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CHAPTER 1

A HOLISTIC COUNSELING MODEL FOR DIGITAL ADDICTION AND TECHNOLOGY USE DISORDERS

ÖZGE SAKARYA ÇINKİ¹

1. Introduction

With digital technologies becoming an indispensable part of everyday life, concepts such as digital addiction, problematic internet use and technology use disorders have become universally studied topics and, at the same time, sources of concern. These concepts refer to uncontrolled and excessive technology use that disrupts individuals' vital functioning, leading to numerous physical, cognitive, social, and occupational problems, and affecting all age groups from early childhood onward.

As the misuse of technology increases, new concepts that are recognized in the literature as disorders or illnesses are added day by day. Concepts such as gaming disorder or gaming addiction, smartphone addiction (phubbing), internet addiction, social media addiction, phubbing/socioterrorism, cyberbullying, doomscrolling, netlessphobia, nomophobia, and FOMO have each emerged as separate fields of study. In addressing these problems, individual-centered or traditional methods are no longer sufficient; instead,

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there is a growing need for multilayered intervention programs that adopt a holistic approach to the individual.

The purpose of this chapter is to present a holistic counseling model that targets not only the individual but also all systems surrounding them (family, school/work, and social environment), adopting a multidisciplinary structure and encompassing prevention, intervention, and monitoring stages in the fight against digital addiction.

2. Conceptual and Theoretical Framework of Digital Addiction

Digitalization, which permeates every area of life, both facilitates human life and enslaves individuals through its darker aspects. When technology use reaches a level that disrupts individuals' cognitive, physical, social, emotional, occupational, or personal functioning and turns into uncontrolled and compulsive use, concepts such as digital addiction, problematic internet use, and technology use disorders are frequently encountered.

Social media platforms, online games, and smartphones in particular are designed to encourage continuous use, thereby reinforcing addictive behavioral patterns. In 2019, the World Health Organization (WHO) officially recognized gaming disorder as a clinical condition by including it in the International Classification of Diseases (ICD-11). This step clearly demonstrates that the magnitude of the problem has been acknowledged by global health authorities.

The recognition of these disorders as public health problems is based on their prevalence and the negative consequences they produce. Research shows that problematic use rates, particularly among adolescents and young adults, have reached alarming levels. Studies using measurement tools for problematic internet use reveal strong associations with anxiety, depression, sleep disorders, declines in academic/work performance, social isolation, attention problems, and health issues related to physical inactivity. The

increased digitalization during the pandemic normalized screen time and further elevated addiction risk among individuals with limited self-control (Domoff et al., 2019; Pan et al., 2020). This situation has negatively affected not only individual health but also family relationships, educational and occupational productivity, and social interactions, thereby expanding the socioeconomic dimension of the problem.

Neuroscientific research indicates that such behaviors can alter neural pathways related to reward and impulse control through neuroplasticity, resembling mechanisms observed in substance addiction. Participants with problematic internet use have shown increased activity in brain regions associated with craving, reward, sensory-motor, and emotional processing compared to recreational users (Chen et al., 2021). These findings highlight the necessity of addressing digital addiction not merely as a self-control issue but as a biopsychosocial health problem (Weinstein, 2022; Tereshchenko, 2023).

2.1. Definition

Digital addiction is defined as an individual's pathological and compulsive behavior regarding the use of digital technologies such as smartphones, computers, tablets, the internet, social media platforms, video games, etc., and their inability to control themselves, their failure to restrain themselves against the urge to use these technologies, and their manifestation of withdrawal symptoms (anxiety, anger, restlessness, difficulty concentrating) when they reduce or cease usage (Allcott, Gentzkow, Song, 2022). In 2018, the World Health Organization (WHO) officially recognized a form of digital addiction by including "gaming disorder" in the International Classification of Diseases (ICD-11). This definition includes criteria such as impaired control over gaming behavior, giving gaming priority over other life activities, and continuing the behavior despite negative consequences (WHO,

2019). Digital addiction is seen as technology becoming central to life and its extraordinary use.

2.2. Types of Digital Addiction

Digital addiction can be categorized into various subtypes depending on the platform and content used, often overlapping with one another:

Social Media Addiction: Excessive time spent on platforms such as Facebook, Instagram, X/Twitter, TikTok, and Snapchat, driven by the need for social approval and validation; compulsive checking of notifications; and the replacement of real-life social relationships with virtual interactions. The cycle of seeking likes, sharing content, and continuously monitoring updates reinforces addictive behaviors. Research indicates that excessive social media use is associated with increased levels of social anxiety, depression, decreased self-esteem, and sleep disturbances, particularly among adolescents and young people (Kuss & Griffiths, 2017).

Gaming Addiction (Online/Offline): This refers to the state of excessive gaming, whether in online multiplayer or offline games, involving uncontrolled sessions lasting for hours, which prevents individuals from fulfilling their daily life obligations. The player withdraws from the real world due to the sense of achievement, status, and identity gained in the virtual world. The "gaming disorder" defined by the WHO falls into this category. Research reveals that gaming disorder has negative consequences on low academic achievement, social isolation, physical health problems (obesity, carpal tunnel syndrome, sleep disorders), and tendencies toward aggression. It particularly negatively affects social and emotional development in children, causing communication difficulties, social adjustment problems, or concentration difficulties.

(Stavrou, 2018; Bağatarhan, 2023; Beadini, 2023; Şenol, Şenol, and Can Yaşar, 2023).

Internet/Cyber Relationship Addiction: An excessive focus on relationships established in virtual environments may lead individuals to neglect real-life family and friendship ties, resulting in the adoption of an entirely virtual social life. For instance, intense and often romantic relationships formed through online chat rooms, dating applications, or social networking platforms are frequently observed in this type of addiction. Underlying this form of addiction are factors such as individuals constructing identities that differ from their real selves on these platforms, which enables them to feel more comfortable and to express themselves more freely within virtual relationships.

Information Seeking/Uploading Addiction (Cyberchondria): This refers to the excessive behavior of constantly searching for information, following news, watching videos, or downloading files online. This type of addiction is closely related to "Nomophobia" (fear of being without a mobile phone). Individuals feel a constant need to stay up-to-date due to the fear of missing out (FOMO), leading to an inability to focus on tasks, distraction, and inefficiency.

Doomscrolling Addiction: This type of addiction, which emerged particularly during the pandemic, is defined as individuals spending excessive time constantly following negative and misleading news, conspiracy theories, and digital content creators' accounts that produce negative news content. The root of disaster scrolling addiction can include many factors, including negativity bias, fear of missing out, increased anxiety, and attempts to gain control over uncertainty.

Online Shopping/Marketplace Addiction: It is defined as the behavior of making unnecessary and uncontrolled purchases on

online shopping sites or digital marketplace applications. The excitement and feeling of pleasure at the moment of purchase overrides regret and financial problems, motivating the individual to shop continuously. This type shares similar characteristics with behavioral addictions (such as gambling addiction). The individual buys and feels relief. The arrival of the purchased product from the courier company excites them. However, this excitement disappears shortly after the courier package is opened.

Pornography Addiction:

It is defined as the uncontrollable use of easily accessible pornographic content via the internet. This condition may lead to problems such as dissatisfaction in real sexual relationships, performance anxiety, and difficulties in establishing emotional intimacy (Griffiths, 2012).

3. Neurobiological and Psychological Foundations

The fundamental neurobiological mechanism of digital addiction manifests in the brain's reward and pleasure centers, particularly through the complementary phases of impulsivity and compulsivity (Deveci, 2020). During the impulsivity phase, individuals take risks and are unable to anticipate consequences; therefore, they may easily cause harm to themselves or others. In the compulsivity phase, which is characterized by involuntary and frequently repeated behaviors that include impulsive elements, the individual engages in a pleasurable action in order to escape an anxiety-provoking situation. Over time, this repetitive behavior becomes a habit and subsequently develops into an addiction (Dalley et al., 2011).

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At the psychological core of digital addiction, the individual's efforts to avoid negative emotional states and to cope with adverse situations play a significant role. For such individuals, digital platforms offer a temporary escape from emotions such as stress, anxiety, loneliness, and boredom, thereby reinforcing addictive behaviors through negative reinforcement. In addition, cognitive factors such as FOMO (Fear of Missing Out) and the need for social approval contribute to this process. Digital platforms—particularly social media—provide rewards at unpredictable intervals; because it is uncertain when a like or positive comment will be received, individuals are increasingly driven to check these platforms repeatedly (Elhai et al., 2017).

When neurobiological and psychological processes operate together, they gradually impair an individual's functioning and create a vicious cycle. Due to excessive time spent in digital environments, individuals become distanced from real-life social relationships, experience declines in academic and occupational performance, and begin to neglect personal self-care. This deterioration further intensifies underlying negative emotions (such as feelings of inadequacy or loneliness), leading individuals to increasingly turn toward the digital world, which they believe provides relief. This cycle interacts with underlying psychopathologies, such as impulse control disorders and attention deficits, thereby placing the individual in an even more entrenched predicament (Brand et al., 2016).

