

**THE INVESTIGATION OF THE PREVENTIVE
EFFECTIVENESS OF A DIALECTICAL
BEHAVIOR THERAPY SKILLS TRAINING
PROGRAM ADAPTED FOR TURKISH COLLEGE
STUDENTS**

AYŞENUR ALKAN

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THE INVESTIGATION OF THE PREVENTIVE EFFECTIVENESS OF A
DIALECTICAL BEHAVIOR THERAPY SKILLS TRAINING PROGRAM
ADAPTED FOR TURKISH COLLEGE STUDENTS

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Name and Surname of the Student: Ayşenur Alkan

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Assoc. Dr. Burak KÜNTAY

Institute Director

I certify that this thesis has fulfilled the necessary requirements as a Master's thesis.

Program Coordinator

This thesis was read by us, quality and content as a Master's thesis has been seen and accepted as sufficient.

	Title/Name	Signature
Thesis Advisor's	Assist. Prof. Ayşe Meltem Üstündağ Budak	
Member's	Assist. Prof. Başak Türküler Aka	
Member's	Prof. Ebru Şalcıoğlu	

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Signature:

ABSTRACT

THE INVESTIGATION OF THE PREVENTIVE EFFECTIVENESS OF A DIALECTICAL BEHAVIOR THERAPY SKILLS TRAINING PROGRAM ADAPTED FOR TURKISH COLLEGE STUDENTS

Alkan, Ayşenur

M.A., Clinical Psychology

Supervisor: Assist. Prof. Ayşe Meltem Üstündağ-Budak

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The primary aim of the present study was to investigate the effectiveness of an adapted 9-week dialectical behavior therapy (DBT) skills training as a preventive program on the DBT skills use, use of dysfunctional coping strategies, difficulties with emotion regulation, and mental health symptoms of a nonclinical sample of Turkish college students. The secondary aim was to discern the feasibility, acceptability and beneficiality of the program for the students through qualitative analysis of their textual responses to evaluative questions about the program. The sample consisted of 72 participants, 19 to 26 years old ($M = 22.43$, $SD = 1.17$), 39 of whom were in the experimental group and underwent the training, and 33 of whom were in the no-treatment control group. Results of the quantitative analyses demonstrated that, compared to the

control condition, the adapted DBT skills training program was effective in increasing participants' DBT skills use and reducing their dysfunctional coping and emotion regulation difficulties. There was also a trend for reduction of participants' mental health symptoms. Results of the qualitative analyses indicated that the participants perceived the program to be acceptable and beneficial with high percentages of reports of benefits, positive experiences, attainment of goals, and life changes following the program in their responses. High attendance, low attrition, and positive feedback of participants attested to the feasibility of the program. These results provide evidence for the effectiveness, feasibility, and acceptability of the adapted DBT skills training program utilized in the present study as a preventive intervention for the nonclinical Turkish college student population that could be incorporated in college curricula or college counseling services to enhance students' adaptive coping and psychological well-being.

Keywords: Dialectical behavior therapy, dialectical behavior therapy skills training, college student mental health, preventive mental health

ÖZ

TÜRK ÜNİVERSİTE ÖĞRENCİLERİ İÇİN UYARLANMIŞ DİYALEKTİK DAVRANIŞ TERAPİSİ BECERİ EĞİTİMİ PROGRAMININ KORUYUCU ETKİNLİĞİNİN ARAŞTIRILMASI

Alkan, Ayşenur

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Bu araştırmanın birincil amacı 9 haftalık bir diyalektik davranış terapisi (DDT) beceri eğitimi uyarlamasının sağlıklı bir Türk üniversite öğrencileri örnekleminin DDT becerileri kullanımı, işlevsel olmayan başa çıkma stratejileri kullanımı, duygu düzenleme güçlükleri ve ruh sağlığı belirtileri üzerindeki koruyucu etkinliğini araştırmaktır. Araştırmanın ikincil amacı ise programın öğrenciler için uygulama elverişliliği, kabul edilebilirlik ve faydalılık derecelerini öğrencilerin açık uçlu değerlendirme sorularına verdikleri yazılı cevapların niteliksel analizi ile ortaya koymaktır. Araştırmanın örneklemi, 39 katılımcı beceri eğitiminin verildiği deney grubuna ve 33 katılımcı tedavisiz kontrol grubuna dahil olmak üzere, yaşları 19 ile 26 arasında değişen ($Ort. = 22.43$, $S = 1.17$) toplam 72 katılımcıdan oluşmaktadır. Niceliksel analizlerin sonuçları,

kontrol koşuluna kıyasla uyarlanmış DDT beceri eğitim programının katılımcıların DDT becerileri kullanımını artırmada, işlevsel olmayan başa çıkma ve duygu düzenleme güçlüklerini ise azaltmada etkin olduğunu göstermektedir. Program sonrası katılımcıların ruh sağlığı belirtileri de düşüş eğilimi göstermiştir. Niteliksel analiz sonuçlarına göre katılımcılar programı kabul edilebilir ve faydalı bulmuş; değerlendirme sorularına cevaplarında programdan yüksek oranlarda fayda gördüklerini, olumlu bir deneyim yaşadıklarını, hedeflerine ulaştıklarını ve yaşamlarında anlamlı değişiklikler olduğunu belirtmişlerdir. Katılımcıların programa yüksek devamlılığı, programı bırakma oranlarının düşüklüğü ve verdikleri olumlu geri bildirimler programın uygulama elverişliliğinin göstergesi olmuştur. Tüm bu sonuçlar, bu çalışmada uygulanmış olan uyarlanmış DDT beceri eğitimi programının, üniversite öğrencilerinin işlevsel başa çıkma ve psikolojik iyi oluşlarını desteklemek için üniversite ders programları ve rehberlik hizmetlerinde kendine yer bulabilecek bir koruyucu ruh sağlığı programı olarak sağlıklı Türk üniversite öğrencileri popülasyonunda etkinliği, uygulama elverişliliği ve kabul edilebilirliğine kanıt sunmaktadır.

Anahtar kelimeler: Diyalektik davranış terapisi, diyalektik davranış terapisi beceri eğitimi, üniversite öğrencilerinin ruh sağlığı, koruyucu ruh sağlığı

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CHAPTER 1

INTRODUCTION

“As long as you live, keep learning how to live.”

Lucius Annaeus Seneca

In the 20th century, behavior therapy came forth as the evidence-based, simple, and cost-effective opponent of the psychoanalytic tradition and its pseudoscientific qualities such as confirmation bias, speculations and extrapolations beyond data, self-reference, and lack of falsifiability (Dupont, 2018; Zepf, 2018). Although received with much criticism at its inception by proponents of the then-mainstream psychoanalytical approach, soon it initiated a paradigm shift, and along with succeeding approaches that broadened and enriched its scope (e.g. cognitive-behavioral therapies, applied behavior analysis), became the scientific standard in treating most mental disorders, as indicated by guidelines and recommendations for clinical practice consulted by practitioners in the USA, the UK and other countries (Kazdin & Hersen, 1980; Parry, Cape, & Pilling, 2003).

Behavior therapy may be broadly defined as the modification of overt (i.e. action) and covert (i.e. cognition and emotion) behavioral manifestations of psychopathology by means of therapeutic techniques rooted in learning theory and other areas of experimental psychology to achieve constructive behavior change (Krasner, 1971; Fishman & Franks, 1992). It was developed based on the findings of trailblazing researchers of experimental psychology at the turn of the 20th century, who had been identified with behaviorism as a school of thought. These pioneering researchers include Ivan Pavlov and John Watson with their theories classical conditioning in animals and humans, Edward Thorndike with the law of effect, and the radical behaviorist B. F. Skinner with operant conditioning (Thoma, Pilecki, & McKay, 2015).

In the first half of the 20th century, a series of behavior modification techniques that drew on and expanded the early theories of learning were developed, such as Jones' exposure and response prevention, Jacobson's progressive relaxation, Salter's assertion training, and Wolpe's systematic desensitization; and these were incorporated into behavior therapy among its wide range of therapeutic interventions (Kazdin, 1982; Schorr, 1987). Behavior therapy and related therapies owe their efficacy, as demonstrated by treatment outcome and treatment process research, and their prominence, as indicated by the preferences of practitioners, patients, and policy makers, to applying a scientific and evidence-based approach at every step of treatment development and dissemination. Wilson (1997) attributes the success of behavior therapy and related therapies to (1) conceptualizing and defining clinical problems as overdoing or underdoing adaptive behaviors or displaying maladaptive behaviors,

which allows for scientific observation and measurement, (2) development of therapeutic techniques that apply empirically validated theories to clinical practice, and (3) reliance on rigid, uncompromising testing of these techniques in terms of both efficacy and effectiveness (treatment outcome), and mechanisms of therapeutic action (treatment process).

Researchers and practitioners in the clinical field currently conceptualize behavior therapy along with the recent perspectives that branched from it as the three waves of behavior therapy. Behavior therapy is regarded as the first wave, cognitive-behavioral therapies are viewed as the second wave, and mindfulness and acceptance-based behavior therapies are considered to constitute the third wave (Hayes, 2004a, 2004b). Following the establishment of behavior therapy, the second wave came into light under the influence of an agreed need among researchers and practitioners to tackle with patients' cognitions, in the form of thoughts, attitudes, assumptions, and beliefs, that contributed to their difficulties, and the Cognitive Revolution that psychological science underwent starting in the late 60s with the growing literature on cognitive psychology, neuroscience, and linguistics (Fishman & Franks, 1992). The second wave, with its addition of a cognitive component to behavior therapy, brought about novel techniques such as stress inoculation and cognitive restructuring of thoughts and beliefs. Two pioneering figures of the second wave are A. T. Beck with cognitive therapy and Albert Ellis with rational emotive behavior therapy (Thoma et al., 2015). Although currently cognition and emotion are widely regarded as covert behavior and observable actions as overt behavior, the discourse of Beck's cognitive therapy was emphasizing not only behavior, but cognition and emotion, even though

it incorporated behavior therapy techniques such as behavioral activation and problem solving (Alford & Norcross, 1991; Hoffman, Asmundson, & Beck, 2013). Following the contributions of other prominent researchers in the second wave, the plethora of treatment approaches that utilized both cognitive and behavioral interventions have come to be referred to as cognitive-behavioral therapies (Rachman, 2015).

The third wave of behavior therapy marks a shift in focus from treatment outcome in terms of symptom reduction or relief to treatment process in terms of enhancing the patients' connection to their life and circumstances by means of increasing their mindfulness and acceptance of themselves, their lives, and the human condition (Herbert & Forman, 2010). This does not mean that the efficacy and effectiveness of the interventions were overlooked; it only implies a movement toward process-based care from the traditional change-based care of the previous waves (Hayes & Hofmann, 2017). Similar to behavior therapy and cognitive-behavioral therapies, treatment development relied on empirically supported theories, derivations of therapeutic interventions from those theories, and the validation of interventions through clinical trials (Hofmann, Sawyer, & Fang, 2010).

The main contributions of the third wave are emphasis on the person in context (functionalism) in addition to the person as a single unit that could be addressed without reference to the context (structuralism), and emphasis on acceptance of things that needs to be accepted in addition to changing things that could be changed (Ruggiero, Spada, Caselli, & Sassaroli, 2018). These contributions stem from the integration of novel components to cognitive-behavioral therapies, such as Buddhism

and Zen principles, dialectical philosophy, and contextual behavioral science (Kahl, Winter, & Schweiger, 2012). The third wave of behavior therapy encompasses the most recent additions to this family of psychotherapies from 1980s onward, namely mindfulness-based stress reduction (MBSR), mindfulness-based cognitive therapy (MBCT), acceptance and commitment therapy (ACT), and dialectical behavior therapy (DBT) (Thoma et al., 2015).

DBT is a third-wave behavior therapy based on a dialectical philosophy which synthesizes change-based interventions of cognitive-behavioral therapies with acceptance-based strategies that were integrated from Buddhism and the Zen tradition (Robins, Zerubavel, Ivanoff, & Linehan, 2018). DBT was developed by Marsha M. Linehan (1993a) for the treatment of borderline personality disorder (BPD), which signifies pervasive emotion dysregulation, and then was adapted for use with other mental disorders also characterized by emotion regulation difficulties (Chapman, 2006). Lately, DBT and one of its major components, DBT skills training, has been utilized outside clinical settings, such as educational institutions, and was found to lend itself to preventive use as a means of fostering mental health and well-being, in addition to its unequivocal value as a clinical intervention (Üstündağ-Budak & Özeke-Kocabaş, 2019).

This chapter aims to provide a theoretical and practical background to the current study, a nonrandomized controlled trial of an adapted DBT skills training in a university setting, which draws upon the newly emerged preventive streak within DBT. First, history and development of DBT is discussed. Second, distinctive

characteristics and components of DBT as a novel approach within the cognitive-behavioral tradition are presented. As one of the most studied subjects within DBT, and the intervention utilized in the current study, DBT skills training is elaborated on in detail. Research findings that attest to the value of DBT and its adaptations, which efficaciously help with a wide range of difficulties in many different populations, are presented. Finally, the aim and the significance of the current study is provided.

1.1. History and Development of DBT

DBT was born out of a need to treat patients displaying chronic suicidal and self-harming behavior, many of which were diagnosed with BPD and many of which were young women, who did not respond to the traditional change-based interventions of the first and second waves of behavior therapy, feeling invalidated and blamed for their problems and dropping out of treatment without partial or full recovery, resorting repeatedly to their problematic ways of trying to regulate their emotions (Swales, 2018). As a doctoral student working with this population who also had a background of emotion regulation difficulties and self-harm with repeated hospitalizations, Linehan was aware of the inadequacy of prevailing treatments (Sargin & Sargin, 2015). Through a process of trial-and-error, she discovered which additional strategies were of most help with her patients and designed her cognitive-behavioral treatment of borderline personality disorder. Among these additional components were incorporating acceptance-based strategies such as validation to balance the ill-perceived change strategies, designing a skills training program that included both acceptance and change-oriented skills, and creating support structures for patients as well as their therapists, such as between-session telephone coaching and the DBT

consultation team (Linehan & Wilks, 2015). From the outset, Linehan aimed to show these unpopular patients how to build a life worth living (Linehan, 1993a).

