lancet, Vol. 371, pp. 1115-1125.

Stemberger, R. T., Turner, S. M., Beidel, D. C. and Calhoun, K. S. (1995) *Social phobia: an analysis of possible developmental factors.* Journal of Abnormal Psychology, Vol. 104, No. 3, pp. 526-531.

Stopa, L. and Clark, D. M. (1993) *Cognitive processes in social phobia.* Behaviour Research and Therapy, Vol. 31, No. 3, pp. 255-267.

Stopa, L. and Clark, D. M. (2000) *Social phobia and interpretation of social events.* Behaviour Research and Therapy, Vol. 38, pp. 273-283.

Suls, J., Martin, R. and Wheeler, L. (2002) *Social comparison: Why, with whom, and with what effect?* Current Directions in Psychological Science, Vol. 11, pp. 159-163.

Suls, J. and Wheeler, L. (Eds.). (2000). *Handbook of social comparison: Theory and research.* 1st edition. New York: Plenum.

Sungur, M. Z. and Dilsiz, A. (1995) *Sosyal fobi.* Anksiyete Monografları Serisi, Vol. 5, pp. 205-215.

Swallow, S. R. and Kuiper, N. A. (1988) *Social comparison and negative self-evaluations: An application to depression.* Clinical Psychology Review, Vol. 8, No. 1, pp. 55-76.

Swallow, S. R. and Kuiper, N. A. (1990). *Mild depression, dysfunctional cognitions, and interest in social comparison information.* Journal of Social and Clinical Psychology, Vol. 9, No. 3, pp. 289-302.

Swallow, S. R. and Kuiper, N. A. (1992) *Mild depression and frequency of social comparison behavior.* Journal of Social and Clinical Psychology, Vol. 11, No. 2, pp. 167-180.

Swap, W. C. and Rubin, J. Z. (1983) *Measurement of interpersonal orientation.* Journal of Personality and Social Psychology, Vol. 44, No. 1, pp. 208-219.

Tairi, T., Adams, B. and Zilikis, N. (2016) *Cognitive errors in Greek adolescents: the linkages between negative cognitive errors and anxious and depressive symptoms.* International Journal of Cognitive Therapy, Vol. 9, No. 3, pp. 261-278.

Taylor, S. E. and Brown, J. (1988) *Illusion and well-being: A social psychological perspective on mental health.* Psychological Bulletin, Vol. 103, No. 2, pp. 193-210.

Taylor, S. E. and Lobel, M. (1989) *Social comparison activity under threat: downward evaluation and upward contacts.* Psychological Review, Vol. 96, No. 4, pp. 569-575.

Taylor, S. E., Wayment, H. A. and Carrillo, M. (1996) *Social comparison, self-regulation, and motivation.* 3rd edition. In R. M. Sorrentino and E. T. Higgins (Eds.), Handbook of motivation and cognition (pp. 3–27). New York: The Guilford Press.

Taylor, S. E., Wood, J. V. and Lichtman, R. R. (1983) *It could be worse: Selective evaluation as a response to victimization.* Journal of Social Issues, Vol. 39, No. 2, pp. 19-40.

Teközel, M.İ. (2007). *Sosyal Karşılaştırma Süreçlerinde Gerçekçi ve Kurgusal Karşılaştırma Enformasyonu Kullanma Eğilimlerinin İncelenmesi*. Unpublished Ph.D. Thesis. Ege University.

Tennen, H. and Affleck, G. (1997) *Social comparison as a coping process: A critical review and application to chronic pain disorders.* 1st edition. In B. P. Buunk and F. X. Gibbons (Eds.), Health, coping, and well-being: Perspectives from social comparison theory (pp. 263-298). Mahwah, NJ: Erlbaum.

Tennen, H., McKee, T. E. and Affleck, G. (2000) *Social comparison processes in health and illness.* 1st edition. In J. Suls and L. Wheeler (Eds.), Handbook of social comparison: Theory and research (pp. 443-483). New York: Plenum.

Tesser, A. (1991) *Emotion in social comparison and reflection processes.* 1st edition. In J. Suls and T. A. Wills (Eds.), Social Comparison: Contemporary Theory and Research (pp. 115-145). Hillsdale, NJ: Lawrence Erlbaum.

