



**THE ROLE OF SELF-COMPASSION IN THE  
RELATIONSHIP BETWEEN SOCIAL ANXIETY AND  
SMARTPHONE ADDICTION**

**HAZIM TEVFIK KATIRCIOĞLU**

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**HAZIM TEVFİK KATIRCIOĞLU**

THESIS ADVISOR: ASST. PROF. DR. YASEMİN MERAL ÖĞÜTÇÜ

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## **ETHICAL DECLARATION**

I hereby declare that I am the sole author of this thesis and that I have conducted my work in accordance with academic rules and ethical behaviour at every stage from the planning of the thesis to its defence. I confirm that I have cited all ideas, information and findings that are not specific to my study, as required by the code of ethical behaviour, and that all statements not cited are my own.

Name, Surname: Hazım Tevfik KATIRCIOĞLU

Date: 09.10.2023

Signature:



# ABSTRACT

## THE ROLE OF SELF-COMPASSION IN THE RELATIONSHIP BETWEEN SOCIAL ANXIETY AND SMARTPHONE ADDICTION

Katirciođlu, Hazım Tefik

Master's Program in Clinical Psychology

Advisor: Asst. Prof. Dr. Yasemin Meral Öđütçü

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Social anxiety disorder is characterized by intense fear or anxiety about one or more social situations in which the individual is exposed to potential evaluation by other individuals. Due to intense fear and anxiety, individuals with high social anxiety tend to withdraw from social interactions and isolate themselves. Based on the literature online interaction tools such as smartphones have been a useful tool for individuals with social anxiety because communicating face to face is not mandatory. Since there is no need to interact face to face, individuals with high social anxiety disorder might be more prone to the unwanted consequences of excessive smartphone usage, namely: smartphone addiction. While there are studies that examine the relationship between social anxiety and smartphone addiction, there is no study that investigates the role of self-compassion in this relationship. Thus, the present study examines the mediating role of self-compassion in the relationship between social anxiety and smartphone addiction. The sample consists of 204 participants aging between 19-67

years. To test the hypotheses, Liebowitz Social Anxiety Scale, Smartphone Addiction Scale-SV, and Self-Compassion Scale were used. Results suggest that self-compassion significantly mediated the association between social anxiety and smartphone addiction. It is thought that the present study contributes to the literature by demonstrating the mediating role of self-compassion in the impact of social anxiety on smartphone addiction.

Keywords: Social Anxiety, Smartphone Addiction, Self-Compassion, Excessive Smartphone Usage



# ÖZET

## SOSYAL KAYGI BOZUKLUĞU VE AKILLI TELEFON BAĞIMLILIĞI ARASINDAKİ İLİŞKİDE ÖZ-ŞEFKATİN ROLÜ

Katırcıoğlu, Hazım Tefvik

Klinik Psikoloji Yüksek Lisans Programı

Tez Danışmanı: Dr. Öğr. Üyesi Yasemin Meral Öğütçü

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Sosyal kaygı bozukluğu, bireyin diğer bireyler tarafından potansiyel olarak değerlendirilmesine maruz kaldığı bir veya daha fazla sosyal duruma ilişkin yoğun korku veya kaygı ile karakterizedir. Yoğun korku ve kaygı nedeniyle sosyal kaygısı yüksek olan bireyler, sosyal etkileşimlerden geri çekilme ve kendilerini izole etme eğilimi gösterirler. Literatüre bakıldığında, akıllı telefon gibi çevrimiçi etkileşim araçları, yüz yüze görüşme zorunlu olmadığı için sosyal kaygısı olan bireyler için yararlı bir araç olmuştur. Yüz yüze etkileşime gerek olmadığı için, sosyal kaygı bozukluğu yüksek olan bireyler, aşırı akıllı telefon kullanımının istenmeyen sonucu olan akıllı telefon bağımlılığına daha yatkın olabilir. Sosyal kaygı ile akıllı telefon bağımlılığı arasındaki ilişkiyi inceleyen çalışmalar bulunurken bu ilişkide öz-şefkat rolünü araştıran bir çalışma bulunmamaktadır. Bu nedenle, bu çalışma, sosyal kaygı ile akıllı telefon bağımlılığı arasındaki ilişkide öz-şefkatın aracı rolünü incelemektedir. Örnekleme, 19-67 yaş arası 204 katılımcıdan oluşmaktadır. Hipotezleri test etmek için Liebowitz Sosyal Kaygı Ölçeği, Akıllı Telefon

Bağımlılığı Ölçeği-KF ve Öz-Şefkat Ölçeği kullanılmıştır. Sonuçlar, öz-şefkatin sosyal kaygı ile akıllı telefon bağımlılığı arasındaki ilişkiye önemli ölçüde aracılık ettiğini göstermektedir. Bu çalışmanın, sosyal kaygının akıllı telefon bağımlılığı üzerindeki etkisinde öz-şefkatin aracı rolünü ortaya koyarak literatüre katkı sağlayacağı düşünülmektedir.

Anahtar Kelimeler: Sosyal Kaygı, Akıllı Telefon Bağımlılığı, Öz-şefkat, Aşırı Akıllı Telefon Kullanımı



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## CHAPTER 1: INTRODUCTION

Socializing and having fruitful relationships with other people have been one of the main motivations of humans throughout history. Having good and stable relationships with other people contributes to the psychological and physical well-being of humans. Individuals who are particularly anxious about social situations may have hard times to participate in social situations and miss the opportunity to receive the benefits of socializing. Individuals with social anxiety disorder struggle in social processes because they fear being evaluated or humiliated by other people (APA, 2013). In the majority of situations where an individual with social anxiety is observed by other people, it is painfully difficult for them and they can experience intense emotions with accompanying self-judgmental processes. Individuals with high social anxiety tend to withdraw themselves from social situations in order to cope with their emotions but in return they face isolation and loneliness (Leary, 1983). One of the ways that individuals with high social anxiety use to cope with their condition is using their smartphones, because a communication that does not require a face-to-face interaction might be more at ease and endurable for them.

Smartphone is a relatively new technology that has entered the lives of humans. Today, there are billions of smartphone owners all around the world. Even though there are plenty of benefits of owning and using smartphones, there is also a darker side to it. Using smartphones excessively can lead to smartphone addiction. Every individual that has a smartphone is potentially at risk for becoming addicted to their smartphones, and individuals with high social anxiety could be in the group that is at higher risk. Since smartphones provide different kinds of services such as applications, texting, and calling, individuals with social anxiety might use this gadget in order to lessen their anxiety and partially fulfill their desire to socialize.

There are studies in literature that investigated the relationship between social anxiety and smartphone addiction. However, information about the factors that could aid individuals with social anxiety disorder and their relationship with their smartphones are relatively few. There is no study that investigates the role of self-compassion in the relationship between social anxiety disorder and smartphone addiction. A substantial body of research suggests that cultivating self-compassion serves as a robust protective factor against social anxiety. Numerous studies have

highlighted the significant role of self-compassion in mitigating the adverse effects of social anxiety (Neff, 2003; Kelly and Carter, 2013; Terry et al., 2019). Understanding this relationship is fundamental to the focus of this thesis, which aims to delve deeper into the mechanisms through which self-compassion can effectively ameliorate social anxiety and enhance overall mental well-being. By exploring the potential of self-compassion as a proactive intervention strategy, this research endeavors to contribute to the growing knowledge base surrounding the positive impact of self-compassion on mental health outcomes, particularly in the context of social anxiety. Therefore, the aim of this thesis is to discover the mediating role of self-compassion in the relationship between social anxiety and smartphone addiction. In this study, a strategic progression begins with a comprehensive exploration of social anxiety disorder, unpacking its intricate nuances, diagnostic criteria, and impact on individuals' daily lives. The elucidation of social anxiety disorder sets the stage for the subsequent in-depth analysis of smartphone addiction, underscoring its modern prevalence, contributing factors, and the detrimental effects it exerts on mental health and interpersonal relationships. Following this, the focus shifts to an exhaustive examination of self-compassion, probing into its psychological constructs, benefits, and its potential as a mitigating factor against the adverse consequences of social anxiety disorder and smartphone addiction. By meticulously traversing through these distinct yet interconnected domains, this study endeavors to provide a comprehensive understanding of the intricate interplay between social anxiety disorder, smartphone addiction, and self-compassion, ultimately contributing to a more nuanced comprehension of the psychological landscape. In conclusion, while this study delves into the realm of social anxiety disorder, it is essential to note that clinical samples were not utilized; rather, individuals with social anxiety were the focus. This distinction is significant because it reflects the reality that many individuals grappling with social anxiety may not seek formal clinical help due to various reasons, including shyness or reluctance to undergo therapy. Understanding social anxiety through the lens of a broader spectrum of affected individuals, not limited to those in clinical settings, adds a crucial dimension to our comprehension of this pervasive mental health issue. By encompassing a diverse range of individuals, this study underscores the importance of investigating social anxiety beyond clinical contexts, shedding light on the experiences of those who may not readily seek or have access to formal mental health treatment, ultimately advocating for more

inclusive and effective support strategies.

### ***1.1. Social Anxiety Disorder***

Marked fear or anxiety about one or more social situations in which the person is exposed to potential scrutiny by others is referred to as social anxiety disorder. Being seen while chewing, meeting new individuals, performing in front of an audience, and being observed can be given as an example of such social situations (APA, 2013). Beyond simple shyness, social anxiety disorder causes patients to avoid dreaded situations or to deal with them while experiencing great anxiety/fear and distress, which greatly impairs psychosocial functioning (Liebowitz et al., 2005). The symptoms of social anxiety disorder might affect a person's relationships, daily activities, employment, education, or other pursuits (Mayo Clinic, 2021).

#### ***1.1.1. Diagnostic Criteria of Social Anxiety Disorder***

Individuals' comfort level in social situations and level of anxiety differ greatly. Common social situations can be listed as eating in front of others, dating, starting conversations, making eye contact, using public toilets, going to work or school, attending to parties, meeting new people, entering a room full of people, returning items to store, and speaking in front of a group of people (APA, 2013). Individuals with social anxiety disorder can experience physical symptoms such as blushing, muscle tension, nausea, upset stomach, trembling, sweating, lightheadedness, increased heartbeat and feeling mind going blank when faced with social situations. Common emotional and behavioral symptoms that can accompany these physical symptoms are fear of situations where you could be negatively assessed, high anxiety while interacting with or chatting with strangers, fear that people would notice that you seem worried, fear that people would notice that you seem worried, fear of having physical manifestations that can humiliate you, such as trembling, sweating, or speaking with a shaky voice, evaluate performance after a social event, search for deficiencies in your interactions and avoiding situations in which you might attract attention (Mayo Clinic, 2021).

According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, (DSM 5) there are several criteria for an individual to receive diagnosis of



social anxiety disorder. Diagnostic criteria of social anxiety disorder are provided in the following table (Table 1).

Table 1. The Diagnostic Criteria of Social Anxiety Disorder (APA, 2013).

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>Note:</b> In children, the anxiety must occur in peer settings and not just during interactions with adults.
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).
The social situations almost always provoke fear or anxiety.
<b>Note:</b> In children, the fear or anxiety may be expressed by crying, tantrums, freezing, clinging, shrinking, or failing to speak in social situations.
The social situations are avoided or endured with intense fear or anxiety.
The fear or anxiety is out of proportion to the actual threat posed by the social situation and to the sociocultural context.
The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.
The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
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.
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.
If another medical condition (e.g., Parkinson's disease, obesity, disfigurement from burns or injury) is present, the fear, anxiety, or avoidance is clearly

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unrelated or is excessive.

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Specify if:

**Performance only:** If the fear is restricted to speaking or performing in public.

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### *1.1.2. Epidemiology of Social Anxiety Disorder*

There have been great amount of research about the epidemiology of social anxiety throughout the years. Following substance addiction and depression in terms of prevalence rates, social anxiety disorder is the most prevalent anxiety disorder (Kessler et al., 2005). According to the National Comorbidity Survey (NCS), the prevalence rate for social anxiety disorder throughout the course of one's lifetime is 13.3% (Kessler et al., 1994). Stein et al. (2017) discovered in their study including different geographical regions in the world that 1 month, 12 month, and lifetime prevalence of social anxiety were 1.3, 2.4, and 4%, respectively. Social anxiety disorder had a 1-year prevalence rate of 7.9% in a community sample of 8098 adults in the US (aged 15 to 64), according to research by Magee et al. (1996) from the National Co-morbidity Survey (NCS). The 1-year prevalence rate was 6.7% among the 9953 participants in the Ontario Health Survey (aged 15 to 64) (Boyle and Campbell, 1996). According to Weiller et al. (1996), social anxiety disorder has a 14.4% lifetime prevalence rate and a 4.9% 1-month prevalence rate in the general healthcare context of Paris (n = 2096). Prevalence rates in studies of younger populations were discovered to be comparable to those in adult populations. Statistically, 9.2% of Dutch adolescents (ages 13 to 18) have social anxiety disorder at any given time in the previous six months, according to a survey (Verhulst et al., 1997). According to Erol et al. (1998), 1.8% of Turkish people experience social anxiety. Based on the study of Demir et al. (2013) among a sample of 1482 Turkish students between 4<sup>th</sup> grade and 8<sup>th</sup> grade social anxiety disorder prevalence stood at 3.9%. The prevalence of social anxiety disorder among 4th and 5th grade students was 3.5% for females and 1.8% for males. The prevalence of social anxiety disorder among students in grades 6–8 was 6.4% for females and 3.2% for males.

## **Gender Differences**

Similar to the majority of other anxiety disorders, social anxiety disorder is more prevalent in women (59%) than in men (41%), according to surveys (Magee et al., 1996). In general, people with social anxiety disorder were more likely to be female, young, single, uneducated, and low in socioeconomic level. For social anxiety disorder, the ratio of females to males is roughly 3 to 2 (Davidson et al., 1993; Schneier et al., 1992; Stein et al., 1994). Female to male ratio of social anxiety disorder is also found to be similar in a Turkish sample. Males have a lifetime prevalence rate of 9.4% and females of 9.8% for social anxiety disorder in the Turkish sample. According to İzgiç et al. (2000), the prevalence in the most recent year was 7.1% for men and 8.9% for women. Schneier and colleagues (1992) observed that almost 70% of people with social anxiety disorder were female in the Epidemiological Catchment Area (ECA) Survey.

## **Onset and Course**

In the literature there is a large amount of evidence that points out to the age of onset of social anxiety disorder. The onset of social anxiety disorder can happen following a humiliating or a traumatic experience (like being made fun of or vomiting in front of people), or alternatively, it might develop covertly over time. First manifestation in adulthood is rather rare, and it most frequently happens following a traumatic or embarrassing situation or after major changes in life that need new social responsibilities (for instance, getting married to an individual from another category of socioeconomic class or being promoted at work) (APA, 2013). The early and late adolescent years, between the ages of 11 and 19, are when social anxiety disorder generally manifests, according to earlier studies on the condition (Amies et al., 1983; Bruce and Saeed, 1999; Liebowitz et al., 1985; Mannuzza, et al., 1990). The majority of people who have social anxiety disorder experience the first symptoms before the age of 20 (mean age range: 13 to 24); many say they have been present since childhood (Hazen and Stein, 1995). Social anxiety disorder is a persistent condition that does not appear to go away on its own (Davidson et al., 1994). Studies show that without treatment social anxiety disorder in childhood and adolescence often persists into adulthood (Beesdo-Baum et

al., 2012; Burstein et al., 2011; Kessler et al., 2012), with earlier onset increasing the likelihood of persistence (Abidin, 1992; Beesdo et al., 2007; Wittchen and Fehm, 2003). Despite having a tendency to wax and wane rather than follow a steady course, social anxiety disorder is really one of the more chronic and persistent mental disorders over the lifespan (Beesdo-Baum et al., 2012; Bruce et al., 2005).

## **Comorbidity**

Davidson and colleagues (1994) discovered in an epidemiological study that people with social anxiety disorder had lower self-confidence, more co-occurring diagnostic mental disorders, and less social support from friends and family. Individuals with social anxiety disorder had an 81% lifetime risk of having at least one additional mental disease, according to the NCS (Magee et al., 1996). The Epidemiological Catchment Area (ECA) investigation discovered high rates of comorbidity (69%) as well (Schneier et al., 1992). Another anxiety disorder, such as agoraphobia, panic disorder, or generalized anxiety disorder, is the most frequent comorbid lifetime diagnosis, followed by mood disorders (41%) and drug addiction (40%) (Magee et al., 1996). A third of people with social anxiety disorder experience severe substance addiction or co-occurring mental problems (Schneier et al., 1992). Patients with social anxiety disorder are 4 times more likely to experience depression and dysthymic disorder in their lifetime than people without the condition. According to Lecrubier and Weiller (1997), patients with social anxiety disorder had the biggest lifetime odds ratio of 10.4 for agoraphobia comorbidity. Lifetime comorbidity rates for people with social anxiety disorder are over 10% for simple phobia, agoraphobia, major depressive disorder, obsessive-compulsive disorder, alcoholism, and drug addiction (Regier et al., 1990; Schneier et al., 1992). Comorbid conditions have a significant impact on the prognosis of social anxiety disorder. Patients with social anxiety disorder who also have other psychiatric diseases had a suicide incidence of 15.7%, compared to 1.0% for those with social anxiety disorder in its purest form without comorbidity (Schneier et al., 1992).

### ***1.1.3. Etiology of Social Anxiety Disorder***

The etiology of social anxiety disorder appears to include a complex

interaction between intra-individual factors—genetic, biological, and social processes—and environmental factors—parental influences, unpleasant social encounters, and negative life events (Spence and Rapee 2016). In the subsequent sections, intricate factors contributing to the etiology of social anxiety disorder will be briefly mentioned and later cognitive theory of social anxiety disorder will be mentioned in detail. The in-depth exploration of Clark and Wells' Cognitive Theory of Social Anxiety Disorder is paramount in the subsequent chapters. This theory provides a comprehensive framework to comprehend the cognitive processes that underlie social anxiety, shedding light on the intricate mechanisms that influence how individuals perceive and respond to social interactions. Understanding these cognitive processes in detail is critical to unravel the core psychological factors contributing to social anxiety disorder. Ultimately, a thorough exploration of this theory will enrich our understanding of social anxiety at a cognitive level and pave the way for more informed and targeted treatments to improve the lives of those affected by this pervasive mental health condition.

According to research done on twins and families over the past three decades, genetic variables are critical in the emergence of anxiety disorders, including social anxiety disorder (Eley, 2001; Eley and Gregory, 2004). Regarding twin studies, Torgersen (1983) discovered that monozygotic twins had greater proband-wise concordance rates for all anxiety disorders categories (apart from generalized anxiety disorder) than dizygotic twins (34% and 17%). Based on family studies (Mancini, van Ameringen, Szatmari, Fugere and Boyle, 1996; Mannuzza et al., 1995; Stein, Chartier, Hazen, et al., 1998), social anxiety disorder is more common in first-degree relatives of those who have been diagnosed with it. For instance, Mancini et al. (1996) found that offspring of adult probands who had been diagnosed with the condition had greater rates of social anxiety disorder. In a study published in 1998, Stein, Chartier, Hazen, and colleagues compared the first-degree relatives of 106 people who had a social anxiety disorder versus those who did not have one. The prevalence of social anxiety disorder in first-degree relatives of those who were affected was found to be ten times higher than in the control group. These studies show that genetic predisposition can be a key factor in the etiology of social anxiety disorder.

Temperament characteristics of a child could also affect the onset and maintenance of social anxiety disorder. According to Chess and Thomas (1977,

1984), temperament describes consistent response tendencies that appear early in childhood, are perceptible in a range of contexts, and are largely enduring across time. Children who are “shy” or “inhibited” generally delay their responses or interrupt ongoing activities, display vocal constraint, and withdraw from circumstances when they are unfamiliar or when meeting new people. On the contrary, “sociable” children generally look for novelty, converse with others, smile, and discover their surroundings (Elizabeth et al., 2006). According to Chess and Thomas' New York Longitudinal Study from 1977, these inclinations to interact with or retreat are rather persistent behavioral traits. Studies conducted by Kagan and his colleagues (Kagan, Reznick, and Gibbons, 1989; Kagan, Reznick, and Snidman, 1988) have showed that 10-15% of American Caucasian children are inclined to be demanding and uneasy as infants, shy and afraid as toddlers, and cautious, reserved, and introverted when they come to school age.

According to Duggan, Sham, Minne, Lee, and Murray (1998) as well as Wiborg and Dahl (1997), parenting methods marked by a lack of consistency or inconsistent expressions of warmth and concern as well as a strong tendency toward overprotection and control are linked to childhood anxiety. In observing mother-child dyads completing a puzzle assignment, Krohne and Hock (1991) discovered that mothers of high-anxious girls were more controlling than mothers of low-anxious girls. According to a pattern of bidirectional effect identified by Dumas, LaFraniere, and Serketich (1995), mothers of anxious children try control them by being oppressive and unresponsive, while anxious children try to handle their mothers by being coercive and resistant. Children are more likely to exhibit socially confident behavior to help them deal with novel or hard situations if their parents utilize supportive, motivating ways to help them participate socially and confront novel situations, and who also model healthy coping mechanisms. On the other hand, it is suggested that extremely restricting, penetrating, apprehensive, or critical/rejecting parenting will maintain and intensify a disposition that inhibits behavior (Ollendick et al., 2014). They concluded by noting the connection between parental behavior that signals threat and the expectation of unfavorable outcomes and social anxiety disorder in childhood, which is likely to cause the child to develop the same cognitive biases, explaining how intergenerational transmission occurs (Spence and Rapee, 2016).