A novel therapy was brought about by a novel theory of the targeted psychopathology and its behavioral excesses or deficits. Linehan developed DBT's theoretical approach to borderline personality disorder, and more broadly, pervasive difficulties with emotion regulation resulting in severe skill deficits in many areas of life, as the biosocial theory of emotion dysregulation (Brodsky & Stanley, 2013). During the first randomized controlled trials (RCTs) of DBT with patients with BPD, DBT went under constant revision with the researchers' observations of areas open for improvement (Linehan & Wilks, 2015). These trials attested to the superior efficacy of DBT in treating symptoms of BPD and the underlying processes of emotion dysregulation, as well as increasing treatment retention (Swales, 2018). After the establishment of sufficient evidence base, Linehan (1993a, 1993b) published the treatment and skills training manuals for DBT in their final form. Since then, DBT has become the first line of treatment for BPD (Gunderson, 2011), and has been adapted for many other mental disorders and difficulties, which will be discussed in later sections. DBT is now taught at select graduate programs and certification in DBT is offered to mental health professionals through the DBT training institutes, the Linehan Institute and Behavioral Tech, in the USA, the UK, Canada, and Australia, and online (DuBose, Botanov, Navarro-Haro, & Linehan, 2018).

1.2. Characteristics and Components of DBT

Those features of DBT that distinguish it from cognitive-behavioral therapies of the second wave and other therapies of the third wave are the biosocial theory of the development and maintenance of BPD and pervasive emotion regulation, a dialectical treatment strategy that synthesizes acceptance and change-based interventions, and the therapy structure that divides treatment into different modalities and stages, which facilitates the adaptation of DBT to different mental disorders and difficulties, needs of individual patients, and treatment settings (Swales, Heard, & Williams, 2000).

1.2.1. Biosocial Theory of Emotion Regulation and Dysregulation

Within the context of DBT, emotions are “complex, brief, involuntary, patterned responses to internal and external stimuli” (p. 6), internal stimuli referring to covert behavior such as physiological changes and thoughts, while external stimuli refer to changes in or responses from the environment (Linehan, 2015a). Emotion regulation is the competence to interpret correctly and respond adaptively to one’s emotional cues, such as coordinating oneself to act in accordance to what the emotion is signaling (e.g. danger, discomfort) if appropriate, distracting and refocusing attention from strong emotions in favor of goal-directed behavior, inhibiting impulsive or inappropriate behavior, and self-soothing. Emotion dysregulation, on the other hand, signifies the incompetence, against all efforts, to interpret correctly and respond adaptively to emotional cues, characterized by too many strong emotional experiences, failure to regulate arousal, difficulty in controlling impulsive and inappropriate responses, and inability to distract, refocus, and self-soothe to avoid engaging in mood-

dependent behavior in favor of goal-directed behavior. Emotion dysregulation is pervasive when this incompetence is generalized into many disparate emotional experiences, areas of life, environments, and relationships (Linehan, 2015a; Neacsiu, Bohus, & Linehan, 2015).

Linehan (1993a) viewed the BPD diagnosis as a set of behavioral excesses and deficits that results from an unfavorable transaction between an emotionally vulnerable individual and invalidating environments that have led to an insufficient acquisition of adaptive life skills and development of maladaptive coping strategies. A theory of personality functioning informed by research in developmental psychology and psychobiology as well as previous evidence-based theories of personality (Linehan, 1993a), the biosocial theory explains the mechanism of this unfavorable transaction between the individual's biological makeup, which constitutes her emotional vulnerability, and her early social environment. The biosocial theory remained central to the adaptations of DBT across different populations, disorders, and settings, attesting to its functionality in understanding emotion dysregulation (Koerner, 2012).

The 'bio' in biosocial theory denotes genetic, neurological, and neurochemical characteristics of an individual that contributes to emotional vulnerability. These include but are not limited to genetic disposition to traits (temperamental traits) such as aggressiveness, impulsivity, affective instability, and negative affectivity, abnormal functioning in neurological substrata implicated in emotional arousal and self-

regulation, such as hyperactivity of the limbic system and decreased activation of the prefrontal cortex, and irregularities in neurotransmitter systems associated with mood-related processes and bonding, such as the serotonergic, vasopressinergic and acetylcholinergic systems (Crowell, Beauchaine, & Linehan, 2009; Niedtfeld & Bohus, 2018). Resulting from these biological disadvantages, emotional vulnerability manifests threefold: High sensitivity, high intensity, and prolonged activation. High emotional sensitivity denotes that the emotionally vulnerable individual has a low threshold for emotional arousal, is sensitive to minor disturbances, and easily provoked. High emotional intensity connotes that her emotional reactions are extreme and dramatic, what others experience as an amusement, fancy, or annoyance she may experience as intense joy, love, or rage, respectively. Prolonged activation signifies that emotional arousals are long-lasting, and it takes time for the individual to return to baseline (Linehan, 1993a; Brodsky & Stanley, 2013).

The ‘social’ in biosocial theory refers to an early childhood environment, particularly to those in the primary caregiving roles, that continuously invalidates the emotional experiences of the emotionally vulnerable individual (Neacsiu et al., 2015). In contrast to normative development in which the caregiver helps the individual make sense of what is appropriate and inappropriate, normal or abnormal, effective or ineffective by understanding and validating her responses, positively reinforcing the former, and negatively reinforcing or punishing the latter; in an invalidating environment, there is a lack of goodness of fit between the caregiver and the child (Koerner, 2012). Emotional experiences and displays of the child are responded in erratic, inconsistent, inappropriate, or extreme ways (Linehan, 1993a).

For instance, the caregiver is unable to understand and validate the emotional intensity of a child with difficult temperament, and persistently invalidates the child's experience by telling the child that she has no reason to feel or act those ways, or she is doing so to draw attention, discards minor to moderate emotional displays as irrelevant, and only attends to and soothes intense emotional displays. In such an unfortunate relationship, the child learns that she should distrust and ignore her emotional experiences, and that she is guaranteed to receive affection through extreme displays of emotion. As such, in invalidating environments, the caregivers fail to teach, model, or reward adaptive behaviors, while dysfunctional behaviors are intermittently reinforced, or extremely punished without offering an alternative, whereby the emotionally vulnerable individual is shaped into behavioral excesses and deficits (Grove & Crowell, 2018).

More nefarious examples of invalidating environments are those in which neglect, physical abuse, and/or sexual abuse take place. In abusive and neglectful caregiving relationships, the child is subjected to extreme ambivalence and confusion, receiving both sporadic care and affection, and abuse and/or neglect from the same figure (Brodsky & Stanley, 2013). While BPD has been robustly associated with early life experiences of abuse and neglect (Lieb, Zanarini, Schmahl, Linehan, & Bohus, 2004), recent evidence indicates that the relationship between early emotional abuse and BPD features is mediated by emotion regulation difficulties (Kuo, Khoury, Metcalfe, Fitzpatrick, & Goodwill, 2015), supporting the maladaptive pathways postulated in the biosocial theory.

1.2.2. Treatment Strategies

Linehan (1993a) conceptualizes the symptoms of BPD as a diagnostic category in DSM-5 (American Psychiatric Association, 2013) across five areas of dysregulation experienced by the diagnosed individuals: Emotion dysregulation, behavioral dysregulation, cognitive dysregulation, interpersonal dysregulation, and self-dysregulation. Diagnostic criteria 6 (affective instability) and 8 (inappropriate and intense anger) belongs in emotion dysregulation, criteria 4 (impulsivity) and 5 (suicidal and/or self-harming behavior) agree with behavioral dysregulation, criteria 9 (paranoid ideation and dissociation) matches with cognitive dysregulation, criteria 1 (avoidance of real or imagined abandonment) and 2 (unstable relationships) pertain to interpersonal dysregulation, and criteria 3 (identity disturbance) and 7 (feelings of emptiness) are concerned with self-dysregulation (Swales et al., 2000; Lieb et al., 2004). DBT utilizes a range of dialectical, acceptance-based, and change-based interventions to address these multiple dimensions of dysregulation experienced by patients. Dialectical interventions originate from the dialectical philosophy of DBT, acceptance-based interventions are adapted from Zen contemplative practices, and change-based interventions are elaborations of cognitive and behavior therapy techniques (Linehan, 1993a).

Dialectical philosophy views the world as a constant clash of extreme opposites, theses and antitheses, creating a synthesis which symbolizes the truth for a brief moment, then clashes with its own antithesis. This process continues forevermore, and thus, the truth is always changing (Linehan, 1993a; Swenson, 2016). Likewise, in DBT, there is no absolute truth the therapist transmits to the patient, instead, she views

the patient in context and part of the universe as a whole, both of which are in constant transformation. The therapist and patient are always in the process of trying to approximate the truth, seeking a synthesis between the extreme ends of thoughts, emotions, and behavior, trying to walk the middle path (Sayrs & Linehan, 2018). Due to its dialectical philosophy and treatment strategies, DBT and its adaptations have been shown to be especially promising in treating disorders characterized by patients' oscillation across opposite ends of behavior, such as emotion expression and inhibition or idealization and devaluation in BPD, bingeing and purging or fasting in eating disorders (EDs), or mania and depression in bipolar disorder (Rizvi, Steffel, & Carson-Wong, 2013).

The central dialectic of treatment is the dialectic between acceptance and change. The two core treatment strategies of DBT, validation and problem solving, are reflective of this central dialectic. The therapist validates the patient and her behaviors while emphasizing the need for change (Linehan, 1993a). Other dialectics include the dialectic between the therapist and the patient, its synthesis being the therapeutic alliance, finding middle paths between behavioral excesses and deficits, attaining flexibility by working through the rigidity of opposite ends of thoughts, emotions, and behavior, and irreverent vs. reciprocal communication with the patient (Koerner, 2012; Swenson, 2016). Dialectical interventions in DBT include but are not limited to therapist's balancing of acceptance and change-based strategies throughout treatment, therapist's modeling of dialectical thinking and behaviors for the patient, use of metaphors, entering the paradox by emphasizing that opposite sides of an argument or decision could be true at the same time, and therapist's magnifying the tension between

opposites to invite the patient into dialectical thinking (Linehan, 1993a; Sayrs & Linehan, 2018).

Validation, mindfulness, and radical acceptance constitute the acceptance-based interventions in DBT (Swenson, 2016). Validation refers to therapist's communication to the patient that her responses are understandable and make sense given her current situation and circumstances (Linehan, 1993a). This shows acceptance of the patient by the therapist, and encourages patient's acceptance of herself. However, acceptance and change being a central dialectical dilemma, accepting herself does not entail that she need not change; on the contrary, her acceptance is expected to promote change (Fruzzetti & Ruork, 2018). Validation practices provide support and foster commitment to treatment in borderline individuals who have difficulty tolerating solely change-based interventions (Swales et al., 2000).

Mindfulness and radical acceptance were integrated into DBT from Buddhist principles and Zen contemplative practice (Robins, 2002). Since patients vary in their degree of spirituality and may have a hard time with formal meditation practices, Linehan transformed mindfulness and radical acceptance into behavioral skills that could be taught and acquired with ease (Wolbert, 2018). Within the context of DBT, mindfulness denote living in the present moment with intention and awareness, but without judgment or rejection of, or attachment to it. Radical acceptance is complete and total acceptance of one's reality, limitations, and the causality of the universe, and

that life is worth living despite its difficulties, with all one's heart, mind, and body (Linehan, 2015a; 2015b).

Change-based interventions of DBT are behavioral strategies addressing the patient's motivational problems, behavioral excesses and deficits, and post-traumatic stress. The core behavioral strategy of treatment is problem solving through chain analysis, a detailed functional analysis of dysfunctional behaviors, and solution analysis (Chapman, 2018). Skills training and coaching, cognitive restructuring, contingency management, observing limits of the treatment process, and prolonged exposure are among other behavioral strategies employed in DBT (Linehan, 1993a). Therapists are expected to have excellent command of the treatment apparatus, and utilize them within the structure of each session, and the structure of treatment in general, according to the patient's needs and the requirements of each moment with confidence, flexibility, and spontaneity (Swenson, 2007). This aspect of practicing DBT has been likened to jazz, a music genre in which the artists have great mastery of their instruments and respond to the flow of the music and their band at each moment, readily and spontaneously (Koerner & Dimeff, 2007).

1.2.3. Treatment Structure

As a highly structured form of behavior therapy, DBT involves a treatment hierarchy with each stage containing its own hierarchy of target behaviors. DBT is comprised of five stages of treatment, with the patient's progression through stages signifying reduction in overall psychopathology, moving from the urgency of

debilitating symptoms to self-actualization (Swales et al., 2000). The pretreatment stage is at the very beginning, in which the patient is oriented into DBT and expresses commitment to the entailments of undergoing DBT such as attendance to the various modalities of treatment, compliance with home and real-life practices (e.g. filling diary cards, practicing DBT skills), and respecting the therapist's limits. The therapeutic alliance is established during this stage through the patient's commitment to therapy and both parties' mutual agreement on expectations and goals for the treatment process (Brodsky & Stanley, 2013).

Stage I sets out to move the patient from the state of emotion, behavioral, and interpersonal dysregulation in which she enters the treatment to sufficient control and regulatory capabilities in these areas (Robins et al., 2018). The hierarchy of target behaviors starts from suicidal and self-harming behaviors, followed by therapy-interfering and therapy-destroying behaviors, behaviors that interfere with quality of life, and skills deficits (Koerner, 2013). If they occur during treatment, after the involvement of relevant health and security services, suicide attempts and acts of self-harm are addressed primarily, and treatment does not move forward until they are resolved (Linehan, Comtois, & Ward-Ciesielski, 2012). Therapy-interfering and therapy-destroying behaviors may include overstepping the therapist's limits through out-of-schedule contact, verbal aggression, noncompliance to home and real-life practices, habitual absence from the treatment modalities, or missing four sessions in a row which entails dismissal from a standard DBT program (Linehan, 1993a; Rizvi, 2011). These behaviors also constitute priority in the sessions after suicide and self-harm.