4. Current Assessment and Intervention Approaches

4.1. Assessment Tools

In the assessment of digital addiction, standardized psychometric instruments are commonly used to measure specific behavioral patterns, frequency of use, and the degree of impairment in an individual's functioning. These instruments are predominantly Likert-type scales that focus on different forms of digital addiction.

Young's Internet Addiction Test (IAT): This is the most widely used measure, developed by Kimberly Young in 1998. It consists of 20 items and assesses the extent to which internet use negatively affects an individual's life (e.g., time management, social relationships, mood). It is based on the criteria for pathological gambling.

Problematic Internet Use Questionnaire (PIUQ): Developed by Demetrovics et al. (2008), this scale comprises three subdimensions: obsession, neglect, and loss of control. It is a brief instrument with strong psychometric properties.

Internet Addiction Scale (IAS): Developed by Griffiths (2005), this scale measures the core components of addiction, including salience, mood modification, tolerance, withdrawal symptoms, conflict, and relapse.

Bergen Social Media Addiction Scale (BSMAS): Developed by Andreassen et al. (2016), this brief instrument consists of six items assessing six fundamental addiction components: salience, mood modification, tolerance, withdrawal, conflict, and relapse. A validated Turkish version is also available.

Social Media Disorder Scale (SMDS): Developed by Van den Eijnden et al. (2016), this scale is based on the DSM-5 criteria for Internet Gaming Disorder.

Gaming Disorder Test (GDT):This is a four-item screening tool developed in accordance with the WHO's ICD-11 diagnostic criteria, designed to support clinical diagnosis.

Internet Gaming Disorder Scale—Short Form (IGDS9-SF):Developed by Pontes and Griffiths (2015), this nine-item scale assesses the nine criteria for Internet Gaming Disorder included in the DSM-5.

Problematic Video Game Playing Scale (PVP):Developed by Tejeiro Salguero and Bersabé Morán (2002), this scale assesses problematic video game playing behaviors.

Smartphone Addiction Scale (SAS):Developed by Kwon et al. (2013), this scale includes the subdimensions of daily-life disturbance, positive anticipation, withdrawal, cyberspace-oriented relationships, overuse, and tolerance.

In addition to these assessment tools, numerous scales have been developed to evaluate digital addiction, problematic internet use, and gaming addictions in different populations. Although these instruments are primarily used for screening purposes, a comprehensive clinical evaluation is required for a definitive diagnosis. During the clinical assessment, the individual is evaluated through an in-depth clinical interview conducted by a mental health professional. If the individual uses “digital well-being” or “screen time” applications on their mobile phone, data obtained from these applications may also support the clinical evaluation process. All of these data are considered together in forming an overall assessment.

4.2. Therapeutic Approaches Applicable in Individual and Group Psychological Counseling

Digital addiction is considered a type of behavioral addiction characterized by an individual's inability to control the use of social media, gaming, online shopping, or the internet. In recent years, with

the widespread integration of digital technologies into all areas of life, digital addiction has become a significant clinical problem, necessitating preventive, supportive, and intervention efforts. Treatment approaches for digital addiction can be examined under two main categories: pharmacotherapeutic and psychotherapeutic interventions (Arisoy, 2009).

When planning pharmacological treatment for internet addiction, the primary focus of the clinical evaluation should be on identifying the presence of underlying or comorbid psychiatric conditions. For example, if a primary disorder such as depression or anxiety is identified, treatment should prioritize addressing this underlying condition. This is because effective management of the primary disorder often leads to a reduction in pathological internet use behaviors as well (Young, 1999). If internet addiction presents as an isolated condition, pharmacotherapy options may be considered based on the individual's clinical characteristics. In cases where significant difficulties in impulse control or prominent mood fluctuations are present, the use of mood-stabilizing medications—known to be effective in bipolar spectrum disorders and impulse control disorders—may be considered as part of the treatment plan. The literature suggests that antidepressants and medications with noradrenergic–dopaminergic effects, such as bupropion, may be beneficial in reducing symptoms (Han & Renshaw, 2012). In addition, naltrexone, which acts on the reward mechanism and is commonly used in alcohol and substance use disorders, has been proposed to play a role in suppressing compulsive behaviors in internet addiction as well (Lee, Han, & Yang, 2008). If such pharmacological options are deemed necessary, referral to a clinical psychologist or psychiatrist is essential.

Another method employed in the treatment of digital addiction is psychotherapy. Therapeutic approaches used in individual or group psychotherapy aim to help individuals

acknowledge their addictive behaviors, develop behavioral regulation skills, increase awareness of cognitive processes, and transform dysfunctional habits (Young, 2011). Given that this type of addiction involves cognitive, behavioral, and emotional dimensions, as in the treatment of other addictive disorders, treatment plans can be tailored according to individuals' needs and the severity of the addiction.

Cognitive Behavioral Therapy (CBT):

This approach focuses on negative automatic thought patterns that maintain addictive behaviors and on the behaviors triggered by these thoughts. It is one of the most frequently used therapeutic approaches in the treatment of addiction. Individuals with digital addiction may hold intrusive and persistent negative thoughts such as "I'll just watch one video," or "No one understands or likes me; the only thing that makes me feel better is playing this game/watching videos." Similarly, individuals who engage in online gaming excessively may develop maladaptive beliefs such as "If I don't log into the game, I will be excluded by my friends."

The primary aim of CBT is to modify the automatic thoughts, dysfunctional beliefs, and avoidance behaviors that lead to excessive digital use. During the therapeutic process, the individual's negative automatic thoughts are collaboratively examined with the therapist. The distressing emotions and behavioral responses resulting from these thoughts are evaluated in detail. In subsequent stages, therapy focuses on helping the individual develop more realistic and functional beliefs to replace negative automatic thoughts. For example, when individuals adopt beliefs such as "I can control this," "I can also enjoy offline activities," or "I do not have to interact with my friends solely through online games," they begin to observe positive changes in their emotions and behaviors, which in turn enhances their motivation for treatment.

The treatment process should be supported by homework assignments, behavioral experiments, skills training, and systematic behavioral interventions such as gradual reduction and behavior modification. To reduce usage time, time limits may be set, and offline activities that the individual engages in or participates in may be monitored or reinforced through point-based systems (Davis, 2001).

Motivational Interviewing (MI): When working with individuals with digital addiction, resistance toward the therapy or psychological counseling process may be observed. This is because developing awareness of addictive behaviors and a desire for change often requires time. The Motivational Interviewing approach aims to strengthen the individual's readiness for change by eliciting intrinsic motivation and adopts a nonjudgmental, collaborative stance toward the client. Listening to the client's narrative, accepting the individual as they are, refraining from judgment, striving to understand their experiences, clarifying the focus of change, helping the client explore ambivalence, encouraging them to articulate the benefits of change themselves, and fostering the motivation necessary for change constitute the core principles of this approach (Miller & Rollnick, 2013).

During the therapeutic process, conducting a cost-benefit analysis of the addictive behavior and of change itself can serve as a powerful catalyst for enhancing motivation for change. Reflective questions that encourage introspection-such as "What does playing this game give you, and what does it take away from you?" or "What might your life look like in five years if it continues in this way?"- can help strengthen the individual's readiness and willingness to change.

This approach consists of four stages. For individuals who seek therapy with a history of digital addiction, questions that demonstrate understanding and empathy during the *engaging* stage

such as “You are here to talk about your frequent phone use and the difficulties it has caused. Could you tell me what has become challenging for you in this regard?” or “How has this process been affecting you?” can facilitate the establishment of collaboration and a trusting therapeutic relationship.

During the *focusing* stage, questions such as “From our conversation, you mentioned that the time you spend on social media both negatively affects your academic performance and makes you feel more lonely. Which of these would you like to prioritize changing in order to feel better?” may help the individual clarify the focus of change.

In the *evoking* stage, questions like “How would your life be different if you changed this situation?” or “What would you gain from making this change?” encourage individuals to articulate their own reasons for change and the potential benefits it may bring.

Finally, in the *planning* stage, questions such as “What could be your first step toward change?” and “How might you cope with difficulties if you encounter them during the change process?” help the individual recognize that the plan belongs to them and that they are responsible for implementing and sustaining change.

Mindfulness-Based Approaches: Digital addiction manifests as a loss of control, cognitive preoccupation, and the continuation of the behavior despite negative consequences. In this type of behavioral addiction, individuals experience impulsivity and difficulties in emotion regulation during automatic patterns of digital use. Mindfulness is defined as “paying attention to the present moment, intentionally and nonjudgmentally” (Kabat-Zinn, 2003). Mindfulness-based approaches aim to help individuals observe their internal experiences without judgment, regulate impulses, and make conscious, deliberate choices. In the treatment of digital addiction,

the effectiveness of mindfulness-based interventions is explained through the following mechanisms:

Disruption of Impulsive Behavior: In digital addiction, negative emotional states (such as boredom, anxiety, or loneliness) or external cues (e.g., notification sounds, lights, vibrations) automatically trigger digital device use. Mindfulness helps interrupt this automatic chain by fostering a “pause skill.” Individuals learn to notice the impulse, observe it without judgment, and create space for conscious choice rather than responding automatically (Brewer et al., 2013).