Tesser, A., Millar, M. and Moore, J. (2000) *Some affective consequences of social comparison and reflection processes: The pain and pleasure of being close.* 1st edition.

In E. Higgins and A. Kruglanski (Eds.), Motivational science: Social and personality perspectives (pp. 60-75). New York, NY: Psychology Press.

Testa, M. and Major, B. (1990) *The impact of social comparisons after failure: The moderating effects of perceived control.* Basic and Applied Social Psychology, Vol. 11, No. 2, pp. 205-218.

Thomas, G. and Fletcher, G.J.O. (2003) *Mind–Reading accuracy in intimate relationships: Assessing the roles of the relationship, the target and judge.* Journal of Personality and Social Psychology, Vol. 85, No. 6, pp. 1079-1094.

Thornton, D. A. and Arrowood, A. J. (1966) *Self-evaluation, self-enhancement, and the locus of social comparison.* Journal of Experimental Social Psychology, Vol. 1, pp. 40-48.

Thwaites, R. and Dagnan, D. (2004) *Moderating variables in the relationship between social comparison and depression: An evolutionary perspective.* Psychology and Psychotherapy, Vol. 77, pp. 309-323.

Tillfors, M., Furmark, T., Ekselius, L. and Fredrikson, M. (2001) *Social phobia and avoidant personality disorder as related to parental history of social anxiety: a general population study.* Behaviour research and therapy,Vol. 39, No. 3, pp. 289-298.

Tillfors, M. (2004) *Why do some individuals develop social phobia? A review with emphasis on the neurobiological influences.* Nordic Journal of Psychiatry, Vol. 58, No. 4, pp. 267-276.

Trower, P. and Gilbert, P. (1989) *New theoretical conceptions of social anxiety and social phobia.* Clinical Psychology Review, Vol. 9, No. 1, pp. 19-35.

Turk, C. L., Heimberg, R. G., Orsillo, S. M., Holt, C. S., Gitow, A., Street, L. L., ... and Liebowitz, M. R. (1998) *An investigation of gender differences in social phobia.* Journal of anxiety disorders, Vol. 12, No. 3, pp. 209-223.

Turner, S. M., Johnson, M. R., Beidel, D. C., Heiser, N.A. and Lydiard, R. B. (2003) *The social thoughts and beliefs scale: a new inventory for assessing cognitions in social phobia.* Psychological Assessment, Vol. 15, No. 3, pp. 384-391.

Tyler, J. M. and Feldman, R. S. (2005) *Deflecting threat to one's image: Dissembling personal information as a self-presentation strategy.* Basic and Applied Social Psychology, Vol. 27, No. 4, pp. 371-378.

Van der Zee, K., Buunk, B. and Sanderman, R. (1996) *The relationship between social comparison processes and personality.* Personality and Individual Differences, Vol. 20, No.5, pp. 551-565.

Vogel, E. A., Rose, J. P., Okdie, B. M., Eckles, K. and Franz, B. (2015) *Who compares and despairs? The effect of social comparison orientation on social media use and its outcomes.* Personality and Individual Differences, Vol. 86, pp. 249-256.

Voncken, M. J. and Bögels, S. M. (2008) *Social performance deficits in social anxiety disorder: Reality during conversation and biased perception during speech.* Journal of Anxiety Disorders, Vol. 22, No. 8, pp. 1384-1392.

Voncken, M. J., Dijk, C., de Jong, P. J. and Roelofs, J. (2010) *Not self-focused attention but negative beliefs affect poor social performance in social anxiety: An investigation of pathways in the social anxiety–social rejection relationship.* Behaviour Research and Therapy, Vol. 48, No. 10, pp. 984-991.

Wang, P.S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B. and Kessler, R. C. (2005) *Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication.* Archive of General Psychiatry, Vol. 62, pp. 629-640.

Weeks, J. W. and Howell, A. N. (2012) *The bivalent fear of evaluation model of social anxiety: further integrating findings on fears of positive and negative evaluation.* Cognitive behaviour therapy, Vol. 41, No. 2, pp. 83-95.

Weinstein, A., Dorani, D., Elhadif, R., Bukovza, Y., Yarmulnik, A. and Dannon, P. (2015) *Internet addiction is associated with social anxiety in young adults.* Annals of clinical psychiatry: Official Journal of the American Academy of Clinical Psychiatrists, Vol. 27, No. 1, pp. 4-9.