Quality-of-life-interfering behaviors encompass other motivational and behavioral problems that have largely adverse effects by destabilizing the patient's life, such as unemployment, vocational or academic problems that put the continuity of work or education at risk, or Axis I disorders, e.g. panic attacks, depressive episodes, bingeing (Dimeff & Linehan, 2001). Skill deficits that contribute to patient's dysregulation in the aforementioned areas are addressed through DBT skills training and skill coaching through between-session contact. Expected outputs of Stage I are life expectancy with the cessation of suicidal and self-harming behaviors, behavioral control gained through the acquired skills, and stability in the previously dysregulated areas of life and subjective experience (Robins et al., 2018).

Stage I is the distinctive stage of DBT where the four treatment modalities are applied (Swales et al., 2000). The four treatment modalities in DBT are individual therapy, group skills training, between-session telephone coaching, and the consultation team (Linehan, 1993a). Individual therapy sessions take place weekly for at least a year; acceptance-based and behavioral interventions other than skills training are applied during these sessions; and the session agenda is established based on the progression of treatment as well as the patient's current problems or crises. Sessions of DBT skills training groups are also conducted weekly and the aim is acquisition of skills based on DBT's skill deficit model of emotional and behavioral dysregulation (Schmidt & Russo, 2018). DBT skills training will be elaborated in the following sections in detail.

Between-session telephone consultation represents scheduled contact between the therapist and the patient outside individual therapy sessions and aims at therapist's coaching of skills for the patient in real-life situations, providing support in the face of thoughts and plans of suicide and self-harm, and resolving patient's issues with the therapeutic relationship as they arise before they turn into potential therapy-interfering behaviors (May, Richardi, & Barth, 2016). The DBT consultation team, on the other hand, is a support structure for the therapist in working with the challenging population of individuals with BPD and other disorders of emotion dysregulation (Robins et al., 2018). In consultation team meetings, the therapist discusses her cases with and gets feedback from other DBT therapists and skill trainers on her approach, stance, and progress in her cases. The consultation team validates the therapist and her difficulties in working with this population, prevents adverse treatment decisions based on the therapist's unrecognized frustrations and resentments with her patients, fosters her own use of DBT skills, and shapes her into treatment fidelity (Sayrs, 2018).

The aim of Stage II is emotional processing of past trauma in those patients with posttraumatic stress disorder (PTSD), symptoms of posttraumatic stress and other traumatic phenomena often associated with BPD, and move toward nontraumatic emotional experiencing (Linehan, 1993a). Treatment of traumatic phenomena is carried out with DBT-PE, the prolonged exposure protocol developed for DBT (Harned, Korslund, Foa, & Linehan, 2012). The treatment may move forward to Stage II when the goals of Stage I are met and the patient has necessary skills to cope with extreme distress that may be induced by exposure to traumatic memories, and places, events, objects etc. that have been associated with trauma (Swales et al., 2000). After

achieving emotional and behavioral stability and capacity for healthy emotional experiencing in Stages I and II, the patient progresses onto Stage III to undertake ordinary problems in living and attainment of individual goals. During this stage of treatment, the therapist and the patient works on patients' self-respect, self-efficacy, mastery, and values, and prepares her for independence from the therapist in these issues as the treatment approximates termination. Finally, in Stage IV, the patient transcends problems in living and embarks upon resolving her existential concerns, moves from incompleteness to a sense of completeness, focuses on increasing her capacity for freedom, joy, and connection to others, her community, and the universe (Brodsky & Stanley, 2013; Robins et al., 2018).

1.3. DBT Skills Training

One of the four modalities of treatment, DBT skills training is both an acceptance and change-based intervention because it incorporates four skill modules, two of which emphasize acceptance, the other two of which emphasize change (Linehan, 1993a). DBT skills training differs from assertiveness training or social skills training found in cognitive-behavioral therapies of the second wave on the grounds that these were augmented in the treatment apparatus only when the presenting problem of the patient was relevant, such as social anxiety disorder (Angélico, Crippa, & Loureiro, 2013), Cluster C (anxious) personality disorders (Simon, 2009), or schizophrenia (Smith, Bellack, & Liberman, 1996). However, within the context of DBT, although the patients in a group may vary regarding their degree of skill deficits, skills training is an integral part of treatment for every patient (Linehan, 1993a).

1.3.1. Training Structure

DBT skills training is conducted as 2,5-hour weekly sessions and in a group format; and it is designed to take six months and to be repeated twice, coinciding with individual therapy which is intended to continue for at least a year. A patient's individual DBT therapist and DBT skills trainer are different members of a DBT consultation team (Linehan, 1993a). In terms of a patient's skill acquisition, the skills trainer is responsible for teaching of skills and troubleshooting problems that may arise with the patient's learning and use of skills, while the individual therapist may suggest different skills in problem solving and coach the patient for skills use when necessary during between-session telephone consultations. The training is given by certified DBT therapists or DBT skills trainers. Each group has a group leader and a co-leader, the former responsible for the instruction of skills to the group as a whole, while the latter mediates tensions between group members that may arise, focuses on and keeps track of each individual's progress, and assists operational issues (Linehan, 2015a). Each session starts with a mindfulness exercise, followed by reviewing homework, presenting and teaching of new material, assignment of new homework, and conclusion of the session (Linehan, 2018).

DBT skills training is made up of four skill modules: Mindfulness skills, the core skills of DBT that is given at the beginning of the training and repeated between the other skills modules, interpersonal effectiveness skills, emotion regulation skills, the longest and most comprehensive module, and distress tolerance skills. Within a span of six months, DBT skills training is scheduled to begin with the 2-week orientation and mindfulness module, followed by the 5-week interpersonal effectiveness module,

the 2-week mindfulness module, the 7-week emotion regulation module, the 2-week mindfulness module, and ending with the 6-week distress tolerance and closure module (Linehan, 2015a). The structure of the program is visualized in Figure 1.1.



Figure 1.1. DBT skills training standard program structure. Adapted from “Introduction to DBT Skills” in DBT Skills Online Training by M. M. Linehan, 2018 (<https://psychwire.com/linehan/dbt-skills>). Copyright 2018 by the Behavioral Tech.

DBT skills training may be administered in individual or group format, however, the group format is always preferable to individual skills training. Conducting skills training in group format has a community support function for the patient and helps her better tolerate the intervention by hearing others’ struggles and perspectives, and fosters social and experiential learning in addition to instructions and exemplifications of the skills by group leaders (Cowperthwait, Wyatt, Fang, & Neacsiu, 2018). Individual skills training may take place when there are limitations to the implementation of standard DBT, such as when there are not enough patients to form

a group or when DBT is implemented in private practice (Linehan, 2018). Another possibility is when the patient's social anxiety interferes with her willingness to attend group skills training. These individuals are expected to move into groups as soon as their social anxiety is ameliorated with individual therapy and individual skills training (Robins et al., 2018).

1.3.2. Skill Modules

DBT skills training consists of two acceptance-based skill modules, mindfulness and distress tolerance, and two change-based skill modules, interpersonal effectiveness and emotion regulation (Linehan, 1993a). In line with DBT's conceptualization of emotional and behavioral dysregulation and motivational problems in terms of skill deficits that have an impact on the individual's capability to control their thoughts and attention, ability to communicate effectively, difficulty regulating emotions, and competence in managing distress, and the four skill modules of mindfulness, interpersonal effectiveness, emotion regulation, and distress tolerance were designed to improve patients' skills deficits in these areas, respectively (Cowperthwait et al., 2018; Linehan, 2018). The scope of each module in terms of addressing these areas of skills deficit is summarized in Figure 1.2.

Mindfulness (being aware of the present moment without judgment)	Interpersonal Effectiveness (getting interpersonal objectives met, maintaining relationships, and increasing self-respect in relationships)
Emotion Regulation (understanding and reducing vulnerability to emotions, changing unwanted emotions)	Distress Tolerance (getting through crisis situations without making things worse and accepting reality as it is)

*Figure 1.2. The four modules of DBT skills training. Adapted from “Dialectical Behavior Therapy Skills is Effective Intervention” by M. S. Harned and Y. Botanov, 2016, *Psychiatric Times*, 33, p. 2. Copyright 2016 by MJH Life Sciences.*

In DBT skills training, topics covered in the mindfulness module involve goals of mindfulness practice, mindfulness definitions, and the core mindfulness skills of States of Mind (Reasonable Mind, Emotion Mind, Wise Mind), “What” Skills (Observing, Describing, Participating), and “How” Skills (Nonjudgmentally, One-Mindfully, Effectively). Interpersonal effectiveness module includes the topics of goals of interpersonal effectiveness, factors in the way of interpersonal effectiveness, obtaining objectives skillfully through the skills of Clarifying Priorities, Objectives Effectiveness: DEAR MAN, Relationship Effectiveness: GIVE, and Self-Respect Effectiveness: FAST, How Intensely to Ask for Something or Say No, and building relationships while ending destructive ones (Linehan, 2015a, 2015b).

Emotion regulation module discusses the goals of emotion regulation, understanding and naming emotions, the DBT model of emotions, the skills for

changing emotional responses being Checking the Facts, Opposite Action, and Problem Solving, and the skills for reducing vulnerability to Emotion Mind, including Accumulating Positive Emotions, Building Mastery, Coping Ahead of Time, and PLEASE (Taking Care of the Mind by Taking Care of the Body) skills. The final module of distress tolerance contains such topics as goals of distress tolerance, Crisis Survival Skills (STOP, Pros and Cons, TIP, Distracting with Wise Mind, Self-Soothing with the Five Senses, and Improving the Moment), and Reality Acceptance Skills (Radical Acceptance, Turning the Mind, Willingness, Half-Smiling and Willing Hands) (Linehan, 2015a, 2015b). The four skill modules also encapsulate additional skills that are optional for the group leaders to teach or indicated for specific problems such as addiction and recurrent nightmares (see Linehan, 2015a for the full range of DBT skills).

1.4. Evidence Base of Standard DBT

Standard DBT refers to the original form of treatment developed for chronically suicidal and self-harming adult women who meet the criteria for BPD with the application of all four treatment modalities, while succeeding adaptations with modifications to accommodate other problems, populations, and settings take on different names. The first RCT of DBT (Linehan, Armstrong, Suarez, Allmon, & Heard, 1991) and its one-year follow-up (Linehan, Heard, & Armstrong, 1993) attest to the efficacy of DBT in increasing treatment retention and reducing the number of parasuicidal episodes, severity of these episodes, psychiatric hospitalizations, and days spent in these hospitalizations, while during the follow-up, patients maintained these

treatment gains and demonstrated less anger with better social adjustment compared to patients who had undergone treatment as usual (TAU).

Further studies continued to reflect the superiority of DBT compared to TAU in terms of treatment retention and reduction in the number and medical risk of parasuicidal behaviors, and the number and length of hospitalizations (Verheul et al., 2003; Linehan et al., 2006; Priebe et al., 2012) as well as improvement on secondary outcomes such as disability and quality of life (Carter, Willcox, Lewin, Conrad, & Bendit, 2010). Women with BPD and comorbid substance dependence who had undergone DBT showed less drug abuse and better global and social adjustment compared to TAU, suggesting that DBT is helpful for individuals who meet the criteria for BPD with different symptom presentations (Linehan et al., 1999). Two recent meta-analyses, one study with 16 RCTs and non-RCTs (Kliem, Kröger, & Kosfelder, 2010) and another more conservative study with 5 RCTs (Panos, Jackson, Hasan, & Panos, 2014), support the efficacy of standard DBT for BPD and its advantage over other treatments in reducing suicidal and self-harming behaviors and treatment dropout.

1.5. Adaptations of Standard DBT

DBT has been adapted for preadolescent children with emotion regulation difficulties who display suicidal and self-harming behaviors (DBT-C, Perepletchikova et al., 2011). This adaptation of DBT involves modifications in the content and delivery of skills training to accommodate children's cognitive capabilities,

modifications to the treatment hierarchy, and a parent skills training component (Perepletchikova, 2018). DBT-C was significantly efficacious for children with disruptive mood regulation disorder compared to TAU in reducing affective and behavioral symptoms and improving treatment retention, with higher treatment satisfaction reported by children and their families in the DBT condition (Perepletchikova et al., 2017).

A more widely studied and established adaptation of DBT is DBT-A (Miller, Rathus, & Linehan, 2007), which was created with its distinct treatment and skills training manual for suicidal and self-harming adolescents, and further adapted for use with adolescents who have other symptoms or disorders associated with emotion dysregulation (Groves, Backer, van den Bosch, & Miller, 2012). Like DBT-C, DBT-A involves differences to the treatment hierarchy, the content and presentation of skills training, and participation of the family in treatment by means of multi-family skills training and skills coaching by phone (Rathus, Miller, & Bonavitacola, 2018). In community studies, DBT-A was demonstrated to be effective in reducing adolescents' persistent suicidal and self-harming behavior, depressive symptoms, dissociative symptoms, externalizing behaviors, anger, and hopelessness while increasing overall functioning (James, Taylor, Winmill, & Alfoadari, 2008; Woodberry & Popenoe, 2008). A number of clinical trials attest to the efficacy of DBT-A in reducing adolescent suicidal and self-harming behaviors in addition to improvements in depressive symptoms and overall functioning compared to TAU in both inpatient and outpatient settings, while the treatment gains persisted during one-year follow-ups (Katz, Cox, Gunasekara, & Miller, 2004; Fleischhaker et al., 2011; Mehlum et al.,

2014; Mehlum, et al., 2016; McCauley, et al., 2018). DBT-A was further tested for use with adolescent bipolar disorder (Goldstein, Axelson, Birmaher, & Brent, 2007; Goldstein et al., 2015), anorexia nervosa (AN) and bulimia nervosa (BN) (Salbach-Andrae, Bohnkamp, Pfeiffer, Lehmkuhl, & Miller, 2008), substance use disorders (Beckstead, Lambert, DuBose, & Linehan, 2015), and behavioral problems of juvenile offenders (Trupin, Stewart, Beach, & Boesky, 2002). The intervention was effective in reducing manic and depressive symptoms while increasing periods of euthymia, disordered eating behaviors, substance use, and impulsive and aggressive behaviors of adolescent offenders, respectively.