Emotion Regulation: Individuals may use the digital world as a “safe haven” to escape from distressing emotions. Mindfulness teaches individuals to remain with their emotions rather than suppressing or avoiding them, and to understand their transient nature. As a result, the capacity to tolerate emotional distress increases, and the need for digital escape is reduced (Kober & Bolling, 2014).

Reduction of Cognitive Preoccupation: In digital addiction, the mind is persistently occupied with thoughts related to digital activities. Mindfulness meditations facilitate disengagement from this ruminative cycle by directing attention to the breath or bodily sensations. In particular, the technique of urge surfing—acknowledging the urge without giving in and actively coping with it—enables individuals to recognize the impulse to reach for their phone and to regulate this behavior consciously (Lan et al., 2018; Li, Garland, & Howard, 2018).

Solution-Focused Brief Therapy: Grounded in the work of de Shazer and Berg, this therapeutic approach focuses on how solutions can be constructed rather than on the causes of the problem, and it emphasizes the future rather than the past. Instead of analyzing

problematic technology use behaviors in detail, it centers on exception situations in which controlled use is possible, the individual's strengths, and the desired change. Small, achievable goals are identified to enable the individual to build a more functional and adaptive life.

In the Solution-Focused Brief Therapy approach, individuals are not defined through an addictive identity during the therapeutic process; rather, they are viewed as individuals with the capacity for change. This approach is grounded in the philosophy that, no matter how pervasive a problem may be, there are always exceptions in which solutions are possible. Solution-Focused Brief Therapy offers a strengths-based, hope- and collaboration-oriented framework in the treatment of digital addiction. Instead of focusing on the origins of the problem, it seeks to make visible the solutions that already exist within the individual's current life, thereby providing an effective and sustainable pathway for coping with digital addiction. In work with individuals with digital addiction, the following techniques are commonly employed (de Shazer & Berg, 1997; Corey, 2017).

The Miracle Question:Posing a question such as, “If a miracle happened tonight and excessive gaming were no longer a problem for you, what would be different in your life when you woke up in the morning?” helps the client shift from an abstract problem to identifying concrete and attainable goals. For example, a statement like “I wouldn’t check my phone first thing in the morning” contributes to clarifying therapeutic goals and guiding the intervention process (Franklin, Trepper, Gingerich & McCollum, 2012).

The Exception Question:In digital addiction, there are invariably times when individuals are not entirely out of control. The therapist can uncover these exceptions by asking questions such as, “Are there times when you use your phone less?” For example,

recognizing that screen time decreases during exam periods or while spending time with family helps clients become aware that change is already possible and within their reach (Franklin, Trepper, Gingerich, & McCollum, 2012).

Scaling Questions: Individuals are asked to rate their level of control over digital use on a scale from 0 to 10. In subsequent sessions, questions such as “What could you do differently to increase this number by half a point?” are used to encourage small, sustainable changes. This technique helps reduce the common “all-or-nothing” thinking often observed in digital addiction (Franklin, Trepper, Gingerich, & McCollum, 2012).

Schema Therapy: Early maladaptive schemas such as avoidance, emotional deprivation, or failure may sometimes underlie digital addiction. In such cases, Schema Therapy helps individuals meet their emotional needs in healthier ways. For example, an individual who excessively uses social media to satisfy a need for social approval can, through increased awareness of their schemas, learn to meet their emotional needs within relationships in a more balanced and adaptive manner (Seligman & Reichenberg, 2014).

According to the Schema Therapy approach, digital addiction is not viewed merely as a “problem,” but rather as an attempt to fill an emotional void. Individuals try to compensate for basic emotional needs that were insufficiently met in early life experiences - such as safety, acceptance, autonomy, and limits - through digital platforms (Young, 2014). Within this framework, the need to be seen and valued through social media and online interactions is associated with the *emotional deprivation* schema; the search for belonging in the digital world corresponds to *social isolation/alienation*; the presentation of an idealized self in online environments reflects the *defectiveness/shame* schema; excessive concern with likes, comments, and follower counts is linked to *approval-seeking*; and compensating for feelings of inadequacy in real life through gaming

or virtual achievements is related to the *failure* schema. These schemas are frequently observed in individuals with digital addiction (Şenormancı, Konkan, Güçlü & Şenormancı, 2014).

In Schema Therapy, individuals are understood to use different coping modes when faced with stress and triggering situations. When the *Vulnerable Child Mode* is activated, individuals may spend hours on social media to escape feelings of loneliness. When the *Avoidant Protector Mode* comes into play, individuals turn to screens rather than confronting negative emotions. In the *Overcompensating Mode*, individuals attempt to suppress feelings of inadequacy by constructing a perfect or idealized identity in online environments. Digital addiction most often manifests within the Avoidant Protector Mode (Arntz & Jacob, 2013).

If Schema Therapy is to be applied to a client who presents to therapy with complaints of digital addiction, the first step should be to provide psychoeducation explaining schemas, modes, and how these are related to digital addiction. For example, awareness can be fostered by asking questions such as, “Which mode might be activated when you feel the urge to pick up your phone?”

To examine the underlying factors of digital addiction, experiential techniques can be utilized. For example, early life experiences can be addressed through the use of Imagery Rescripting, focusing particularly on memories of emotional neglect and loneliness.

To help reduce excessive reliance on the digital world, it is important to use limited reparenting, which enables clients to experience their unmet emotional needs within a safe therapeutic relationship. In addition, identifying moments that trigger digital use together with the client and developing alternative coping strategies such as face-to-face interaction, bodily awareness, and emotion regulation skills can be beneficial (Arntz & Jacob).

5. Holistic Counseling Model: “Multisystem Digital Balance Model

Efforts to address this phenomenon which has evolved into a global threat and is likely to reach uncontrollable levels if preventive measures are not taken necessitate a holistic and multi-stakeholder approach. This multidimensional framework should encompass public health policies, digital literacy education, early detection and intervention protocols, family counseling, and community-based awareness campaigns, integrating the individual within their family, educational and occupational environments, and the broader society.

As digitalization has become an inseparable component of all systems, from education to working life, drawing a clear boundary between “use” and “misuse” has become increasingly difficult. Therefore, alongside individual psychological support and awareness-raising initiatives, public policies and the responsibility of technology companies are of critical importance. Researchers emphasize that within the scope of ethical design, the development of “digital well-being” tools is essential, and that platforms should avoid addictive design features (e.g., infinite scrolling and notification mechanisms) that reinforce problematic use (WHO, 2020).

The literature emphasizes that this multidimensional approach is essential for establishing a healthy digital balance at both individual and societal levels (Griffiths, 2018). Drawing on Urie Bronfenbrenner’s Ecological Systems Theory (Ryan, 2001), it is possible to propose a multilayered model that places the client at the center while incorporating all surrounding systems into the intervention framework. This model, built upon four core components, should include the following:

A. Individual Level (Microsystem): At this level, psychoeducation can be provided to the individual regarding the addiction cycle and the effects of digital addiction on the brain. Cognitive restructuring may be implemented by challenging and

modifying cognitive distortions such as “I’ll quit after this game ends.” In place of digital escape, healthy coping strategies and emotion regulation skills can be developed (e.g., mindfulness practices and relaxation exercises). Additionally, the client can be supported in exploring personal values and life goals beyond the digital world, such as family relationships, friendships, and educational or career aspirations.

B. Family Level (Mesosystem): Individuals with digital addiction often experience significant difficulties in family communication. For this reason, family counseling can make a substantial contribution to the treatment process by strengthening intrafamilial communication and enhancing conflict resolution skills. It is important to help parents develop the ability to set clear and consistent digital boundaries based on collaboration rather than punishment. Accordingly, the family counseling process may include psychoeducation for parents on digital literacy and boundary-setting. Families can also be encouraged to plan non-digital activities that foster connection and shared experiences, such as playing board games together, going on nature walks or picnics, engaging in outdoor activities, establishing a family conversation hour around a predetermined topic, or organizing trips. These activities may also be assigned as homework at the end of sessions.

C. School/Workplace Level (Exosystem): Early identification and referral of individuals at risk are of critical importance at this level. Psychological counselors, teachers, and workplace professionals play a key role in this process. School-based prevention programs targeting digital addiction should be developed, incorporating education on digital citizenship, cyberbullying, and critical media literacy. In addition, attention should be given to environmental modifications—both in classrooms and in home or workplace study areas—to reduce distractions and support focused and healthy technology use.

D. Societal/Digital Level (Macrosystem): Rather than excluding technology altogether, promoting habits of intentional, purposeful, and controlled use often referred to as a “digital diet” or “conscious use” is of great importance for the future of societies. Widespread problems related to the excessive and maladaptive use of technology, such as difficulties in meeting work responsibilities, interpersonal communication problems, and increasing rates of issues like divorce, highlight the need for broader interventions. In this context, social skills training programs should be organized to strengthen face-to-face effective communication, as well as skills for initiating and maintaining interpersonal interactions, particularly for individuals who have become socially isolated due to problematic technology use.