Weisberg, Y. J., Deyoung, C. G. and Hirsh, J. B. (2011) *Gender Differences in Personality across the Ten Aspects of the Big Five.* Frontiers in Psychology, Vol. 2, 178.

Weisman, O., Aderka, I. M., Marom, S., Hermesh, H. and Gilboa-Schechtman, E. (2011) *Social rank and affiliation in social anxiety disorder.* Behaviour Research and Therapy, Vol. 49, No. 6-7, pp. 399-405.

Wheeler, L. (2000). *Individual differences in social comparison.* 1st edition. In Handbook of Social Comparison: Theory and Research, Plenum: New York.

Wheeler, L., Shaver, K. G., Jones, R. A., Goethals, G. R., Cooper, J., Robinson, J. E., Cruder, C. L. and Butzine, K. W. (1969) *Factors determining the choice of a comparison other.* Journal of Experimental Social Psychology, Vol. 5, pp. 219-232.

White, J. B., Langer, E. J., Yariv, L. and Welch, J. C. (2006) *Frequent Social Comparisons and Destructive Emotions and Behaviors: The Dark Side of Social Comparisons.* Journal of Adult Development, Vol. 13, No. 1, pp. 36-44.

Wills, T. A. (1981) *Downward comparison principles in social psychology.* Psychological Bulletin, Vol. 90, No. 2, pp. 245-271.

Wiltink, J., Haselbacher, A., Knebel, A., Tschan, R., Zwerenz, R., Michal, M., Subic-Wrana, C. and Beutel, M. E. (2010) *Soziale Phobie--eine im psychosomatischen Ambulanz- und Konsildienst unterdiagnostizierte Angsterkrankung? [Social phobia--an anxiety disorder underdiagnosed in outpatient and consultation-liaison service*?]. Psychotherapie, Psychosomatik, Medizinische Psychologie, Vol. 60, No. 3-4, pp. 111-117.

Wittchen, H. U., Jacobi, F., Rehm, J., Gustavsson, A., Svensson, M., Jönsson, B., ... and Steinhausen, H. C. (2011) *The size and burden of mental disorders and other disorders of the brain in Europe 2010.* European Neuropsychopharmacology, Vol. 21, No. 9, pp. 655-679.

Wittchen, H. U., Stein, M. B. and Kessler, R. C. (1999) *Social fears and social phobia in a community sample of adolescents and young adults: Prevalence, risk factors and comorbidity.* Psychological Medicine, Vol. 29, pp. 309-323.

Wong, Q. J. J., Gregory, B., Gaston, J. E., Rapee, R. M., Wilson, J. K. and Abbott, M. J. (2017) *Development and validation of the Core Beliefs Questionnaire in a sample of individuals with social anxiety disorder.* Journal of Affective Disorders, Vol. 207, pp. 121-127.

Wong, Q. J. J. and Moulds, M. L. (2011) *The relationship between the maladaptive self-beliefs characteristic of social anxiety and avoidance.* Journal of Behavior Therapy and Experimental Psychiatry, Vol. 42, No. 2, pp. 171-178.

Wong, Q. J. J., Moulds, M. L. and Rapee, R. M. (2014) *Validation of the self-beliefs related to social anxiety scale: A replication and extension.* Assessment, Vol. 21, No. 3, pp. 300-311.

Wood, J. V. (1989) *Theory and research concerning social comparisons of personal attributes.* Psychological Bulletin, Vol. 106, No. 2, pp. 231-248.

Wood, J.V. (1996) *What is social comparison and how should we study it?* Personality and Social Psychology Bulletin, Vol. 22, pp. 520-537.

Wood, J. V. and Taylor, K. L. (1991) *Serving self-relevant goals through social comparison.* 1st edition. In J. Suls and T. A. Wills (Eds.), Social comparison:

Contemporary theory and research (pp. 23-49). Mahwah NJ: Lawrence Erlbaum Associates.

Wood, J. V., Taylor, S. E. and Lichtman, R. R. (1985) *Social comparison in adjustment to breast cancer.* Journal of Personality and Social Psychology, Vol. 49, No. 5, pp. 1169-1183.