Further adaptations of standard DBT for adults have targeted PTSD, treatment-resistant depression, and the whole range of EDs. Compared to TAU, DBT adapted for PTSD was shown to be significantly more efficacious in reducing posttraumatic stress in survivors of childhood sexual abuse regardless of a comorbid BPD diagnosis (Bohus et al., 2013). In women with PTSD and BPD, integrating DBT-PE into the treatment protocol led to higher remission of PTSD symptoms and more improvement in suicidal and self-injuring behaviors, shame and guilt, depressive symptoms, and global functioning in comparison to DBT without PE (Harned, Korslund, & Linehan, 2014). In chronically depressed seniors, DBT augmented with antidepressants was more effective in reducing depressive symptoms and enhancing adaptive coping compared to antidepressants and case management while the advantage of DBT was maintained at the 6-month follow-up (Lynch, Morse, Mendelson, & Robins, 2003). Compared to waitlist controls, DBT for binge eating disorder (BED) was effective in reinforcing abstinence from binge eating and decreasing ED pathology (Telch, Agras,

& Linehan, 2001). A pilot study utilizing a sample with BN or BED and comorbid BPD demonstrated a large effect of DBT in lowering binge eating episodes and ED pathology and a medium effect for reducing suicidal and self-injuring behavior (Chen, Matthews, Allen, Kuo, & Linehan, 2008). In a case series design that augments standard DBT with typical cognitive-behavioral ED interventions for a challenging sample with AN or EDNOS and various psychiatric comorbidities, the researchers found that the intervention significantly decreased ED pathology, suicidal and self-injuring acts, and medical instability due to ED complications while increasing treatment retention (Federici & Wisniewski, 2013).

The most recent adaptation of standard DBT is radically open DBT (RO-DBT; Lynch, 2018), developed to treat disorders that are theorized to be those of emotional and behavioral overcontrol, such as AN, treatment-resistant depression, and Cluster C personality disorders, as opposed to disorders of undercontrol which standard DBT is known to target (Gilmartin & Valladares, 2019). In a case series with an outpatient sample of adults with AN, RO-DBT resulted in larger improvements in BMI and ED pathology compared to standard DBT (Chen et al., 2015). A pilot study of RO-DBT for adults with AN in an inpatient setting yielded significant improvements in global psychological distress, BMI, ED pathology, and ED-related quality of life (Lynch et al., 2013). For treatment-resistant depression, a multisite RCT indicated efficacy of RO-DBT in reducing depression compared to TAU, and the RO-DBT group was significantly advantageous in increased emotional processing and expression, psychological flexibility, and the number of participants that attained partial remission (Lynch et al., 2018).

1.6. DBT Skills Training as Stand-Alone Treatment

DBT skills training has long been adapted and used as a stand-alone treatment before the establishment of its legitimacy as one, due to the increased demand for DBT as opposed to the limited number of trained therapists and DBT-providing treatment centers as well as the high cost of implementing a standard DBT program (Carmel & Rose, 2015). Linehan and colleagues (2015) conducted a dismantling study of standard DBT to gauge the respective efficacies of its treatment components with BPD patients at high risk for suicide, comparing standard DBT, DBT individual therapy sans skills training (DBT-I), and DBT skills training sans individual therapy (DBT-S). Their results demonstrated that standard DBT was no more efficacious in reducing suicidal behavior and psychiatric hospitalizations than other conditions, and those conditions that incorporated skills training produced significantly superior improvements in depression, anxiety, and self-injurious behaviors than DBT-I, suggesting that skills training is a necessary and contingently sufficient component of DBT, depending on the aims, setting, and targeted population of an adaptation.

Although the skills training within standard DBT takes a year to complete, adapted versions for stand-alone use may vary in overall length, the length of each module, and the skills included in each module (Linehan, 2015a). Researchers and practitioners are advised to make adaptation decisions based on the aims of the program, available resources, and practicalities of application while consulting relevant literature to adhere to the evidence base (Cowperthwait, Wyatt, Fang, & Neacsiu, 2018). A recent systematic review of the stand-alone use of DBT skills training points out that while such use appears feasible for a variety of problems,

populations, and settings, research is still in its early stage for many areas of stand-alone use, with existing studies largely lacking methodological rigor in the form of randomization, multiple assessment points, control groups, and evaluation of treatment fidelity (Valentine, Bankoff, Poulin, Reidler, & Pantalone, 2015).

In addition to the routine target population of DBT suffering with BPD and self-harm, stand-alone DBT skills training has been studied in clinical samples with neurodevelopmental, conduct, mood, and eating disorders, and in community samples with diverse problems. A 13-week adaptation of DBT skills training was more efficacious than standard group therapy in terms of fostering treatment adherence and lowering depressive, anxious, and psychotic symptoms, irritability, and affective instability in borderline individuals; however, there were no treatment effects of the intervention on suicidal and self-harming behaviors (Soler et al., 2009). Suicidal patients with BPD who underwent a 20-week adapted DBT skills program displayed larger decreases in anger and suicidal and self-harming behaviors, and greater increases in emotion regulation and distress tolerance than waitlist controls (McMain, Guimond, Barnhart, Habinski, & Streiner, 2017). A 6-week DBT-informed skills training named “Living Through Distress” for transdiagnostic self-harm in an inpatient setting was effective in improving emotion regulation and reducing episodes of self-harm compared to TAU, which was maintained at the 3-month follow-up (Gibson, Booth, Davenport, Keogh, & Owens, 2014).

A 14-week adapted DBT skills training group was more efficacious than a discussion group in alleviating ADHD symptoms of adults as an adjunct to a stable medication regimen (Hirvikoski et al., 2011). A 6-week modified DBT skills training for adults with ADHD in mandatory care for comorbid substance abuse was effective in reducing self-reported symptoms of ADHD and enhancing psychological well-being (Muld, Jokinen, Bölte, & Hirvikoski, 2016). An augmented DBT skills group for adult ADHD patients with poor response to stimulants resulted in significant improvements in their ADHD symptoms, anger, depression, and hopelessness (Cole et al., 2016). In a forensic setting, a 13-week adapted DBT skills group for intellectually disabled convicts of violent crimes showed diminished levels of risk and incident reports with elevated adaptive behavior and overall functioning (Sakdalan, Shaw, & Collier, 2010). An 18-week adaptation of DBT skills training for intellectually disabled clients and their support staff promoted positive changes in psychological well-being, distress, and global functioning that were maintained at the 4-month follow-up (Crossland, Hewitt, & Walden, 2017).

A pilot study of a 16-week DBT skills training adapted for treatment-resistant depression demonstrated that the training resulted in significant alleviation of refractory depressive symptoms compared to the waitlist control group as showed by both self-report and clinician-administered measures of depression (Harley, Sprich, Safren, Jacobo, & Fava, 2008). With respect to bipolar disorder, a 12-week adapted DBT skills and psychoeducation program produced significant improvements in attendees compared to waitlist controls in affective control, depressive symptoms, and mindfulness while decreasing emergency service utilization and psychiatric

hospitalizations (Van Dijk, Jeffrey, & Katz, 2013), and another study of a 12-week DBT skills training adapted for bipolar patients as an adjunctive treatment, while failing to demonstrate an effect for depressive and manic symptoms, presented significantly higher scores in measures of mindfulness and distress tolerance and lower ones in measures of emotion dysregulation and reactivity pre- to posttreatment (Eisner et al., 2017).

A number of studies examine the utility of DBT skills training as stand-alone treatment for binge eating and emotional overeating. Two studies conducted with individuals seeking weight management services who present emotional overeating problems attest to the effectiveness of adapted DBT skills training with this population; the first study featuring a 20-week adapted DBT skills training reported significantly reduced emotional overeating, ED-related symptoms, and depressive symptoms while promoting weight loss or maintenance, which were maintained at the 6-month follow-up (Roosen, Safer, Adler, Cebolla, & van Strien, 2012); the second study involving a 12-week DBT skills program reported significant improvements in participants' emotional overeating behavior, difficulties with emotion regulation, and mindfulness levels, while these changes were preserved at the 3-month follow-up (Beaulac, Sandre, & Mercer, 2019). Another study with a community sample of obese individuals demonstrated significantly lowered binge eating, emotional eating and depression with significantly elevated intuitive eating and emotion regulation following a 10-week adapted DBT skills program (Canclan, de Souza, Liboni, Machado, & Oliveira, 2019). An investigation with individuals presenting clinical or subthreshold levels of binge eating and BN compared supervised self-monitoring with DBT diary cards to a 15-

week adaptation of DBT skills training; the results pointed at equivalent effectiveness of the interventions in decreasing binge eating and bulimic behaviors, while the training led to significant improvements in many facets of disordered eating as well (Klein, Skinner, & Hawley, 2013). In an RCT of a 20-week adapted DBT skills training vs supportive group therapy for BED, treatment retention was higher and treatment gains in the form of reductions in binge eating episodes and achieving abstinence from binge eating were attained more rapidly for participants in the DBT skills group (Safer, Robinson, & Jo, 2010).

Adapted DBT skills training was further found to be significantly effective in decreasing internalizing, externalizing, and depressive symptoms of adolescents with oppositional defiant disorder (Nelson-Gray et al., 2006), reducing seizure frequency and severity in conversion disorder (Bullock, Mirza, Forte, & Trockel, 2015), fostering abstinence and functional emotion regulation skills in alcohol dependence (Maffei, Cavicchioli, Movalli, Cavallaro, & Fossati, 2018), ameliorating symptoms of traumatic stress, depression, and interpersonal difficulties in female survivors of childhood and/or recent abuse in detainment (Bradley & Follingstad, 2003), and improving social adjustment, depressive symptoms, and psychological distress in female survivors of domestic abuse (Iverson, Shenk, & Fruzzetti, 2009).

Stand-alone DBT skills training has also been utilized in community settings to address transdiagnostic and multiproblem samples. In a community sample of participants with single or multiple Axis I and/or BPD diagnoses, a single 6-month

course of DBT skills training was effective in decreasing depressive symptoms and general psychiatric distress, and increasing social functioning and quality of life (Blackford & Love, 2011). In another community study with the same inclusion criteria as above, a single course of DBT skills training significantly improved a range of mental health outcomes including self-esteem, self-care, social functioning, addictive behaviors, anxiety, and depression (Vickers, 2016). An RCT of an adapted 16-week DBT skills program vs an activity-based support group showed that the skills program was significantly efficacious in increasing emotion regulation, DBT skills use, and improving anxiety symptoms in a transdiagnostic sample of individuals who had had different anxiety and/or mood disorders and presented significant emotion regulation difficulties (Neacsiu, Eberle, Kramer, Wiesmann, & Linehan, 2014). In a controlled trial of a 9-week RO-DBT skills training for outpatients of a mental hospital presenting with diverse problems who scored highly on a measure of overcontrol, the training was significantly efficacious compared to TAU in decreasing overall psychopathology and emotional overcontrol, and increasing DBT skills use and emotional flexibility, while treatment gains were maintained at the 3-month follow-up (Keogh, Booth, Baird, & Gibson, 2016).

1.7. DBT in Educational Settings

Students of higher education are vulnerable to a series of idiosyncratic stressors and risk factors (Cleary, Walter, & Jackson, 2011), and prevalence of mental health problems and a corresponding demand for on-campus mental health services in this population are on the rise (Storrie, Ahern, & Tuckett, 2010; Watkins, Hunt, & Eisenberg, 2011). Longitudinal studies suggest that the nature and complexity of their

presenting problems also shifted from mild psychopathology and informational and guidance needs to more severe psychopathology (Prince, 2015). Undertreated or untreated mental health problems in college students adversely affect their academic success, engagement with life on campus, and degree completion (Eisenberg, Golberstein, & Hunt, 2009; Salzer, 2012).

Although there are barriers to achieving high fidelity in DBT's implementation in college counseling services, such as number of therapists, their access to intensive training, and limited time for DBT modes other than the skills training in the face of productivity demands (Chugani & Landes, 2016); the well-established efficacy of DBT with complex, severe, and comorbid presentations, and its adaptability in terms of treatment length and modalities render it a suitable and feasible treatment program for college counseling services (Chugani, 2017). Both standard DBT and stand-alone DBT skills training have been adapted for application in educational settings to address the increasing demand for tackling the mental health problems of students with an evidence-based and cost-effective approach (Uliaszek, Chugani, & Williams, 2018), and, recently and increasingly, to prevent the development of such problems (Mazza & Dexter-Mazza, 2018; Üstündağ-Budak & Özeke-Kocabaş, 2019).

To this date, three studies compared standard DBT to alternative treatments offered in college counseling services. An RCT of 1-year standard DBT and therapy by experts for suicidal students who had had at least one episode of self-injury and met 3 or more diagnostic criteria for BPD reported standard DBT to be significantly more

efficacious compared to the control condition in reducing suicidality, self-injuring behaviors, depressive symptoms, and the number of BPD criteria the students meet while enhancing their social adjustment, which were maintained at the 6-month follow up (Pistorello, Fruzzetti, MacLane, & Gallop, 2012). The results of a pilot study comparing standard DBT to psychodynamic therapy for students with BPD pointed out DBT's superiority in decreasing the number of psychiatric and drug-related hospitalizations, and the number of leaves taken from studies (Engle, Gadischkie, Roy, & Nunziato, 2013). A pretest-posttest design of standard DBT for students presenting with a wide range of problems including suicidality, self-injurious and risky behaviors, disordered eating, substance abuse, behavioral addictions, and BPD, indicated effectiveness of the DBT program in significantly reducing symptoms and improving problem areas of self-dysregulation, emotion dysregulation, behavioral dysregulation, and interpersonal dysregulation targeted by DBT (Panepinto, Uschold, Olandese, & Linn, 2015).

Due to the aforementioned barriers to the implementation of standard DBT, group skills training is the most widely applied mode of DBT in college counseling centers (Chugani & Landes, 2016), and trials of stand-alone treatment have been studied more extensively than standard DBT. Chugani and colleagues (2013) investigated the effectiveness of an 11-week adapted DBT skills training for students with Cluster B personality disorders or significantly impairing Cluster B traits. Compared to TAU, the program was significantly effective in inculcating coping skills and enhancing skills use, promoting emotion regulation, and reducing dysfunctional coping. A pilot study of a modified 8-week DBT skills group for students diagnosed

with BPD reported significant improvements in students' depressive symptoms, BPD traits, and functional coping strategies such as problem solving, seeking professional help, and self-protection, while remediating maladaptive coping styles such as self-blame (Meaney-Tavares & Hasking, 2013).