According to Rapee and Spence (2004), a variety of negative/stressful life

events as well as early trauma can raise the likelihood of developing social anxiety disorder. The risk of developing social anxiety disorder can be increased by a variety of stressful life experiences and trauma during childhood, including sexual, physical, and emotional abuse and neglect, divorce of parents, separation from parents, domestic abuse, childhood sickness, and parental psychopathology (Bogels and Brechman-Toussaint, 2006). Gren-Landell and his colleagues (2011) discovered in their cross-sectional study that increased rates of parental neglect and physical, emotional, and sexual abuse was detected in socially anxious children.

Particularly, children with social anxiety disorder tend to avoid and fear specific situations, such as speaking in front of the class, seeking assistance from teachers, or participating in social activities during lunch (Blote et al., 2015). The emergence and persistence of social anxiety disorder are often linked to negative social experiences, including severe teasing, bullying, criticism, rejection, mockery, and mistreatment by peers and important individuals (Blote et al., 2015). In comparison to their non-socially anxious peers, socially anxious children and adolescents typically have fewer friends, a reduced likelihood of being liked or accepted by classmates, encounter more negative interactions with peers, and face a higher risk of being bullied and rejected (Erath et al., 2007; Verduin and Kendall, 2008). Ongoing research suggests that socially anxious youngsters perform less effectively in social situations compared to their less anxious counterparts. This creates a detrimental cycle wherein anxious children anticipate unfavorable outcomes in future social interactions due to their previous poor social performance, leading peers to respond less favorably to them (Miers, Blote and Westenberg, 2011).

In addition, gender differences in the emergence and prevalence of social phobia may be influenced by processes of sex-role socialization. Shyness, according to Bruch and Cheek (1995), is not compatible with the conventional male sex role. They point out that shy boys may be more prone to conflict and unfavorable feedback throughout the course of their social development and are less likely to behave in accordance with typical male sex-role expectations (such as dominance and self-confidence). Furthermore, parents are more likely to think that their sons' shy behavior and poor peer interaction are bigger issues than their daughters' (Bacon and Ashmore, 1985). On the other hand, shyness is seen as being in line with the standard feminine sex role (Bem, 1974). As a result, women with social phobia may perceive less negative feedback about their restrained social behavior and may be

able to avoid some of the drawbacks that men with the condition deal with. Naturally, males could be less inclined to share about their social anxiety in different environments including surveys or clinical settings, which could potentially affect the prevalence results of the studies. There have been also studies that suggest that biological and hormonal differences between genders could be a potential factor that explains the higher prevalence of social anxiety among females (Deitweler et al., 2014).

Understanding the cognitive aspects of the Cognitive Theory of Social Anxiety Disorder is imperative, as it offers valuable insights into how individuals perceive and process social interactions. This comprehension provides a window into the intricate interplay between cognitive processes and the experience of social anxiety. Understanding the cognitive aspects will provide valuable insights into how individuals perceive and process social interactions, further elucidating the complex interplay between cognitive processes and social anxiety.

#### ***1.1.4. Cognitive Theory of Social Anxiety Disorder***

People with social anxiety retain strong ideas about the value of leaving a positive impression on other people, but they also assume that they come across poorly, according to the cognitive model created by Clark and Wells in 1995. People with social anxiety form presumptions about their social surroundings and themselves because of beliefs like "I am weird.". High expectations from oneself (I must constantly appear cool and collected) and conditional thoughts about their behavior (If I act anxiously, people will think I'm a lunatic) are typically involved in these. These negative thoughts become active in social situations and naturally these individuals feel alarmed. A series of cognitive, affective, and behavioral reactions are then triggered by the perception of danger. This feedback loop closes off to new data and continues on its own. Several connected processes are highlighted in the model including a change in attentional focus inward and the use of internal data to infer how one appears to others (collectively referred to as "processing of the self as a social object"); safety behaviors; and worry and ruminating both before and after the social encounter (Leigh and Clark, 2018).

Based on the model, people direct their attention to an almost completely internal focus when they are in interactions with others in order to carefully watch



how they appear (Leigh and Clark, 2018). The fact that the individual has a less room to think about the social setting and responses of other individuals (because individual is generally focused in his/her thoughts) is one of the explanations why this self-focused attention is detrimental. Individuals with social anxiety frequently miss the fact that other people are generally interacting with them in a harmless/kind way as a result. Moreover, shift of attention to internal processes results in becoming highly aware of the unpleasant feelings. The model suggests that people construct a perception of how other people perceive them based on information that they generate internally. Internally generated information involves anxiety feelings and negative self-perception. Individuals with social anxiety frequently exaggerate how nervous they appear because they believe that their appearance reflects how they are feeling (for instance, "I feel sweaty, so my face is probably looking red"). Images typically seem to arise from an outsider's perspective rather than a personal standpoint, therefore it is only natural to think that the images are a true depiction of how the person appears to other individuals. Engagement in safety behaviors, which are driven by the need to avoid or lessen the effects of scary outcomes (such appearing foolish), further perpetuates social anxiety and negative social beliefs. Avoiding eye contact, thinking up discussion topics ahead of time, and approving with other people are all typical safety behaviors in social anxiety. Safety practices are ineffective for a variety of reasons. They keep the person from seeing that the feared event was extremely improbable to occur in the first place. As a person makes sure the safety behaviors are "working," it might help to increase self-focus and monitoring. Feared symptoms may be directly caused by safety behaviors. For instance, hiding your face with your hands to stop flushing might increase your body temperature and lead to flushing. Safety-related behaviors can give the impression that one is detached and cold. The interaction can be polluted by actions like refusing eye contact or cutting chatting short, which imply disinterest. In the final, safety behaviors could highlight frightened behaviors. For instance, talking quietly may lead others to come closer and pay closer attention in order to hear what is being said.

The cognitive model of social anxiety disorder developed by Clark and Wells (1995) is shown in Figure 1.

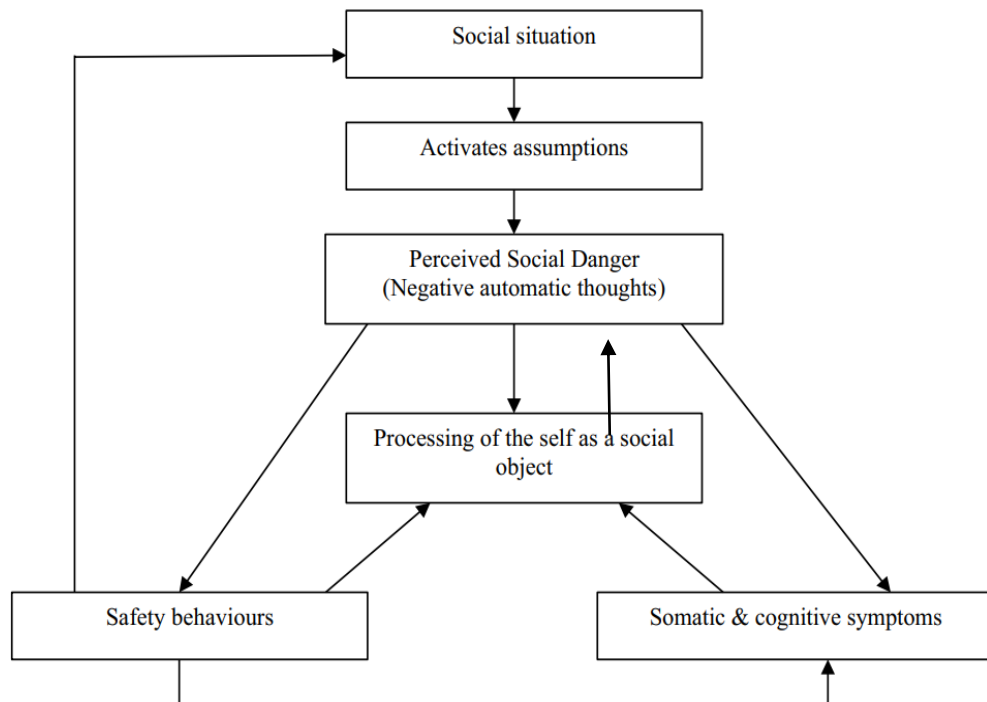


Figure 1. The cognitive model of social anxiety disorder (Clark and Wells, 1995).

The cognitive model of social anxiety disorder proposed by Clark and Wells continues to receive empirical support. This model posits that individuals with social anxiety have negative beliefs about themselves, leading to heightened self-focused attention during social interactions and an overestimation of the likelihood and impact of negative social evaluations. In a study conducted by Morrison and Heimberg (2013), they found that individuals with social anxiety exhibited increased self-focused attention during a public speaking task. This heightened self-focus was associated with greater self-reported anxiety levels, aligning with the cognitive model's predictions regarding self-focused attention. Wong et al. (2014), conducted a study exploring the role of self-focused attention in social anxiety disorder. Their findings indicated that individuals with social anxiety displayed greater self-focused attention when anticipating social interactions. This self-focus was linked to higher social anxiety symptoms, supporting the cognitive model's emphasis on self-focused attention. A study conducted by Moscovitch, Hofmann and Litz (2005) delved into the intricate role of negative self-beliefs within the realm of social anxiety disorder. Their research provided valuable insights by examining the cognitive aspect of social anxiety, particularly focusing on how individuals perceive themselves in social situations. The researchers discovered a significant correlation between social

anxiety and the presence of negative self-beliefs. Individuals grappling with social anxiety tended to harbor markedly pessimistic beliefs regarding their own social performance and how others perceived their actions and behaviors. This alignment with the cognitive model's central premise emphasizes the critical influence of negative self-beliefs in the manifestation and perpetuation of social anxiety. The study shed light on the internal cognitive processes that contribute to the often-debilitating experiences of individuals with social anxiety, further reinforcing the fundamental role of cognitive factors in understanding and addressing this mental health condition (Moscovitch, Hofmann and Litz, 2005). A study was conducted by Meral and Vriends (2021) based on Clark and Wells' cognitive model, which suggests that social anxiety is perpetuated by negative self-image and self-focused attention (SFA). In their examination of the interplay between negative self-image and social anxiety, the study found that highly socially anxious individuals with a negative self-image experienced heightened anxiety during conversations compared to those with a positive self-image, as well as in comparison to low socially anxious individuals. Furthermore, the study revealed that highly socially anxious individuals reported higher SFA; however, SFA was not influenced by self-image positivity or negativity. These findings reaffirm the significant influence of self-image and SFA on social anxiety, particularly emphasizing the powerful impact of a negative self-image on socially anxious individuals. Moreover, in a study conducted by Vriends et al. (2017), the research aimed to explore the role of self-focused attention (SFA) in social anxiety disorder (SAD) using an ecologically valid approach. The first experiment involved a video conversation between socially anxious single women and an attractive male confederate, monitoring SFA through eye-tracked gaze duration at the participants' own image versus the confederate's image. High socially anxious individuals demonstrated heightened self-focus during critical phases but reduced self-focus during active questioning phases compared to their low socially anxious counterparts. In the second experiment, women diagnosed with SAD exhibited increased SFA throughout all conversation phases, correlating with higher self-rated anxiety during the interaction. The findings suggest that subclinical social anxiety leads to heightened SFA primarily in critical interactions, while individuals with clinical SAD maintain heightened self-focus consistently.

Expanding upon the cognitive model of social anxiety disorder outlined by Clark and Wells (1995), which emphasizes self-focused attention and negative self-

beliefs as core components, it becomes evident that individuals grappling with social anxiety tend to be excessively self-conscious during social interactions, often due to the fear of negative evaluation. This heightened self-focus can intensify anxiety and perpetuate negative self-beliefs, as predicted by the model. This intricate understanding of social anxiety sets the stage for an exploration of its manifestations in the digital age. In today's technologically driven society, the constant presence and use of smartphones provide a unique lens through which we can examine how these devices impact individuals with social anxiety, potentially exacerbating their self-focused attention and negative self-perception.

### ***1.1.5. Smartphone***

Building on the discussion of social anxiety disorder and its pervasive impact on individuals in today's technologically advanced world, it is essential to explore the interconnected dynamics between mental health, specifically social anxiety, and the omnipresent integration of smartphones into our daily lives.

In the vast expanse of human existence throughout millennia, smartphones are a recent and relatively modern innovation, but this technological device has transformed into a need for daily living, and today, there are billions of smartphone owners around the world (Miller, 2012). Smartphone has no singular definition but generally it is defined as a mobile phone that has functions of a computer, such as accessibility to internet and applications (Oxford Dictionary, 2013). Chen (2011) defined smartphones as the technology that combines cell phones and handheld computer functions in a single device. Smartphones often have touch screens and a wide range of applications (apps). Smartphones contain diverse features such as instant access to social media and the Internet and multimedia functionality (gaming, camera, music, radio and video).

Apple Company made a major contribution in promoting and selling smartphones internationally, and they introduced their first smartphone back in 2007. However, the history of smartphone actually goes back to 1993. The International Business Machines Corporation created the first smartphone "Simon" in 1993. This device had features like making phone calls, having a calculator, a calendar, a clock and having a touch screen (Hosch, 2023). When smartphones were first introduced to the market, their purpose was to help people in corporations with their daily tasks

and smartphones were designed solely for that purpose. Moreover, those smartphones were expensive, and the target audience was mainly companies. A couple of years later, Apple Company introduced its first smartphone, “iPhone” in 2007. This era could be considered as the second revolutionary stage of smartphones because smartphones were introduced for the general consumer market. Now individuals from different backgrounds and occupations were able to buy this product. After 2007, with the involvement of other major tech companies into smartphone business, smartphone usage has spread all over the globe. Today, billions of people use smartphones for different kinds of purposes such as listening to music, checking their e-wallet, using Global Positioning System (GPS), sending, and receiving e-mails, taking photographs, playing games, shopping, sharing information and checking social media accounts (Alfawareh and Jusoh, 2014).

When compared with other portable devices, smartphones have the highest ownership rate over the years (Chun et al., 2012). Pew Research Center did research in 2015 across 40 countries about smartphone ownership and results revealed that highest rate of ownership belonged to South Korea. Australia, Israel, America and Spain followed after South Korea and Turkey belonged to 12th in this list (Poushter, 2016). According to Turkish Statistical Institute (Türkiye İstatistik Kurumu- TÜİK), in 2018 92.7% of individuals in Turkey were using mobile or smartphones and in 2022, this amount increased to 95.8% (TÜİK, 2022). 1500 smartphone users from 25 Turkish cities participated in questionnaire-based research done in 2014. In this study it was found that 91% of users benefited from social networking, 86% from instant messaging, 83% from browsing the web, 71% from playing mobile games, and 67% from downloading new applications by the use of mobile services. In addition, the majority of Turkish smartphone users tend to be more involved (in regards to using mobile services) than smartphone users in other countries (Ericsson Consumer Lab, 2014).

#### ***1.1.6. Consequences of Excessive Smartphone Use***

The timeline of smartphones in relation to human history is brief, yet research has highlighted that excessive utilization of these devices can negatively impact both the human mind and body.

One issue with excessive smartphone use is the inability to pay attention to

traffic because of interactions with the device (Billieux, Maurage et al., 2015). With the prevalence of smartphone users conversing, texting, or listening to music while driving, unintentional injuries include traffic accidents, pedestrian collisions, and falls have grown (Kim et al., 2017; Kong et al., 2015; Shabeer and Wahidabanu, 2012; Walsh et al., 2008). Over a four-year period in Korea, smartphone-related accidents involving pedestrians climbed by 1.9 times (Lim, et al., 2016). Another is the loss of productivity due to frequent interruptions (Duke and Montag, 2017b); third is the inability to pay attention to tasks related to one's job because of the smartphone's "presence" on one's desk (Ward et al., 2017). Additionally, excessive smartphone use is linked to less successful educational outcomes and superficial learning strategies (Rozgonjuk, Saal and Täht, 2018; Samaha and Hawi, 2016). Furthermore, problematic smartphone use is linked to aggressive behavior (Billieux, Maurage et al., 2015), irregular eating patterns (Kim and Kim, 2015), and less physical activity (Kim, Kim and Jee, 2015). Problematic smartphone use has been linked in a recent study by Grant, Lust, and Chamberlain (2019) to impaired educational performance, affective disorders, and alcohol use disorder. Excessive smartphone use can also cause neurological alterations. Gamma-aminobutyric acid levels in the brain of those who are affected have been found to be considerably higher which leads to a decline in concentration and control, as well as an increase in inattention. Adolescents' attention spans may also be shortened by their smartphones' quick access to the swift information stream. (Kim et al., 2016). Because of their neurological immaturity, adolescents are more likely to grow reliant on the immediate gratification provided by cellphones than on the natural and/or delayed gratification provided by their interests, activities with friends and family, or other activities (Chen et al., 2016; Kim et al., 2019). Studies by Kushlev, Proulx, and Dunn (2016) and Hadar et al. (2017) imply that frequent smartphone use may cause behaviors similar to ADHD. Similar correlations to social anxiety and ADHD are found by Dey et al. (2019). Excessive smartphone use may also disrupt the connectivity in regions of the brain that control emotions, judgment, inhibition, and impulse control (Chen et al., 2016). Moreover, smartphones emit blue light, and it has been shown in studies that blue light has detrimental effects on sleep. Blue light exposure at night promotes vigilant behavior, which shortens and disrupts sleep. Blue light interferes with the brain's ability to release melatonin, a type of naturally occurring sleep chemical, which can confuse the body's sleep-wake cycle and cause

irregular sleep patterns (Demirci, Akgönül and Akpınar, 2015; Randler et al., 2016).

In conclusion, while the history of smartphones in relation to humans is relatively short, the detrimental effects of excessive usage on both the human mind and body have been well-documented in numerous studies. The repercussions encompass a wide spectrum, ranging from diminished productivity and educational outcomes to heightened risks such as traffic accidents and compromised sleep patterns. Smartphone addiction, a critical concern of our modern era, will be explored in depth in the upcoming section, shedding light on the multifaceted dimensions of this pervasive issue and its intricate connection to mental well-being.

### ***1.2. Smartphone Addiction***

“The International Classification of Diseases (ICD-10) and the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) do not presently recognize excessive smartphone use as a clinical disorder, but many aspects of the behavior appear to be similar to other known behavioral addictions (Ting and Chen, 2020). The only behavioral addiction currently acknowledged by the DSM-5 is gambling disorder; all other addictive behaviors, such as "Internet gaming," "sex addiction," "exercise addiction," and "shopping addiction," are considered to be impulse disorders (APA, 2013). There isn't currently agreement on what constitutes a smartphone "addiction." Because of this, the phrase "problematic smartphone use" is commonly used to refer to a persistent inability to control an addictive behavior that causes functional impairment or distress (Ting and Chen, 2020). However, there are several definitions of smartphone addiction in the literature. According to several publications, smartphone addiction is described as unchecked and excessive smartphone use, the occurrence of withdrawal symptoms when control is tried, and continued smartphone use despite knowledge of the dangers (Kamibeppu and Sugiura 2005; Wu et al. 2013; Kim et al. 2014; Mok et al. 2014). The term "problematic smartphone use" is defined by Kardefelt-Winther et al. (2017) as a repeated inability to restrain an addictive behavior that causes functional impairment or discomfort, and according to their proposal it matches the requirements for behavioral addiction. According to the DSM-5 criteria for compulsive gambling and substance abuse, the setting of such behavioral addiction is conceived using the conventional addiction symptoms as a guideline (Kwon et al., 2013; Lin et al., 2016).

According to the DSM-5 criteria for substance abuse and gambling disorder, the following table shows the suggested symptomatology of smartphone addiction (APA, 2013).

Table 2. Symptomatology of problematic smartphone use and DSM-5 criteria for gambling disorder and substance abuse (Source: American Psychiatric Association, 2013).