6. Conclusion

Individual therapeutic approaches aim to transform the cognitive, behavioral, and emotional processes of individuals with digital addiction. For these methods to be effective, it is essential to support the individual’s motivation, regulate usage habits, and strengthen alternative life domains. The appropriate therapeutic approach may vary according to the individual’s needs; therefore, professional assessment and the development of individualized intervention plans are regarded as fundamental requirements.

Nevertheless, for individual therapeutic approaches in the treatment of digital addiction to produce lasting effects, the focus should extend beyond mere symptom reduction to the strengthening of protective and promotive factors that enhance overall life satisfaction. The development of self-regulation skills, the cultivation of emotional awareness, and the acquisition of effective stress-coping strategies are among the key elements that reduce an individual’s reliance on digital tools. In this context, addressing the therapeutic process through a holistic framework that encompasses the individual’s social relationships, academic or occupational goals,

and leisure activities contributes to achieving sustainable and functional outcomes in the treatment of digital addiction.

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CHAPTER 2

THE ROLE OF DIGITAL TECHNOLOGIES IN THE MEDICAL APPROACH TO BIPOLAR DISORDERS

1. DİLEK YEŞİLBAŞ¹

Introduction

Bipolar disorder (BD) is a psychiatric disorder characterized by individuals experiencing alternating cycles of mania and depression (Goes, 2023; Gordovez and McMahon, 2020; Smith et al, 2012; Benazzi, 2007). The differences in the cycle and frequency of these episodes in BD patients can cause difficulties both in regulating relationships with others in daily life and in establishing and maintaining their social identities within society. Therefore, the integration of BD patients with their environment and social life is as important as the treatment process and outcomes it causes.

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Individuals' relationships with their social lives and their environments are also important issues affecting their psychological and psychiatric health. While antisocial personality disorders are psychiatric disorders in and of themselves, one of the main reasons for this can be linked to individuals' communication and nurturing within their social lives (Graham and Barnfield, 2021; Ostic et al, 2021). Individuals who cannot establish necessary social relationships within the social structure fail to develop a social identity, which can subsequently lead to significant deficiencies in their understanding of the meaning of life or their relationships with their environment. Every individual has social needs, such as sharing with others, sharing, and listening to their troubles. These can be considered nourishment for the soul.

The most important and primary stage of societal and social identity construction is social communication. Social communication encompasses not only communication between individuals but also the relationship between individuals and institutions. With the advent of technology, this communication has undergone significant changes in both its medium and content. The development of social media and mass communication tools, in particular, has significantly altered the relationships between individuals and other individuals and institutional structures. These changing communication patterns, both in the treatment process and in daily life, are an important issue to be addressed in bipolar disorder cases. Furthermore, developing technology and communication tools facilitate treatment monitoring and new diagnostic processes in bipolar disorder patients. However, insufficient resources have been found examining the impact of technology on bipolar disorder cases. Therefore, this section aims to examine the role of digital technologies in medical treatments for bipolar disorder patients.

Bipolar Disorder

Bipolar disorder is a psychiatric illness in which individuals experience alternating manic and depressive moods. Previously known as manic-depressive disorder, bipolar disorder (BD) patients experience manic and depressive mood swings that can disrupt the routine flow of daily life (Bauer, 2022; Michalak et al, 2005; Russell and Browne, 2005; Arnold, 2003). During a depressive episode, unhappiness, loss of energy, loss of enjoyment of life, and low energy levels are prominent. During a manic episode, individuals may exhibit hyperactivity, overconfidence, and exhibit risky or irrational behaviors.

While BD patients experience profound changes in their emotions and thoughts, during manic and hypomanic periods, excessive excitement, excessive talking, poor sleep, rapid thinking, and high-risk behaviors increase (Vieta et al, 2018; Harrison et al, 2016; Passos et al, 2016; Vieta et al, 2011). This leads to disruptions in individuals' daily functioning. In depressive periods, severe energy loss and fatigue, sadness, loss of pleasure and interest, changes in appetite and sleep patterns, feelings of guilt and worthlessness, and suicidal tendencies are common.

The exact treatment for bipolar disorder is still unknown, and therefore, it is a lifelong illness. Treatment primarily aims to minimize the symptoms that occur during manic and depressive episodes and to prevent the patient from engaging in extreme tendencies, such as suicide. Various combination treatment methods are available for this purpose, including psychotic and neurotic agents, medical treatments, environmental support therapies, and stimuli reduction (Miller, 2016; Barbosa et al, 2014; Hirschfeld, 2014). However, it is safe to say that no treatment has yet achieved complete cure.

Medical Digital Technologies

Medical digital technologies, in their most general sense, refer to specialized applications and analysis programs used in the medical field. Medical digital technologies can be broadly categorized into two main areas: patient communication and patient follow-up and support.

Communication aims to ensure continuous and regular communication between patients and doctors. While there are undoubtedly many alternatives for communication in the digital environment, medical digital systems represent relatively more closed and specific communication environments. The collection, processing, and storage of information provided by patients during medical procedures is protected by both personal data law and relevant regulations, and it is unsafe to provide it through public communication channels (Kasoju et al, 2023; Fröhlich et al, 2022; Utukuri et al, 2022). Therefore, digital medical systems offer more closed and controlled communication tools, and more controlled processes are followed for these tools.

Tracking and support are among the most important functions of medical digital technologies. This function not only contributes positively to the patient's treatment process but also provides significant benefits in the fight against disease by providing information and analysis of disease-related processes. These applications or technologies allow tracking of a patient's entire treatment history from past to present, the medications and treatment support received, medications and support received from other healthcare units, and the frequency and regularity of medication use, among many other aspects. These programs enable the identification of any disruptions or deficiencies in patients' treatment processes, and the provision of necessary adjustments and support.

Digital Technologies in Bipolar Disorders

The effects of digital technologies on the treatment process in bipolar disorder cases can be examined under two headings: "monitoring the diagnosis and treatment process" and "socialization." While monitoring the diagnosis and treatment process focuses more on the relationship between the patient and their psychiatrist, socialization encompasses the patient's relationship with the society they live in. Therefore, the role of digital technologies in the treatment process of bipolar disorder needs to be addressed both in terms of medical treatment monitoring and socialization.

The most significant benefits of digitalizing medical systems include the increased duration of patient-doctor interaction and the possibility of more controlled patient follow-up. While in the past, patient-doctor interactions occurred physically only in healthcare institutions or the doctor's office, based on specific days and appointments, today, many healthcare institutions, especially hospitals, and insurance companies are developing applications specifically for patient communication. Furthermore, social media allows for more effective and intensive communication between doctors and patients. In addition to this communication, patients can closely monitor their treatments, medications, dosages, and diagnoses and medications received from other doctors or clinics. Furthermore, some applications can analyze patient risk factors in multiple variables, providing predictive results. This significantly contributes to the monitoring of medication treatments, as well as the patient's communication with their doctor regarding other diseases and prognostic factors in bipolar disorder (BD).

In terms of communication, patients can communicate more effectively not only with their doctors but also with other

individuals through digital technologies. It can be argued that, particularly in bipolar disorder patients, certain individuals in their microenvironment or relatives contribute significantly to the depressive episodes of the disease. During these times, patients can find opportunities to connect with their loved ones through digital communication, even if they are physically distant. This can significantly contribute to the patient's treatment process or alleviate symptoms. Furthermore, thanks to digital technologies, bipolar disorder patients can interact with like-minded individuals within the community, thus protecting themselves from the negative effects of social isolation or social anomalies.

Although genetic predisposition is the most important risk factor for bipolar disorder, environmental factors and individuals' psychotic or neurotic tendencies also play a significant role. Environmental factors include social life and daily routines, and online environments, particularly digital and social media platforms, are also significant factors and risk factors. However, in this regard, digital medical systems are more closed systems than other social media tools, involving more controlled communication. Therefore, when evaluating digital medical applications and tools, it's safe to say that we're talking about systems with defined limitations and specific objectives, rather than traditional digital systems.

Although new studies are emerging in the literature on the use of digital technologies in the treatment of bipolar disorder, considering the overall potential of the relationship between bipolar disorder and digital technologies, existing studies are still insufficient and further research is essential. Therefore, based on the information and findings presented in this section, further research is needed on the impact of digital technologies on the treatment of bipolar disorder.

In conclusion, although there are criticisms about some issues such as data security and physical activity related to digital technologies, they offer serious and positive contributions to the treatment process of bipolar disorder, in terms of the doctor's monitoring of the patient and his/her evaluation in a multidimensional manner, together with other variables, and the patient's continuous communication with his/her doctor and close social circle.

Conclusion

The results obtained, studies in the literature, and data from daily life to clinical practice clearly demonstrate that digital technologies have provided significant and beneficial benefits in the medical treatment of bipolar disorder. In addition to the general benefits of using digital technologies in medicine, the more qualitative or subjective nature of the disease in bipolar patients demonstrates the significant function of these technologies in terms of recording and digitizing, or numerating. In other words, digital technologies allow for the recording and analysis of certain conditions in bipolar patients that were previously relatively difficult to monitor.