An RCT of an 8-week adapted DBT skills training vs a control condition of receiving DBT skills handouts for 8 weeks for students diagnosed with ADHD reported significant efficacy of the training in lowering attention-deficit and hyperactive symptoms and improving executive functioning as well as quality of life compared to the control group at the end of interventions and the 3-month follow up (Fleming, McMahon, Moran, Peterson, & Dreessen, 2015). Another RCT by Uliaszek and colleagues (2016) utilizing a severely emotionally dysregulated student sample with differing symptom presentations aggregated on a referral basis compared 12-weeks of DBT skills training to group positive psychotherapy. Their results did not indicate superior efficacy of the DBT skills group in decreasing symptoms and promoting functional coping and well-being, however, the DBT group had significantly lower treatment dropout and higher participation, engagement, and therapeutic alliance, suggesting advantageous acceptability and feasibility of the treatment for this population.

A series of studies of DBT skills training as stand-alone treatment with college students have modified the training to include specific skills modules while discarding others or utilized only a selection of DBT skills in order to dismantle the comparative

effectiveness of training components and meet time constraints. A pilot study conducted with an emotionally dysregulated student sample aiming to gauge the comparative efficacy of two different forms of 8-week adapted DBT skills groups, an emotion regulation skills-only group and a combined emotion regulation and mindfulness skills group, demonstrated equivalent efficacy of the groups in decreasing depression, anxiety, stress, negative affect, and dysfunctional coping, increasing mindfulness, emotion regulation, positive affect, and DBT skills use, and promoting social and occupational adjustment, suggesting a lack of additional benefit from a mindfulness module (Rizvi & Steffel, 2014). Another pilot study utilized an emotionally dysregulated student sample with serious and diverse problems to gauge the effectiveness of a modified DBT skills program open to enrollment throughout the semester comprising only of the mindfulness and distress tolerance modules. The results demonstrated the program to be significantly effective in increasing DBT skills use, curtailing dysfunctional coping, and reducing difficulties with emotion regulation (Muhomba, Chugani, Uliaszek, & Kannan, 2017). Lastly, a recent study compared the effectiveness of an 8-week mindfulness training incorporating the “What” and “How” skills from the mindfulness module of DBT skills training and elements from Kabat-Zinn’s MBSR given face-to-face or through distance learning to a waitlist control group for students with test anxiety. The researchers reported significant reductions in test anxiety and general anxiety with improvements in facets of mindfulness for participants in the experimental groups, barring the facet “Observe” in the distance learning group (Lothes, Mochrie, Wilson, & Hakan, 2019).

1.8. The Preventive Value of DBT

Preventive mental health refers to promoting resilience, coping, and well-being of persons in the face of common risk factors faced by the general population, the effect sizes of which may accumulate over time to increase vulnerability, or idiosyncratic risk factors faced by at-risk populations, before the development of psychological disorders or symptoms, as opposed to intervention after such adversities have already developed (Arango et al., 2018). Preventive mental health is advantageous both on an individual and social scale. If effective, it protects the individual from the burden of psychological disorders or symptoms, many of which come in episodes and are likely to recur, that cause suffering and dysfunction in many life areas (Wittchen, Lieb, Pfister, & Schuster, 2000). On a social scale, preventive efforts and programs are much more cost-effective and likely to take place in group or community settings than psychiatric and psychotherapeutic interventions, which are individually tailored, in high demand, time-consuming, expensive, not covered by basic insurance, and create a budgetary toll if covered by socialized healthcare (Bhui & Dinos, 2011).

Reviews of literature on different areas of preventive mental health point out that many preventive programs adhere to the basic principles of behavioral interventions, emphasizing both instruction and contingency management, and incorporating some form of psychoeducation or skills training (Mrazek & Haggerty, 1994). The most recent trend in DBT literature is the preventive value and use of DBT skills training to promote resilience and well-being in targeted at-risk and nonclinical populations (Üstündağ-Budak & Özeke-Kocabaş, 2019). Although DBT was originally developed

for a disorder as serious and impairing as BPD, the skills within DBT may, and are increasingly shown to, foster functional coping, resilience, and well-being in any person. This is because they are life skills, thought to be absent or inadequate in borderline persons within the skill deficit model of DBT, which hinder building a life worth living (Linehan, 1993a). Thus, they can help anyone in achieving just that. In her autobiography, Linehan (2020), the creator of DBT, expresses the value of DBT skills with the following words:

These same skills are extraordinarily important to each and every one of us in our daily lives. And, as such, you could call them life skills. They help us navigate relationships we have with loved ones, friends, colleagues at work, and the world in general, and they help us manage our emotions and overcome fears. They are important in how well we manage in the practical realm, such as doing a job well. (p. 25)

As I have said, these are also life skills that can help every one of us live more fulfilled and emotionally stable lives. They are the stuff of everyday life. (p. 177)

The current and limited literature on the preventive usage of DBT skills training involves studies with students of post-primary and higher education, and treatment providers and caregivers dealing with difficult patients. The importance for prevention programs targeting stress management to prevent patient stigma, patient abuse, and burnout among mental healthcare workers had been emphasized early on in the literature (Taylor-Brown, Johnson, Hunter, & Rockowitz, 1982), and DBT skills training has been utilized towards this end. Huffman and colleagues (2005) describe with a hypothetical case report of a patient hospitalized following a suicide attempt how DBT skills could be applied to difficult staff-patient situations invoking distress for the treatment providers and may disrupt proper care.

An RCT in a state-funded clinic for personality disorders (PDs) compared the efficacy of a 2-day ACT-based vs DBT skills training-based workshop for staff working with PD patients primarily targeting the prevention of patient stigmatization and betterment of staff-patient relationships (Clarke, Taylor, Bolderston, Lancaster, & Remington, 2015). The results demonstrated that both workshops were efficacious in improving the primary targets of staff attitudes and staff-patient relationships, however, they did not significantly affect secondary targets such as distress and burnout in staff. Results of another study aiming to gauge the effectiveness of a 6-week adapted DBT skills training for staff in a child and adolescent psychiatry ward of a hospital in preventing burnout and BPD stigma in staff reported that the program was successful in equipping the staff with DBT skills and significantly improved their attitudes towards BPD and degree of burnout (Haynos, Fruzzetti, Anderson, Briggs, & Walenta, 2016). On the subject of the preventive use of DBT for caregiver burnout, Drossel and colleagues (2011) investigated the effectiveness of an adapted 9-week DBT skills training as a support and prevention program for family caregivers of dementia patients identified as at risk for elder abuse and neglect in a community clinic. Results of the study indicated the program to be significantly effective in promoting the caregivers' functional coping, psychological well-being, social adjustment, and further seeking of professional help if needed, while reducing their level of fatigue.

Adolescents and young adults, who face distinctive risk factors associated with their developmental stage of life, such as conflict in family, peer, and romantic relationships, pressure for academic performance, high-risk behaviors, and transition

to college and/or work life, who also are at an advantageously early age for preventive interventions, are common targets of preventive mental health efforts, frequently addressed through educational institutions (Macklem, 2014). Preventive programs are offered through high school and college counseling services or integrated in curricula as courses on mental health and coping skills, and research has shown these efforts to be effective in facilitating functional coping and reducing depression, anxiety, and stress levels (Schiraldi & Brown, 2002; Frydenberg et al., 2004). In the same vein, DBT skills training is increasingly adapted and utilized as a preventive and protective measure for these populations (Üstündağ-Budak & Özeke-Kocabaş, 2019).

At the post-primary school level, DBT Skills Training for Emotional Problem Solving for Adolescents (DBT STEPS-A; Mazza, Dexter-Mazza, Miller, Rathus, & Murphy, 2016) is a preventive program developed to equip students with DBT skills to promote emotional, behavioral, and interpersonal regulation as well as additional decision-making and problem-solving skills to aid them in the developmental tasks associated with their age, and to protect against suicidal, self-injuring, and other high-risk behaviors. DBT STEPS-A is a manualized adaptation and the program is designed for integration into the curriculum by general education staff, delivered by schoolteachers for the duration of an academic year (Mazza & Dexter-Mazza, 2018). Findings of RCTs by program developers are still in press, however, a group of independent researchers conducted a pilot study of DBT STEPS-A in two high schools. Compared to no-treatment controls, students who were delivered the program demonstrated significant reductions in emotional symptoms, such as depression, anxiety, and social distress, and internalizing problems; however, the program did not

significantly result in increased DBT skills use and reduced dysfunctional coping (Flynn, Joyce, Weichrauch, & Corcoran, 2018).

Two other studies examined the effectiveness of DBT skills training as a preventive intervention for adolescent students of post-primary education. Zapolski and Smith (2017) conducted a pilot study of an adapted 9-week DBT skills program to reduce high-risk behaviors among middle schoolers with academic or behavioral concerns sampled on a referral basis. The program significantly diminished their likelihood to engage in risky behaviors, such as smoking, drinking, shoplifting, picking up fights, or cheating on exams while in an intensely positive or negative mood, and the effect was stronger for students high on impulsivity. A randomized controlled study investigating the efficacy of an adapted 6-week DBT skills training in preventing mental health symptoms in high school students compared to a waitlist control group failed to report significant changes in the primary outcomes of emotion regulation difficulties, depression, anxiety, and anger at post-intervention and 6-month follow-up assessments (Burckhardt et al., 2018). However, qualitative analysis of students' answers to evaluative open-ended questions indicated positive response to and benefits from the program in the form of high percentages of overall satisfaction with the program, and positive life changes, coping with negative emotions more skillfully, and moving towards positive emotional experiencing following the program.

At the university level, four recent studies from the USA, Australia, and Turkey investigated the preventive usage of DBT skills training to protect against mental

health symptoms and promote psychological well-being and resilience. Lee and Mason (2019) delivered a 4-week adapted DBT skills program to college students who have consulted the on-campus counselling services with academic, relationship, and adjustment issues and mild emotional symptoms. Their results demonstrated significant effectiveness of the program in enhancing students' global mental health and resilience. Another study aiming to gauge the preventive effectiveness of an 8-week adapted DBT skills training group for Australian masters-level psychology trainees reported that compared to the no-treatment control group, adapted DBT skills training was significantly effective in increasing students' levels of vigor for their studies, emotional stability, mindfulness, and psychological flexibility while decreasing their level of burnout, and marginally significantly effective for dedication to their studies and meeting job demands, which were maintained at the 6-month follow up (Robins, Roberts, & Sarris, 2019).

In Turkey, Gülgez and Gündüz (2015) conducted a pilot study of an adapted 8-week DBT skills training program with students who scored highly on a faculty-wide screening for difficulties with emotion regulation. Compared to the no-treatment control group, the program was significantly effective in ameliorating students' emotion dysregulation. Lastly, Üstündağ-Budak, Özeke-Kocabaş, and Ivanoff (2019) investigated the effectiveness of an adapted 8-week DBT skills group and a 3-month DBT skills-graduate follow-up group, which had involved skills reviews and practice reminders following the main training, to prevent mental health symptoms and promote psychological well-being in a nonclinical sample of sophomore and junior college students. The results of the study indicated that the training was significantly

effective in decreasing general psychological distress of students at post-intervention, which was maintained and enhanced after the reinforcement of skills with the 3-month graduate group, and qualitative results suggested that the groups were acceptable and beneficial for students.

1.9. The Aim of the Study

Counseling psychology research in Turkey shows that, in line with the reviewed literature, Turkish university students also face idiosyncratic stressors and risk factors associated with university life, and they regularly consult on-campus counseling services and other sources of professional help for mild to moderate psychological symptoms and adjustment issues (Özgüven, 1992; Erkan, Cihangir-Çankaya, Terzi, & Özbay, 2011). These stressors include but are not limited to problems with motivation and time management, negative perceptions regarding faculty, classes, and academic assessments, worry about life after university, perceived loneliness, adjustment to novel living arrangements, adjustment to social life on campus, conflicts in family, peer, and romantic relationships, poor eating and sleeping habits, and financial problems (Gizir, 2005; Mercan & Yıldız, 2011; Aşçı, Hazar, Kılıç, & Korkmaz, 2015; İkiz & Mete-Otlı, 2015).

Most university students experience moderate levels of stress (Savcı & Aysan, 2014; Hancıoğlu, 2017) and suffer from depression and anxiety symptoms (Bozkurt, 2004). Studies report significant correlations between negative emotional experiencing of students with poor social adjustment (Erözkan, 2005), poor academic performance

(Kavakcı, Güler, & Çetinkaya, 2011), addictive, suicidal, and self-injurious behaviors (Hisli-Şahin & Durak-Batıgün, 2009; Odacı & Çıkrıkçı, 2017), and lower satisfaction with life (Güney, Kalafat, & Boysan, 2010). On the other hand, students with a repertoire of functional coping skills are much less likely to experience these problems and they demonstrate higher levels of resilience and psychological well-being (Özbay, Palancı, Kandemir, & Çakır, 2012; Gürkan, 2014). A number of studies suggest a mediating role of functional coping and problem-solving skills between stressors and risk factors and the development of mental health symptoms as opposed to positive emotional experiencing (Otrar, Ekşi, Dilmaç, & Şirin, 2002; Terzi, 2013; Kaya & Demir, 2017). This notion is in accordance with the equilibrium approach to well-being the current study employs, which proposes a necessary balance between the stressors and challenges the person faces with her intra- and interindividual sources of coping with and managing these stressors and challenges to achieve a state of well-being (Dodge, Daly, Huyton, & Sanders, 2012).

In university-wide survey studies, many students report dissatisfaction with psychosocial services on campuses (Ekinçi & Burgaz, 2007), and low to moderate willingness to seek professional psychological help (Kızıldağ, Demirtaş-Zorbaz, Gençtanırım, & Arıcı, 2012; Erkan, Özbay, Cihangir-Çankaya, & Terzi, 2012). These findings altogether show that programs offered by university counseling services or integrated into the university curricula targeting the learning and enhancement of coping skills for primary prevention, to prevent symptoms and disorders before their inception, and secondary prevention, to reduce the impact of and ameliorate ongoing mild to moderate problems (Gordon, 1983), are of utmost importance for Turkish

university students' well-being, adjustment, academic performance, and successful transition into graduate studies and/or professional life.