<b>Characteristic</b>	Gambling disorder	Substance abuse	Problematic smartphone use
<b>Obsessions or preoccupations</b>	Frequently focused on gambling (e.g., daydreaming about past gambling experiences and making plans for future gambling)	Spent a lot of time getting the substance, using it, or recovering after using it	Feel strongly the need to check often
<b>Maintain behavior despite the negative consequences</b>	Despite having money issues as a result of gambling, continue to gamble; depend on others for financial support  Lies are used to cover up money spent on gambling.  Pursuing the loss with a larger sum of money	Even if it is understood that the substance may have contributed to or made their physical or psychological problem worse, they continue to use it despite how badly it affects their bodily or mental health  Despite the negative consequences, continue using the drug  Urges and cravings to consume the drug	Having trouble sleeping or experiencing insomnia related to frequent checking  Continue using it in scenarios that are against the law or could be hazardous (such as when driving, walking, or engaging in unsafe live broadcasting)  Significant financial outlays
<b>Difficulty in controlling</b>	Repeated failures to regulate, limit, or quit gambling	Repeated failures to regulate, limit, or quit substance use	Repeated failures to regulate, limit, or quit compulsive use of smartphone
<b>Negatively affect daily, social, and occupational functioning.</b>	Due to gambling, loss of a significant relationship, job, or chance at education or employment	Due to substance abuse, significant social, professional, or recreational activities are decreased or abandoned	Absence from family or shared events as a result of using a smartphone  Adverse consequences on familial, social, emotional, or educational functioning



		Fail to carry out important responsibilities at work, school, or home	
<b>Withdrawal</b>	Feel restless or agitated when trying to reduce or stop gambling	Withdrawal symptoms  Craving, or a strong desire or urge to use the substance	Uncomfortable sensations, cravings, dependence, and anger when using a phone is prohibited  Increased agitation and/or anxiety if phone is unavailable
Not better explained by other disorder	Not better explained by other disorder	Not better explained by other disorder	Not better explained by other disorder

Young individuals are especially prone to side effects of technological devices because they grow up in environments filled with gadgets that have the latest technology. Based on findings, teenagers are twice as likely as adults to engage in excessive or problematic smartphone use (Park and Park, 2014). According to recent research conducted in the United Kingdom, almost 90% of youngsters between the ages of 16 and 24 own a smartphone, and about half of them check it as soon as they wake up (Ofcom, 2016). In Korea 80.4% of Korean primary school students started using smartphones at or before the age of 10, and 59.9% of them used them for one hour or more every day (Lee and Kim, 2018).

According to Sansone and Sansone (2013) and Thomée (2018), some teenagers use their smartphones as a coping strategy to lessen their depressive symptoms and to get rid of boredom or irritation. They can divert their focus from other issues in their lives by using devices because they are entertaining and make them feel less distressed. Adolescents may temporarily feel relieved and be able to escape their issues by engaging in such conduct, but it is not long-term helpful because the problems are not resolved. Instead, this will raise the possibility of being dependent on smartphones in order to deal with psychological issues (Alhassan et al., 2018). Individuals looking for friendship in a secure virtual setting run the risk of developing depression or intensifying it as they isolate themselves from others while only paying attention to their phones (Hinduja and Patchin, 2010; Walsh et al., 2011). Hence, rather than being a method of problem-solving, excessive smartphone use may be a sort of maladaptive coping technique (avoidant or emotion-based) and because their lives are so intertwined with their smartphones, adolescents who use

them compulsively seem to find it challenging to put them down, even for a short time (Thomé, 2018; Walsh et al., 2011). According to Sansone and Sansone (2013), Shabeer and Wahidabanu (2012), and Walsh et al. (2008), some adolescents who use their smartphones poorly even text or view videos while walking, driving, or even conversing with others, which would also cause psychosocial problems.

### ***1.2.1. Social Anxiety and Smartphone Addiction***

An overwhelming dread of social circumstances or interactions with others, as well as of being judged or scrutinized by others, especially when one encounters strangers in public places, is referred to as social anxiety (Schlenker and Leary, 1982). Socially anxious people strive to limit their possibilities of leaving an unfavorable impression on others in order to alleviate their worry (Caplan, 2007). However, in return, they can face social withdrawal and isolation (Leary, 1983).

Excessive smartphone use has been consistently linked to a range of mental health issues, including attention deficit problems, social anxiety, depression, impulsivity, and loneliness (Elhai, Dvorak, Levine and Hall, 2017). This overreliance on smartphones, particularly for social interactions, creates a concerning pattern: teenagers using smartphones excessively tend to lack practice in essential nonverbal communication skills, such as interpreting facial expressions and emotional reactions (Hong et al., 2012). This deficiency in understanding their actions and rigid communication patterns leads to less emotionally fulfilling interactions, especially when frequent texting is involved (Sansone and Sansone, 2013). As a result, problematic smartphone use is shown to adversely impact social interaction and parent-child communication (Radesky et al., 2014; Sansone and Sansone, 2013).

Moreover, individuals' resort to smartphone usage as a coping strategy, seeking relief from depressive symptoms, boredom, or irritation, albeit temporarily (Sansone and Sansone, 2013; Thomé, 2018). This escape from reality, while momentarily relieving, does not address the underlying issues, potentially leading to dependency on smartphones as a coping mechanism (Alhassan et al., 2018). Unfortunately, the search for companionship in a secure virtual setting poses risks, as individuals isolate themselves from others, intensifying feelings of depression (Hinduja and Patchin, 2010; Walsh et al., 2011). Instead of resolving problems, excessive smartphone use tends to be a maladaptive coping technique, particularly

for adolescents whose lives are profoundly intertwined with their smartphones, making it difficult for them to disengage, even temporarily (Thomé, 2018; Walsh et al., 2011). This cycle of overuse and potential addiction is further complicated by premorbid problems in social communication, including social anxiety disorder, loneliness, or other psychosocial conditions, which render individuals more vulnerable to excessive technology use (Darcin, Kose, Noyan, Nurmedov and Dilbaz, 2016). Loneliness and shyness also contribute to smartphone dependency, as individuals use their devices for various activities and feel more comfortable engaging in social interactions through this filtered and controlled virtual context (Bian and Leung, 2014; Joinson, 2004). Moreover, individuals with low self-esteem and increased anxiety are more likely to become addicted to their phones, using them as a coping mechanism (Toda et al., 2008). Lonely and nervous people gain from online engagement (Morahan-Martin and Schumacher, 2003; Yen et al., 2012) and interacting online rather than in person has shown to be a good option, satisfying the need to interact in a less direct approach because social anxiety is lower while doing so (Reid and Reid 2007; Yen et al., 2012). It is probable that individuals with high social interaction anxiety would be more likely to rely on their smartphones than people with low social interaction anxiety given that 83% of smartphone users use their phone for communication (Our Mobile Planet, 2013). Another factor in the rise in smartphone use is a lack of social support from peers and a desire for belonging (Ihm, 2018; Wang et al., 2017). According to Choi et al. (2015), the use of smartphones can improve interpersonal interactions by bringing various people together. When it comes to maintaining social connections, people who are dissatisfied with their offline interpersonal relationships are more inclined to spend more time on their smartphones (Bae, 2015; Zhu et al., 2019). Similar findings were made by Herrero et al. (2017), who discovered that a lack of social support can lead to increased social isolation and feelings of loneliness, which in turn can lead to excessive smartphone use. Additionally, Pierce (2009) noted a correlation between "feeling uneasy speaking with others face-to-face," "speaking with others online," and communicating via text messaging."

Darcin and his colleagues conducted a study among university students to discover the relationship between social anxiety and smartphone addiction among Turkish university students. Their findings revealed that people who had higher risk for social anxiety symptoms had an increased chance to be addicted to smartphones

due to avoiding relationships in real time (Darcin et al., 2016). The dread or worry of exhibiting outward physical manifestations of physiological arousal symptoms, which are central symptoms of social anxiety, can also be reduced through virtual socialization. Individuals with social anxiety have the chance to communicate freely and without feeling under pressure by using smartphones but in return they miss the opportunity of real-time interactions. In the short term, using smartphones for these individuals can work as a beneficial tool that helps them to interact in some way to other individuals, but it prevents them from breaking the cycle of their pathology.”

Examining social anxiety and smartphone addiction, it's clear that individuals facing these challenges often lack self-compassion. Socially anxious individuals fear judgment, leading to self-isolation. Excessive smartphone use is often an escape from negative emotions, potentially resulting in dependency. Exploring self-compassion offers a way to break these cycles and foster healthier relationships with oneself and others.

### ***1.3. Self-Compassion***

In Western society, compassion is typically thought of in terms of compassion for other people, but Buddhist psychology holds that compassion for oneself is just as crucial as compassion for others. Being receptive to and moved by another person's suffering and having the desire to lessen that suffering are both characteristics of compassion. Additionally, it entails showing others patience, kindness, and nonjudgmental understanding while acknowledging that everyone is imperfect and prone to wrongdoing (Neff, 2003). Similar to compassion, self-compassion entails being receptive to and moved by one's own suffering, feeling compassion and kindness toward oneself, adopting an accepting, nonjudgmental attitude toward one's flaws and shortcomings, and realizing that one's own experience is a part of the universal human experience (Neff, 2003). Being self-compassionate does not imply being egotistical or self-centered, nor does it imply placing one's needs above those of others. Rather, self-compassion includes accepting that inadequacies, suffering, and failure are all a part of the human experience and that everyone, including oneself, is deserving of compassion. In addition, self-compassion differs from self-pity (Goldstein and Kornfield, 1987). Self-pity often makes people feel quite cut off from other people. They grow

preoccupied with their own issues and lose sight of the challenges others around the world are going through, which may be worse.

Self-pity also has a tendency to overstate the severity of personal pain because people get carried away by their emotions. This process is known as "overidentification" because it makes it challenging to step back from the situation and take a more detached viewpoint because one's sense of self is so deeply ingrained in one's subjective responses (Bennett-Goleman, 2001). Because of this, it can be argued that having compassion for oneself implies having the balanced mental attitude known as mindfulness (Goldstein and Kornfield, 1987). When people are in a mindful state of mind, they are able to watch their thoughts and feelings as they come without trying to suppress them or change them and without letting them take over either (Hayes et al., 1999). People should neither ignore or suppress their unpleasant emotions, but they also shouldn't identify too strongly with them in order to maintain a mindful viewpoint. In summary, there are three fundamental parts to self-compassion: 1) treating oneself with kindness and understanding rather than strict self-criticism; 2) seeing one's experiences as a part of the greater human experience rather than as an isolate and solitary experience; and 3) holding one's unpleasant thoughts and feelings in balanced awareness (mindfulness) instead of over-identifying with them (Neff, 2003).

Understanding age and gender differences in self-compassion is crucial, as it provides insights into how self-compassion evolves across the lifespan and varies within diverse demographic groups. This knowledge is vital for tailoring effective interventions and support systems that address the unique self-compassion needs associated with different age groups and genders. There are studies that have shown age and gender differences in level of self-compassion. According to a new meta-analysis on gender differences in self-compassion, women have slightly lower levels of self-compassion than males do (Yarnell et al. 2015). Females have more self-consciousness than males do during adolescence, especially in regard to changes in their physical development and their interpersonal relationships with peers and love partners. Particularly when female adolescents get older and encounter more of these developmental challenges, this increased self-consciousness may work against concept of self-compassion (Hyde et al., 2008). Based on the notions of Gilligan (1990), adolescent females start to realize that our male-dominated culture does not value the female-specific values of being nurturing and relational, which may

increase their vulnerability to a variety of internalizing symptoms (such as depression, anxiety, and stress). In a similar vein, gender-role amplification, or the pressure to fit into stereotyped sex roles that occurs during adolescence, may also contribute to decreased levels of self-compassion in females (Hill and Lynch 1983). We would anticipate internalizing symptoms in females to be negatively impacted and their level of self-compassion to be lesser than that of male adolescents as female adolescents notify more adverse life experiences than male adolescents (e.g., females encounter twice the rate of sexual abuse and have higher rates of peer sexual harassment victimization than males) (Hyde et al., 2008; Bronfenbrenner, 1979; Petersen et al., 1991). Moreover, women report higher rates of self-criticism, feelings of isolation, and ruminating on unpleasant experiences (Neff, 2003a) as well as lower overall levels of compassion for oneself (Yarnell et al., 2015).

According to the literature, self-compassion grew stronger as people aged (Homan, 2016; Allen et al., 2012). According to Murn and Steele (2019), older people are better able to understand that suffering is a universal experience, which in theory enables them to be more compassionate toward themselves while facing challenging circumstances. When faced with emotional or cognitive distress, older people are more able to keep a mindful perspective than their younger counterparts. As people live longer, they inevitably accumulate more life experiences, many of which are challenging. Dealing with life's challenges brings one into contact with humanity, and these experiences may help one develop self-compassion.

When unpleasant or upsetting feelings are kept in awareness with kindness, empathy, and a sense of our shared humanity, it can be seen as a helpful emotional regulation technique. Negative emotions are thus changed into a more positive feeling state, enabling a deeper understanding of one's current condition and the adoption of activities that modify oneself or the environment in suitable and efficient ways (Folkman and Moskowitz, 2000; Isen, 2000). Numerous cross-sectional studies on adult populations have revealed that self-compassion is positively correlated with emotional health and negatively related with psychopathology. Higher levels of self-compassion are inversely correlated with perceived stress, rumination, and symptoms of anxiety and depression, and positively correlated with life satisfaction and positive affect (MacBeth and Gumley, 2012). Based on a different study, self-compassion was found to regulate the association between self-esteem and mental health in a large sample of Australian ninth graders, protecting against negative self-judgments

throughout the next year (Marshall et al. 2014). Hence, research indicates that self-compassion may hold significance in addressing psychological challenges like anxiety and depression. In the subsequent section, we will delve into an in-depth exploration of research examining the correlation between self-compassion and social anxiety.

### ***1.3.1. Self-Compassion and Social Anxiety***

According to the general definition of self-compassion, it is a multifaceted construct that includes elements like being kind to oneself after failing, seeing bad things that happen in life as opportunities for growth, and accepting that negative emotions are a part of human life (Neff, 2003). In general, people who are more compassionate toward themselves are less likely to report experiencing anxiety-related symptoms (Marsh et al., 2018). When compared to healthy adults, adults with social anxiety disorder had considerably lower self-compassion scores (Werner et al., 2012). Similar results were seen in adolescents, showing that high levels of self-compassion may serve as a protective factor since they are both simultaneously and longitudinally associated with reduced levels of anxiety (Gill et al., 2018). According to studies, individuals with high levels of social anxiety also tend to engage in excessive self-criticism and ruminating on failure rather than adopting alternative viewpoints on one's flaws (Heimberg et al., 2010). Werner et al. (2012), discovered that people with social anxiety disorder displayed more self-judgment, isolation, and overidentification and less self-kindness, common humanity, and mindfulness. This negative self-evaluation perpetuated their social anxiety, forming a cycle that reinforced their fears and inhibitions in social settings. The contrast between these patterns and the potential protective impact of self-compassion suggests that developing self-compassion may be a vital component in interventions targeting social anxiety, offering individuals a more constructive and self-affirming perspective to break free from the constraints of anxiety and self-critique. According to research, a variety of elements and mechanisms linked to social anxiety may also be linked to self-compassion. One of these processes is the fear of negative evaluation, whereby people with SAD are more prone to think that everyone will see them and judge them unfavorably (Werner et al., 2012). These anxieties frequently stem from past events and ingrained beliefs (Clark and Wells, 1995), and they can

have a significant negative impact on a person's capacity to deal with day-to-day situations. Higher levels of self-compassion have been linked to improved considering different viewpoints and more accurate self-evaluations, suggesting that self-compassion is a key coping mechanism when dealing with unpleasant interpersonal experiences (Leary et al., 2007). People who have SAD pay extra attention to themselves and watch their psychological, physical, and cognitive processes to reduce the possibility of receiving unfavorable reviews from others (Spurr and Stopa, 2002). As a result of this process, people become less aware of external cues, become disconnected from their surroundings, and rely more on internal information to determine how they seem (Rapee and Heimberg, 1997). A lack of access to external disconfirmatory information subsequently fuels self-critical ruminations, which are viewed as a shortcoming of the self (Cox et al., 200). Gill et al. (2018) examined the relationship between self-compassion and social anxiety in adolescents. The research included 316 adolescents in the age range of 14-18 and found a significant inverse correlation between self-compassion and social anxiety, indicating that higher levels of self-compassion were associated with lower social anxiety. This relationship was found to be partially mediated by fear of negative evaluation. Kelly et al. (2014) conducted a study where they observed that individuals exhibiting higher levels of self-compassion tend to report lower levels of social anxiety. This initial finding was reinforced by subsequent research conducted by Zessin et al. (2015), who further established a negative correlation between self-compassion and social anxiety. In essence, their results suggested that those individuals who cultivate a greater sense of self-compassion tend to experience reduced levels of social anxiety. Reliance on cognitive and behavioral avoidance tactics is another characteristic of SAD (McManus et al., 2008). As it has been shown that greater self-compassion when encountering difficulties is linked with a decreased need to engage in cognitive avoidance, it is possible that self-compassion could change this relationship. For instance, Neff et al. (2007) discovered that when performing a mock interview, those with high self-compassion had less self-evaluation anxiety than those with low self-compassion. Importantly, even when overall worry was considered, this study found a negative correlation between self-compassion and thought suppression. The same research has shown that people who have poor self-compassion behave more avoidantly (Krieger et al., 2013). Adding to this body of evidence, a study by Krieger et al. (2013) also affirmed these trends by



demonstrating a clear inverse relationship between self-compassion and social anxiety symptoms. Collectively, these studies emphasize the significant role that self-compassion can play in mitigating the impact of social anxiety, indicating a promising avenue for potential interventions and support strategies in managing social anxiety.

Amir and Taylor (2012) and Biagianni et al. (2020) found that cognitive-behavioral techniques that target the development of deeper understandings of self-related negative situations reduce social anxiety levels in both adults and adolescents, providing further proof in this direction. Like this, techniques based on mindfulness have been shown to be particularly effective in reducing social anxiety in both adults and adolescents (Gu et al., 2015; Stefan et al., 2018). These interventions teach participants kindness and self-compassion as ways to become more concentrated on the present moment experience instead of worrying about past errors or failures in the future.

### ***1.3.2. Self-Compassion and Smartphone Addiction***

Given the dearth of literature on smartphone addiction and how it interacts with self-compassion, in this part the area of internet addiction and social media usage will be also mentioned. I have delved into the aspects of internet addiction due to its parallels with smartphone addiction.

Criticism towards oneself has detrimental impacts on various aspects of life, notably contributing to conditions like depression, social anxiety, and even internet addiction (Błachnio et al., 2016). In contrast, self-compassion promotes an open, understanding approach towards one's own suffering, failures, and flaws, aiding in better coping during difficult times (Neff, 2003). It acts as an antidote against self-critical attitudes, leading to reduced self-criticism, depression, anxiety, and stress (Neff et al., 2007; Werner et al., 2012). Individuals may resort to excessive internet use to escape challenging realities and difficulties, but this can result in internet addiction as a problematic avoidance strategy (Shapira et al., 2003). Supporting self-compassion has also proven effective in decreasing loneliness (Akin, 2010). Additionally, self-compassion plays a pivotal role in coping strategies, allowing individuals to handle negative situations without viewing them as catastrophic, thereby fostering a sense of well-being (Allen and Leary, 2010). Those with social

anxiety often exhibit heightened self-criticism and lower self-esteem (Iancu et al., 2015), contributing to a negative self-image and potential susceptibility to internet addiction (Błachnio et al., 2016). Interventions focused on cultivating self-compassion have shown positive effects in protecting against various psychopathologies (Halamová et al., 2019), with targeted training significantly increasing self-compassion and reducing self-criticism in individuals struggling with internet addiction (Strnádelová et al., 2021).

In a study conducted by Baránková and Karpinský (2022), the aim was to assess the effectiveness of Emotion-Focused Training for Self-Compassion in individuals dealing with internet addiction, focusing on enhancing self-compassion and reducing self-criticism. A total of 67 participants, aged 19 to 55 years, were randomly split into experimental and control groups (Baránková and Karpinský, 2022). Various scales, including the Internet Addiction Test and Sussex-Oxford Compassion for the Self Scale, were employed to gauge the impact of the intervention. The results demonstrated a notable increase in self-compassion and a decrease in self-criticism within the experimental group, showcasing the success of the two-week online EFT-SCP intervention (Baránková and Karpinský, 2022). This intervention presents promise as an effective tool for individuals struggling with internet addiction, effectively promoting self-compassion and reducing self-criticism.

In a study conducted by Liu et al. (2020), the relationship between peer victimization and adolescent mobile phone addiction was investigated, with a focus on the moderating roles of self-compassion and gender. The research involved a sample of 1265 adolescents from two high schools, utilizing a cluster random sampling method. The results indicated a positive association between peer victimization and mobile phone addiction. Notably, self-compassion emerged as a significant moderator, weakening the association between peer victimization and mobile phone addiction, particularly for adolescents with higher levels of self-compassion. Moreover, in another study it was mentioned that distressed individuals often spend more time on social media, which negatively impacts their daily life functioning. Interestingly, the research finds that individuals who are more compassionate towards themselves tend to spend less time on social media and experience lower levels of psychological distress (Mitropoulou et al., 2022). Their study involved 255 Greek adults, and their participation was voluntary. The analysis of the collected data revealed significant correlations: social media addiction was

negatively correlated with self-compassion and positively correlated with psychological distress. The results indicated that individuals with higher levels of self-compassion reported less addictive behavior related to social media and experienced less distress. The study highlighted that extensive use of social media is linked to negative emotions, emphasizing self-compassion as a potential protective factor and distress as a potential risk factor for social media addiction.