In the context of digital technologies, the first things that come to mind are social media and medical applications. The most frequently criticized issue in the relationship between an individual and an institution or doctor is that communication is virtual, rather than physical. Furthermore, while physical interaction is more important and effective than virtual interaction, virtual interaction offers greater opportunities for continuity. Therefore, it's safe to say that digital technologies contribute positively to patients' feelings of security.

Among the most frequently criticized issues in digital environments and media regarding psychological and psychiatric illnesses are unsafe sharing, misinformation and misleading, manipulation, and misinformation. Furthermore, digital bullying, data security, and the lack of trust in sharing personal information are among the harshest and most intense criticisms leveled against digital media. Undoubtedly, regulations from a higher-level regulatory body are needed on this issue. However, it's worth noting that medical practices allow for more specific and reliable sharing.

Although digital medical solutions provide positive and significant benefits for the treatment of bipolar disorder patients, the literature has yet to provide sufficient studies in this area. However, the literature and clinical observations clearly demonstrate that further research in this area could yield significant benefits. Therefore, prospective and controlled studies are needed in this area to contribute both to academic advancements and to clinical and field applications. It would be greatly beneficial to expand these intuitively and theoretically perceived and observed benefits from a qualitative perspective to a quantitative and evidence-based perspective.

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CHAPTER 3

THE EFFECT OF PSYCHOEDUTIONAL PROGRAM ON COPING WITH FEAR OF COMPASSION AMONG UNIVERSITY STUDENTS

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Introduction

Recent studies have frequently observed that individuals avoid not only emotions they perceive as negative, but also positive emotions, including compassion (Gilbert et al., 2012; Gilbert et al., 2014b). An individual confronted with compassion may perceive it as weakness, submission, or a threat. Therefore, they fear the negative emotions and situations that may arise as a result of contact with compassion, and this fear is called compassion phobia (Rockliff et al., 2008). Similarly, resistance and avoidance reactions shown in the face of compassion are also compassion phobias. This fear can

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vary depending on the individual's age and personality, as well as their life experiences (Gilbert et al., 2011).

Compassion

A review of the literature reveals many different definitions of compassion. Gilbert (2011) defines compassion as an individual's contact with their own suffering and/or the suffering of others, and their action to alleviate that suffering. Beaumont et al. (2016) define compassion as an individual's effort to understand their own and others' pain and to alleviate it. According to Goetz, Keltner, and Simon-Thomas (2010), compassion is a positive emotion that arises when others are in distress and motivates the individual to help them.

For an individual to be able to show compassionate actions towards themselves or others, they must possess feelings of warmth, kindness, politeness, and sincerity. At the same time, they must possess the ability to empathize and tolerate negativity (Fehr, Sprecher, & Underwood, 2009). The dynamics that constitute compassion are motivation to care, the capacity to tolerate unpleasant emotions, and the ability to empathize (Gilbert, 2021).

Numerous studies support the notion that individuals developing compassion towards both themselves and others reduces negative situations and increases positive ones (Lutz et al., 2004). Individuals exhibit different responses to compassion (Gilbert et al., 2011). Since early life experiences and the relationships children form with their parents or caregivers influence individuals' attitudes toward compassion, childhood is the most influential period in the development of compassion anxiety (Gilbert and Protector, 2006).

Fear of Compassion

Childhood plays a major role in the development of compassion (Gilbert and Procter, 2006). Children who are exposed to affectionate behavior by their parents or caregivers during

childhood may develop resistance to affection. This resistance and avoidance response to compassion is called fear of compassion (Gilbert et al., 2011).

If a child has managed to establish warm relationships with their parents or caregivers during this period, feels safe, and has positive experiences, they will be compassionate towards themselves and others, and will accept compassionate behavior from others. Conversely, in children who have been exposed to negative memories and experiences, have not been able to establish a warm, trusting relationship with their parents or caregivers, and have developed negative attachment styles, a fear of compassion is observed (Gilbert, 2021; Gilbert, 2016; Gilbert et al., 2014a; Matos et al., 2017).

Negative experiences later in life can also lead to the development of a fear of compassion. An individual may experience a fear of compassion if they have been neglected by others when they needed it, if they haven't received the necessary support, or if they have been disappointed (Whetsel, 2017). Gilbert (2021) states that having a shy personality and a high level of self-criticism can lead to a fear of compassion. The fear of compassion is also related to how compassionate behaviors are perceived by individuals themselves and others. One such perception is that compassionate actions are seen by individuals or others as weakness, powerlessness, pitiable, or useless. The anxiety that compassionate actions will be rejected or misused is also a factor in the development of a fear of compassion (Gilbert, 2021; Gilbert et al., 2011; Kirby et al., 2017). One of the underlying reasons why individuals experience a fear of compassion may be their weak ability to understand, reflect on, and be mindful of emotions (Gilbert et al., 2012). Psychopathologies such as self-criticism, depression, eating disorders, negative childhood experiences, unhealthy attachment, feelings of shame, trauma, post-traumatic stress disorder, and anxiety are strongly

associated with and can cause a fear of compassion (Matos et al., 2017).

Individuals who fear compassion have weak flexible thinking skills (Miron et al., 2015), may exhibit very harsh behaviors towards themselves, and experience intense feelings of inadequacy and unease (Gilbert et al., 2011). Another emotion frequently experienced by individuals who fear compassion is anger. In difficult and upsetting situations, contact with compassion helps individuals manage their emotions. In these situations, individuals who fear compassion cannot easily overcome difficulties and feel angry about their problems (Whetsel, 2017).

Fear of compassion consists of three sub-dimensions: fear of compassion for others, fear of receiving compassion from others, and fear of self-compassion (Gilbert et al., 2011). The inability and unwillingness of individuals to recognize and alleviate the suffering of others is "fear of compassion for others" (Gilbert et al., 2011). Individuals with a fear of compassion for others believe that others are taking advantage of and using them. They are also uncomfortable with the idea that those they show compassion to will become dependent on them. They believe that exhibiting compassionate behaviors will be exploited by others. They have a belief that they will be harmed if they show compassion (Çevik and Tanhan, 2020; Gilbert et al., 2011).

The second sub-dimension, "fear of receiving compassion from others," refers to individuals feeling uncomfortable or having difficulty receiving kindness, emotional support, and attention from others in stressful situations (Gilbert et al., 2011). Individuals experiencing this fear do not trust the compassion shown to them by others. Because they believe they don't deserve compassion. For them, unhappiness is what they deserve. Therefore, they perceive compassionate behavior from the outside world as a threat and are afraid of receiving compassion (Whetsel, 2017).

The third sub-dimension is the fear of self-compassion, which is the fear individuals experience when it comes to showing compassion to themselves (Gilbert et al., 2011). The fear of self-compassion refers to an unwillingness or inability to show compassion to oneself in the face of mistakes or undesirable life events (Gilbert et al., 2014b). These individuals believe they do not deserve compassion and that compassion is a weakness (Gilbert et al., 2011).

With the increasing number of studies exploring the relationship between the concept of compassion and the field of mental health, therapy approaches based on compassion have also begun to develop (Kirby, Tellegen, and Steindl, 2017). One of these approaches is Compassion-Focused Therapy.

Compassion-Focused Therapy

This program was developed to help individuals who experience high levels of self-criticism and shame, have mental health problems as a result, and often suffered neglect and/or abuse in childhood, to understand their emotional pain without shame and to cope with this pain. Its core principle is not to ignore or alleviate the pain, but to enable individuals to cope with it (Gilbert, 2021). Originating from Tibetan Buddhist traditions (Kirby, Tellegen, and Steindl, 2017), it is a multifaceted approach incorporating many techniques and theories such as cognitive behavioral therapy, developmental psychology, social psychology, neuroscience, and attachment theory (Gilbert, 2014). Unlike other approaches, it addresses clients' problems within an evolutionary context. It focuses on how the emotions they feel affect their brains. In doing so, it helps them understand the experiences they gained in the early years of life and the events that shaped their personalities (Kolts, 2023). Studies in psychology based on compassion-focused therapy approaches have shown positive results. It has been found to be quite

effective in reducing and preventing individuals' fear of compassion (Ochghaz et al., 2020).

In recent years, the increase in scientific studies focusing on the relationship between the concept of compassion and the field of mental health has led to the development of therapy methods that focus on compassion (Kirby, Tellegen, and Steindl, 2017). One of these approaches is Compassion-Focused It is research-oriented and does not rely on a single model. It emerged with the aim of creating a science of psychotherapy based on understanding how the human mind works, and its development includes research focused on the neurophysiology of emotions (Gilbert, 2009). Its primary goal is not to ignore or alleviate individuals' suffering, but to enable them to cope with it (Gilbert, 2021). It aims to develop compassion for a specific purpose. It focuses on compassion-based strengths and skills, and how compassion can be used to help individuals cope with their suffering. The focus areas are attention, reasoning, rumination, behaviors, emotions, motivations, and imagination. Like many therapeutic approaches, it aims to increase the awareness of both the client and the therapist (Siegel, 2010), while using techniques such as psychoeducation, compassionate imagery, chair technique, letter writing, exposure therapy, and visualization (Gilbert, 2021). These techniques aim to help clients understand that their problems are not their fault. This allows individuals to overcome shame and cease self-blame. As a result, they gain motivation to take responsibility for solving their problems (Kolts, 2023).