In light of the review of the limited but promising literature of the preventive value and use of DBT skills training as an intervention fostering functional coping and remediating dysfunctional coping, the main aim of the current study is to discern and evaluate the effectiveness of a 9-week adapted DBT skills training as a preventive program for increasing DBT skills use and reducing dysfunctional coping, mental health symptoms (depression, anxiety, and stress), and emotion regulation difficulties of a nonclinical sample of junior and senior Turkish university students compared to a no-treatment control group. The current study also involves a qualitative component to gauge the specific benefits of the program experienced by the participants, its acceptability for them, their attitudes and perceptions towards it, and suggestions for further development.

The first set of study hypotheses is that, following the intervention, there will be significant changes in positive directions in each of the outcome variables, as in increased DBT skills use or decreased difficulties with emotion regulation, etc., for the DBT skills group, as opposed to no changes, due to their lack of intervention, for the control group. The second set of hypotheses of the study posits that, at posttreatment, there will be significant differences in the outcome variables between the DBT skills group and the control group, favoring the DBT skills group for each variable.

The choice of the outcome variables of the current study resides in the theoretical background of DBT skills training as an intervention for emotional and behavioral dysregulation by addressing skill deficits in these areas (Linehan, 2015a), and choices made in previous studies of efficacy and effectiveness of DBT skills training as a stand-alone treatment for various problems and populations (see Valentine et al., 2015, for a systematic review). DBT skills use and dysfunctional coping were measured to assess the effectiveness of the program in equipping the participants with DBT skills and discouraging dysfunctional coping strategies. Depression, anxiety, and stress were included to observe the effects of the program on these constructs of psychological distress widely experienced by university students in hopes of changes towards less negative emotional experiencing and more psychological well-being. Emotion regulation is the most comprehensive module of DBT skills training, and the intervention warrants its measurement apart from measuring overall skill acquisition given the theoretical background and content of the intervention, and the failure of the instrument for DBT skills in discerning the specific treatment gains made from each module (Neacsiu, Rizvi, Vitaliano, Lynch, & Linehan, 2010).

1.10. The Significance of the Study

As indicated by the reviewed literature, the preventive usage of DBT skills training as a stand-alone treatment for university students' mental health and well-being is an emergent and highly understudied topic. Four studies, two of them with Turkish university students, have addressed this potential of the training and reported promising results (Lee & Mason, 2019; Robins, Roberts, & Sarris, 2019; Gülgez & Gündüz, 2015; Üstündağ-Budak, Özeke-Kocabaş, & Ivanoff, 2019). A study

furthering the idea of the preventive value of DBT skills training will be a serviceable contribution to the literature. The specific additions of the current study to the existing research is investigating the replicability of the adaptation of the training to Turkish college students developed by Üstündağ-Budak, Özeke-Kocabaş, and Ivanoff (2019), the measurement of participants' DBT skills use and dysfunctional coping with the instrument recommended by Linehan (2015a) to quantify the effectiveness of a DBT skills training program, inclusion of a control group to increase methodological rigor and the reliability of the results, and a qualitative component to help discern the acceptability of and benefits from the program based on participants' individual experiences.

CHAPTER 2

METHOD

2.1. Participants

The current study followed a nonrandomized controlled pretest-posttest design with nonequivalent groups selected via convenience sampling. The experimental design included an experimental group and a no-treatment control group. All participants in the experimental group were undergraduate students from the Department of Psychology at Bahçeşehir University, enrolled in an elective course taught by Dr. Ayşe Meltem Üstündağ-Budak. These students were informed about DBT, the content, purpose, and benefits of DBT skills training, and the structure of the program in the first week of the course. Volunteering students were required to stay for the DBT skills training after each class starting the following week. They were rewarded course credit for their participation.

For individuals in the experimental group, criterion for inclusion in the data analyses was attending a minimum of six sessions of the DBT skills training out of a total of nine. Although the original experimental group included 47 participants, 3

participants who did not attend any session after the pretreatment data collection and 5 participants who attended five or less sessions failed to meet the attendance criterion and their data were not included in the analyses. The final experimental group consisted of 39 individuals, 35 of whom were female ($M_{\text{age}} = 22.5$, $SD = 1.01$) and 4 of whom were male ($M_{\text{age}} = 21.5$, $SD = .58$).

Participants in the control group were psychology students who were not enrolled in Dr. Üstündağ-Budak's elective course in Bahçeşehir University, and undergraduate students from the Department of Philosophy at Mimar Sinan Fine Arts University. These students were informed of the design of the study and their contribution to it as controls, which entailed not undergoing DBT skills training. The incorporation of a control group in the form of a no-treatment control group was justified since participants in this group were not treatment seekers due to the preventive nature of the intervention, they could have taken the course in which Dr. Üstündağ-Budak provided DBT skills training but had chosen not to, and they were aware that, if they opted to, they could take the course and attend the DBT skills training in the next fall semester. Participation in the control group was voluntary and awarded with course credit. The control group consisted of 33 participants, 28 of whom were female ($M_{\text{age}} = 22.3$, $SD = 1.21$) and 5 of whom were male ($M_{\text{age}} = 23.8$, $SD = 1.48$). The total number of participants in the study was 72, with 63 female ($M_{\text{age}} = 22.4$, $SD = 1.02$) and 9 male ($M_{\text{age}} = 22.8$, $SD = 1.64$) participants.

2.2. Materials

Materials for the study included informed consent form for the experimental group (Appendix A), two different batteries for pretest and posttest data of the experimental group, and one battery for the control group. Pretest battery for the experimental group and the battery for the control group both included demographic information forms and Turkish versions of the Dialectical Behavior Therapy Ways of Coping Checklist (DBT-WCCL; Neacsiu et al., 2010), Depression Anxiety Stress Scale (DASS; Lovibond & Lovibond, 1995), and Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004). Pretest and posttest batteries for the experimental group also included open-ended questions to gather qualitative data.

2.2.1. Demographic Information Forms

Three different demographic forms were designed for use at the pretest administration to the experimental group (Appendix B), posttest administration to the experimental group (Appendix C), and both pretest and posttest administration to the control group (Appendix D). The demographic forms aimed to obtain information from both groups on subject variables relevant to the aims of the study. Variables operationalized by questions common to the demographic information forms given to both groups at the pretest included age, gender, previous mindfulness training experience, currently applicable medical or psychiatric diagnoses, current regular or psychiatric medication use, and currently being in psychotherapy. Demographics of the sample in terms of these variables may be found in Table 2.1. The demographic form given to the experimental group at the posttest also questioned whether

participants in this group received a psychiatric diagnosis or started psychotherapy during the nine weeks of DBT skills training.

Table 2.1. Demographic characteristics of the sample

Subject Variables	Experimental Group (N = 39)				Control Group (N = 33)			
	<i>M</i>	<i>SD</i>	N	%	<i>M</i>	<i>SD</i>	N	%
Age	22.38	1.02			22.48	1.34		
Gender								
Female			35	89.74			28	84.85
Male			4	10.26			5	15.15
Department								
Psychology			39	100			28	84.85
Philosophy			0	0			5	15.15
Previous mindfulness training								
Yes			8	20.51			7	21.21
No			31	79.49			26	78.79
Current medical diagnosis								
Yes			2	5.13			3	9.09
No			37	94.87			30	90.91
Regular medication use								
Yes			8	20.51			4	12.12
No			31	79.49			29	87.88
Current psychiatric diagnosis								
Yes			5	12.82			3	9.09
No			34	87.18			30	90.91
Psychiatric medication use								
Yes			2	5.13			1	3.03
No			37	94.87			32	96.97
Current psychotherapy								
Yes			4	10.26			0	0
No			35	89.74			33	100
Psychiatric diagnosis received during training								
Yes			0	0				
No			39	100				
Psychotherapy started during training								
Yes			5	12.82				
No			34	87.18				

The demographic forms for the pretest and posttest data of experimental group were utilized to gather qualitative data with select open-ended questions. At the pretest, participants in this group were asked to give at least two reasons for participation in the study. At the posttest, eight open-ended questions were given with the purpose of qualitative evaluation of the DBT skills training by participants in this group. These questions included what personal goals in participation they did and did not achieve, whether the training was helpful, if it was helpful, the ways in which it was helpful, which subject or skill they benefited from the most, the thoughts and emotions they experienced in the course of the training, whether they experienced any differences in themselves, if they did, what those differences were, the differences they experienced in their lives after the training, which methods and skills they deemed as unhelpful, their suggestions of methods and skills that could have been included in the program if they have any, how they thought the training was conducted, and their evaluation of group leaders.

2.2.2. Dialectical Behavior Therapy Ways of Coping Checklist (DBT-WCCL)

The DBT-WCCL was developed to measure the effectiveness of DBT skills training in terms of increasing the use of DBT skills and decreasing the use of dysfunctional coping strategies (Neacsiu et al., 2010). Before the development of the DBT-WCCL, the efficacy of DBT skills training was measured in clinical trials by asking the participants to record the skills they used daily in diary cards. However, this method was far from ideal due to several reasons. Diary cards were designed as clinical tools, not tools for measurement. The accuracy of the reports was questionable since

they could be affected by social desirability bias due to their discussion with therapists in each session. Clients could fail to report the skills they used correctly due to not knowing or remembering the name of or acronym for those skills. Finally, the diary card method could not be used in trials that did not incorporate standard DBT due to the lack of the individual therapy component of the interventions.

The DBT-WCCL consists of two subscales, three factors, and a total of 59 items. The items list functional –based on DBT skills– and dysfunctional ways of coping. Participants rate how often they use the listed ways of coping on a scale between 0 (Never Used) and 3 (Regularly Used). The DBT Skills subscale involves 38 items that aim to measure the acquisition and usage of DBT skills. Although composed of items selected to represent skills from distinct skills modules, the DBT Skills subscale is not divided into further subscales of mindfulness, interpersonal effectiveness, emotion regulation, and distress tolerance because results of the measure development study did not yield factors corresponding to skill modules. The Dysfunctional Coping subscale includes 21 items: 15 in the General Dysfunctional Coping Factor and 6 in the Blaming Others Factor. This subscale measures how often the participant resorts to dysfunctional and unfavorable (avoidant, accusatory, etc.) ways of coping. Although the Dysfunctional Coping subscale involves two subfactors; Neacsiu and colleagues (2010) recommend using and reporting the subscale in total as an overall indicator of the usage of various dysfunctional coping strategies unless differentiating the subfactors is meaningful in the context of a particular study.

In the original study with highly suicidal or drug-dependent BPD patient cohorts, internal consistency values of the DBT Skills subscale ranged between $\alpha = .92$ and $\alpha = .96$, while those of the Dysfunctional Coping subscale were between $\alpha = .87$ and $\alpha = .93$. Test-retest reliability for the DBT Skills subscale was .71 with BPD patient controls and .66 with healthy controls, while not calculated for the Dysfunctional Coping subscale. In a study aiming to establish the internal consistency of the DBT Skills subscale in a diagnostically diverse sample, the authors reported a Cronbach's alpha of .94 (Stein, Hearon, Beard, Hsu, & Björgvinsson, 2016). These values show that the DBT-WCCL has excellent internal consistency and moderate test-retest reliability.

2.2.2.1. Translation of the DBT-WCCL to Turkish and its reliability

The DBT-WCCL has not yet been adapted to the Turkish language. For the purposes of the current study, the DBT-WCCL was translated to Turkish in close accordance with the well-accepted guidelines of translation of self-report measures to another language, without a complete adaptation. These guidelines describe the steps of translation of self-report measures as (1) creating two translations, (2) synthesizing and reconciling the two translations to create a single provisional translation, (3) back translation, (4) expert committee review, and (6) pretesting with cognitive interviews (Beaton, Bombardier, Guillemin, & Ferraz, 2000; Lenz, Soler, Dell'Aquila, & Uribe, 2017).

In the current study, the original form of the DBT-WCCL (Appendix E) was translated by the researcher and a doctoral student of psychology, then the two translations were synthesized. The provisional translation was not back translated. After the synthesis, an expert committee consisting of two assistant professors and a research assistant from the Department of Psychology at Bahçeşehir University reviewed the provisional translation. The provisional translation was revised according to their criticisms and suggestions. After the expert committee review, cognitive interviews were conducted with 11 graduate students in psychology. They were asked to think aloud and share their thoughts about the items as they filled the questionnaire, ask questions if they did not understand an item, suggest alternative translations if they had any, and give feedback regarding the clarity and quality of the translation. The translation went under its final revision following the cognitive interviews and was used in the study as the Turkish form of the DBT-WCCL (Appendix F). In the current study, internal consistencies of the DBT Skills subscale and Dysfunctional Coping subscale calculated with the pretest scores of all participants were $\alpha = .90$ and $\alpha = .87$, respectively.

2.2.3. Depression Anxiety Stress Scale (DASS)

Developed by Lovibond and Lovibond (1995), the DASS is a self-report inventory of negative emotional states experienced within the last week before measurement. It consists of 42 items and the three subscales of Depression, Anxiety, and Stress. Each subscale has 14 items that are rated on a four-point Likert-type scale ranging between 0 (Did not apply to me at all) and 3 (Applied to me very much or most of the time). The Depression subscale has items representing dysphoria,

hopelessness, devaluation of life, self-deprecation, lack of interest or involvement, anhedonia, and inertia. Autonomic arousal, skeletal musculature effects, situational anxiety, and subjective experiences of anxious affect are represented in the Anxiety subscale. The Stress subscale includes items measuring difficulty with relaxing, nervous arousal, being easily upset or agitated, irritability, overreaction, and impatience. The DASS total score is commonly used as a measure of general psychological distress (Henry & Crawford, 2005).