#### ***1.4. Aim of the Present Study***

Based on extensive epidemiological studies, social anxiety disorder is one of the most prevalent psychiatric disorders. According to American Psychiatric Association (2013) social anxiety disorder is defined as having a severe fear of receiving negative assessment from others in one or multiple social circumstances, such as one involving conversations, performances, or observations (e.g., eating). Individuals with social anxiety fear that they will act in anxious or awkward ways and will be negatively evaluated by others. Experiencing emotions such as anxiety and fear and having presumptions about social surroundings can lead individuals with social anxiety to seek out ways to comfort themselves and avoid social situations (Wong and Moulds, 2011). Problems related to social situations can have detrimental effect on the social life of individuals with social anxiety and negatively impact their psychological and physical well-being. Problem in social communication like social anxiety disorder and loneliness can put these individuals at higher risk for overusing technological gadgets (Darcin et al., 2016). Since smartphones are the most prominent technological device and it is relatively easy to access, it is important to investigate the relationship between social anxiety and smartphone addiction. In the literature it has been shown that socially anxious, shy and lonely individuals are at higher risk of becoming dependent on smartphones (Bian and Leung, 2014). Individuals with social anxiety might be using smartphones in order to compensate for their need to socialize, emotionally regulate themselves and avoid feelings of boredom or irritation. Since there are multiple ways to interact socially on smartphone rather than face to face, individuals with social anxiety might find it incentivizing to use this device more.

In this context, examining the relationship between social anxiety and smartphone addiction is one of the main goals of this study. Furthermore, to identify

a mitigating element for individuals grappling with heightened social anxiety in the face of potential smartphone addiction, extensive scrutiny has been dedicated to the role of self-compassion. The central focus has been on discerning whether self-compassion acts as a mediating force within the intricate web linking social anxiety and smartphone addiction. The choice to utilize self-compassion as a mediating variable stemmed from its well-established reputation as a protective agent against a myriad of psychological problems. Given the propensity of individuals with social anxiety disorder to engage in heightened self-judgment, self-criticism, and perfectionism, it is hypothesized that self-compassion may play a significant role in mediating the relationship between social anxiety and smartphone addiction. This comprehensive investigation holds the promise of providing valuable insights, potentially bolstering both academic knowledge and practical clinical approaches. By understanding how self-compassion may operate as a protective factor, we can glean essential information for developing tailored and effective treatment strategies to support individuals struggling with the compounding challenges of social anxiety and smartphone addiction. Such insights could significantly enhance therapeutic interventions, ultimately leading to better outcomes and improved well-being for these individuals.

Incorporating an examination of gender differences in my study was also essential to capture a comprehensive view of how social anxiety, self-compassion, and smartphone usage manifest and vary across different genders, enabling a more nuanced understanding of the complexities within these domains. Gender, as a socio-cultural construct, can influence the way individuals perceive and experience social anxiety, self-compassion, and their smartphone usage patterns. Research has consistently shown that gender-related societal expectations, norms, and roles can shape how individuals manifest and cope with social anxiety. Similarly, gender socialization can impact the development and expression of self-compassion, with societal attitudes often influencing how individuals treat themselves in various situations. Moreover, smartphones have become deeply ingrained in modern social and professional life, and understanding how gender may influence patterns of smartphone usage, dependence, and the related impact on mental well-being is critical.

Examining age differences in smartphone addiction, social anxiety, and self-compassion was also vital for my study to comprehend the nuanced interplay within

these domains across diverse age groups. Firstly, age can influence smartphone usage patterns due to varying levels of technological familiarity and generational experiences, providing valuable insights into age-related trends in smartphone dependency and their potential psychological consequences. Additionally, social anxiety's manifestation and coping mechanisms may vary among individuals of different ages, prompting a need to explore these age-related variations. Moreover, investigating self-compassion across age groups allows for a deeper understanding of how life experiences and maturity influence self-perception and self-care practices. By dissecting age differences within these domains, tailored interventions and strategies can be developed to address the specific needs and challenges experienced by different age cohorts, contributing to more effective mental health support and outcomes.

### **Research Question**

1. Is there a mediating role of self-compassion in the relationship between social anxiety and smartphone addiction?

#### ***1.4.1. Hypotheses***

1. Female participants will exhibit significantly higher social anxiety scores compared to male participants.

2. Self-compassion scores among male participants will be significantly higher than those of female participants.

3. Daily smartphone usage scores and daily smartphone checking frequency scores of female participants will be significantly higher than those of male participants.

4. Participants with high social anxiety will demonstrate higher scores in smartphone addiction compared to participants with low social anxiety.

5. Participants with high social anxiety will have higher daily smartphone usage scores and daily smartphone checking frequency compared to participants with low social anxiety.

6. Fear/anxiety and avoidance scores will be significantly higher among female participants.

7. There is a significant negative relationship between age and social anxiety levels.

8. There is a significant negative relationship between age and smartphone addiction levels.

9. There is a significant positive relationship between age and self-compassion levels.

10. There is a significant positive relationship between social anxiety and smartphone addiction.

11. There is a significant negative relationship between social anxiety and self-compassion.



## CHAPTER 2: METHOD

### 2.1. Participants

A total of 204 individuals participated and filled out the online survey. Inclusion criteria was to be a volunteer and to be 18 or older in order to participate in this study. All of the participants owned a smartphone. Data were collected through an online platform (Google Forms) by using snowball sampling method. In order to participate in the surveys, participants were required to click on the link. Also, it was requested from the participants to share the link with other individuals. There were 69 male and 135 female participants. Participants age ranged between 19-67 ( $M = 37.47$ ,  $SD = 14.06$ ). Demographic information of 204 participants (age, gender, education level, job status, income level, marital status, daily amount of smartphone usage, daily amount of smartphone checking frequency, main purposes for using smartphone, and their preferred social media platform) are represented in Table 3.

Table 3. Demographic Information of Participants

Study Variables		<i>N</i>	%
Gender	Male	69	33.8
	Female	135	66.2
Education Status	Primary School	0	0
	Secondary School	0	0
	High School	8	3.9
	University	138	67.6
	Master	42	20.6
	Doctorate	16	7.8
Working Status	Working	114	55.9
	Not Working	90	44.1
Income Level	Low Income	31	15.2
	Middle Income	141	69.1
	High Income	32	15.7
Marital Status	Married	83	40.7
	Single	101	49.5

	Divorced	19	9.3
	Widowed	1	0.5
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Daily Smartphone Usage	Less than 1 hour	1	0.5
	1-2 Hours	50	24.5
	3-4 Hours	100	49
	5 Hours and above	53	26
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Daily Smartphone Checking Frequency	Less than 10 times	10	4.9
	10-20 times	51	25
	20-30 times	51	25
	30-40 times	49	24
	More than 40 times	43	21.1
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Purpose of Using Smartphone	Internet	129	63.2
	Social Media	174	85.3
	Gaming	29	14.2
	Texting	145	71.1
	Talking	124	60.8
	Listening Music	83	40.7
	Watching Video	67	32.8
	Work/Business	85	41.7
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Most Used Social Media Site	Twitter	27	13.2
	Instagram	141	69.1
	Facebook	14	6.9
	TikTok	3	1.5
	Youtube	19	9.3
	Snapchat	0	0
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Total		204	100
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## ***2.2. Data Collection Instruments***

Demographic Information Form, Liebowitz Social Anxiety Scale (LSAS), Smartphone Addiction Scale-Short Version (SAS-SV) and The Self-Compassion Scale (SCS) were the instruments used in this study. In order to explain the research



to the participants and obtain their consent, an informed consent form was also provided. All of these scales will be thoroughly introduced in the next part.

### ***2.2.1. Demographic Information Form***

The participants filled out the form for demographic data. There were 11 questions on the demographic information form about the participants' age, gender, education level, job status, current occupation, income level, marital status, daily amount of smartphone usage, daily amount of smartphone checking frequency, main purposes for using smartphone, and their preferred social media platform.

### ***2.2.2. Liebowitz Social Anxiety Scale (LSAS)***

Liebowitz created the Liebowitz Social Anxiety Scale (LSAS) (1987). Liebowitz Social Anxiety Scale assesses social phobia, which can be defined as a persistent dread of embarrassment or unfavorable judgment when participating in social interaction or in public performance. The scale consists of two subscales and 24 items that cover performance (13 items) and social interactional (11 items) factors and items are rated on a 4 point Likert scale with (Fear/Anxiety) “none”, “mild”, “moderate” and “severe”, and (Avoidance) “never”, “occasionally”, “often” and “usually” options. The cumulative scores for fear and avoidance are added to create an overall number. On the fear/anxiety and avoidance subscales, the cut-off scores were suggested to be set at 30, and for the overall scale, it was set at 60. The possible score range is between 0 to 144. High degrees of social anxiety are indicated by higher scores for participants. Fear/Anxiety and Avoidance subscales were both found to have Cronbach's Alpha coefficient of 0.92 (Heimberg et al., 1999). Cronbach Alpha value of the total LSAS score was found to be 0.96.

The validity and reliability of the Turkish translation of the Liebowitz Social Anxiety Scale were studied by Soykan, Özgüven, and Gençöz in 2003. The fear/anxiety and avoidance subscales were found to have Cronbach's alpha coefficients of 0.96 and 0.95, accordingly. The total scale's Cronbach's alpha coefficient was determined to be 0.98. The whole scale, the fear/anxiety subscale, and the avoidance subscale all had interrater reliability values of 0.96, 0.96, and 0.95, respectively. The total scale and subscales' test-retest reliability coefficients were

found to be 0.97. On the fear/anxiety and avoidance subscales, the cut-off scores were suggested to be set at 25, and for the overall scale, it was suggested to be set at 50. According to this research, the Turkish version of the Liebowitz Social Anxiety Scale serves as a highly valid and reliable measurement tool. This study demonstrated the validity and reliability of the Turkish version of the Liebowitz Social Anxiety Scale as a measurement tool. The scale's Cronbach alpha value in this study was determined to be .96.

### ***2.2.3. Smartphone Addiction Scale-Short Version (SAS-SV)***

The Smartphone Addiction Scale-Short Version (SAS-SV) was created by Kwon and his colleagues (Kwon, Kim, Cho and Yang, 2013) in order to assess level of smartphone addiction of people. Original Smartphone Addiction Scale (SAS) was also developed by Kwon and his colleagues (Kwon, Kim, Cho and Yang, 2013). In SAS there are 6 factors (daily-life disturbance, positive anticipation, withdrawal, cyberspace-oriented relationship, overuse, and tolerance) and 33 items. Items are rated on a 6-point Likert Scale (1 being strongly disagree and 6 being strongly agree). The SAS has a 0.97 Cronbach's alpha correlation coefficient. The SAS-SV, or Smartphone Addiction Scale-Short Version, is a self-report questionnaire with 10 items that are each scored on a 6-point Likert scale (1 being strongly disagree and 6 being strongly agree). SAS-SV has only a single dimension and the scale's overall rating is between 0 and 40. A higher level of smartphone addiction is indicated by higher scores on the scale. The SAS-SV score in Kwon and his colleagues' study revealed a significant gender difference. A separate cut-off value was consequently proposed for each gender category. Cut off scores for men and women were 31 and 33, respectively. The SAS-SV has a .91 Cronbach's alpha correlation coefficient.

The validity and reliability of the Turkish translation of the Smartphone Addiction Scale-Short Version were studied by Akin, Altundağ and Akin in 2014. Items are scored on a 6-point Likert scale (1 being strongly disagree and 6 being strongly agree). Higher score from the scale indicates a higher risk for smartphone addiction. In the Korean sample cut off scores for men and women were 31 and 33, respectively. Based on the higher self-reporting scores among female participants, it was inferred that they were more conscious of their addiction. In terms of self-reporting, female participants tend to be more conscious and articulate their issues

more transparently than male participants. While female participants tended to internalize their addiction symptoms, male students tended to externalize them (Kim and Lee, 2012). For the Turkish sample no cut off scores have been calculated. The SAS-SV's Cronbach's alpha correlation coefficient was .88. The scales adjusted item-total correlations ranged from .43 to .76. According to research, this scale showed a high level of reliability and validity (Büyüköztürk, 2004; Tabachnick and Fidell, 1996). The scale's Cronbach alpha value in this study was determined to be .89.

#### ***2.2.4. Self-Compassion Scale (SCS)***

Neff (2003) developed the Self-Compassion Scale (SCS) to assess the level of self-compassion individuals possessed for themselves. The scale was created to clearly depict the ideas, feelings, and actions connected to the different aspects of self-compassion. SCS has 6 subdimensions (isolation, common humanity, over-identification, mindfulness, self-judgment and self-kindness) and a total of 26 items. Items are scored on a 5-point Likert scale, 1 being "never" and 5 being "always". High score from each subscale indicates that the feature represented by that subscale is distinctly evident. In order to receive a total score, items from self-judgment, over-identification and isolation should be reverse scored. For every single subscale means are assessed and for overall score a grand mean is calculated to give an average on level of self-compassion. According to Neff (2003a), a score of 1-2.5 stands for self-compassion, 2.5-3.5 stands for moderate self-compassion, and 3.5-5 stands for high self-compassion. Internal consistency coefficients of self-judgment, self-kindness, over-identification, mindfulness, isolation and common humanity were found .77, .78, .81, .75, .79 and .80, respectively. The Cronbach's alpha coefficient of the total scale was measured to be .92. The test-retest reliability values of these six subscales ranged between .80-.88.

The validity and reliability of the Turkish translation of the SCS were studied by Akın, Akın and Abacı in 2007. Means scores can range from 1 to 5 (1 - 2.5 = low self-compassion, 2.5-3.5 = moderate self-compassion and 3.5 - 5 = high self-compassion) (Akın, Akın, and Abacı, 2007). Cronbach's Alpha coefficient of self-judgment, self-kindness, over-identification, mindfulness, isolation and common

humanity were found to be .72, .77, .74, .74, .80 and .72, respectively. Based on the findings, scoring, sub-scales and number of questions remained the same according to the original scale. Research revealed that Turkish translation of the SCS showed a high level of reliability and validity. The scale's Cronbach alpha value in this study was discovered to be .95.

### ***2.3. Procedure***

The present study started after receiving the approval of the Ethics Committee of Izmir University of Economics. Scales used in this study were presented to participants by using an online survey platform (Google Forms). A variety of channels, including WhatsApp, Instagram, and email groups, were used to contact participants. Link of the survey was sent through these platforms. The eligibility requirements for participation were being a volunteer and being older than 18. After receiving thorough information regarding the terms and goals of the study, the participants filled out an informed consent form. Participants were told about the study's purpose, methodology, duration, confidentiality, voluntary participation, anonymity, and freedom to withdraw at the outset. Participants who gave their consent were included in the study. Participants filled out the survey in the following order: Informed Consent, Demographic Information Form, Liebowitz Social Anxiety Scale, Smartphone Addiction Scale-Short Version and Self-Compassion Scale. It took approximately fifteen minutes to complete the study.

### ***2.4. Statistical Analysis***

The necessary number of participants was determined using G\*Power software. The maximum number of participants that should be attained was found to be 55 based on the findings of G\*Power analysis. For the statistical analysis, PROCESS v3.5 by Andrew Hayes and SPSS version 20 (Statistical Package for Social Sciences) were used. To see if there was any missing data, the entire set of data was examined.

Preliminary analyses were performed prior to the main analysis. Preliminary analyses contain descriptive statistics and normality analyses for variables, and reliability analyses of the scales. Mean, standard deviation, percentage, and

frequency scores were computed for descriptive statistics. Skewness and kurtosis values were used to assess normality. All values for skewness and kurtosis in the current research fell between the range of (-1.50) and (+1.50), which are the key values for normality (Tabachnick and Fidell, 2007). Through the use of Cronbach's Alpha reliability analyses were conducted and all scales displayed strong reliability.

Correlation analyses were carried out to look at the relationships between the study variables (social anxiety, smartphone addiction, and self-compassion). Independent and dependent t-test analyses were used to examine group differences like level of social anxiety and gender. The mediating role of self-compassion was then examined using mediation analyses. Initially, the mediation analysis focused on assessing self-compassion as a holistic construct, followed by a subsequent analysis involving its subscales through multiple mediation, all aiming to ascertain its mediating role.

## CHAPTER 3: RESULTS

Preliminary analysis and main analyses are the two major sections of this chapter. Reliability tests, normality checks, and descriptive statistics are all part of preliminary analysis. Group differences, relationships among study variables, and mediation analysis are included in the primary analyses.

### 3.1. Preliminary Analyses

#### 3.1.1. Reliability Tests

Cronbach's Alpha value was determined in order to assess the validity of the scales employed in the present study. High Cronbach's Alpha values were found for each scale, which suggests the items' internal consistency was relatively high (Table 4).

Table 4. Cronbach's Alpha Values of All Scales Used in This Study.

Scales	$\alpha$
Liebowitz Social Anxiety Scale	.96
Anxiety	.93
Avoidance	.92
Smartphone Addiction Scale – Short Version	.89
Self-Compassion Scale	.95
Self-Kindness	.86
Self-Judgment	.90
Common Humanity	.73
Isolation	.85
Mindfulness	.87
Over-identification	.83

#### 3.1.2. Normality

Skewness and kurtosis values were calculated in order to check the normality

of study variables and results showed that skewness and kurtosis values of all variables were between critical values for normality (-1.50 and +1.50) (Tabachnick and Fidell, 2007).

Table 5. Skewness and Kurtosis Values of All Variables Used in This Study

Variables	Skewness	Kurtosis
Social Anxiety	0.789	0.355
Smartphone Addiction	0.167	-0.837
Self-Compassion	-0.155	-0.598

### 3.1.3. Descriptive Statistics

Means (*M*), standard deviations (*SD*), maximum (*Max*), and minimum (*Min*) scores were calculated in order to determine the descriptive statistics of the study variables (Table 6).

Table 6. Descriptive Statistics of the Study Variables.

Variables	<i>M</i>	<i>SD</i>	<i>Max</i>	<i>Min</i>
Social Anxiety	35.39	22.55	106	0
Anxiety	19.68	12.50	71	0
Avoidance	15.71	11.51	59	0
Smartphone Addiction	29.13	10.92	60	10
Self-Compassion	3.16	0.81	4.85	1.04

## 3.2. Main Analyses

### 3.2.1. Between-Group Differences

#### Gender

Independent samples t-tests were conducted to compare female and male participants social anxiety, smartphone addiction, self-compassion, daily smartphone usage and daily smartphone checking frequency scores (Table7). There was a significant difference in social anxiety scores for male and female participants;  $t(202) = -3.22, p < .05$ . The social anxiety scores of female participants ( $M = 38.94, SD = 22.69$ ) were significantly higher than male participants ( $M = 28.43, SD = 20.72$ ).

Both fear/anxiety and avoidance scores were significantly higher for female participants. Female and male participants showed similar smartphone addiction scores. There was not a significant difference in smartphone addiction scores for female and male participants;  $t(202) = -1.31, p > .05$ . On the other hand, there was a significant difference in self-compassion scores for female and male participants;  $t(202) = 2.64, p < .05$ . The self-compassion scores of male participants ( $M = 3.37, SD = 0.78$ ) were significantly higher than female participants ( $M = 3.06, SD = 0.81$ ). There was a significant difference in daily smartphone usage scores for male and female participants;  $t(202) = -2.34, p < .05$ . The daily smartphone usage scores of female participants ( $M = 3.09, SD = 0.74$ ) were significantly higher than male participants ( $M = 2.84, SD = 0.68$ ). On the other hand female and male participants showed similar scores in daily smartphone checking frequency. There was not a significant difference in smartphone checking frequency scores for female and male participants;  $t(202) = 1.66, p > .05$ .

Table 7. Independent Samples T-Tests Results Regarding Study Variables and Gender.

Variables	Female Participants		Male Participants		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Social Anxiety	38.94	22.69	28.43	20.72	-3.22*
Anxiety	21.51	12.07	16.09	12.62	-2.99*
Avoidance	17.43	11.67	12.35	10.47	-3.04*
Smartphone Addiction	2.98	1.12	2.77	1.03	-1.31
Self-Compassion	3.06	0.81	3.37	0.78	2.64*
Daily Smartphone Usage	3.09	0.74	2.84	0.68	-2.34*
Daily Smartphone Checking Frequency	3.21	1.17	3.51	1.23	1.66

\* $p < .05$

### ***Participants with Low and High Social Anxiety***

Depending on their levels of social anxiety, the participants were split into two groups: low anxiety and high anxiety. A cut-off score of 50 was used, as recommended by Soykan et al. (2003), to differentiate between groups with low and



high levels of social anxiety. In order to compare the scores of smartphone addiction, daily smartphone usage, and daily smartphone checking frequency between participants with low and high social anxiety, independent samples t-tests were used (Table 8). There was not a significant difference in daily smartphone checking frequency scores in low and high social anxiety groups,  $t(202) = -0.36, p > .05$ . On the other hand, there was a significant difference in smartphone addiction scores between low and high social anxiety groups;  $t(202) = -4.88, p < .05$ . Participants with high social anxiety ( $M = 3.54, SD = 1.17$ ) had higher scores on smartphone addiction than participants with low social anxiety ( $M = 2.71, SD = 0.99$ ). There was a significant difference in daily smartphone usage scores between participants with low and high social anxiety,  $t(202) = -1.99, p < .05$ . Participants with high social anxiety ( $M = 3.18, SD = 0.81$ ) had higher daily smartphone usage scores than participants with low social anxiety ( $M = 2.95, SD = 0.69$ ).