The relationship between client and therapist involves Socratic dialogue and guided discovery. Techniques and interventions are applied to develop emotion regulation, brain states, and self-experiential styles that bring about change (Gilbert, 2021). In compassion-focused therapy, the therapist's most important task is to help clients become aware of their emotions and behaviors and learn how to work with compassion based on this awareness. At this

point, compassion is both taught and modeled for the client (Kolts, 2023). In the therapist-client relationship, it is emphasized that the therapist should prioritize compassion and make the client feel supported. As with other approaches, the client and therapist are a team. This team focuses on a problem and works collaboratively. In addition, compassion-focused therapy emphasizes sharing. Because, according to compassion-focused therapy, one of an individual's most important motivations is the desire to share their feelings and thoughts. At the root of this desire is the wish to be understood and accepted by others (Gilbert, 2021).

Compassion-focused therapy enables individuals to relate to experiences they perceive as problems in a compassionate way. This helps them find effective ways to cope with the challenges in their lives using compassion. It supports them in building self-confidence and feeling secure. It also contributes to them being courageous and constructive in the face of problems (Kolts, 2023).

Research has shown that approaches that utilize compassion, such as compassion-focused therapy (Gilbert, 2014), reduce the impact of seemingly negative mental health conditions such as depression, stress, anxiety, burnout, and post-traumatic stress disorder (Almasi et al., 2020; Melsom et al., 2023; Souza, Rodrigues, and Teodoro, 2024). In addition, they have been shown to increase desirable states such as psychological resilience, subjective well-being, self-efficacy, and self-love (Boykin et al., 2018; Deniz and Yıldırım Kurtuluş, 2023; Yıldırım and Sarı, 2022).

Purpose and Hypotheses

The fear of compassion consists of three sub-dimensions. These dimensions are called the fear of compassion for others, the fear of receiving compassion from others, and the fear of self compassion. There may not always be a direct relationship between these sub-dimensions. However, positive or negative developments

in one dimension can potentially affect the others (Lopez et al., 2018). In light of this information, a psychoeducation program targeting all three dimensions was designed and implemented in this study based on the Compassion-Focused Therapy framework. This study aimed to reduce the fear of compassion of university students using a psychoeducational program developed based on Compassion-Focused Therapy. In line with this purpose, the following hypotheses were tested.

- H1. Fear of compassion can be reduced using a psychoeducational program developed based on Compassion-Focused Therapy.
- H2. Fear of compassion for others can be reduced using a psychoeducational program developed based on Compassion-Focused Therapy.
- H3. Fear of receiving compassion from others can be reduced using a psychoeducational program developed based on Compassion-Focused Therapy.
- H4. Fear of self-compassion can be reduced by using a psychoeducational program developed based on Compassion-Focused Therapy.

Method

In this study, the effect of a psychoeducation program developed based on the Compassion-Focused Therapy approach on individuals' fear of compassion was examined. A quasi-experimental design was preferred because true random assignment could not be fully achieved and the participants were situated within their existing natural groups.

Research Design

In the study, a quasi-experimental design with a pre-test–post-test–follow-up test and a control group, using repeated measures, was employed. The study involved two groups: an experimental group (adolescents participating in a compassion-focused therapy-based psychoeducational program) and a control group (adolescents receiving no intervention). The effectiveness of the program was evaluated through measurements taken over time on the groups (pre-test, post-test, follow-up test). The experimental design of the study is summarized in Table 1.

Table 1 Experimental design of the study

<i>Group</i>	<i>Pre-Test</i>	<i>Intervention</i>	<i>Post-Test</i>	<i>Follow-up Test</i>
<i>Experimental</i>	<i>ME1</i>	<i>Compassion-focused therapy-based psychoeducational program</i>	<i>ME2</i>	<i>ME3</i>
<i>Control</i>	<i>MC1</i>	<i>- (No psychoeducation/intervention is administered)</i>	<i>MC2</i>	<i>MC3</i>

M = Measurement

Participants

The participants in this study consisted of second-year students from the Department of Psychological Counseling and Guidance at Mersin University who volunteered to participate during the 2024-2025 academic year. First, the fear of compassion scale was administered to 65 students. Students with high fear of compassion scores were identified. Based on their scores, and considering group balance, the students to be included in the experimental and control groups were selected using criterion sampling, one of the purposeful sampling methods. Then these students were randomly assigned to experimental and control groups. In criterion sampling, a type of purposive sampling, participants are selected based on whether they meet specific criteria, whereas random sampling refers to a method in which every individual in the population has an equal chance of

being selected (Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz ve Demirel, 2022). According to the measurement results, 20 participants with high fear of compassion scores were identified. Of these 20 participants, 10 (6 women and 4 men) were assigned to the experimental group, and 10 (6 women and 4 men) were assigned to the control group.

Data Collection Instruments

Fear of Compassion Scale

The Fear of Compassion Scale, developed by Gilbert, McEwan, Matos, and Rivas (2011) and adapted into Turkish by Necef and Deniz (2023), consists of three sub-dimensions: fear of self-compassion, fear of compassion for others, and fear of receiving compassion from others. In the Turkish adaptation, 3 sub-dimensions were preserved, and items with factor loadings lower than the target were removed, resulting in a scale consisting of 35 items with a five-point Likert-type rating. In the original scale, the internal consistency coefficients ranged from .78 to .92, whereas in the Turkish adapted version, they ranged from .83 to .93 (Necef & Deniz, 2023).

Data Analysis

Before proceeding with data analysis, the assumptions of normality and homogeneity of variance in the data were examined. For this purpose, Shapiro–Wilk normality test, skewness, and kurtosis values were calculated at the group and measure level for each variable. The distribution characteristics of the pre-test, post-test, and follow-up test scores of the Fear of Compassion Scale's total score and subscales were evaluated using the Shapiro–Wilk normality test, and the distributions were found to be normal ($p > 0.05$). Furthermore, when the Levene test results for the pre-test, post-test, and follow-up tests of the experimental and control groups were examined, it was observed that the group variances were

largely homogeneous ($p>0.05$). Based on these findings, it was decided to use parametric tests in the study.

Prior to the experimental intervention, an independent samples t-test was conducted to examine whether there was a significant difference between the pre-test scores of the experimental and control groups. The analysis results showed no statistically significant difference between the pre-test scores of the groups; therefore, it was concluded that the groups had equivalent baseline scores. In line with the main purpose of the study, a Two-Factor Mixed ANOVA (split-plot design) was conducted to examine both the group effect (experimental–control comparison) and the time effect (pre-test, post-test, follow-up) within the same model, as well as to test the group \times time interaction effect. This analysis evaluated whether a psychoeducational program based on compassion-focused therapy resulted in a significant change in levels of fear of compassion over time, favoring the experimental group.

In cases where a significant effect was detected in the mixed-design ANOVA results, a Bonferroni-corrected Pairwise Comparisons Test was conducted to determine between which measurements and in favor of which group this difference occurred. This allowed for a detailed interpretation of both the changes over time (pre-test–post-test–follow-up test) and the differences between the groups. The significance level was set at .05 for all statistical analyses. Descriptive statistics for the total and sub-dimensions of fear of compassion are given in Tables 2, 3, 4, and 5.

Table 2 Descriptive Statistics on Fear of Compassion Scale Scores of Experimental and Control Groups

Scale	Group	Time	N	Mean	Median	SD	Skewness	Kurtosis
Fear of Compassion - Total	EG	Pre-test	10	88.0	88.0	29.67	-1.57	3.06
	CG	Pre-test	10	78.5	78.5	16.66	-1.54	3.65
	EG	Post-test	10	65.0	65.0	23.33	-0.57	1.73
	CG	Post-test	10	81.0	81.0	15.89	-1.07	1.73
	EG	Follow-up test	10	57.5	57.5	26.56	-0.34	1.36
	CG	Follow-up test	10	78.0	78.0	12.55	-0.31	1.33

EG = Experimental Group

CG = Control Group

Table 3 Descriptive Statistics on Fear of Compassion for Others Subscale Scores of Experimental and Control Groups

Group	Time	N	Mean	Median	SS	Skewness	Kurtosis
EG	Pre-test	10	21.9	23.0	5.04	-0.59	-0.37
CG	Pre-test	10	22.1	21.5	5.97	-0.87	1.88
EG	Post-test	10	18.5	17.5	3.75	0.82	0.72
CG	Post-test	10	21.2	22.0	5.51	-0.73	0.62
EG	Follow-up Test	10	16.4	17.0	5.08	-1.06	2.41
CG	Follow-up Test	10	20.9	20.0	4.36	-0.20	-0.45

Table 4: Descriptive Statistics on Fear of Receiving Compassion from Others Subscale Scores of Experimental and Control Groups