Wood, J. V. and Van der Zee, K. (1997) *Social comparisons among cancer patients: Under what conditions are comparisons upward and downward?* 1st edition. In B. Buunk and F. X. Gibbons (Eds.), Health, coping, and well-being: Perspectives from social comparison theory (pp. 299-28). Mahwah, NJ: Erlbaum.

Wong, Q. J. and Rapee, R. M. (2016) *The aetiology and maintenance of social anxiety disorder: A synthesis of complementary theoretical models and formulation of a new integrated model.* Journal of Affective Disorders,Vol. 203, pp. 84-100.

Wright, J. H. and Beck, A. T. (1983) *Cognitive therapy of depression: Theory and practice.* Psychiatric Services, Vol. 34, No. 12, pp. 1119-1127.

Xu, Y., Schneier, F., Heimberg, R. G., Princisvalle, K., Liebowitz, M. R., Wang, S. and Blanco, C. (2012) *Gender differences in social anxiety disorder: Results from the national epidemiologic sample on alcohol and related conditions.* Journal of Anxiety Disorders, Vol. 26, No. 1, pp. 12-19.

Yang, C. C. (2016) *Instagram use, loneliness, and social comparison orientation: Interact and browse on social media, but don't compare.* Cyberpsychology, Behavior, and Social Networking, Vol. 19, No. 12, pp. 703-708.

Yoshinaga, N., Kobori, O., Iyo, M. and Shimizu, E. (2013) *Cognitive behaviour therapy using the Clark & Wells model: a case study of a Japanese social anxiety disorder patient.* The Cognitive Behaviour Therapist, Vol. 6, No. 3, pp. 1-13.

Zink, C. F., Tong, Y., Chen, Q., Bassett, D. S., Stein, J. L. and Meyer-Lindenberg, A. (2008) *Know your place: neural processing of social hierarchy in humans.* Neuron, Vol. 58, No. 2, pp. 273-283.

APPENDICES

APPENDIX A.: ETHICS COMMITTEE APPROVAL

SAYI : B.30.2.İEÜ.0.05.05-**020**-*189* 25.02.2022

KONU : Etik Kurul Kararı hk.

Sayın Dr. Öğr. Üyesi Yasemin Meral Öğütcü ve Beste İçağası

"Sosyal Karşılaştırma Süreçlerinin Sosyal Kaygı Üzerindeki Etkisi: Sosyal Bağlamda Ortaya Çıkan Düşünce ve İnançlar ile Bilişsel Çarpıtmaların Aracı Rolü" başlıklı projenizin etik uygunluğu konusundaki başvurunuz sonuçlanmıştır.

Etik Kurulumuz 27.01.2022 tarihinde sizin başvurunuzun da içinde bulunduğu bir gündemle toplanmış ve Etik Kurul üyeleri projeleri incelemiştir.

Sonuçta 27.01.2022 tarihinde "Sosyal Karşılaştırma Süreçlerinin Sosyal Kaygı Üzerindeki Etkisi: Sosyal Bağlamda Ortaya Çıkan Düşünce ve İnançlar ile Bilişsel Çarpıtmaların Aracı Rolü" konulu projenizin etik açıdan uygun olduğuna oy birliğiyle karar verilmiştir.

Gereği için bilgilerinize sunarım.
Saygılarımla,

Prof. Dr. Murat Bengisu
Etik Kurul Başkanı

APPENDIX B.: BİLGİLENDİRİLMİŞ ONAM FORMU

Sayın Katılımcı,

Bu çalışma, İzmir Ekonomi Üniversitesi Klinik Psikoloji Yüksek Lisans programı öğrencisi Beste İÇAĞASI tarafından yürütülen ve Dr. Öğretim Üyesi Yasemin Meral Öğütçü danışmanlığında sürdürülen bir tez çalışmasıdır. Çalışma kapsamında sosyal karşılaştırma ile sosyal kaygı arasındaki ilişkide bilişlerin ve tutumların aracı rolüne ilişkin bilgi toplamak amaçlanmaktadır.

Bu çalışmada sizden, ekte sunulacak olan ölçekleri eksiksiz olarak doldurmanız beklenmektedir. Çalışma toplamda 5 bölümden oluşmakta ve yaklaşık olarak 30 dakika sürmektedir. Çalışmaya katılabilmeniz için 18 yaş ve üstü olmanız gerekmektedir.