Table 8. Independent Samples T-Tests Results Regarding Study Variables and Social Anxiety Scores

Variables	Low Social Anxiety (N = 155)		High Social Anxiety (N = 49)		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Smartphone Addiction	2.71	0.99	3.54	1.17	-4.88*
Daily Smartphone Usage	2.95	0.69	3.18	0.81	-1.99*
Daily Smartphone Checking Frequency	3.30	1.18	3.37	1.27	-0.36

\* $p < 0.5$

### 3.2.2. Correlation Analyses

The relationship between social anxiety, age, self-compassion, smartphone addiction, daily smartphone usage, and daily smartphone checking frequency was examined using Pearson product-moment correlation coefficients. (Table 9). There were weak correlations between age and social anxiety,  $r = -.19, p < .05$ ; age and social anxiety fear,  $r = -.21, p < .05$ ; age and social anxiety avoidance,  $r = -.21, p < .05$ ; age and self-compassion,  $r = .33, p < .05$ ; age and self-compassion self-kindness,

$r = .21$ ; age and self-compassion self-judgement,  $r = -.30$ ,  $p < .05$ ; age and self-compassion common humanity,  $r = .12$ ,  $p > .05$ ; age and self-compassion isolation  $r = -.37$ ,  $p < .05$ ; age and self-compassion mindfulness,  $r = .26$ ,  $p < .05$ ; age and self-compassion over-identification,  $r = -.35$ ,  $p < .05$ ; age and smartphone addiction,  $r = -.29$ ,  $p < .05$ ; age and daily smartphone usage,  $r = -.34$ ,  $p < .05$ ; age and daily smartphone checking frequency,  $r = -.25$ ,  $p < .05$ . As age increases, social anxiety, smartphone addiction, daily smartphone usage, and daily smartphone checking frequency decreases. On the other hand, as age increases, self-compassion increases.

There was a moderate negative relationship between social anxiety and self-compassion,  $r = -.48$ ,  $p < .05$ . There was a positive relationship between social anxiety and self-compassion self-judgement,  $r = .50$ ,  $p < .05$ ; social anxiety and self-compassion isolation,  $r = .49$ ,  $p < .05$ ; social anxiety and self-compassion over-identification,  $r = -.35$ ,  $p < .05$ . There was a negative relationship between social anxiety and self-compassion self-kindness,  $r = -.29$ ,  $p < .05$ ; social anxiety and self-compassion common humanity,  $r = -.29$ ,  $p < .05$ ; social anxiety and self-compassion mindfulness,  $r = -.35$ ,  $p < .05$ . There was a negative correlation between social anxiety fear and self-compassion self-kindness,  $r = -.22$ ,  $p < .05$ ; social anxiety fear and self-compassion common humanity,  $r = -.24$ ,  $p < .05$ ; social anxiety fear and self-compassion mindfulness,  $r = -.22$ ,  $p < .05$ . There was a positive relationship between social anxiety fear and self-compassion self-judgement,  $r = .49$ ,  $p < .05$ ; social anxiety fear and self-compassion isolation,  $r = .50$ ,  $p < .05$ ; social anxiety fear and self-compassion over-identification,  $r = .48$ ,  $p < .05$ . There was a positive correlation between social anxiety avoidance and smartphone addiction,  $r = .38$ ,  $p < .05$ ; social anxiety avoidance and self-compassion self-judgement,  $r = .46$ ,  $p < .05$ ; social anxiety avoidance and self-compassion isolation,  $r = .42$ ,  $p < .05$ ; social anxiety avoidance and self-compassion over-identification,  $r = .46$ ,  $p < .05$ ; social anxiety avoidance and daily smartphone usage,  $r = .19$ ,  $p < .05$ . There was no significant correlation between social anxiety avoidance and daily smartphone checking frequency. There was a negative correlation between social anxiety avoidance and self-compassion,  $r = -.47$ ,  $p < .05$ ; social anxiety avoidance and self-compassion self-kindness,  $r = -.33$ ,  $p < .05$ ; social anxiety avoidance and self-compassion common humanity,  $r = -.31$ ,  $p < .05$ ; social anxiety avoidance and self-compassion mindfulness,  $r = -.34$ ,  $p < .05$ . There was a moderate positive relationship between social anxiety and smartphone addiction,  $r = .40$ ,  $p < .05$ . There

was a positive relationship between social anxiety fear and smartphone addiction,  $r = .37, p < .05$ , and social anxiety avoidance and smartphone addiction,  $r = .38, p < .05$ . There was a weak positive relationship between social anxiety and daily smartphone usage,  $r = .19, p < .05$ . There was no correlation between social anxiety and daily smartphone checking frequency,  $r = .02, p > .05$ . There was a moderate negative relationship between self-compassion and smartphone addiction,  $r = -.41, p < .05$ . There was a negative correlation between smartphone addiction and self-compassion self-kindness,  $r = -.29, p < .05$ ; smartphone addiction and self-compassion common humanity,  $r = -.20, p < .05$ ; smartphone addiction and self-compassion mindfulness,  $r = -.35, p < .05$ . There was a positive correlation between smartphone addiction and self-compassion self-judgement,  $r = .42, p < .05$ ; smartphone addiction and self-compassion isolation,  $r = .36, p < .05$ ; smartphone addiction and self-compassion over-identification,  $r = .40, p < .05$ . There was a weak negative relationship between self-compassion and daily smartphone usage,  $r = -.28, p < .05$ . There was no correlation between self-compassion and daily smartphone checking frequency,  $r = -.09, p > .05$ . There was a negative relationship between daily smartphone checking frequency and self-compassion mindfulness,  $r = -.14, p < .05$ . There was a negative relationship between daily smartphone usage and self-compassion self-kindness,  $r = -.17, p < .05$ ; daily smartphone usage and self-compassion common humanity,  $r = -.11, p > .05$ ; daily smartphone usage and self-compassion mindfulness,  $r = -.27, p < .05$ . There was a positive relationship between daily smartphone usage and self-compassion self-judgement,  $r = .26, p < .05$ , daily smartphone usage and self-compassion isolation,  $r = .27, p < .05$ ; daily smartphone usage and self-compassion over-identification,  $r = .28, p < .05$ . There were moderate positive relationships between smartphone addiction and daily smartphone usage,  $r = .46, p < .05$ ; smartphone addiction and daily smartphone checking frequency,  $r = .47, p < .05$ . There was a moderate positive relationship between daily smartphone usage and daily smartphone checking frequency,  $r = .50, p < .05$ .

Table 9. Pearson Correlation Coefficients Among Variables.

	Age	SA	SAF	SAA	SMA	SC	SCSK	SCSJ	SCC	SCI	SCM	SCO	DSU	DSCI
Age	1													
SA	-.22*	1												
SAF	-.21*	.94*	1											
SAA	-.21*	.93*	.76*	1										
SMA	-.29*	.40*	.37*	.38*	1									
SC	.33*	-.48*	-.44*	-.47*	-.41*	1								
SCSK	.21*	-.29*	-.22*	-.33*	-.29*	.85*	1							
SCSJ	-.30*	.50*	.49*	.46*	.42*	-.88*	-.64*	1						
SCC	.12	-.29*	-.24*	-.31*	-.20*	.76*	.77*	-.64*	1					
SCI	-.37*	.49*	.50*	.42*	.36*	-.84*	-.53*	.80*	-.48*	1				
SCM	.26*	-.35*	-.22*	-.34*	-.35*	.82*	.78*	-.56*	.68*	-.53*	1			
SCO	-.35*	.50*	.48*	.46*	.40*	-.85*	-.57*	.81*	-.44*	.79*	-.60*	1		
DSU	-.34*	.19*	.17*	.19*	.46*	-.28*	-.17*	.26*	-.11	.27*	-.27*	.28*	1	
DSCF	-.25*	.02	.01	.03	.47*	-.09	-.09	.05	-.05	.02	-.14*	.09	.50*	1

\* $p < .05$

*Note.* SA: Social Anxiety, SAF: Social Anxiety Fear, SAA: Social Anxiety Avoidance, SMA: Smartphone Addiction, SC: Self-Compassion, SCSK: Self-Compassion Self-Kindness, SCSJ: Self-Compassion Self-Judgement, SCC: Self-Compassion Common Humanity, SCI: Self-Compassion Isolation, SCM: Self-Compassion Mindfulness, SCO: Self-Compassion Over-Identification DSU: Daily Smartphone Usage, DSCF: Daily Smartphone Checking Frequency.

### 3.2.3. Mediation Analyses

The relationship between social anxiety and smartphone addiction was investigated using mediation analysis to determine the mediating impact of self-compassion. In this analysis, social anxiety was predictor variable, smartphone addiction was outcome variable, and self-compassion was mediator. Firstly, simple mediation analyses was performed to examine the mediating role of self-compassion in relation between social anxiety and smartphone addiction, then a multiple mediation was conducted to examine which subdimensions of self-compassion scale significantly contributed to the indirect effect of social anxiety on smartphone addiction through self-compassion.

### 3.3. The Mediating Role of Self-Compassion in Relation Between Social Anxiety and Smartphone Addiction

The first mediation analysis was conducted to investigate the mediating role

of self-compassion in relation between social anxiety orientation and smartphone addiction. The mediation model was given in Figure 2.

The results indicated that social anxiety significantly predicted self-compassion,  $b = -0.017$ ,  $t = -7.81$ ,  $p < .05$ . Social anxiety explained 23% of the variance in self-compassion, and the negative  $b$  value indicated a negative relationship. As social anxiety increased, self-compassion decreased. Social anxiety significantly predicted smartphone addiction, with the presence of self-compassion in the model,  $b = 0.13$ ,  $t = 3.76$ ,  $p < .05$ . Social anxiety explained 22% of the variance in the smartphone addiction with the presence of the self-compassion in the model. Self-compassion significantly predicted smartphone addiction,  $b = -3.79$ ,  $t = -3.96$ ,  $p < .05$ . There was a negative relationship since the  $b$  value was negative and this model explained 22% of the variance in smartphone addiction. When self-compassion was not in the model, social anxiety significantly predicted smartphone addiction,  $b = 0.20$ ,  $t = 6.24$ ,  $p < .05$ , explaining 16% of the variance in smartphone addiction. When a mediator was included, the amount of variance that the model could explain was higher than when a predictor was the only variable. There was a significant indirect effect of social anxiety on smartphone addiction through self-compassion,  $b = 0.07$ , 95% BCa CI [.031, .105]. For the standardized indirect effect,  $b = 0.14$ , 95% BCa CI [.066, .212]. Bootstrapped confidence intervals do not include zero.

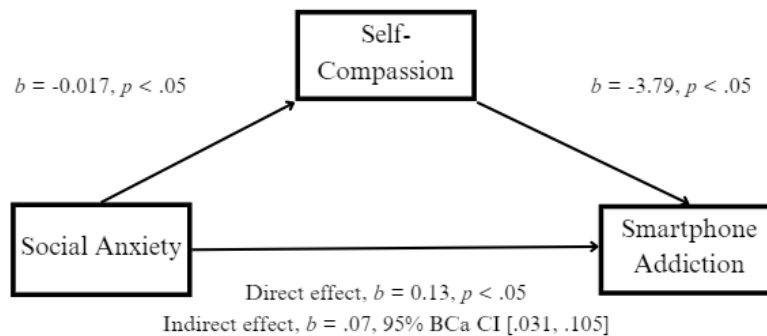


Figure 2. The mediation pathway for the relationship among social anxiety and smartphone addiction, mediated by self-compassion.

A multiple mediation analysis was conducted to examine which sub-dimensions of self-compassion scale significantly contributed to the indirect effect of social anxiety on smartphone addiction through self-compassion. The mediation model was given in Figure 3.

The results indicated that social anxiety significantly predicted self-kindness,  $b = -0.06$ ,  $t = -4.36$ ,  $p < .05$ , self-judgement,  $b = 0.12$ ,  $t = 8.27$ ,  $p < .05$ , common

humanity,  $b = -0.04$ ,  $t = -4.36$ ,  $p < .05$ , isolation,  $b = 0.09$ ,  $t = 8.02$ ,  $p < .05$ , mindfulness,  $b = -0.05$ ,  $t = -4.39$ ,  $p < .05$ , over-identification,  $b = 0.09$ ,  $t = 8.21$ ,  $p < .05$ . Social anxiety explained 9% of the variance in self-kindness, 25% of the variance in self-judgement, 9% of the variance in common humanity, 24% of the variance in isolation, 9% of the variance in mindfulness and 25% of the variance in over-identification. Negative  $b$  value in self-kindness, common humanity, and mindfulness indicated a negative relationship. Positive  $b$  value in self-judgement, isolation and over-identification indicated a positive relationship. When self-compassion was not in the model, social anxiety significantly predicted smartphone addiction,  $b = 0.20$ ,  $t = 6.24$ ,  $p < .05$ , explaining 16% of the variance in smartphone addiction. The results showed that there was a significant indirect effect of social anxiety on smartphone addiction through self-judgment,  $b = 0.56$ , 95% BCa CI [.040, 1.079] and mindfulness,  $b = -0.83$ , 95% BCa CI [-1.440, -.224]. There was not a significant indirect effect for self-kindness,  $b = -0.01$ , 95% BCa CI [-0.050, 0.033], common humanity,  $b = -0.02$ , 95% BCa CI [-0.058, 0.005], isolation,  $b = -0.01$ , 95% BCa CI [-0.060, 0.046] and over-identification,  $b = 0.00$ , 95% BCa CI [-0.052, 0.061] and their bootstrapped confidence intervals included zero.

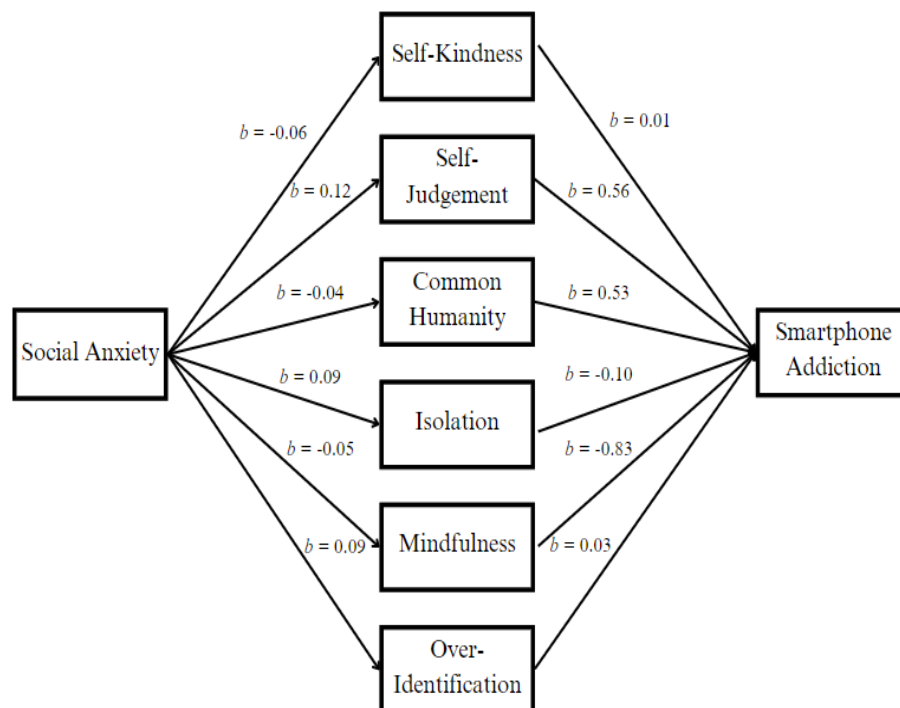


Figure 3. The mediation pathway for the relationship among social anxiety and smartphone addiction, mediated by self-judgement and mindfulness.

## **CHAPTER 4: DISCUSSION**

The purpose of the present study was to investigate the mediating role of self-compassion in the relationship between social anxiety and smartphone addiction. First, differences in gender between groups in social anxiety, smartphone addiction, self-compassion, daily smartphone usage, and daily smartphone checking frequency will be discussed. Secondly, differences in level of social anxiety between groups in smartphone addiction, daily smartphone usage, and daily smartphone checking frequency will be discussed. Thirdly, the relationship between social anxiety, age, self-compassion, smartphone addiction, daily smartphone usage, and daily smartphone checking frequency will be highlighted. Finally, the mediating role of self-compassion in the relationship between social anxiety and smartphone addiction will be discussed.

### ***4.1. Between-Group Differences***

#### ***4.1.1. Gender***

The results showed that social anxiety, self-compassion, and daily smartphone usage differ significantly by gender. Females had higher scores on social anxiety and smartphone usage and lower scores on self-compassion when compared to males. In contrast, there were no significant gender differences in smartphone addiction and daily smartphone checking frequency.

Female participants scored higher on social anxiety than male participants. Findings in this study are in accordance with the literature. According to literature, social anxiety is more prevalent in women (59%) than in men (41%) (Magee et al., 1996). Davidson et al. (1993) reported female to male ratio of social anxiety disorder as 3 to 2. In a study that was conducted with a Turkish sample İzgiç et al. (2002), reported that prevalence for social anxiety was 7.1% for men and 8.9% for women. Difference between males and females in social anxiety could be an effect of sex roles. Bruch and Cheek (1995) explained that shyness, is not compatible with the conventional male sex role. Shy males may be more prone to conflict and unfavorable feedback throughout the course of their social development and are less

likely to behave in accordance with typical male sex-role expectations (like dominance and self-confidence). Moreover, parents of these individuals might believe that their sons shy behavior and poor peer interaction are bigger problems than their daughters (Bacon and Ashmore, 1985). On the other hand, shyness is seen as being in accordance with the standard feminine sex role (Bem, 1974). In conclusion, when compared to men, women with social anxiety may perceive less negative feedback about their restrained behavior and avoid some of the drawbacks than men with this condition deal with. This could pressure males to be less voluntary to share their condition about social anxiety in different environments like clinical settings or surveys, and this might explain some of the difference between prevalence rates of social anxiety between males and females. There are some studies that point out potential biological and hormonal differences between genders that could affect the prevalence rates.

Female participants had higher daily smartphone usage score when compared to male participants, but no difference was found in smartphone addiction and daily smartphone checking frequency. There is lack of research about gender differences in smartphone addiction and the findings are unclear. Kwon and Paek (2016) and Lee et al. (2017), reported that females were more likely than males to use smartphones excessively, but factors that contributed to the difference are not clear. Heo et al. (2016) claimed that although girls used mobile phones for a smaller variety of activities, such as talking, updating personal homepages, and searching for information, they were more reliant on these activities. Even though there were no difference in daily smartphone checking frequency between males and females, females might tend to spend a larger amount of time using their smartphones to do activities mentioned above, without checking frequently. The lack of difference in daily smartphone checking frequency between males and females could be attributed to various factors such as similar notification habits, work-related requirements, or social communication patterns. However, despite this similarity in checking frequency, females may still spend a greater overall amount of time using their smartphones. This might be due to engaging in activities that don't prompt frequent checking, such as extended periods of browsing, reading, or engaging in applications that do not generate notifications. Factors like social media usage and online shopping could contribute to this extended usage without necessarily triggering frequent checks.



Male participants self-compassion was higher than female participants. There are several explanations in the literature for the difference in self-compassion between these two groups. Firstly, Hyde et al. (2008) reported that females have more self-consciousness than males do during adolescence (in regard to changes in physical development and interpersonal relationships with peers and love partners). When female adolescents become older, they encounter more of these developmental challenges and their increased self-consciousness may work against their level of self-compassion (Hyde et al., 2008). Gilligan (1990) noted that adolescent females notice that male-dominated culture does not value female-specific values of being nurturing and relational, and this could increase their vulnerability to stress, depression and anxiety. Hill and Lynch (1983) added that gender-role amplification or being pressured to fit in a stereotyped sex role might also contribute to lower levels of self-compassion in females. Internalizing symptoms in females (stress, anxiety etc.) and self-compassion could be negatively impacted since females notify more adverse life experiences than males (e.g., females encounter twice the rate of sexual abuse than males) (Hyde et al., 2008; Bronfenbrenner, 1979; Petersen et al., 1991). Lastly, females report higher rates of self-criticism, feelings of isolation, and rumination after unpleasant experiences (Neff, 2003), which could decrease their level of self-compassion (Yarnell et al., 2015).

#### ***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 smartphone addiction scale. The results supported the hypothesis. Participants with high social anxiety scored higher on smartphone addiction scale. Moreover, participants with high social anxiety had higher daily smartphone usage scores than participants with low social anxiety. There was no significant difference between high social anxiety group and low social anxiety group in terms of daily smartphone checking frequency.