<i>Group</i>	<i>Time</i>	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>SS</i>	<i>Skewness</i>	<i>Kurtosis</i>
<i>EG</i>	<i>Pre-test</i>	10	26.6	27.0	11.79	-1.24	1.95
<i>CG</i>	<i>Pre-test</i>	10	24.0	25.5	5.25	-1.03	0.67
<i>EG</i>	<i>Post-test</i>	10	18.5	19.0	8.55	-0.89	1.78
<i>CG</i>	<i>Post-test</i>	10	24.5	24.5	5.15	-0.78	0.44
<i>EG</i>	<i>Follow-up Test</i>	10	17.7	16.5	9.63	-0.17	-0.04
<i>CG</i>	<i>Follow-up Test</i>	10	25.4	25.5	3.92	-0.87	1.30

Table 5: Descriptive Statistics on the Fear of Self-Compassion Subscale Scores of the Experimental and Control Groups

<i>Group</i>	<i>Time</i>	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>SS</i>	<i>Skewness</i>	<i>Kurtosis</i>
<i>EG</i>	<i>Pre-test</i>	10	37.9	40.0	14.50	-1.62	3.56
<i>CG</i>	<i>Pre-test</i>	10	32.0	34.0	7.87	-0.77	0.52
<i>EG</i>	<i>Post-test</i>	10	23.2	25.5	12.60	-0.46	0.91
<i>CG</i>	<i>Post-test</i>	10	31.3	31.5	7.09	-0.65	0.13
<i>EG</i>	<i>Follow-up Test</i>	10	22.6	23.0	13.19	0.00	1.26
<i>CG</i>	<i>Follow-up Test</i>	10	30.6	31.5	6.82	0.37	0.48

Psychoeducation Program

The overall aim of the psychoeducational program, developed based on a compassion-focused therapy approach, is to reduce university students' levels of fear of compassion. It is based on a compassion-focused therapy approach. First, the theoretical aspects of compassion-focused therapy were thoroughly researched. Training sessions related to this approach have been attended and psychoeducational programs and group psychological counseling

studies based on compassion-focused therapy approaches that have been conducted to date have been examined. As a result of this process, a psychoeducational program was created that aims to reduce the levels of fear of compassion among university students. This program consists of a total of 8 sessions, each lasting 90 minutes. The sessions are based on interventions from the Compassion-Focused Therapy approach. The objectives of these sessions are given in the Appendix.

Results

This section presents findings on the effects of an 8-session psychoeducational program, developed based on a compassion-focused therapy approach, on university students' fear of compassion and its sub-dimensions.

Findings Related to the Total Score of the Fear of Compassion Scale

Table 6 presents the results of a two-factor ANOVA test for mixed designs, conducted to determine whether there was a statistically significant difference in the pre-test, post-test, and follow-up test total scores of individuals in groups that participated in and did not participate in a psychoeducational program designed to reduce levels of fear of compassion.

Table 6 Mixed Design ANOVA Results for the Total Score of the Fear of Compassion Scale

Source of Variance	SS	S d	MS	F	p	Effect Size ($\eta^2 p$)
<i>Between Groups</i>						
<i>Group (Experimental/Co ntrol)</i>	1.372,8 17	1	1.372,8 17	1,0 89	0,3 11	0,051
<i>Error</i>	22.700, 03	1 8	1.261,1 13			
<i>Whitin Groups</i>						
<i>Time (Pre–Post– Follow-up)</i>	2.855,1	2	1.427,5 5	19, 365	0,0 00*	0,101
<i>Group*Time</i>	2.423,0 33	2	1.211,5 17	16, 434	0,0 00*	0,087
<i>Group (Experimental/Co ntrol)</i>	1.372,8 17	1	1.372,8 17	1,0 89	0,3 11	0,051

*p < 0,05

As a result of the mixed-methods two-factor ANOVA performed on the total scores of the Fear of Compassion Scale, it was seen that the main group effect was not significant ($F(1, 18) = 1.089$, $p = 0.311$, $\eta^2 p = 0.051$), and this finding indicated that there was no significant difference between the experimental and control groups in terms of fear of compassion levels across the measurements. However, the main effect of measurement (time) was found to be significant ($F(2, 36) = 19.365$, $p < 0.001$, $\eta^2 p = 0.101$), and this result showed that when all participants were considered together, the fear of compassion scores changed significantly from pre-test to post-test and follow-up measurement. Furthermore, the fact that the group \times measure interaction was significant ($F(2, 36) = 16.434$, $p < 0.001$, $\eta^2 p = 0.087$) revealed that this pattern of change over time differed between the experimental and control groups. In the experimental group, a significant decrease in fear of compassion scores was observed after the psychoeducational program, and this decrease was

largely maintained in the follow-up measurement, whereas no significant change was observed over time in the control group.

Findings Related to the Fear of Compassion for Others Subdimension

Table 7 presents the results of a two-factor ANOVA test for mixed designs, conducted to determine whether there was a statistically significant difference between the pre-test, post-test, and follow-up test scores of the Fear of Compassion subscale (Showing understanding and compassion to others) in groups that participated in and did not participate in a psychoeducational program designed to reduce levels of fear of compassion.

Table 7: Mixed Design ANOVA Results for the Fear of Compassion for Others Subscale Score

<i>Source of Variance</i>	<i>SS</i>	<i>Sd</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>Effect Size</i> ($\eta^2 p$)
<i>Between Groups</i>						
<i>Group (Experimental/Control)</i>	91,267	1	91,267	1,54	0,231	0,063
<i>Error</i>	1.067,067	18	59,281			
<i>Within Groups</i>						
<i>Time (Pre–Post–Follow-up)</i>	115,233	2	57,617	7,249	0,002*	0,078
<i>Group*Time</i>	46,633	2	23,317	2,934	0,066	0,033
<i>Error</i>	286,133	36	7,948			

*p < 0,05

As a result of the mixed-methods two-factor ANOVA performed for the fear of compassion for others subscale scores, it was found that the main group effect was not statistically significant ($F(1, 18) = 1.54$, $p = 0.231$, $\eta^2 p = 0.063$). This finding indicates that the experimental and control groups did not show a significant

difference in their scores on this subscale across the measurements. However, the main effect of measurement (time) was found to be significant ($F(2, 36) = 7.249, p = 0.002, \eta^2p = 0.078$). This result shows that when all participants are considered together, their scores on showing understanding and compassion to others changed significantly from the pre-test to the post-test and follow-up measurement. The group \times measure interaction remained close to the statistical significance level ($F(2, 36) = 2.934, p = 0.066, \eta^2p = 0.033$). This suggests that the pattern of change over time is not exactly the same in the experimental and control groups, but this difference does not provide statistically strong evidence according to the classical significance level of 0.05. When the average scores were examined, a decreasing trend in showing understanding and compassion towards others was observed in the experimental group from the pre-test to the post-test and follow-up, while the change over time remained more limited in the control group; however, this differentiation did not reach the level of a statistically strong interaction effect.

Findings Related to the Subdimension of Fear of Receiving Compassion from Others

Table 8 presents the results of a two-factor ANOVA test for mixed designs, conducted to determine whether there was a statistically significant difference in pre-test, post-test, and follow-up test scores on the Responding to Kindness subscale between individuals in groups who participated in and did not participate in a psychoeducational program designed to reduce levels of fear of kindness.

Table 8 Mixed Design ANOVA Results for the Fear of Compassion subscale score for responding to compassion from others

<i>Source of Variance</i>	<i>SS</i>	<i>Sd</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>Effect Size</i> ($\eta^2 p$)
<i>Between Groups</i>						
<i>Group</i> (Experimental/Control)	205,35	1	205,35	1,196	0,289	0,057
<i>Error</i>	3.090,16 7	18 6	171,67			
<i>Within Groups</i>						
<i>Time (Pre-Post-Follow-up)</i>	190,033	2	95,017	12,316	0,000*	0,053
<i>Group*Time</i>	304,9	2	152,45	19,761	0,000*	0,083
<i>Error</i>	277,733	36	7,715			

*p < 0,05

A mixed-methods two-factor ANOVA was conducted on the scores of the “Fear of receiving compassion from others” subscale of the Fear of Compassion subscale in the groups that participated and did not participate in the psychoeducation program designed to reduce levels of fear of compassion. The group main effect was found to be statistically insignificant ($F(1, 18) = 1.196$, $p = 0.289$, $\eta^2 p = 0.057$); this finding indicates that the experimental and control groups did not differ significantly in terms of scores on this subscale across the measurements. In contrast, the main effect of measurement (time) was found to be significant ($F(2, 36) = 12.316$, $p < 0.001$, $\eta^2 p = 0.053$), revealing that when all participants are considered together, their scores for responding to compassion from others changed significantly from the pre-test to the post-test and follow-up measurement. The group \times measurement interaction was also found to be significant ($F(2, 36) = 19.761$, $p < 0.001$, $\eta^2 p = 0.083$); this result shows that the pattern of change over time is different between the experimental and control groups. When the average scores were examined, it was observed that in the

experimental group, there was a significant decrease in scores for responding to compassion from others from the pre-test to the post-test and follow-up measurement, whereas in the control group, the scores remained relatively constant over time and even showed an increasing trend. When these findings are considered together, it can be said that the psychoeducational program had a significant effect, particularly in the experimental group, in reducing the fear of compassion in the dimension of responding to compassion from others, while a similar improvement pattern was not observed in the control group.