Katılımınız araştırma hipotezinin test edilmesi ve yukarıda açıklanan amaçlar doğrultusunda literatüre sağlayacağı katkılar ve klinik uygulamalar bakımından oldukça önemlidir. Bu sebeple, soruların samimi bir şekilde ve eksiksiz doldurulması büyük önem arz etmektedir. Ölçekleri doldururken sizi tam olarak yansıtmadığını düşündüğünüz durumlarda size en yakın yanıtı işaretleyiniz.

Çalışma kapsamında katılımcılardan elde edilen veriler isim kullanılmaksızın analizlere dahil edilecektir; yani çalışma sürecinde size bir katılımcı numarası verilecek ve isminiz araştırma raporunda yer almayacaktır.

Çalışmaya katılmanız tamamen kendi isteğinize bağlıdır. Katılımı reddetme ya da çalışma sürecinde herhangi bir zaman diliminde devam etmeme hakkına sahipsiniz. Eğer görüşme esnasında katılımınıza ilişkin herhangi bir sorunuz olursa, araştırmacıyla e-posta adresi üzerinden iletişime geçebilirsiniz.

Bu çalışmaya tamamen gönüllü olarak katılmayı kabul ediyorum ve verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum.

EVET ☐ HAYIR☐

APPENDIX C.: KATILIMCI BİLGİ FORMU

Yaş :

Cinsiyet : Kadın ☐ Erkek ☐ Diğer ☐

Eğitim seviyesi : İlkokul ☐ Ortaokul ☐ Lise ☐ Üniversite ☐
Yüksek Lisans ☐ Doktora ☐

Çalışıyor musunuz? : Evet ☐ Hayır ☐

Meslek :

Gelir düzeyi : Düşük ☐ Orta ☐Yüksek ☐

Medeni durum : Evli ☐ Bekar ☐ Boşanmış ☐ Dul ☐

Herhangi bir kronik rahatsızlığınız var mı?

Evet ☐ Belirtiniz: Hayır ☐

Herhangi bir psikiyatrik bir tanı aldınız mı?

Evet ☐ Belirtiniz: Hayır ☐

Ailenizde psikiyatrik hastalık öyküsü var mıdır?

Evet ☐ Belirtiniz: Hayır ☐

Son 3 ayda herhangi bir psikiyatrik ilaç kullandınız mı?

Evet ☐ Belirtiniz: Hayır ☐

Son 3 aydır psikoterapi aldınız mı?

Evet ☐ Belirtiniz: Hayır ☐

Sigara kullanma durumu?

Evet ☐ Belirtiniz: Hayır ☐

Alkol kullanma durumu?

Evet ☐ Belirtiniz: Hayır ☐

Madde kullanım durumu?

Evet ☐ Belirtiniz: Hayır ☐

APPENDIX D.: LIEBOWITZ SOSYAL KAYGI ÖLÇEĞİ

Aşağıda belirtilen durumlarda duyduğunuz **kaygının** şiddetine göre puan verin.

		Yok ya da çok hafif	**Hafif**	**Orta derecede**	**Şiddetli**
1	Önceden hazırlanmaksızın bir toplantıda kalkıp konuşmak				
2	Seyirci önünde hareket, gösteri ya da konuşma yapmak				
3	Dikkatleri üzerinde toplamak				
4	Romantik veya cinsel bir ilişki kurmak amacıyla birisiyle tanışmaya çalışmak				
5	Bir gruba önceden hazırlanmış sözlü bilgi sunmak				
6	Başkaları içerdeyken bir odaya girmek				
7	Kendisinden daha yetkili biriyle konuşmak				
8	Satın aldığı bir malı, ödediği parayı geri almak üzere mağazaya iade etmek				
9	Çok iyi tanımadığı birisine fikir ayrılığı veya hoşnutsuzluğun ifade edilmesi				
10	Gözlendiği sırada çalışmak				
11	Çok iyi tanımadığı bir kişiyle yüz yüze konuşmak				
12	Bir eğlenceye gitmek				
13	Çok iyi tanımadığı birisinin gözlerinin içine doğrudan bakmak				
14	Yetenek, beceri ya da bilginin sınanması				
15	Gözlendiği sırada yazı yazmak				
16	Çok iyi tanımadığı bir kişiyle telefonla konuşmak				
17	Umumi yerlerde yemek yemek				
18	Evde misafir ağırlamak				
19	Küçük bir grup faaliyetine katılmak				
20	Umumi yerlerde bir şeyler içmek				
21	Umumi telefonları kullanmak				
22	Yabancılarla konuşmak				
23	Satış elemanının yoğun baskısına karşı koymak				
24	Umumi tuvalette idrar yapmak				