Participants with high social anxiety scored higher on smartphone addiction scale than participants with low social anxiety. Also, individuals with high social anxiety scored higher on daily smartphone usage, which implies that these individuals spend more time using their smartphones than individuals with low social anxiety. Individuals with social anxiety disorder have a marked fear/anxiety about

social situations where the individual is exposed to possible scrutiny by others (APA, 2013). Individual fears acting in anxious ways and believes that he/she will be negatively evaluated. Due to feelings of fear/anxiety and having presumptions about social surroundings and themselves (“I am weird, they think I am a fool”), individuals might avoid these situations for their comfort (Wong and Moulds, 2011). Because these negative thoughts usually become active in social situations and individuals feel alarmed, it is natural to avoid these triggering situations (Hofmann, 2007). Darcin et al. (2016) reported that problems in social communication including social anxiety disorder and loneliness can render an individual vulnerable to overusing technology. Additionally, Bian and Leung (2014) noted that shyness and loneliness make individuals more at risk of becoming dependent on smartphones. In return, individuals with social anxiety might use their smartphones as a coping mechanism to lessen their depressive symptoms, and to avoid feelings of boredom or irritation. They can divert their focus from other issues by using smartphones because they are entertaining and make them feel less distressed (Sansone and Sansone, 2013). Moreover, individuals with social anxiety feel more at ease using their smartphone for social interaction because it filters social signals such as facial expressions and gestures, which reduces self-disclosure. Individuals with social anxiety shift their attention to internal processes and become highly aware of their unpleasant feelings in social situations (Meral and Vriends, 2021; Vriends et al., 2017). They frequently exaggerate how anxious they appear and believe that their appearance reflects how they are feeling. These images usually arise from an outsider’s perspective; therefore, it is natural to think that the images are a true portrayal of how the person appears to other individuals. This process can induce more anxiety for the individual with social anxiety disorder and further increase the negative thought processes (Leigh and Clark, 2018). Smartphone give these individuals a “safe” environment to interact. They also have more control over communication by texting and can use their time to organize messages (Joinson, 2004). People who are not satisfied with their offline interpersonal relationships tend to spend more time on their smartphones (Bae, 2015; Zhu et al., 2019). Herrero et al. (2017) also added that a lack of social support can lead to increased social isolation and feelings of loneliness, which in return can lead to excessive smartphone use. Darcin et al. (2016) also found in a sample of Turkish university students those individuals who had higher risk for social anxiety symptoms had an increased chance

to be addicted to smartphones due to avoiding relationships in real time.

There was no difference in daily smartphone checking frequency between individuals high and low social anxiety and there is no clear explanation in the literature about this difference. One of the explanations could be that even though these individuals equally check their phones on a daily basis, the group that was high in social anxiety spend more time on their smartphones after checking them.

#### ***4.2. Correlations***

At the beginning of the study, it was hypothesized that there will be a positive relationship between social anxiety and smartphone addiction. Also, it was hypothesized that there will be a negative relationship between social anxiety and self-compassion. Both hypotheses were supported. There was a significant positive correlation between social anxiety and smartphone addiction, and there was a significant negative correlation between social anxiety and self-compassion. Moreover, age was negatively correlated with social anxiety, smartphone addiction, daily smartphone usage and daily smartphone checking frequency. There was a positive correlation between age and self-compassion. Social anxiety was positively correlated with daily smartphone usage but there was no correlation to daily smartphone checking frequency. Self-compassion was negatively correlated with smartphone addiction and daily smartphone usage but no correlation was found for daily smartphone checking frequency. Finally, smartphone addiction was positively correlated with daily smartphone usage and daily smartphone checking frequency. Daily smartphone usage and daily smartphone checking frequency were also positively correlated.

As the age of the participants increased self-compassion levels increased. Based on literature self-compassion grew stronger as people aged (Homan, 2016; Allen et al., 2012). Murn and Steele (2019) reported that older individuals are better able to understand that suffering is a universal experience, which in theory enables them to be more compassionate toward themselves while facing challenging situations. When faced with emotional or cognitive distress, older individuals are more able to keep a mindful perspective than their younger counterparts. As people live longer, they inevitably accumulate more life experiences, many of which are challenging. Dealing with life's challenges brings one into contact with humanity,

and these experiences may help one develop self-compassion. So, as people grow, they gain more life experiences and more alternative ways to interpret situations, which help them to be more compassionate toward themselves. There was a negative correlation between age and social anxiety. Based on the literature there are no clear evidence that supports this notion. Social anxiety disorder is really one of the more chronic and persistent mental disorders over the lifespan (Beesdo-Baum et al., 2012; Bruce et al., 2005). The reason for this correlation could be based on the relationship between age and self-compassion. As individuals age, they become more compassionate and individuals with social anxiety disorder could also experience this increase of self-compassion to some level.

As age increased, smartphone addiction, daily smartphone usage and daily smartphone checking frequency decreased. Park and Park (2014) reported that younger individuals are especially prone to side effects of technological devices because they grow up in environments filled with gadgets that have the latest technology. Findings show that teenagers are twice as likely as adults to engage in excessive or problematic smartphone use. In Korea it was found that 80.4% of Korean primary school students started using smartphones at or before the age of 10, and 59.9% of them used them for one hour or more every day (Lee and Kim, 2018). When we consider the fact that smartphones are relatively new gadgets and many individuals who were born and raised before that era grew up in a smartphone sterile environment it is not surprising to find that young individuals are more likely to be more dependent on them. Also, negative correlation between age and daily smartphone usage and daily smartphone checking frequency show that young individuals spend more time on their smartphones and more often check their smartphones. Research also shows that compulsive smartphone use frequently developed from regular use, and "checking behavior" was found to be a significant factor in smartphone use. Even though they did not receive any notifications, smartphone users frequently checked their home screen, text messages, and emails. This unneeded checking behavior can be an entryway for exploring all other apps, which could then lead to excessive smartphone use (Oulasvirta et al., 2011). In short, being exposed to smartphones at a young age could be a significant factor in these correlations.

As social anxiety increased, smartphone addiction and daily smartphone usage increased. On the other hand, as social anxiety increased self-compassion

decreased. There was no correlation between social anxiety and daily smartphone checking frequency.

In the literature, the relationship between social anxiety and problematic smartphone usage have been demonstrated by multiple studies. Elhai et al. (2017) reported that excessive smartphone use was linked to mental illnesses like social anxiety, depression and loneliness. Sansone and Sansone (2013) claimed that adolescents used their smartphones as a coping strategy to get rid of their boredom and depressive symptoms. Instead of focusing and working on their problems, these individuals distract themselves from their real-life problems. This temporary escape gives them relief for a short period of time but in the long term their problems continue. Looking for a friendship in a secure virtual setting has the risk of developing depression because it isolates individuals from real-life interaction and causes them to pay attention to their phones (Hinduja and Patchin, 2010; Walsh et al., 2011). It puts individuals with social anxiety at greater risk due to their fear/anxiety about social interactions and using avoidance as a coping method. Results in the present study showed that as social anxiety increased, daily smartphone usage also increased. Individuals with social anxiety might be using their smartphones as a coping method but in return they use it excessively. There was no correlation between social anxiety and daily smartphone checking frequency. It is possible that even though individuals with social anxiety have the same checking frequency as other individuals, they have a tendency to spend more time on their smartphones after checking it.

There was a negative correlation between social anxiety and self-compassion. One of the main features of individuals with social anxiety is that they have a tendency to harshly criticize themselves and have a judgmental attitude toward themselves in situations where there is a possibility to fail or show poor performance (Heimberg et al., 2010; Hofmann, 2007). Self-compassion is a potential mechanism to overcome detrimental effects of such bias on social adaptation. Self-compassion involves being kind toward oneself in the face of failure, perceiving negative circumstances as an opportunity to gain insight and as a shared common human experience, and instead of identifying with negative emotions viewing them as a part of life (Neff, 2003). Studies showed that individuals diagnosed with social anxiety disorder had significantly low self-compassion scores when compared to healthy control group (Werner et al., 2012). Marsh et al. (2018) and Potter et al. (2014) also

supported this notion by stating that there was a negative correlation between self-compassion and social anxiety.

Self-compassion was negatively correlated with smartphone addiction and daily smartphone usage. There was no correlation between self-compassion and daily smartphone checking frequency. When individuals experience negative emotions, they seek out a way to feel better and get rid of those emotions. In order to regulate emotions, there are healthy and unhealthy ways. Approaching negative/unpleasant emotions with kindness, empathy, and with a sense of shared humanity is a helpful and healthy emotional regulation technique. Negative emotions are thus changed into a more positive feeling state, enabling a deeper understanding of one's current condition and the adoption of activities that modify oneself or the environment in suitable and efficient ways (Folkman and Moskowitz, 2000; Isen, 2000). Self-compassion involves being kind toward oneself in the face of failure, perceiving negative circumstances as a shared common human experience (Neff, 2003) A cross-sectional study demonstrated that that self-compassion is positively correlated with emotional health, life satisfaction and positive affect (MacBeth and Gumley, 2012). On the other hand, smartphones are also used as a coping method to relieve stress or to ease emotional tension (Chiv, 2014). However, using smartphones as a source of pleasure, a temporary diversion, or to get away from problems is an unhealthy way of coping since it does not provide a long-term solution. Using smartphones as a coping method for psychological issues carry the risk of being dependent on them (Alhassan et al., 2018) Individuals with low self-compassion might be at risk of developing smartphone addiction and using smartphone more excessively due to lack of healthy emotion regulation methods.

Finally, smartphone addiction was positively correlated with daily smartphone usage and daily smartphone checking frequency. Noyan et al. (2015) found similar results in their study conducted with Turkish University students. Their finding revealed that smartphone addiction score was positively related with daily smartphone usage and daily smartphone checking frequency. Increased usage of smartphones contributes to the development of smartphone addiction (Kuss and Griffiths, 2011). Moreover, smartphone checking frequency could be an indicator of compulsive behavior. Compulsive usage of smartphones could also put smartphone users at higher risk of smartphone addiction. Research showed that compulsive use of smartphone developed from regular use, and "checking behavior" was found to be

a significant element in smartphone use. Smartphone users frequently check their home screen, text messages, and e-mails even when there is no notification. This unnecessary checking behavior could be an entry way for exploring all other applications, which could then lead to excessive smartphone use (Oulasvirta et al., 2011).

### ***4.3. Mediation Analyses***

The first mediation analysis was conducted to investigate the mediating role of self-compassion in the relationship between social anxiety and smartphone addiction. The results showed that there was a significant indirect effect of social anxiety on smartphone addiction through self-compassion. Self-compassion played a mediating role in the relationship between social anxiety and smartphone addiction.

The second mediation analysis was conducted to investigate which factors in self-compassion contributed to the significant indirect effect of social anxiety on smartphone addiction. The results suggested that there was a significant indirect effect of social anxiety on smartphone addiction through self-judgment and mindfulness.

Individuals with social anxiety extremely fear social situations, and being scrutinized by others (Schlenker and Leary, 1982). These individuals also tend to engage in excessive self-criticism and rumination on failure (Heimberg et al, 2010). They seek out ways to prevent leaving unwanted impression on other people to decrease their fear/anxiety (Caplan, 2007), and avoidance of social situations is a safe choice for these individuals to lessen their anxiety. However, this can cause individuals to become socially withdrawn and isolated (Leary, 1983). Morahan-Martin and Schumacher (2003) reported that individuals who are anxious and lonely can benefit from online engagement. Since there is no direct face to face communication in using smartphones, using it as a supplementary way of socializing and communication is a good option for socially anxious people. People who are displeased with their real-life interactions are more likely to spend greater time on their smartphones (Bae, 2015; Zhu et al., 2019). In return, lack of real time social interactions can cause an individual to be isolated and to feel lonely, which in turn can lead that individual to become more in touch with his/her smartphone. Relationship between social anxiety and smartphone have been shown in the study of

Darcin and his colleagues among a Turkish university student sample. Individuals with high social anxiety scores were more at risk for smartphone addiction because of the lack of offline social relationships. Results in this study supported this finding. Individuals with high social anxiety were more likely to have higher scores on smartphone addiction.

Self-compassion plays a critical part in the cycle of social anxiety and smartphone addiction. Self-compassion allows an individual to view his/her inadequacies as part of being human. Rather than judging themselves, individuals who adopt a compassionate attitude approach themselves in a more accepting way (Goldstein and Kornfield, 1987). Moreover, self-compassion helps an individual to be in a more mindful state, instead of becoming overidentified with his/her thoughts and feelings (Hayes et al., 1994). Having a more mindful state provides a more detached viewpoint for the individual and it enables them to observe their thoughts and feelings without attempting to suppress them or change them (Neff, 2003). Due to these reasons self-compassion can be used with individuals with social anxiety to lessen anxiety levels (MacBeth and Gumley, 2012), and protect against self-judgment (Marshall et al., 2014). Amir et al. showed that cognitive-behavioral techniques that specifically work on the deeper understanding of self-related negative situations reduce social anxiety level. Also, mindfulness techniques have been proven to be effective in reducing social anxiety (Gu et al., 2015; Stefan et al., 2018). By learning and developing self-compassion, individuals with social anxiety disorder can adopt ways to deal with their anxiety and they can be less tempted to use alternative ways such as smartphones to cope with their condition.

The results of the study indicate that self-compassion is a protective factor for individuals with social anxiety against smartphone addiction. It has been demonstrated that social anxiety predicts smartphone addiction. It is plausible to think that many individuals with social anxiety use smartphones due to their condition. Therefore, in circumstances where this is the case, self-compassion can be used in the treatment of individuals in order to help them to be more accepting and less judgmental toward themselves and be more mindful. The relationship observed between self-compassion, self-criticism, and smartphone usage sheds light on the experience of individuals with heightened social anxiety. Notably, individuals with elevated social anxiety tend to engage in increased self-criticism and self-judgment while struggling to adopt alternative viewpoints. Recognizing the importance of



cultivating a more compassionate self-attitude, one that includes adopting alternative viewpoints, and having a more mindful approach toward thoughts becomes crucial in this context. Such an approach could potentially reduce the reliance on smartphones. By fostering self-compassion and encouraging a broader perspective towards oneself, individuals may find fewer reasons to seek refuge in smartphone usage, emphasizing the significance of adopting alternative viewpoints as a strategy to promote well-being and decrease excessive smartphone reliance among those with social anxiety. By having a more compassionate attitude toward themselves, individuals might be less in need of using their smartphones. Specifically, working on self-judgment and mindfulness should be considered when working with individuals with social anxiety in the clinical setting.

#### ***4.4. Limitations and Future Suggestions***

The study has some limitations in addition to the contributions it offers to literature and clinical practice. These limitations must be taken into account while interpreting the study's findings.

Strength of the current study is having a diverse sample instead of working on a more homogenous group. Most studies regarding smartphone addiction used university students in their investigations but in this study, more heterogeneous sample was used. Therefore, it can be interpreted that results are more generalizable when compared to studies that included less diverse populations.

The 208 participants in the study's sample did not exhibit an equal distribution of high and low levels of social anxiety. Participants with low levels of social anxiety were seen to outweigh those with high levels. Future research is expected to be more generalizable if it uses a sample where social anxiety is distributed relatively evenly. In light of the variations in social anxiety among groups, it is determined that the research findings have limited generalizability.

Non-clinical volunteers were used for this research. Although the majority of hypotheses are confirmed, more accurate results would come from examining these variables in people with social anxiety disorder. For a more thorough comprehension of the nature of social anxiety disorder, future research should be undertaken with the clinical population, examining variations between clinical and control groups.

Finally, in addition to clinical groups, it's crucial to keep in mind that not all

participants may be represented by the binary gender system. The generalizability of the findings could be improved by doing numerous replications of the study with various groups.



## CHAPTER 5: CONCLUSION

For the first time, the relationship between social anxiety and smartphone addiction was examined in this study to determine how self-compassion functions as a mediator.

In conclusion, this research demonstrates that self-compassion significantly mediates the relationship between social anxiety and smartphone addiction. In addition, it was found that self-judgment and mindfulness were the two components of self-compassion that significantly mediated the relationship between social anxiety and smartphone addiction. Notably, individuals grappling with heightened social anxiety, as indicated by existing literature, tend to exhibit higher levels of self-criticism. This suggests that individuals with social anxiety might turn to smartphones as a coping mechanism to escape or alleviate the detrimental effects of increased self-criticism. Additionally, the role of mindfulness implies that being more present and aware of one's thoughts and emotions could potentially reduce the need for excessive smartphone use as a means of distraction or avoidance. Understanding the mediating role of these self-compassion components, along with the higher levels of self-criticism associated with social anxiety, sheds light on the intricate dynamics linking social anxiety, self-compassion, and smartphone addiction. This knowledge is instrumental in devising targeted interventions to alleviate smartphone dependence in individuals dealing with social anxiety.

Overall, the research contributes to the literature and advances clinical practice for treatment while offering a critical and deeper grasp of ideas linked to social anxiety and smartphone addiction.

### *5.1. Clinical Implications*

Previous research has looked at the connection between smartphone addiction and social anxiety. Being the first study to look at the part that self-compassion plays in this relationship, the current study adds to the literature and clinical practice. Examining self-compassion is specifically important for the understanding of applicable treatment methods in the context of cognitive behavioral therapy. Specifically, working on self-judgment and mindfulness factors of self-compassion

could potentially be a treatment strategy in working with clients. Working with clients' judgmental automatic thoughts, helping he/she gain awareness of these thoughts and understand their effects on emotions, behavior and other thoughts, doing Socratic Questioning and presenting a more compassionate and flexible type of thinking could be beneficial for individuals with social anxiety. Moreover, helping client have a more observant view toward his/her emotions without suppressing them, changing them, or completely identifying with them can help client to have a more mindful perspective. Using mindfulness techniques such as "leaves on a stream", where client imagines putting his/her thoughts on a leaf and viewing it slide through the stream can help patient to detach himself/herself, instead of completely identifying with his/her thoughts. Such techniques can be beneficial to help patients understand the concept of mindfulness and apply it in his/her life. It is believed that the information collected from this study would give current cognitive-behavioral techniques a fresh viewpoint and be helpful to practitioners in treatment planning.

## REFERENCES

- Aimes, P., Gelder, M. and Shaw, P. (1983) *Social phobia: A comparative clinical study*. British Journal of Psychiatry. Vol 142. pp. 174-179.
- Alhassan, A.A., Alqadhib, E.M., Taha, N.W., Alahmari, R.A., Salam, M. and Almutairi, A.F. (2018) *The relationship between addiction to smartphone usage and depression among adults: A cross sectional study*, BMC Psychiatry, Vol.18 No.1, pp. 148.
- Allen, A.B., Goldwasser, E. R. and Leary, M. R. (2012) *Self-compassion and well-being among older adults*. Self and Identity, Vol. 11 No. 4, pp. 428–453.
- American Psychiatric Association (2013) *Diagnostic and statistical manual of mental disorders*. 5th edition. Arlington: American Psychiatric Publishing. Access Address: <https://www.psychiatry.org/psychiatrists/practice/dsm> (Date of access:07.06.2023).
- Amir, N and Taylor, C.T. (2012) *Interpretation training in individuals with generalized social anxiety disorder: A randomized controlled trial*, Journal of Consulting and Clinical Psychology, Vol. 80 No. 3, pp. 497–511.
- Bacon, M.K and Ashmore, R.D. (1985) *How mothers and fathers categorize descriptions of social behavior attributed to daughters and sons*, Social Cognition, Vol.3, pp.193–217.
- Bae, S.M. (2015) *The relationships between perceived parenting style, learning motivation, friendship satisfaction, and the addictive use of smartphones with elementary school students of South Korea: Using multivariate latent growth modeling*, School Psychology International, Vol.36 No .5, pp. 513–531.
- Beesdo-Baum, K., Knappe, S., Fehm, L., Hofler, M., Lieb, R., Hofmann, S. and Wittchen, H. U. (2012) *The natural course of social anxiety disorder among adolescents and young adults*. Acta Psychiatrica Scandinavica, Vol.126, No.6, pp.411-425.
- Bem, S.L. (1974) *The measurement of psychological androgyny*, Journal of Consulting and Clinical Psychology, Vol. 42, No.2, pp.155–162.
- Bennett-Goleman, T. (2001) *Emotional alchemy: How the mind can heal the heart*. New York: Three Rivers Press.
- Biagianti, B., Conelea, C., Brambilla, P.ve Bernstein, G. (2020) *A systematic review of treatments targeting cognitive biases in socially anxious adolescents*, Journal of

Affective Disorders, Vol. 264, No. 1, pp.543–551.

Bian, M.W and Leung, L. (2014) *Linking loneliness, shyness, smartphone addiction symptoms, and patterns of smartphone use to social capital*, Social Science Computer Review, Vol.33, No.1, pp. 1–19.

Bianchi, A and Phillips, J.G. (2005) *Psychological predictors of problem mobile phone use*, Cyberpsychology Behavior, Vol.8, No.1, pp. 39–51.