Internal consistencies of the Depression, Anxiety, and Stress subscales in the normative sample of the scale development study were $\alpha = .91$, $\alpha = .84$, and $\alpha = .90$; in another study aiming to establish convergent validity of the inventory with other measures of depression and anxiety, they were $\alpha = .91$, $\alpha = .81$, and $\alpha = .89$ (Lovibond & Lovibond, 1995). DASS has high construct validity with item-scale correlation values between .36 and .80 for Depression, between .34 and .64 for Anxiety, and between .40 and .76 for Stress subscales. Test-retest reliability of the subscales over a three-year period were .29 for Depression, .41 for Anxiety, and .39 for Stress (Lovibond, 1998). These values indicate that although the DASS subscales show excellent internal consistency, they have low temporal stability because the DASS measures negative emotional experiences in the last week rather than in general, and has questions worded to measure states rather than traits pertinent to negative emotional experiencing.

The DASS was adapted to the Turkish language by Bilgel and Bayram (2010) using a large university sample. The three-factor structure were replicated. The adapted version (Appendix G) shows good construct validity with item-scale correlation values ranging from .46 to .75 for items in the Depression subscale, .21 to .68 for items in the Anxiety subscale, and .20 to .75 for items in the Stress subscale. Convergent validity of the Turkish adaptation of the DASS was determined with significantly high correlations between the Turkish adaptation and an established measure of depression and anxiety. Internal consistency of the Depression, Anxiety, and Stress subscales were $\alpha = .92$, $\alpha = .96$, and $\alpha = .98$, respectively. In the present study, internal consistencies of the Depression, Anxiety, and Stress subscales calculated with the pretest scores of all participants were $\alpha = .94$, $\alpha = .91$, and $\alpha = .92$, respectively.

2.2.4. Difficulties in Emotion Regulation Scale (DERS)

The DERS is a self-report measure of emotional dysregulation developed by Gratz and Roemer (2004) consisting of 36 items, 10 of which are reversely coded. Scores on the DERS correlate positively with measures of psychopathology and negatively with those of psychological well-being (Ritschel, Tone, Schoemann, & Lim, 2015). Participants rate the DERS items enlisting problems they would face with emotion identification, awareness, and regulation on a five-point Likert-type scale ranging between 1 (Almost never) to 5 (Almost always). Instructions of the DERS do not specify a time period to keep in mind while rating items and items are worded with the intention of measuring emotion regulation as a trait rather than state, which led to the development of State Difficulties in Emotion Regulation Scale (S-DERS;

Lavender, Tull, DiLillo, Messman-Moore, & Gratz, 2017), not yet available in the Turkish language.

The DERS consists of six subscales which are named Goals, Strategy, Nonacceptance, Impulse, Clarity, and Awareness. The Goals subscale involves items targeting difficulties in engaging goal-directed behavior to regulate emotions. Items in the Strategy subscale target difficulty with using functional and effective emotion regulation strategies. The Nonacceptance subscale measures the degree of difficulty in accepting emotional experiences. The Impulse subscale consists of items targeting giving into impulsive behavior in the face of difficult emotions. Items in the Clarity subscale measures lack of emotional clarity which manifests as difficulties with identifying and making sense of emotions. The Awareness subscale has items targeting difficulties with being aware of emotions such as paying attention to, acknowledging, and validating one's emotions. The DERS total score represents global difficulties in emotion regulation.

The scale development study, which was conducted with a university sample, reports the internal consistency of Goals, Strategy, Nonacceptance, Impulse, Clarity, and Awareness subscales as $\alpha = .89$, $\alpha = .88$, $\alpha = .85$, $\alpha = .86$, $\alpha = .84$, and $\alpha = .80$, respectively (Gratz & Roemer, 2004). Cronbach's α for total DERS scores was .93. Item-scale correlations of items in the six subscales ranged from .59 to .81 for Goals, from .46 to .75 for Strategy, from .52 to .71 for Nonacceptance, from .45 to .76 for Impulse, from .56 to .71 for Clarity, and from .49 to .67 for Awareness. Test-retest

reliability of the DERS in total was .88 within a period of eight weeks with correlation coefficients for the subscales ranging between .57 and .89. These values demonstrate that the DERS has high internal consistency, good temporal stability, and adequate construct validity.

The DERS was adapted to the Turkish language by Rugancı and Gençöz (2010) utilizing a university sample, replicating of the factor structure of the original form. Overall internal consistency was found to be $\alpha = .94$ with Cronbach's alpha coefficients for the six subscales of Goals, Strategy, Nonacceptance, Impulse, Clarity and Awareness being $\alpha = .90$, $\alpha = .89$, $\alpha = .83$, $\alpha = .90$, $\alpha = .82$, and $\alpha = .75$, respectively. The test-retest reliability of the Turkish version (Appendix H) in total was .83; .72 for the Goals subscale, .85 for the Strategy subscale, .60 for the Nonacceptance subscale, .68 for the Impulse subscale, .69 for the Clarity subscale, and .72 for the Awareness subscale. All items had factor loadings above .35 and the total variance explained by the replicated six-factor structure was 64%. These values demonstrate that the Turkish adaptation of the DERS has internal consistency and temporal stability equivalent to the original form with good construct validity. In the current study, reliability analyses with pretreatment scores from all participants showed that the overall internal consistency of the DERS was $\alpha = .92$, while the internal consistencies of the Goals, Strategy, Nonacceptance, Impulse, Clarity, and Awareness subscales were $\alpha = .86$, $\alpha = .86$, $\alpha = .87$, $\alpha = .86$, $\alpha = .76$, and $\alpha = .84$, respectively.

2.2.5. Adapted DBT Skills Training

The adaptation of DBT skills training utilized in this study consisted of nine 1,5-hour sessions, run over a course of nine consecutive weeks in the fall semester. The training was given by Dr. Ayşe Meltem Üstündağ-Budak, a DBT therapist certified by the Linehan Institute, and assisted by the researcher, a DBT skills trainer certified by Behavioral Tech, a Linehan Institute training company. Sessions were conducted after a break following each class of the course in which participants in the experimental group were enrolled. The training began with a 4-week mindfulness module, followed by a 2-week emotion regulation module, a 2-week interpersonal effectiveness module, and a 1-week distress tolerance module. The complete program with the details of skills taught in each module may be found in Table 2.2. This program was similar to Üstündağ-Budak, Özeke-Kocabaş, and Ivanoff's (2019) adaptation of DBT skills training, which was found to be effective in reducing Turkish university students' level of psychological distress.

The four skill modules were delivered in accordance with the instructions of Linehan's DBT Skills Training Manual (2015a). The training was provided in participants' native language, Turkish, to foster engagement and participation, and to avoid participants' perception of the training as a course in which they had to perform. Skills were taught in a way that synthesized didactics and application with detailed instruction illustrated by real-life examples. Sessions were highly interactive with leaders encouraging active participation by participants in the form of questions as well as of examples and experiences. Skill acquisition was supported with the provision of corresponding handouts (Linehan, 2015b). Handouts were provided in

English due to the lack of a published translation. All participants were studying psychology in English and had excellent English comprehension, and were able to understand the content of the handouts. As home practice, participants were asked to review the handouts and to try to apply what they have learned to their lives. Practice reminders were provided through the university's online learning platform. Home practices were voluntary and only the volunteering participants shared their experience with their practice.



Table 2.2. Program structure of the adapted DBT skills training

Module	Session	Content	Handouts	Homework
Mindfulness	1	Orientation and introduction to DBT skills training; Definition, goals, and practice of mindfulness; Three states of mind, Wise Mind	Mindfulness Handouts 1, 1A, 2, 3	Practice mindfulness meditation, practice Wise Mind
	2	Mindfulness “What” Skills: Observe, Describe, Participate	Mindfulness Handouts 4, 4A, 4B, 4C	Practice Mindfulness “What” Skills
	3	Mindfulness “How” Skills: Non-Judgmentally, One-Mindfully, Effectively	Mindfulness Handouts 5, 5A, 5B, 5C	Practice Mindfulness “How” Skills
	4	Mindfulness review and practice		Practice mindfulness skills
Emotion Regulation	5	Goals of emotion regulation; Understanding and naming emotions; Functions of emotions; What makes it hard to regulate emotions; Emotion myths; Reducing biological vulnerability to Emotion Mind: PLEASE skills	Emotion Regulation Handouts 1, 2, 3, 4, 4A, 20	Practice observing and describing emotions, practice PLEASE skills
	6	Changing emotional responses: Checking the facts, acting the opposite, problem solving; Reducing vulnerability to Emotion Mind: Accumulating positive emotions, building mastery, coping ahead	Emotion Regulation Handouts 7, 8, 9, 10, 12, 14, 15, 17, 19	Practice changing emotional responses, practice reducing vulnerability to Emotion Mind
Interpersonal Effectiveness	7	Goals of interpersonal effectiveness; Factors interfering with interpersonal effectiveness; Myths about relationships and interactions; Clarifying priorities	Interpersonal Effectiveness Handouts 1, 2, 2A, 3, 4	Attend to and reflect on relationships, practice mindfulness in interpersonal situations
	8	Objectives effectiveness: DEAR MAN; Relationship effectiveness: GIVE; Self-respect effectiveness: FAST	Interpersonal Effectiveness Handouts 5, 5A, 6, 6A, 7	Practice DEAR MAN, GIVE, and FAST
Distress Tolerance	9	Goals of distress tolerance; When to use crisis survival and reality acceptance skills; Crisis survival skills: STOP, TIP, distract with Wise Mind, self-soothing; Reality acceptance skills: Radical acceptance, willingness, half-smile, willing hands	Distress Tolerance Handouts 1, 3, 4, 6, 7, 8, 11, 13, 14	Practice crisis survival skills, practice reality acceptance skills

2.3. Procedure

Upon obtaining approval to conduct the study from the Scientific Research and Publication Ethics Committee of Bahçeşehir University (Appendix I), the process of collecting pretest data was commenced. In the week before the start of DBT skills training, pretest data from the experimental group were collected after they had provided written informed consent. Pretest data from the control group were obtained with verbal informed consent of the participants during the same week. Participants in the experimental group underwent the training for 9 weeks. The control group did not receive an intervention. Posttest data from the experimental group were obtained in the week following the final session of the training. Posttest data from the control group were obtained at the same period of time. Upon the completion of data collection, quantitative data analyses were conducted with IBM SPSS 23.

CHAPTER 3

RESULTS

Results of the quantitative and qualitative data analyses are presented in this chapter. First, raw data were prepared for the analyses and descriptive statistics for the variables were calculated. Then, all variables were investigated in terms of their compliance to the assumptions of inferential statistics to be calculated. Second, within the scope of preliminary analyses, all variables were controlled for the effect of possible third factors, such as previous mindfulness training and current psychiatric diagnosis, in order to ensure that the mean differences between the groups could be confidently attributed to the effect of the intervention, and Pearson correlation coefficients for the bivariate relationships between the outcome variables were calculated. Third, quantitative data analyses were conducted, which included independent and paired-samples *t*-tests and reliability analyses. Finally, results of content analysis of the qualitative data obtained from the experimental group are reported.

3.1. Preliminary Analyses

The initial step was screening the data for clerical errors in data entry and missing values. There were 22 missing values in the quantitative variables and 5 missing values in the categorical variables. Whether data were missing at random or according a confounding pattern was diagnosed with Little's Missing Completely at Random (MCAR) test. The results of Little's MCAR test were nonsignificant, failing to reject the null hypothesis that data were missing at random. Missing values were random and did not concentrate on a participant, group, or variable. Due to the limited number of participants, missing values were imputed with the regression method instead of listwise deletion.

According to the Z score criterion, which entails scores to be classified as outliers if they are at least three standard deviations away from the mean, there were 11 univariate outlier values in scores from 9 different participants. Inspection of the Tukey boxplots also indicated the same values as outliers. However, data from the participants that had extreme scores were not excluded from the analyses. One reason for this was that the exclusion of extreme values did not cause a difference in terms of the significance of the results of correlation and treatment outcome analyses. Another reason was because the assumption of univariate normality held for all variables while the extreme values were present. This reasoning is in line with the argument that outliers could be kept in data if they do not have an effect on the results of the model used in a study, and its assumptions (Sweet & Grace-Martin, 2011). Descriptive statistics for all variables may be found in Table 3.1.

Table 3.1. Descriptive statistics for the outcome variables

Variables	Experimental Group								Control Group							
	Pretest				Posttest				Pretest				Posttest			
	<i>M</i>	<i>SD</i>	Min	Max	<i>M</i>	<i>SD</i>	Min	Max	<i>M</i>	<i>SD</i>	Min	Max	<i>M</i>	<i>SD</i>	Min	Max
DBT-WCCL																
DBT Skills	1.93	.39	.87	2.71	2.22	.42	1.26	2.92	1.77	.45	1.03	2.82	1.88	.45	.76	2.92
Dysfunctional Coping	2.39	1.03	.13	4.37	1.66	.85	.40	3.77	2.36	1.03	.47	4.87	2.49	1.22	.20	5.30
DASS																
Depression	8.49	10.10	0	35	6.70	7.62	0	30	10.45	8.28	0	28	11.88	9.42	0	36
Anxiety	8.54	7.59	0	30	7.13	5.62	1	25	9.86	9.33	0	38	11.36	10.42	0	34
Stress	14.62	10.22	0	35	12.65	7.10	1	32	16.57	9.69	0	35	17.58	10.26	0	38
Total	31.64	25.06	1	98	26.48	17.67	2	80	36.89	24.86	0	101	40.82	27.76	2	104
DERs																
Goals	15.90	4.48	6	25	14.15	4.54	5	25	15.27	4.64	6	24	16.06	4.24	6	23
Strategy	16.67	7.17	8	34	15.18	5.87	8	35	17.58	5.51	9	31	18.06	5.73	10	31
Nonacceptance	10.69	4.77	6	27	9.54	4.88	6	27	10.21	4.68	6	24	10.24	4.78	6	23
Impulse	13.28	5.59	6	27	11.43	4.43	6	25	12.64	4.65	6	27	13.30	5.11	7	27
Clarity	9.74	2.94	5	17	8.62	2.51	5	14	10.88	3.03	5	18	10.24	3.35	5	19
Awareness	10.77	3.47	6	19	10.62	2.01	6	15	11.38	4.23	5	24	10.62	3.53	5	20
Total	77.05	20.62	51	144	69.53	17.98	41	120	77.96	17.46	43	124	78.53	19.77	48	127

Further preliminary analyses were conducted for controlling the effect of possible third factors on the outcome variables. Possible third factors that applied to all study groups were gender, department, previous mindfulness training experience, currently applicable medical diagnoses, currently applicable psychiatric diagnoses, current regular medication use, current psychiatric medication use, and currently being in psychotherapy. Other third factors which applied only to the experimental group were receiving a psychiatric diagnosis and starting psychotherapy during the DBT skills training. In order to compare means of total scores on the outcome variables by participants who did and did not fall under one or more of these groups, a series of two-sample *t*-tests were conducted. Welch's *t*-test was the analysis of choice, as the sample sizes of comparison groups were not equal (Lu & Yuan, 2010).