Findings Regarding the Fear of Self-Compassion Subscale

Table 9 presents the results of a two-factor ANOVA test for mixed designs, conducted to determine whether there was a statistically significant difference in pre-test, post-test, and follow-up test scores on the fear of self-compassion subscale between individuals in groups who participated in and did not participate in a psychoeducational program designed to reduce levels of fear of compassion.

Table 9 Mixed-design ANOVA results for the Fear of Self-Compassion subscale score.

Source of Variance	SS	Sd	MS	F	p	Effect Size (η^2p)
<i>Between Groups</i>						
<i>Group (Experimental/Control)</i>	173,4	1	173,4	0,555	0,466	0,027
<i>Error</i>	5.620,33 3	18	312,24 1			
<i>Whitin Groups</i>						
<i>Time (Pre-Post-Follow-up)</i>	862,9	2	431,45 2	22,28	0,000*	0,120
<i>Group*Time</i>	648,7	2	324,35 1	16,75	0,000*	0,093
<i>Error</i>	697,067	36	19,363			

*p < 0,05

A mixed-methods two-factor ANOVA was performed on the scores of the “Fear of showing self-compassion” subscale of the Fear of Compassion subscale of individuals in groups that participated and did not participate in the psychoeducation program aimed at reducing levels of fear of compassion, and it was found that the main group effect was not statistically significant ($F(1, 18) = 0.555$, $p = 0.466$, $\eta^2p = 0.027$). This finding indicates that the levels of self-understanding and compassion shown by the experimental and control groups were similar across the measurements. However, the main effect of the measurement (time) was found to be significant ($F(2, 36) = 22.282$, $p < 0.001$, $\eta^2p = 0.120$); this reveals that when all participants are considered together, there is a significant change in self-understanding and compassion scores from the pre-test to the post-test and follow-up measurement. In addition, the group \times measure interaction is significant ($F(2, 36) = 16.751$, $p < 0.001$, $\eta^2p = 0.093$), meaning that the pattern of change over time differs between the experimental and control groups. When the mean scores are examined, it is seen that there is a significant decrease in self-

understanding and compassion scores in the experimental group from pre-test to post-test and follow-up, whereas the scores in the control group remained relatively constant throughout the three measurements. These results indicate that the implemented psychoeducational program created a significant change over time in the fear of compassion dimension, specifically the "fear of self-compassion," and that this change pattern differed from the control group.

DISCUSSION

The findings of an 8-session psychoeducational program developed based on a compassion-focused therapy approach, regarding university students' fear of compassion and its sub-dimensions were discussed in this section.

Discussion of Findings Regarding the Effect of a Psychoeducational Program Based on the Compassion-Focused Therapy Approach on Reducing Fear of Compassion

Regarding the fear of compassion, no significant difference was found between the total scores of the experimental and control groups. However, it was concluded that the scores of the experimental group changed significantly from pre-test to post-test and follow-up measurement. In other words, a decrease in the levels of fear of compassion was observed in the students participating in the experiment. This reduction continued afterwards. However, this change was not observed in the control groups. One of the research topics addressed by compassion-focused therapy, which is based on understanding the individual (Gilbert, 2009) and explains the origin of compassion as an evolved thinking skill rooted in altruism and caring, shaped by present-day conditions (Gilbert, 2021), is the fear of compassion. Numerous studies exist that incorporate compassion-focused therapy interventions, and these studies have shown positive outcomes in the field of psychology, proving effective in reducing

conditions such as shame, stress, depression, and anxiety (Gilbert and Proctor, 2006; Goss and Allan, 201; Judge et al., 2012). It has also been frequently used in the treatment of individuals with eating disorders and in anger management programs, and has yielded positive results (Aslami, Amiri ve Mousavi, 2020; Gale vd., 2014; Goss ve Allan, 2014; Grodin vd., 2019; Steindl vd., 2017).

Compassion-focused therapy has been shown to be more effective than cognitive therapy in reducing fear of compassion (Ochghaz et al., 2020). The findings of this study reveal that the developed psychoeducational program had a significant impact on reducing the level of fear of compassion. This is consistent with the described foundations of compassion-focused therapy and the results of previous intervention programs based on this approach (Gilbert, 2014; Gilbert et al., 2017; Kelly and Carter, 2015; Ochghaz et al., 2020).

Discussion of Findings Regarding the Effect of a Psychoeducational Program Based on the Compassion-Focused Therapy Approach on the Levels of Sub-Dimensions

No significant difference was found between the experimental and control groups' scores on the sub-dimensions of Fear of Compassion for Others, Fear of Receiving Compassion, and Fear of Self-Compassion. However, it was concluded that the scores of the experimental group changed significantly between the pre-test, post-test, and follow-up measurements. In other words, a decrease was observed in the levels of the sub-dimensions of fear of compassion among the students participating in the experiment. This reduction continued afterwards. Since showing compassion to others is a result of interpersonal trust and past attachment patterns, the developed psychoeducational program can be explained by focusing more on internal processes and disregarding past sources less

(Gilbert, 2021; Gilbert, 2016; Gilbert, 2015; Gilbert and Procter, 2006; Gilbert et al., 2014a; Matos et al., 2017; Whetsel, 2017).

Gilbert et al. (2011) emphasized that the tendency to receive compassion is related to social environment and behavior. The safe environment created within a group and interpersonal experiences, the overcoming of shame, and the outcomes of interventions aimed at compassion support the theoretical basis and previous studies (Gilbert, 2014; Gilbert et al., 2017; Ochghaz et al., 2020).

The fear of self-compassion is closely related to internal processes such as self-criticism, self-compassion, and shame, as well as the ability to tolerate negativity (Fehr, Sprecher, and Underwood, 2009; Gilbert and Procter, 2006; Matos et al., 2017; Neff, 2003). The inclusion of content addressing internal processes and reactions to negativity in the developed psychoeducational program supports this finding and the existing literature.

Overall, the findings of this study are consistent with the international literature highlighting that interventions based on compassion-focused therapy approaches can be effective in reducing levels of fear of compassion (Gilbert, 2014).

Conclusion And Recommendations

Conclusion

This study concluded that a psychoeducational program developed based on a compassion-focused therapy approach was effective in reducing fear of compassion, the need to receive compassion from others, and self-compassion, and that this effect persisted. However, a limited decrease was observed in the sub-dimension of showing compassion to others. No changes were observed in the control group who did not participate in the training.

Recommendations

- The developed psychoeducational program should be applied to different age groups to test its generalizability.
- To achieve a more adequate understanding of the fear of compassion for others sub-dimension, content that includes past developmental processes such as attachment should be added to the program.
- Qualitative data can be included in the research to conduct a more comprehensive study.

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Appendix 1

Information Regarding The Psychoeducation Program Sessions

SESSION 1

Objectives:

- Helping group members get to know each other
- Providing information about the process of the psychoeducation program
- Establishing the rules for the sessions
- Allowing group members to express their expectations
- Gaining knowledge about the concept of fear of compassion

SESSION 2

Objectives:

- Enhancing cohesion among group members
- Learning about the concept of compassion
- Increasing awareness of what compassion means to the members
- Learning about the three flows of compassion
- Learning about the three types of fears of compassion
- Increasing awareness of which aspects of compassion are strengths and which need improvement
- Increasing awareness of which aspects of fear of compassion are strengths and which need improvement

- Learning about the origins of fear of compassion

SESSION 3

Objectives:

- Developing trust within the group
- Learning about the concept of compassionate mind
- Understanding the relationship between the compassionate mind, shame, globalizing self-evaluations, and evolution
- Learning the aims of cultivating the compassionate mind and putting it into action
- Learning the soothing rhythm breathing technique

SESSION 4

- Objectives:
- Identifying projections within the group process
- Strengthening understanding of the compassionate mind
- Learning about the role of shame in fear of compassion
- Learning the concepts of shame and de-shaming

SESSION 5

Objectives:

- Understanding group Dynamics
- Learning about the critical coach, the optimistic (Pollyanna) coach, and the compassionate coach
- Learning the components of the compassionate coach
- Learning the compassionate touch exercise

SESSION 6

Objectives:

- Identifying projections within the group process
- Learning about the evolution of the mind in relation to compassion
- Gaining knowledge about emotion regulation systems
- Learning about the concept of compassionate understanding

SESSION 7

Objectives:

- Preparing group members for the termination session
- Increasing awareness of what members have given to and received from the group
- Gaining awareness of the social roles and place of compassion
- Developing compassionate listening skills

SESSION 8

Objectives:

- Reviewing all sessions conducted up to this point
- Helping members recognize the changes that have occurred regarding their fear of compassion
- Supporting members in accepting that the psychoeducation program has come to an end and helping them cope with this

- Highlighting the importance of saying goodbye and providing members an opportunity to conclude their participation and group interactions