Biederman, J., Rosenbaum, J. F., Hirshfeld, D. R., Faraone, S. V., Bolduc, E. A., Gersten, M., Meminger, S.R., Kagan, J., Snidman, N. and Reznick, J.S. (1990) *Psychiatric correlates of behavioral inhibition in young children of parents with and without psychiatric disorders*, Archives of General Psychiatry, Vol.47, No 1, pp.21–26.

Billieux, J., Philippot, P., Schmid, C., Maurage, P., De Mol, J., Van der Linden. M. (2015) *Is Dysfunctional Use of the Mobile Phone a Behavioural Addiction? Confronting Symptom-Based Versus Process-Based Approaches*, Clin Psychol Psychother, Vol.22, No.5, pp.460-468.

Billieux, J., Van der Linden, M and Rochat L. (2008) *The role of impulsivity in actual and problematic use of the mobile phone*, Appl Cogn Psychol, Vol.22, No.9, pp.1195–210.

Billieux. J., Gay, P., Rochat, L.and Van der Linden M. (2010) *The role of urgency and its underlying psychological mechanisms in problematic behaviours*, Behav Res Ther, Vol. 48, No.11, pp.1085–96.

Blöte, A.W., Miers, A.C., Heyne, D.A., and Westenberg, P.M. (2015) *Social anxiety and the school environment of adolescents*. In K. Ranta, A. M. La Greca, L.-J. Garcia-Lopez, and M. Marttunen (Eds.), *Social anxiety and phobia in adolescents: Development, manifestation, and intervention strategies* (pp. 151–181).

Bluth, K., Campo, R.A., Futch, W.S. and Gaylord, S.A. (2017) *Age and gender differences in the associations of self-compassion and emotional well-being in a large adolescent sample*, Journal of youth and adolescence, Vol. 46, No.4, pp.840-853.

Bogels, S.M and Brechman-Toussaint, M.L. (2006) *Family issues in child anxiety: Attachment, family functioning, parental rearing and belief*, Clinical Psychology Review, Vol. 26 No.7, pp.834-856.

Bronfenbrenner, U. (1979) *The ecology of human development: Experiments by nature and design*, Cambridge, MA: Harvard University Press.

- Bruce, T.J. and Saeed, S.A. (1999) *Social anxiety disorder: A common, underrecognized mental disorder*, American Family Physician, Vol. 60, No.8, pp. 2311-2320.
- Bruch, M.A. and Cheek, JM. (1995) *Developmental factors in childhood and adolescent shyness*. In R. G. Heimberg, MR. Liebowitz, D A. Hope, and F. R. Schneier (Eds.), *Social phobia: Diagnosis, assessment, and treatment* (pp. 163–182). New York: Guilford Press.
- Burstein, M., He, J.-P., Kattan, G., Albano, A. M., Avenevoli, S. and Merikangas, K. R. (2011) *Social phobia and subtypes in the National Comorbidity Survey adolescent supplement: Prevalence, correlates, and comorbidity*. Journal of the American Academy of Child and Adolescent Psychiatry, Vol. 50, No.9, pp.870-880.
- Butt, S and Phillips J.G. (2008) *Personality and self-reported mobile phone use*. Comput Hum Behav, Vol.24, No. 2, pp. 346–60.
- Chen, K.; Chen, J.V. and Yen, D.C. (2011) *Dimensions of self-efficacy in the study of smart phone acceptance*, Computer Standards and Interfaces, Vol. 33 (2011), pp. 422–431.
- Chess, S and Thomas, A. (1984) *Origins and evolution of behavior disorders*, New York: Brunner/ Mazel, Inc.
- Chiu, S. (2014) *The relationship between life stress and smartphone addiction on Taiwanese university student: A mediation model of learning self-efficacy and social self-efficacy*, Computers in Human Behavior, Vol.34, pp. 49–57.
- Crews, F., He, J.and Hodge, C. (2007) *Adolescent cortical development: A critical period of vulnerability for addiction*. Pharmacology, Biochemistry and Behavior, Vol. 86, No. 2, pp. 189–199.
- Darcin, A.E., Kose, S., Noyan, C.O., Nurmedov, S. and Dilbaz, N. (2016) *Smartphone addiction and its relationship with social anxiety and loneliness*, Behaviour and Information Technology, Vol. 35, No.7, pp. 520–525.
- Davidson, J.R.T, Hughes, D.C, George, L.K. and Blazer, D.G. (1993) *The epidemiology of social phobia: findings from the Duke Epidemiologic Catchment Area Study*, Psychol Med, Vol.23, pp. 709–718.
- Davidson, J.R.T, Hughes, D.C, George, L.K. and Blazer, D.G. (1994) *The boundary of social phobia: exploring the threshold*, Arch Gen Psychiatry Vol. 51. No. 12, ss. 23-27.
- Demir, T., Karacetin, G., Eralp Demir, D. and Uysal,O. (2013) *Prevalence and some*

*psychosocial characteristics of social anxiety disorder in an urban population of Turkish children and adolescents.* Eur Psychiatry, Vol. 28, pp. 64-69.

Detweiler, M.F., Comer, J.S., Crum, K.I. and Albano, A.M. (2014) *Social anxiety in children and adolescents: Biological, developmental, and social considerations*, In *Social Anxiety* (pp. 253-309). Academic Press.

DiBartolo, M.P. and Hofmann, S.G. (2014) *Social anxiety: Clinical, developmental, and social perspectives*, 3rd Edition.

Dir, A.L., Cyders, M.A. and Coskunpinar, A. (2013) *From the bar to the bed via mobile phone: a first test of the role of problematic alcohol use, sexting, and impulsivity-related traits in sexual hookups* Comput Hum Behav. Vol. 29, No. 4, pp. 1664–1670.

Dir, A.L. and Cyders, M.A. (2015) *Risk Factors, and Outcomes Associated with Phone and Internet Sexting Among University Students in the United States*, Arch Sex Behav., Vol. 44, No.6, pp. 1675-84.

Duggan, C., Sham, P., Minne, A., Lee, A. and Murray, R. (1998) *Quality of parenting and vulnerability to depression: Results from a family study*, Psychological Medicine, Vol.28, No.1, pp. 185-191.

Dumas, J.E., LaFraniere, P.J. and Serketich, W.J. (1995) *Balance of power: A transactional analysis in mother-child dyads involving socially competent, aggressive, and anxious children*, Journal of Abnormal Psychology, Vol.104, No.1, pp. 104–113.

Ehrenberg, A., Juckes, S., White, K.M. and Walsh, S.P. (2008) *Personality and self-esteem as predictors of young people's technology use*, CyberpsycholBehav. Vol. 11, No. 6, pp. 739–741.

Eley, T.C. (2001) *Contributions from behavioural genetics research: Quantifying genetic, shared environmental and nonshared environmental influences*, In Vasey, M.W. and M. Dadds (Eds), *The developmental psychopathology of anxiety* (pp. 45–59). New York: Oxford University Press.

Eley, T.C. and Gregory, A M. (2004) *Behavioral genetics*. In T. L. Morris and J. S. March (Eds), *Anxiety disorders in children and adolescents* (2nd ed., pp. 71–97). New York: Guilford Press.

Elizabeth, J., King, N., Ollendick, T. H., Gullone, E., Tonge, B., Watson, S. and Macdermott, S. (2006) *Social anxiety disorder in children and youth: A research update on aetiological factors*, Counselling Psychology Quarterly, Vol. 19, No, 2, pp.



151-163.

Erath, S. A., Flanagan, K.S. and Bierman, K.L. (2007). *Social anxiety and peer relations in early adolescence: Behavioral and cognitive factors*, Journal of Abnormal Child Psychology, Vol. 35, No.3, pp. 405-416.

Erol, N., Kılıc, C., Ulusoy, M. and Kececı, M. (1998) *Türkiye ruhsađlığı profili raporu*, Ankara: T. C. Sađlık Bakanlıđı Temel Sađlık Hizmetleri Genel Müdürlüğü)

Fjeldsoe, B.S., Marshall, A.L. and Miller, Y.D. (2009) *Behavior change interventions delivered by mobile telephone short-message service*, Am J Prev Med, Vol. 36, No.2, pp.165–73.

Gill, C., Watson, L., Williams, C. and Chan, S.W.Y. (2018) *Social anxiety and self-compassion in adolescents*, Journal of Adolescence, Vol. 69, No.8, pp. 163–174.

Gilligan, C., Lyons, N. and Hanmer, T.J. (1990) *Making connections: The relational worlds of adolescent girls at Emma Willard School*, Cambridge, MA: Harvard University Press.

Gladkaya, M., Gundlach, J., Bergert, C. and Baumann, A. (2018) *We need to talk! Antecedents and consequences of children's smartphone use A literature review*. In Americas conference on information systems 2018: Digital disruption, AMCIS 2018.

Goldstein, J. and Kornfield, J. (1987) *Seeking the heart of wisdom: The path of insight meditation*, Boston: Shambhala.

Greco, L.A. and Morris, T.L. (2005) *Factors influencing the link between social anxiety and peer acceptance: Contributions of social skills and close friendships during middle childhood*, Behavior Therapy, Vol 36, No.2, pp. 197-205.

Gren-Landell, M., Aho, N., Andersson, G. and Svedin, C.G. (2011) *Social anxiety disorder and victimization in a community sample of adolescents*, Journal of Adolescence, Vol.34, No.3, pp. 569-577.

Gu, J., Strauss, C., Bond, R. and Cavanagh, K. (2015), *How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improve mental health and wellbeing? A systematic review and meta-analysis of mediation studies*, Clinical Psychology Review, Vol. 37, No.3, pp.1–12.

Ha, J.H., Chin, B., Park, D.H., Ryu, S.H. and Yu J. (2008) *Characteristics of excessive cellular phone use in Korean adolescents*. Cyberpsychological Behavior, Vol.11 No.6, pp. 783–784.

Hayes, S.C., Strosahl, K.D. and Wilson, K.G. (1999) *Acceptance and commitment therapy: An experiential approach to behavior change*, New York: Guilford.

- Hazen, A.L. and Stein, M.B. (1995) *Clinical phenomenology and comorbidity*. In: Stein MB, editor. *Social phobia: clinical and research perspectives*, Washington (DC): American Psychiatric Press,
- Heimberg, R. G., Horner, K. J., Juster, H. R., Safren, S. A., Brown, E. J., Schneier, F. R. and Liebowitz, M. R. (1999) *Psychometric properties of the Liebowitz social anxiety scale*, *Psychological medicine*, Vol. 29, No.1, pp.199-212.
- Heimberg, R.G., Brozovich, F.A. and Rapee, R.M. (2010) *A cognitive-behavioral model of social anxiety disorder: Update and extension*. In Hofmann, S.G. and DiBartolo, P.M (Eds.), *Social anxiety: Clinical, developmental, and social perspectives* (pp. 395–422). Academic Press.
- Heo, J., Oh, J., Subramanian, S.V., Kim, Y. and Kawachi, I. (2014) *Addictive internet use among Korean adolescents: A national survey*, *PLoS One*, Vol.9, No. 2, pp. 1–8.
- Hill, J. and Lynch, M. (1983) *The intensification of gender-related role expectations during early adolescence*. In J. Brooks-Gunn and A. Petersen (Eds.), *Girls at puberty* (pp. 201–228).
- 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.
- Homan, K. (2016) *Self-compassion and psychological well-being in older adults*, *Journal of Adult Development*, Vol. 23. No.2, pp.111–119.
- Hyde, J. S., Mezulis, A. H. and Abramson, L. Y. (2008) *The ABCs of depression: Integrating affective, biological, and cognitive models to explain the emergence of the gender difference in depression*, *Psychological Review*, Vol. 115, No. 2, pp. 291.
- Igarashi, T., Motoyoshi, T., Takai, J. and Yoshida T. (2008) *No mobile, no life: self-perception and text-message dependency among Japanese high school students*, *Comput Hum Behav*. Vol.24, No.5, pp. 2311–2324.
- Izgiç, F., Akyüz, G., Doğan, O. and Kuğu, N. (2004) *Social phobia among university students and its relation to self-esteem and body image*. *The Canadian journal of psychiatry*, Vol.49, No. 9, pp. 630-634.
- Joinson, A.N. (2004) *Self-esteem, interpersonal risk, and preference for e-mail to face-to-face communication*, *CyberPsychology and Behaviour*, Vol.7, No.4, pp. 479-486.
- Kagan, J., Reznick, J.S. and Gibbons, J. (1989) *Inhibited and uninhibited types of children*, *Child Development*, Vol 60, pp. 838–845.

- Kagan, J., Reznick, J.S. and Snidman, N. (1988) *Biological bases of childhood shyness*. Science, Vol 240, pp. 167.
- Kamibeppu, K. and Sugiura, H. (2005) *Impact of the mobile phone on junior high-school students' friendships in the Tokyo metropolitan area*. Cyberpsychol Behav, Vol.8 No. 2, pp. 121-130.
- Kardefelt-Winther, D., Heeren, A., Schimmenti, A., Van Rooij, A., Maurage, P., Carras, M., Khazaal, Y. and Billieux, J. (2017) *How can we conceptualize behavioural addiction without pathologizing common behaviours?* Addiction, Vol. 112, No. 10, pp. 1709-1715.
- Kessler, R. C., Avenevoli, S., Costello, E., Georgiades, K., Green, J. G., Gruber, M. J., He, J.P., Koretz, D., McLaughlin, K.A., Petukhova, M., Sampson, N.A., Zaslavsky, A.M. and Merikangas, K.R. (2012) *Prevalence, persistence, and sociodemographic correlates of DSM-IV disorders in the National Comorbidity Survey Replication Adolescent Supplement*, Arch Gen Psychiatry, Vol. 69, No. 4, pp.372-380.
- Kessler, R.C., McGonagle, K.A., Zhao, S., Nelson, C.B., Hughes, M., Eshleman, S., Wittchen, H.U. and Kendler, K.S. (1994) *Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey*, Arch Gen Psychiatry, Vol. 51, No. 1, pp. 8-19.
- Kessler, R.C., Stein, M.B. and Berglund, P. (1998) *Social phobia subtypes in the National Comorbidity Survey*, Am J Psychiatry Vol. 155, No. 5, pp. 613–619.
- Khang, H., Kim, J.K. and Kim, Y. (2013) *Self-traits and motivations as antecedents of digital media flow and addiction: the internet, mobile phones, and video games*, Computer Human Behavior, Vol 29 No. 6, pp. 2416–2424.
- Kim, H.J., Min, J., Min, K., Lee, T. and Yoo, S. (2018) *Relationship among family environment, self-control, friendship quality, and adolescents' smartphone addiction in South Korea: Findings from nationwide data*. PLoS One, Vol. 13, No. 2, pp. 1–13.
- King, A.L.S., Valença, A.M. and Nardi, A.E. (2010) *Nomophobia: the mobile phone in panic disorder with agoraphobia: reducing phobias or worsening of dependence?* CognBehav Neurol. Vol. 23, No. 1, pp. 52–54.
- King, A.L.S., Valença, A.M., Silva, A.C.O., Baczynski, T., Carvalho, M.R. and Nardi, A.E. (2013) *Nomophobia: dependency on virtual environments or social phobia?* Comput Hum Behav, Vol. 29, No. 1, pp. 140–144.
- Kokkinos, C.M., Antoniadou, N., and Markos A. (2014) *Cyber-bullying: an*

- investigation of the psychological profile of university student participants. J Appl Dev Psychol, Vol. 35, No. 3, pp. 204–14.*
- Krohne, H.W. and Hock, M. (1991) *Relationships between restrictive mother-child interactions and anxiety of the child, Anxiety Research, Journal of Clinical Child Psychology, Vol.17, pp. 84–91.*
- Kuss, D.R. and Griffiths, M.D. (2011) *Online social networking and addiction: A review of the psychological literature, International Journal of Environmental Research and Public Health, Vol. 8, pp. 3528-3552.*
- Kwon, M., Kim, D.J., Cho, H. and Yang, S. (2013) *The Smartphone Addiction Scale: Development and validation of a short version for adolescents, PLoS One, Vol. 8, No. 12, pp. e83558.*
- Kwon, Y. and Paek, K.S. (2016) *The influence of smartphone addiction on depression and communication competence among college students, Indian Journal of Science and Technology, Vol. 9, No. 41, pp. 1-8.*
- Leary, M.R. (1983) *Social anxiousness: The construct and its measurement, Journal of Personality Assessment, Vol. 47, No. 1, pp. 66–75.*
- Leary, M.R. (2001). *Social anxiety as an early warning system: A refinement and extension of the self-presentation theory of social anxiety.* In Hofmann, S.G. and DiBartolo, P.M. (Eds.), *From social anxiety to social phobia: Multiple perspectives* (pp. 321–334). Boston, MA: Allyn and Bacon.
- Lecrubier, Y. and Weiller, E. (1997). *Comorbidity in social phobia, Int Clin Psychopharmacology, Vol.12, pp. 17–21.*
- Lee, H., Kim, J.W. and Choi, T.Y. (2017) *Risk factors for smartphone addiction in Korean adolescents: Smartphone use patterns, Journal of Korean Medical Science, Vol.32, pp. 1674–1679.*
- Lee, Y.K., Chang, C.T, Lin, Y. and Cheng, Z.H. (2014) *The dark side of smartphone usage: psychological traits, compulsive behavior and technostress. Comput Hum Behav, Vol. 31, pp. 373–383.*
- Leigh, E., and Clark, D.M. (2018) *Understanding social anxiety disorder in adolescents and improving treatment outcomes: Applying the cognitive model of Clark and Wells (1995). Clinical child and family psychology review, Vol. 21, No. 3, pp. 388-414.*
- Lepp, A., Barkley, J.E. and Karpinski, A.C. (2014) *The relationship between cell phone use, academic performance, anxiety, and Satisfaction with Life in college*

students, *Comput Hum Behav*, Vol.31, pp.343–50.

Leung, L. (2008) *Linking psychological attributes to addiction and improper use of the mobile phone among adolescents in Hong Kong*, *J Child Media*, Vol. 2, No. 2, pp. 93–113.

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.

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

Liu, Q.Q., Yang, X J., Hu, Y.T. and Zhang, C.Y. (2020) *Peer victimization, self-compassion, gender and adolescent mobile phone addiction: Unique and interactive effects*, *Children and Youth Services Review*, Vol. 118, pp. 105397.

Lu, X., Katoh, T., Chen, Z., Nagata, T. and Kitamura, T. (2014) *Text messaging: are dependency and excessive use discretely different for Japanese university students?* *Psychiatry Res*, Vol. 216, No. 2, pp.255–62.

Lu, X., Watanabe, J., Liu, Q., Uji, M., Shono, M. and Kitamura, T. (2011) *Internet and mobile phone text-messaging dependency: factor structure and correlation with dysphoric mood among Japanese adults*, *Comput Hum Behav*, Vol. 27, No. 5, pp.1702–1709.

MacBeth, A. and Gumley, A. (2012) *Exploring compassion: A metaanalysis of the association between self-compassion and psychopathology*, *Clinical Psychology Review*, Vol. 32, No. 6, pp. 545–552.

Magee, W.J., Eaton, W.W., Wittchen, H.U., McGonagle, K.A. and Kessler, R.C. (1996) *Agoraphobia, simple phobia, and social phobia in the National Comorbidity Survey*, *Arch Gen Psychiatry*, Vol. 53, No. 2, pp. 159-68.

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, No. 11, pp. 1511–1517.

Mannuzza, S., Fyer, A.J., Liebowitz, M.R. and Klein, D. F. (1990), *Delineating the boundaries of social phobia: Its relationship to panic disorder and agoraphobia*. *Journal of Anxiety Disorders*, Vol. 4, No. 1, pp. 41-59.