Lütfen aynı formu şimdi de belirtilen durumlarda duyduğunuz **kaçınmanın** şiddetine göre değerlendirin.

		Yok ya da çok hafif	**Hafif**	**Orta derecede**	**Şiddetli**
1	Önceden hazırlanmaksızın bir toplantıda kalkıp konuşmak				
2	Seyirci önünde hareket, gösteri ya da konuşma yapmak				
3	Dikkatleri üzerinde toplamak				
4	Romantik veya cinsel bir ilişki kurmak amacıyla birisiyle tanışmaya çalışmak				
5	Bir gruba önceden hazırlanmış sözlü bilgi sunmak				
6	Başkaları içerdeyken bir odaya girmek				
7	Kendisinden daha yetkili biriyle konuşmak				
8	Satın aldığı bir malı, ödediği parayı geri almak üzere mağazaya iade etmek				
9	Çok iyi tanımadığı birisine fikir ayrılığı veya hoşnutsuzluğun ifade edilmesi				
10	Gözlendiği sırada çalışmak				
11	Çok iyi tanımadığı bir kişiyle yüz yüze konuşmak				
12	Bir eğlenceye gitmek				
13	Çok iyi tanımadığı birisinin gözlerinin içine doğrudan bakmak				
14	Yetenek, beceri ya da bilginin sınanması				
15	Gözlendiği sırada yazı yazmak				
16	Çok iyi tanımadığı bir kişiyle telefonla konuşmak				
17	Umumi yerlerde yemek yemek				
18	Evde misafir ağırlamak				
19	Küçük bir grup faaliyetine katılmak				
20	Umumi yerlerde bir şeyler içmek				
21	Umumi telefonları kullanmak				
22	Yabancılarla konuşmak				
23	Satış elemanının yoğun baskısına karşı koymak				
24	Umumi tuvalette idrar yapmak				

APPENDIX E.: SOSYAL KARŞILAŞTIRMA YÖNELİMİ ÖLÇEĞİ

Çoğumuz zaman zaman kendimizi başka insanlarla karşılaştırırız. Bu karşılaştırmalar, bazen hislerimizi, bazen görüşlerimizi, bazen yeteneklerimizi, bazen de içerisinde bulunduğumuz durumu başka insanlarınkilerle karşılaştırmak biçiminde olabilir. Bu şekilde karşılaştırmalar yapmanın iyi ya da kötü bir yanı yoktur. Bazı insanlar bunu daha çok yapar; bazıları ise daha az. Biz, sizin kendinizi diğer insanlarla ne sıklıkta karşılaştırdığınızı öğrenmek istiyoruz. Bunun için aşağıda yer alan her bir ifadeye ne derecede katıldığınızı karşısındaki seçeneklerden uygun olanını işaretleyerek yanıtlayınız.

	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
Çoğu zaman sevdiğim insanların (kız/erkek arkadaşım, ailemden kişiler vb.) yaptıkları şeyleri nasıl yaptıklarıyla, diğer insanların nasıl yaptıklarını karşılaştırırım.					
Yaptığım şeylerin diğer insanların yaptıklarıyla karşılaştırıldığında nasıl olduğuna her zaman çok dikkat ederim.					
Bir şeyi ne kadar iyi yaptığımı bilmek istediğimde, yaptığım şeyi diğer insanların yaptıklarıyla karşılaştırırım.					
Ne kadar sosyal birisi olduğum konusunda (sosyal becerilerim, popülerliğim vb.) kendimi sık sık diğer insanlarla karşılaştırırım.					
Kendini sık sık başkalarıyla karşılaştıran birisi değilimdir.					
Hayatta ne kadar başarılı olduğum konusunda çoğu zaman kendimi başka insanlarla karşılaştırırım.					
Diğer insanlarla karşılıklı görüş ve deneyimlerimiz hakkında konuşmaktan çoğu zaman zevk alırım.					
Çoğu zaman, benim karşılaştığım sorunlara benzer sorunlarla karşılaşmış kişilerin ne düşündüğünü öğrenmeye çalışırım.					
Benimkine benzer bir durumda başka insanların ne yapacağını bilmek her zaman hoşuma gider.					
Bir konuda daha fazla şey öğrenmek istersem, o konuda başka insanların ne düşündüğünü öğrenmeye çalışırım.					

Hayatta ne durumda olduğumu asla başkalarının durumlarına göre değerlendirmem.					

APPENDIX F.: YUKARI DOĞRU KARŞILAŞTIRMA ÖLÇEĞİ

Çoğumuz zaman zaman kendimizi başka insanlarla karşılaştırırız. Bu karşılaştırmalar, bazen hislerimizi; bazen görüşlerimizi, bazen yeteneklerimizi; bazen de içerisinde bulunduğumuz durumu başka insanlarınkilerle karşılaştırmak biçiminde olabilir. Bu şekilde karşılaştırmalar yapmanın iyi ya da kötü bir yanı yoktur. Bazı insanlar bunu daha çok yapar; bazıları ise daha az. Biz, sizin kendinizi diğer insanlarla ne sıklıkta karşılaştırdığınızı öğrenmek istiyoruz. Bunun için aşağıda yer alan her bir ifadeye ne derecede katıldığınızı karşısındaki seçeneklerden uygun olanını işaretleyerek yanıtlayınız.

	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
Bazen kişisel yaşamımla ilgili bir konuda, kendimi benden daha iyi olan birileriyle karşılaştırırım.					
Bazen kendimi, hayatta bana göre daha başarılı olmuş kişilerle karşılaştırırım.					
Bir şeyi ne kadar iyi yaptığımı merak ettiğimde, bazen kendimi, o şeyi benden daha iyi yapan kişilerle karşılaştırırım.					
Bir şey kötüye gittiği zaman, o şeyi benden daha iyi yapan kişileri düşünürüm.					
İş, okul, ev ve benzeri alanlarda şu andaki performansımı, yani ne kadar başarılı olduğumu değerlendirirken, çoğu zaman kendimi, benden daha iyi olan kişilerle karşılaştırırım.					
Ne kadar sosyal birisi olduğumu (sosyal becerilerim, popülerliğim vb.) değerlendirirken, kendimi bu konuda benden daha becerikli insanlarla karşılaştırmayı tercih ederim.					

AŞAĞI DOĞRU KARŞILAŞTIRMA ÖLÇEĞİ

Çoğumuz zaman zaman kendimizi başka insanlarla karşılaştırırız. Bu karşılaştırmalar, bazen hislerimizi; bazen görüşlerimizi, bazen yeteneklerimizi; bazen de içerisinde bulunduğumuz durumu başka insanlarınkilerle karşılaştırmak biçiminde olabilir. Bu şekilde karşılaştırmalar yapmanın iyi ya da kötü bir yanı yoktur. Bazı insanlar bunu daha çok yapar; bazıları ise daha az. Biz, sizin kendinizi diğer insanlarla ne sıklıkta karşılaştırdığınızı öğrenmek istiyoruz. Bunun için aşağıda yer alan her bir ifadeye ne derecede katıldığınızı karşısındaki seçeneklerden uygun olanını işaretleyerek yanıtlayınız.

	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
Bir şey kötüye gittiği zaman, o şeyi benden daha kötü yapan kişileri düşünürüm.					
İş, okul, ev ve benzeri alanlarda şu andaki performansımı, yani ne kadar başarılı olduğumu değerlendirirken, çoğu zaman kendimi, benden daha kötü olan kişilerle karşılaştırırım.					
Bazen kişisel yaşamımla ilgili bir konuda, kendimi benden daha kötü olan birileriyle karşılaştırırım.					
Ne kadar sosyal birisi olduğumu (sosyal becerilerim, popülerliğim vb.) değerlendirirken, kendimi bu konuda benden daha az becerikli insanlarla karşılaştırmayı tercih ederim.					
Bir şeyi ne kadar iyi yaptığımı merak ettiğimde, bazen kendimi, o şeyi benden daha kötü yapan kişilerle karşılaştırırım.					
Bazen kendimi, hayatta bana göre daha az başarılı olmuş kişilerle karşılaştırırım.					