Mannuzza, S., Schneier, F.R., Chapman, T.F., Liebowitz, M.R., Klein, D.F. and Fyer,

- A.J. (1995) *Generalized social phobia: Reliability and validity*, Archives of General Psychiatry, Vol. 52, No. 3, pp. 230–237.
- Marsh, I.C. Chan, S.W.Y. and MacBeth, A. (2018) *Psychological distress in adolescents - A meta-analysis*, Mindfulness, Vol 9, No. 4, pp. 1011–1027.
- Marsh, I.C., Chan, S.W.Y. and MacBeth A. (2018) *Self-compassion and Psychological Distress in Adolescents-a Meta-analysis*, Mindfulness (N Y), Vol.9, pp. 1011-1027.
- Mayo Clinic Staff. (2021). *Social anxiety disorder (social phobia)*. Mayo Clinic. Retrieved from Access Address: <https://www.mayoclinic.org/diseases-conditions/social-anxiety-disorder/symptoms-causes/syc-20353561> (Date of access 24.05.2023).
- Mennin, D.S., Fresco, D.M., Heimberg, R.G., Schneier, F.R., Davies, S.O. and Liebowitz, M.R. (2002) *Screening for social anxiety disorder in the clinical setting: using the Liebowitz Social Anxiety Scale*, Journal of anxiety disorders, Vol. 16, No. 6, pp. 661-673.
- Meral. Y. and Vriends, N. (2021) *Self-image and self-focused attention in a social interaction situation: what is relevant for social anxiety?* Behav Cogn Psychother. Vol. 15, pp. 1-11.
- Miers, A.C., Blote, A.W. and Westenberg, P. (2011) *Negative social cognitions in socially anxious youth: Distorted reality or a kernel of truth?*, Journal of Child and Family Studies, Vol. 20, No. 2, pp. 214-223.
- Miller, G.(2012) *The Smartphone Psychology Manifesto*, Perspect Psychol Sci, Vol. Vol. 7, No. 3, pp. 221-37.
- Mitropoulou, E.M., Karagianni, M. and Thomadakis, C. (2022) *Social Media Addiction, Self-Compassion, and Psychological Well-Being: A Structural Equation Model*, Alpha Psychiatry, Vol. 23, No. 6, pp. 298.
- Mok, J.Y., Choi, S.W., Kim, D.J., Choi, J.S., Lee, J., Ahn, H., Choi, E.J. and Moutier W.Y. and Stein, M.B. (1999) *The history, epidemiology, and differential diagnosis of social anxiety disorder*, Journal of Clinical Psychiatry, Vol. 60, No. 9, pp.4-8.
- Mok, J.Y., Choi, S.W., Kim, D.J., Choi, J.S., Lee, J., Ahn, H., Choi, E.J. and Song, W.Y. (2014) *Latent class analysis on internet and smartphone addiction in college students*, Neuropsychiatr Dis Treat, Vol. 10, pp. 817-28.
- Murn, L.T. and Steele, M.R. (2020) *What matters most? Age and gender differences in self-compassion and body attitudes among college students*, Counselling

- Psychology Quarterly, Vol. 33, No. 4, pp. 541-560.
- Neff, K.D. (2003) *The development and validation of a scale to measure self-compassion*, Self and identity, Vol. 2, pp. 223-250.
- Offord, D.R., Boyle, M.H., Campbell, D., Goering, P., Lin, E., Wong, M. and Racine, Y.A (1996) *One-year prevalence of psychiatric disorder in Ontarians 15 to 64 years of age*, Can J Psychiatry, Vol. 41, No. 9, pp. 559-63.
- Ollendick, T.H., Benoit, K.E. and Grills-Taquechel, A.E. (2014) *Social anxiety disorder in children and adolescents*. In J. W. Weeks (Ed.), *The Wiley Blackwell handbook of social anxiety disorder* (pp 181e200) xx, 621 pp (pp. 181e200). Wiley Blackwell.
- Oulasvirta, A., Rattenbury, T., Ma, L. and Raita, E. (2011) *Habits make smartphone use more pervasive*, Personal and Ubiquitous Computing, Vol. 16, No. 1, pp. 105–114.
- Petersen, A., Sarigiani, P. and Kennedy, R. (1991) *Adolescent depression: Why more girls?* Journal of Youth and Adolescence, Vol.20, No. 2, pp. 247–271.
- Pierce, T. (2009) *Social Anxiety and Technology: Face-to-Face Communication Versus Technological Communication among Teens*, Computers in Human Behavior, Vol. 25, No. 6, pp. 1367– 1372.
- Pugh, S. (2017) *Investigating the relationship between smartphone addiction, social anxiety, self-esteem, age and gender*, Submitted in partial fulfilment of the requirements of the BA Hons in Psychology, At Dublin Business School, School of Arts, Dublin.
- Regier, D.A., Farmer, M.E., Rae, D.S., Locke, B.Z., Keith, S.J., Judd, L.L. and Goodwin, F.K. (1990) *Comorbidity of mental disorders with alcohol and other drug abuse. Results from the Epidemiologic Catchment Area (ECA) Study*. JAMA, Vol. 264, No. 19, pp. 2511-8.
- Reid, D.J. and Reid, F.J. (2007) *Text or talk? Social anxiety, loneliness, and divergent preferences for cell phone use*, Cyberpsychol Behav, Vol. 10, No. 3, pp. 424-35.
- Salehan, M. and Negahban, A. (2013) *Computers in human behavior social networking on smartphones: When mobile phones become addictive*, Computers in Human Behavior, Vol. 29, No. 6, pp. 2632–2639.
- Sansone, R.A. and Sansone, L.A. (2013) *Cell phones: The psychosocial risks*, Innovations in Clinical Neuroscience, Vol.10, No. 1, pp.33–37.
- Sareen, J. and Stein, M. (2000) *A review of epidemiology and approaches to the*

*treatment of social anxiety disorder*. *Drugs*, Vol. 59, No. 3, pp. 497-509.

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*, *Arch Gen Psychiatry*, Vol. 49, No. 4, pp. 282-288.

Shabeer, H.A. and Wahidabanu, R.S.D. (2012) *Averting mobile phone use while driving and technique to locate the mobile phone used vehicle*, *Procedia Engineering*, Vol. 30, pp. 623-630.

Spear, L.P. (2000) *The adolescent brain and age-related behavioral manifestations*, *Neuroscience and Biobehavioral Reviews*, Vol. 24, No. 4, pp. 417–463.

Spence, S.H. and Rapee, R.M. (2016) *The etiology of social anxiety disorder: An evidence-based model*, *Behaviour Research and Therapy*, Vol. 86, pp. 50-67.

Ștefan, C.A., Căpraru, C. and Szilágyi, M. (2018) *Investigating effects and mechanisms of a mindfulness-based stress reduction intervention in a sample of college students at risk for social anxiety*, *Mindfulness*, Vol. 9, No. 5, pp. 1509–1521.

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., Walker, J.R. and Forde, D.R. (1996) *Public-speaking fears in a community sample: prevalence, impact on functioning, and diagnostic classification*, *Arch Gen Psychiatry*. Vol.53, No. 2, pp. 169-74.

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*, *American Journal of Psychiatry*, Vol. 155, pp.90–97.

Stein, M.B., Walker, J.R and Forde, D.R. (1994) *Setting diagnostic thresholds for social phobia: considerations from a community survey of social anxiety*, *Am J Psychiatry* Vol.151, No. 3, pp. 408–412.

Ting, C.H. and Chen, Y.Y. (2020) *Smartphone addiction*, In *Adolescent addiction* (pp. 215-240). Academic Press.

Torgersen, S. (1983) *Genetic factors in anxiety disorders*, *Archives of General Psychiatry*, Vol. 40, No. 10, pp. 1085–1089.

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.



- Verduin, T.L. and Kendall, P.C. (2008) *Peer perceptions and liking of children with anxiety disorders*, Journal of Abnormal Child Psychology, Vol. 36, No. 4, pp. 459-469.
- Verhulst, F.C., van der Ende, J., Ferdinand, R.F. and Kasius, M.C. (1997) *The prevalence of DSM-III-R diagnoses in a national sample of Dutch adolescents*, Arch Gen Psychiatry, Vol. 54, No. 4, pp. 329-36.
- Vriends, N., Meral, Y., Bargas-Avila, J.A., Stadler, C. and Bögels, S.M. (2017) *How do I look? Self-focused attention during a video chat of women with social anxiety (disorder)*, Behaviour Research and Therapy, Vol. 92, pp. 77-86.
- Walsh, S.P., White, K.M., Hyde, M.K. and Watson, B. (2008) *Dialling and driving: Factors influencing intentions to use a mobile phone while driving*, Accident; Analysis and Prevention, Vol. 40, No. 6, pp.1893–1900.
- Weiller, E., Bisserbe, J.C., Boyer, P., Lepine, J.P and Lecrubier Y. (1996) *Social phobia in general health care: an unrecognised undertreated disabling disorder*, Br J Psychiatry, Vol. 168, No. 2, pp. 169-74.
- Werner, K.H., Jazaieri, H., Goldin, P.R., Ziv, M., Heimberg, R.G. and Gross, J.J. (2012) *Self-compassion and social anxiety disorder*, Anxiety, Stress, and Coping, Vol. 25, No. 5, pp. 543–558.
- Werner, K.H., Jazaieri, H., Goldin, P.R., Ziv, M., Heimberg, R.G. and Gross, J.J. (2012) *Self-compassion and social anxiety disorder*, Anxiety, Stress, and Coping, Vol. 25, pp. 543–558.
- Wiborg, I.M. and Dahl, A.A. (1997) *The recollection of parental rearing styles in patients with panic disorder*, Acta Psychiatrica Scandinavica, Vol. 96, pp. 58–63.
- 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.
- Wu, A.M., Cheung, V.I., Ku, L. and Hung, E.P. (2013) *Psychological Risk Factors of Addiction to Social Networking Sites among Chinese Smartphone Users*, Journal of Behavioural Addictions, Vol. 2, No. 3, pp. 160–166.
- Wu, Y.L., Lin, S.H. and Lin, Y.H. (2021) *Two-dimensional taxonomy of internet addiction and assessment of smartphone addiction with diagnostic criteria and mobile apps*, Journal of behavioral addictions, Vol. 9, No. 4, pp. 928-933.
- Yen, J.Y., Yen, C.F., Chen, C.S., Wang, P.W., Chang, Y.H. and Ko, C.H. (2012) *Social anxiety in online and real-life interaction and their associated factors*

Cyberpsychology, Behavior, and Social Networking, Vol. 15, No. 1, pp. 7-12.

Zessin, U., Dickhäuser, O. and Garbade, S. (2015) *The relationship between self-compassion and well-being: A meta-analysis*, Applied Psychology: Health and Well-Being, Vol. 7, No. 3, pp. 340-364.

Zheng, F., Gao, P., He, M., Li, M., Wang, C., Zeng Q., Zhou, Z., Yu, Z. and Zhang, L. (2014) *Association between mobile phone use and inattention in 7102 Chinese adolescents: a population-based cross-sectional study*, BMC Public Health, Vol.14, No. 1, pp. 1022.

Zhu, J., Xie, R., Chen, Y. and Zhang, W. (2019) *Relationship between parental rejection and problematic mobile phone use in Chinese university students: Mediating roles of perceived discrimination and school engagement*, Frontiers in Psychology, Vol. 10, pp. 428.

## APPENDICES

### APPENDIX A: ETHICS COMMITTEE APPROVAL

**SAYI** : B.30.2.İEÜ.0.05.05-020-257

05.01.2023

**KONU** : Etik Kurul Kararı hk.

**Sayın Dr. Öğretim Üyesi Yasemin Meral Öğütçü ve Hazım Tevfik Katircioğlu,**

"Sosyal Kaygı Bozukluğu ve Akıllı Telefon Bağımlılığı Arasındaki İlişkide Öz-Şefkatin Rolü" başlıklı projenizin etik uygunluğu konusundaki başvurunuz sonuçlanmıştır.

Etik Kurulumuz 05.01.2023 tarihinde sizin başvurunuzun da içinde bulunduğu bir gündemle toplanmış ve Etik Kurul üyeleri projeleri incelemiştir.

Sonuçta 05.01.2023 tarihinde "Sosyal Kaygı Bozukluğu ve Akıllı Telefon Bağımlılığı Arasındaki İlişkide Öz-Şefkatin 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

### KATILIMCI BİLGİLENDİRME VE ONAM FORMU

Bu araştırma, İzmir Ekonomi Üniversitesi Klinik Psikoloji Yüksek Lisans programı kapsamında Dr. Öğretim Üyesi Yasemin Meral Öğütçü danışmanlığında, Hazım Tefik Katırcıoğlu tarafından yürütülecek olan bir tez çalışmasıdır.

Çalışma yaklaşık olarak 15 dakika sürecektir. Çalışmaya katılabilmeniz için 18 yaş ve üstü olmanız gerekmektedir. Çalışma kapsamında Sosyal Kaygı Bozukluğu ve Akıllı Telefon Bağımlılığının arasındaki ilişkide Öz-Şefkat'in rolüne ilişkin bilgi toplamak amaçlanmaktadır. Bu çalışmaya katılmak tamamen gönüllülük esasına dayanmakla beraber çalışmaya katılmama veya herhangi bir anda çalışmayı bırakma hakkına sahipsiniz. Çalışma kapsamında sizden hiçbir kimlik bilgisi talep edilmeyecektir. Formlar aracılığıyla sizden toplanacak olan bilgiler ise gizli tutulacak ve yalnızca araştırmacı tarafından değerlendirilecektir. Sizden toplanacak olan bu bilgiler yalnızca bilimsel amaçlar doğrultusunda kullanılacaktır. Formlardaki sorulara vereceğiniz yanıtların doğruluğu araştırmanın niteliği açısından oldukça önem taşımaktadır. Lütfen formların başındaki yönergeleri dikkatle okuyarak sorulara sizi en iyi ifade eden cevapları vermeye çalışınız.

Araştırma ile ilgili herhangi bir bilgi edinmek ya da sorun bildirmek isterseniz [hkatircioglu@my.aci.k12.tr](mailto:hkatircioglu@my.aci.k12.tr) adresi üzerinden araştırmacı ile iletişime geçebilirsiniz.

Yukarıda yer alan ve araştırmadan önce katılımcıya/gönüllüye verilmesi gereken bilgileri okudum ve katılmam istenen çalışmanın kapsamını ve amacını, gönüllü olarak üzerime düşen sorumlulukları tamamen anladım. Çalışma hakkında yazılı açıklama yukarıda adı belirtilen araştırmacı tarafından yapıldı. Bu çalışmayı istediğim zaman ve herhangi bir neden belirtmek zorunda kalmadan bırakabileceğimi ve bıraktığım takdirde herhangi bir olumsuzluk ile karşılaşmayacağımı anladım. Bu koşullarda söz konusu araştırmaya kendi isteğimle, hiçbir baskı ve zorlama olmaksızın katılmayı kabul ediyorum.

EVET

HAYIR

## APPENDIX C: KATILIMCI BİLGİ FORMU

### 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

Günde akıllı telefonunuzla kaç saat ilgileniyorsunuz? :

1 saatten az

1-2 saat

3-4 saat

5 saat ve üzeri

Günde ortalama kaç kez akıllı telefonunuzu kontrol edersiniz? :

10'dan az

10-20 kez

20-30 kez

30-40 kez

40'tan fazla

Akıllı telefonunuzu en çok hangi amaç için kullanıyorsunuz? :

İnternet

Sosyal Medya Siteleri (Twitter, Instagram vb.)

Oyun

Mesajlaşma

Telefonla Konuşma

Müzik Dinleme

Video İzleme

İş/Çalışma

En çok kullandığınız sosyal medya sitesi hangisidir?

Twitter

Instagram

Facebook

TikTok

Youtube

Snapchat



## APPENDIX D: LIEBOWITZ SOSYAL KAYGI ÖLÇEĞİ

### LIEBOWITZ SOSYAL KAYGI ÖLÇEĞİ

Lütfen aşağıdaki formu dikkatle okuyun.

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	Umumi yerlerde yemek yemek				
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				
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Lütfen aynı formu şimdi de belirtilen durumlarda duyduğunuz kaçınmanın şiddetine göre değerlendirin.

		Kaçınma yok ya da çok ender	Zaman zaman kaçınırım	Çoğunlukla kaçınırım	Her zaman kaçınırım
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	Umumi yerlerde yemek yemek				
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: AKILLI TELEFON BAĞIMLILIĞI ÖLÇEĞİ-KISA FORM

### Akıllı Telefon Bağımlılığı Ölçeği-Kısa Form

Aşağıda akıllı telefon kullanımı ile ilgili çeşitli duygu ve düşünceleri içeren anlatımlar verilmiştir. Lütfen her anlatımın size ne kadar uyduğunu değerlendirerek en uygun seçeneği yuvarlak içine alınız. 1-Kesinlikle katılmıyorum, 2-Katılmıyorum, 3-Kısmen katılmıyorum, 4-Kısmen katılıyorum, 5-Katılıyorum, 6-Kesinlikle katılıyorum

1	Akıllı telefon kullanmaktan dolayı planladığım işleri aksatırım.	1	2	3	4	5	6
2	Akıllı telefonu kullanmaktan dolayı derslerime odaklanmakta, ödevlerimi yapmakta ve işlerimi tamamlamakta güçlük çekerim.	1	2	3	4	5	6
3	Akıllı telefon kullanmaktan dolayı el bileğimde veya ensemdede ağrı hissederim.	1	2	3	4	5	6
4	Akıllı telefonumun yanımda olmamasına tahammül edemem.	1	2	3	4	5	6
5	Akıllı telefonum yanımda olmadığında sabırsız ve sinirli olurum.	1	2	3	4	5	6
6	Kullanmasam da akıllı telefonum aklımdadır.	1	2	3	4	5	6
7	Günlük yaşamımı aksatmasına rağmen akıllı telefonumu kullanmaktan vazgeçemem.	1	2	3	4	5	6
8	İnsanların twitter veya facebook üzerindeki konuşmalarını kaçırmamak için sürekli akıllı telefonumu kontrol ederim.	1	2	3	4	5	6
9	Akıllı telefonumu hedeflediğimden daha uzun süre kullanırım.	1	2	3	4	5	6
10	Çevremdeki insanlar akıllı telefonumu çok fazla kullandığını söylerler.	1	2	3	4	5	6

## APPENDIX F: ÖZ-ŞEFKAT ÖLÇEĞİ

### Öz-Şefkat Ölçeği

Sizden istenilen bu ifadeleri okuduktan sonra kendinizi değerlendiriniz ve sizin için en uygun seçeneğin karşısına çarpı (X) işareti koymanızdır. Her sorunun karşısında bulunan; (1) Hiçbir zaman (2) Nadiren (3) Sık sık (4) Genellikle ve (5) Her zaman anlamına gelmektedir. Lütfen her ifadeye mutlaka tek yanıt veriniz ve kesinlikle boş bırakmayınız.

1	Bir yetersizlik hissettiğimde, kendime bu yetersizlik duygusunun insanların birçoğu tarafından paylaşıldığını hatırlatmaya çalışırım.	1	2	3	4	5
2	Kişiliğimin beğenmediğim yönlerine ilişkin anlayışlı ve sabırlı olmaya çalışırım.	1	2	3	4	5
3	Bir şey beni üzdüğünde, duygularıma kapılıp giderim.	1	2	3	4	5
4	Hoşlanmadığım yönlerimi fark ettiğimde kendimi suçlarım.	1	2	3	4	5
5	Benim için önemli olan bir şeyde başarısız olduğumda, kendimi bu başarısızlıkta yalnız hissederim.	1	2	3	4	5
6	Zor zamanlarımda ihtiyaç duyduğum özen ve şefkati kendime gösteririm.	1	2	3	4	5
7	Gerçekten güç durumlarla karşılaştığımda kendime kaba davranırım.	1	2	3	4	5
8	Başarısızlıklarımı insanlık halinin bir parçası olarak görmeye çalışırım.	1	2	3	4	5
9	Bir şey beni üzdüğünde duygularımı dengede tutmaya çalışırım.	1	2	3	4	5
10	Kendimi kötü hissettiğimde kötü olan her şeye kafamı takar ve onunla meşgul olurum.	1	2	3	4	5
11	Yetersizliklerim hakkında düşündüğümde, bu kendimi yalnız hissetmeme ve dünyayla bağlantımı koparmama neden olur.	1	2	3	4	5
12	Kendimi çok kötü hissettiğim durumlarda, dünyadaki birçok insanın benzer duygular yaşadığını hatırlamaya çalışırım.	1	2	3	4	5
13	Acı veren olaylar yaşadığımda kendime kibar davranırım.	1	2	3	4	5
14	Kendimi kötü hissettiğimde duygularıma ilgi ve açıklıkla yaklaşmaya çalışırım.	1	2	3	4	5
15	Sıkıntı çektiğim durumlarda kendime karşı biraz acımasız olabilirim.	1	2	3	4	5
16	Sıkıntı veren bir olay olduğunda olayı mantıksız biçimde abartırım.	1	2	3	4	5
17	Hata ve yetersizliklerimi anlayışla karşılarım.	1	2	3	4	5
18	Acı veren bir şeyler yaşadığımda bu duruma dengeli bir bakış açısıyla yaklaşmaya çalışırım.	1	2	3	4	5
19	Kendimi üzgün hissettiğimde, diğer insanların çoğunun belki de benden daha mutlu olduklarını düşünürüm.	1	2	3	4	5
20	Hata ve yetersizliklerime karşı kınayıcı ve yargılayıcı bir	1	2	3	4	5

0	tavır takınırım.					
2 1	Duygusal anlamda acı çektiğim durumlarda kendime sevgiyle yaklaşırım.	1	2	3	4	5
2 2	Benim için bir şeyler kötüye gittiğinde, bu durumun herkesin yaşayabileceğini ve yaşamın bir parçası olduğunu düşünürüm.	1	2	3	4	5
2 3	Bir şeyde başarısızlık yaşadığımda objektif bir bakış açısı takınmaya çalışırım.	1	2	3	4	5
2 4	Benim için önemli olan bir şeyde başarısız olduğumda, yetersizlik duygularıyla kendimi harap ederim.	1	2	3	4	5
2 5	Zor durumlara mücadele ettiğimde, diğer insanların daha rahat bir durumda olduklarını düşünürüm.	1	2	3	4	5
2 6	Kişiliğimin beğenmediğim yönlerine karşı sabırlı ve hoşgörülü değilimdir.	1	2	3	4	5