APPENDIX G.: DÜŞÜNME TÜRLERİ ÖLÇEĞİ

Yönerge: Bu kısımda, kullandığınız farklı düşünme türleri hakkında bilgi edinmek istemekteyiz. İzleyen kısımda, 10 tür düşünme türü okuyacaksınız. Size her bir düşünme türünün açık-laması verilecektir. Ayrıca düşünme türünü açıklamaya yardımcı olacak iki vaka örneği de okuyacaksınız. Biri sosyal ilişkilere (arkadaşlar, eşler ya da aile gibi) ve diğeri kişisel başarılara 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 göründüğünü 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 kullandığınız 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:

A- 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

B- 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:

A- 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

B- 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.

C-

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 HİÇ) 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:

A- Baran, bir sınavdan B alır. Hayal kırıklığına uğramış hisseder, çünkü notu A değildir. O, sınavlardaki başarıyı şu şekilde görme eğilimdedir: "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

C- Emel, birinden ya hoşlanan ya da ondan nefret eden tarzda bir kişidir. Ya onun "İyi Kitabı"ndasınızdır ya da değilsinizdir.

D-

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:

A- 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

B- 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:

A- 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

B- 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 değerlen-dirin.

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 olumsuza odaklanırlar. Bu durum, Zihinsel Filtreleme olarak adlandırılır. Aşağıdaki pasajlar bu durumu örneklerle açıklamak için verilmiştir:

A- 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

B- Burak, bir lise öğrencisidir. Son denemesi ile ilgili öğretmeninin 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:

A- 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

B- 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:

A- 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

B- 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, …MALI)

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:

A- 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

B- 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:

A- 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

B- 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 H.: SOSYAL DÜŞÜNCELER VE İNANÇLAR

Her ifadeyi okuduktan sonra karşısında bulunan kutucuklardan sizin için en uygun seçeneğin karşısına çarpı (X) işareti koyunuz. Lütfen her ifadeye mutlaka tek yanıt veriniz ve kesinlikle boş bırakmayınız.

		Hiç uygun değil	**Uygun değil**	**Biraz uygun**	**Biraz katılıyorum**	**Uygun**	**Tamamen uygun**
1	Sosyal ortamlarda diğer insanlara beceriksiz görünürüm.						
2	Bir grup içindeyken düşündüklerimi söylemeye çekinirim.						
3	Diğer insanlar benden daha zekiymiş gibi hissederim.						
4	Diğer insanlarla birlikteyken kendimi savunma konusunda iyi değilimdir.						
5	Diğer insanlarla etkileşime girmekten korkarım.						
6	Diğer insanlarla birlikteyken kendimi çekici hissetmem.						
7	Asla bir topluluk karşısında konuşma yapamam.						
8	Diğer insanlar sosyal ortamlarda benden daha rahattır.						
9	Diğer insanlar sosyal olarak benden daha yeteneklidir.						
10	Ne yaparsam yapayım sosyal ortamlarda daima rahatsız olacağım.						
11	Sosyal ortamlarda konuşurken beynim bomboş gibi olur.						
12	Havadan sudan konuşmaları beceremiyorum.						
13	Diğer insanlar benimle beraberken sıkılırlar.						
14	Bir grupta konuşurken, insanların benim söylediklerimi aptalca bulacaklarını düşünürüm.						
15	Etkilendiğim birisiyle beraberken muhtemelen panik olur, kendimi utandıracak şeyler yaparım.						
16	Başkalarıyla birlikteyken nasıl davranacağımı bilemem.						
17	Sosyal ortamlarda bir şeyler yanlış gittiğinde sorunu düzeltemem.						
18	Diğer insanlarla birlikteyken onlar genellikle çok zeki olmadığımı düşünürler.						
19	Diğer insanlar güldüğünde sanki bana gülüyorlarmış gibi hissederim.						
20	Ben gerginken insanlar kolaylıkla bunu fark edebilirler.						
21	Eğer bir konuşma sırasında sessizlik olursa, yanlış bir şeyler yaptığım hissine kapılırım.						