Female participants did not score significantly differently than males on the outcome variables of DBT skills use, dysfunctional coping, general psychological distress, and difficulties with emotion regulation. Similarly, psychology students did not score significantly differently than philosophy students. Scores of participants who had had previous mindfulness training, had a current medical or psychiatric diagnosis, who was on medical or psychiatric medication, or were currently undergoing psychotherapy did not differ from scores of participants who did not fall under these categories. None of the participants in the experimental group received a psychiatric diagnosis during the DBT skills training, therefore, a Welch's *t*-test was not conducted with this factor. Scores of participants in the experimental group who started psychotherapy during the training also were not significantly different than those who did not. These results indicate that none of the possible third factors had an influence

on the outcome variables of the study. Results of the Welch's *t*-tests in detail may be found in Table 3.2.

The final set of preliminary analyses were the Pearson product-moment correlation analyses that were conducted with pretreatment data from all participants in order to test whether data fit the model of the current study in terms of the nature and directions of the relationships between the 13 outcome variables. Outcome variables that signified dysfunctional coping, emotion regulation difficulties, and mental health symptoms were predicted to positively correlate with each other while being negatively correlated with the outcome variable that represented functional coping. Inspection of descriptive statistics and scatterplots indicated fulfillment of assumptions regarding normality, linearity, and homoscedasticity. Only significant and marginally significant correlations were reported. The complete correlation matrix may be found in Table 3.3.

Table 3.2. Results of the Welch's *t*-tests

	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	Mean Difference	95% CI of the Difference	<i>t</i>	df	Sig. (2-tailed)
Factor: Gender	Female (N = 63)		Male (N = 9)						
DBT-WCCL									
DBT Skills Use	1.85	.42	1.92	.40	-.07	-.38, .24	-.49	10.81	.634
Dysfunctional Coping	2.41	1.01	2.12	1.09	.29	-.57, 1.15	.75	10.06	.469
DASS Total	35.01	25.32	27.33	22.16	7.67	-9.99, 25.34	.95	11.21	.360
DERS Total	79.06	19.26	66.33	14.37	12.73	1.08, 24.37	1.90	12.52	.061
Factor: Department	PSY (N = 67)		PHIL (N = 5)						
DBT-WCCL									
DBT Skills Use	1.85	.42	2.01	.42	-.16	-.67, .34	-.86	4.63	.435
Dysfunctional Coping	2.37	1.05	2.43	.68	-.06	-.89, .77	-.18	5.51	.861
DASS Total	33.66	25.35	39.20	19.79	-5.54	-29.59, 18.52	-.59	5.04	.580
DERS Total	77.70	19.63	74.34	10.47	3.36	-9.34, 16.06	.64	6.35	.545
Factor: Previous mindfulness training	Yes (N = 15)		No (N = 57)						
DBT-WCCL									
DBT Skills Use	1.79	.46	1.87	.41	-.08	-.36, .19	-.64	20.20	.533
Dysfunctional Coping	2.41	.99	2.37	1.04	.04	-.56, .65	.15	22.71	.883
DASS Total	36.27	24.19	33.46	25.30	2.81	-11.87, 17.47	.40	22.75	.696
DERS Total	79.33	18.05	76.98	19.50	2.35	-8.66, 13.37	.44	23.37	.662
Factor: Current medical diagnosis	Yes (N = 5)		No (N = 67)						
DBT-WCCL									
DBT Skills Use	1.68	.38	1.87	.42	-.19	-.65, .28	-1.04	4.77	.346
Dysfunctional Coping	1.95	.82	2.41	1.03	-.46	-1.45, .53	-1.20	5.01	.285
DASS Total	40.60	34.85	33.56	24.32	7.04	-35.84, 49.92	.44	4.30	.679
DERS Total	66	9.25	78.32	19.41	-12.32	-23.59, -1.06	-1.40	7.02	.166
Factor: Regular medication use	Yes (N = 12)		No (N = 60)						
DBT-WCCL									

DBT Skills Use	1.75	.42	1.88	.42	-.12	-.40, .16	-.94	15.84	.364
Dysfunctional Coping	2.44	.83	2.36	1.06	.07	-.51, .65	.27	18.89	.791
DASS Total	31.50	13.15	34.56	26.72	-3.10	-13.50, 7.39	-.60	32.52	.555
DERS Total	77.75	15.30	77.41	19.89	.34	-10.35, 11.02	.07	19.28	.948
Factor:	Yes (N = 8)		No (N = 64)						
Current psychiatric diagnosis									
DBT-WCCL									
DBT Skills Use	1.87	.50	1.86	.41	.02	-.41, .44	.09	8.24	.931
Dysfunctional Coping	2.51	.67	2.36	1.06	.15	-.45, .74	.54	11.91	.596
DASS Total	33.63	25.24	34.10	25.09	-.48	-21.94, 20.99	-.05	8.82	.961
DERS Total	87	28.51	76.28	17.55	10.72	-13.24, 34.69	1.04	7.68	.330
Factor:	Yes (N = 3)		No (N = 69)						
Psychiatric medication use									
DBT-WCCL									
DBT Skills Use	1.78	.49	1.86	.42	-.08	-1.25, 1.09	-.28	2.13	.806
Dysfunctional Coping	2.34	.42	2.38	1.04	-.03	-.88, .81	-.12	3.18	.909
DASS Total	24.67	20.03	34.45	25.16	-9.79	-55.57, 35.99	-.82	2.28	.490
DERS Total	83	24.25	77.23	19.04	5.77	-52.35, 63.90	.41	2.11	.722
Factor: Current psychotherapy	Yes (N = 4)		No (N = 68)						
DBT-WCCL									
DBT Skills Use	1.72	.27	1.87	.43	-.15	-.54, .25	-1.04	3.98	.357
Dysfunctional Coping	2.29	.49	2.38	1.05	-.09	-.81, .63	-.33	4.78	.759
DASS Total	46.25	22.74	33.33	25.02	12.92	-21.94, 47.79	1.10	3.44	.343
DERS Total	85.25	23.30	77.01	18.94	8.24	-28.03, 44.51	.69	3.24	.534
Factor: Psychotherapy started during training	Yes (N = 5)		No (N = 34)						
DBT-WCCL									
DBT Skills Use	1.83	.37	1.94	.39	-.11	-.56, .34	-.62	5.39	.559
Dysfunctional Coping	2.81	.57	2.33	1.08	.48	-.23, 1.19	1.53	9.02	.160
DASS Total	41.20	21.14	30.24	25.56	10.97	-14.66, 36.59	1.05	5.87	.334
DERS Total	80.60	13.89	76.53	21.54	4.07	-12.91, 21.05	.56	7.22	.590

Table 3.3. Correlations between the outcome variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
DBT-WCCL													
1. DBT Skills Use	—												
2. Dysfunctional Coping	.09	—											
DASS													
3. Depression	-.27*	.40**	—										
4. Anxiety	-.13	.41**	.72**	—									
5. Stress	-.19	.49**	.70**	.74**	—								
6. Total	-.22	.48**	.89**	.90**	.91**	—							
DERs													
7. Goals	-.14	.23	.21	.44**	.48**	.42**	—						
8. Strategy	-.27*	.35**	.64**	.54**	.64**	.67**	.45**	—					
9. Nonacceptance	-.16	.38**	.61**	.59**	.48**	.62**	.32**	.72**	—				
10. Impulse	-.05	.52**	.49**	.59**	.65**	.64**	.51**	.65**	.54**	—			
11. Clarity	-.16	.40**	.58**	.58**	.39**	.57**	.04	.43**	.53**	.37**	—		
12. Awareness	-.19	.23*	.16	.03	.06	.09	-.18	.10	.12	.03	.26*	—	
13. Total	-.24*	.51**	.67**	.69**	.69**	.76**	.58**	.88**	.82**	.81**	.59**	.27*	—

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

3.2. Reliability Analysis

Multiple indices of internal consistency were calculated with pretreatment data from all participants ($N = 72$) in order to examine the reliability of the Turkish translation of the DBT-WCCL utilized in the current study due to the lack of a culturally adapted Turkish form. The selected indices of internal consistency were Cronbach's alpha, Cronbach's alpha if an item is removed, inter-item correlations, and corrected item-scale correlations (Trochim, 2020), which were calculated separately for the DBT Skills subscale and the Dysfunctional Coping subscale of the DBT-WCCL. The values for Cronbach's alpha, inter-item correlations, and item-scale correlations for the two subscales of the DBT-WCCL may be found in Table 3.4.

Table 3.4. Internal consistency indices for the Turkish form of the DBT-WCCL

Subscales	N of Items	Inter-Item Correlations				Corrected Item-Scale Correlations				Cronbach's α
		<i>M</i>	Min	Max	<i>R</i>	<i>M</i>	Min	Max	<i>R</i>	
DBT Skills	38	.20	-.25	.67	.93	.42	.09	.65	.56	.90
Dysfunctional Coping	21	.24	-.20	.70	.90	.45	.27	.72	.45	.87

For the DBT Skills subscale, the value for Cronbach's alpha was .90, which indicates excellent internal consistency. Cronbach's alpha increased by .002 for one item and .003 for two items out of the 38 items if they were deleted, but decreased in case of deletion for 29 items. These values show that none of the items were problematic in terms of significantly lowering the internal consistency of the scale. Inter-item correlations were between -.25 and .67. The criterion proposed for a satisfactory value of an inter-item correlation is between .15 and .85 (Litwin, 2003).

Among the 703 inter-item correlations of the 38 items in the DBT Skills subscale, 434 pairs (62%) met this criterion. The criterion for a good average inter-item correlation is between .15 and .50 with lower values suggesting orthogonality and higher values implying repetitiveness and lack of differentiation among items (DeVellis, 2016). The average inter-item correlation was .20 for the DBT Skills subscale, satisfying this criterion. For item-scale correlations, higher values indicate higher internal consistency with stronger contribution of the item to what scale is supposed to measure, while an acceptable value has been proposed as .30 and above (Sabers & Gochyyev, 2010; Field, 2018). Corrected item-scale correlations for the items in the DBT Skills subscale ranged from .09 to .65 with a mean corrected item-scale correlation of .42, while 31 out of the 38 items (82%) correlated to the scale with a coefficient equal to or higher than .30.

The Cronbach's alpha value for the Dysfunctional Coping subscale was .87, indicating good internal consistency. Cronbach's alpha did not increase if any of the items were deleted, but decreased between .001 and .016 in case of item deletion, which demonstrated that none of the items were problematic with regards to negatively affecting the reliability of the scale with their presence. Inter-item correlations for this subscale ranged between -.20 and .70. Of the 210 inter-item correlations among the items in the Dysfunctional Coping subscale, 156 of them (74%) satisfied the criterion of falling between .15 and .85. The average inter-item correlation with a magnitude of .24 also was in the proposedly acceptable range of .15 and .50 for this indice of internal consistency. The corrected item-scale correlation coefficients for items in the Dysfunctional Coping subscale were between .27 and .72 with an average corrected

item-scale correlation of .45. The magnitude of correlations were equal to or above the criterion of .30 for 20 items out of the total of 21 found in this subscale.

3.3. Treatment Outcome

To assess the effectiveness of the intervention in influencing the outcome variables in the expected directions compared to the no-treatment control condition, an analytic design with a series of independent samples *t*-tests comparing group means of posttreatment scores, and a series of paired samples *t*-tests comparing means of pretreatment and posttreatment scores within each group, was formulated. A 2 x 2 mixed analysis of variance with group as the between-subjects factor and time as the within-subjects factor could not be conducted due to the problem of singularity in data with several highly correlated dependent variables, violation of the homogeneity of variance assumption in four cells, and violation of the assumption of homogeneity of covariance matrices.

A series of independent samples *t*-tests were run with posttreatment data to test the null hypotheses that the experimental group and the control group were not significantly different from each other after the intervention in terms of their scores on each one of the outcome variables. These null hypotheses are contrary to the predictions of the study, because only scores from the experimental group were predicted to change in the expected directions due to the intervention as opposed to the no-treatment control group. Independent selection and normality assumptions held for all analyses as indicated by descriptive statistics, while the assumption of

homogeneity of variances was violated in four comparisons. For these comparisons, equal variances were not assumed and degrees of freedom were adjusted accordingly. Detailed results of the independent samples *t*-tests with posttreatment data from the study groups may be found in Table 3.5.

A series of paired samples *t*-tests were conducted with data from the experimental group to test the effectiveness of the DBT skills training program on increasing participants' DBT skills use and decreasing their dysfunctional coping, depression, anxiety, stress, and general psychological distress levels, and difficulties in emotion regulation. The null hypotheses were that there were not significant differences between pretest and posttest data from the experimental group on any of the outcome variables. The null hypotheses were contrary to the predictions of the study that the intervention was effective in creating differences in the outcome variables towards the expected directions. The assumptions of dependent observations and normal distribution of difference scores for the paired samples *t*-test held for all analyses.

Another series of paired samples *t*-tests were run to test the null hypotheses that there were not any significant differences between the pretest and posttest data from the control group on any of the outcome variables. These hypotheses are in accordance with the predictions of the study that there were not any significant effects observed in the control group due to their no-treatment condition as opposed to the experimental group. The assumptions of dependent observations and normal distribution of

difference scores were met for all analyses. Detailed results of the paired samples *t*-tests conducted with data from the experimental group and the control group may be found in Table 3.6.

Cohen's *d* was the effect size measure of choice throughout all independent and paired samples *t*-tests. As per the guidelines specified by Cohen (1988), the cutoff for a small effect size was a Cohen's *d* value of 0.2, while the Cohen's *d* values of 0.5 and 0.8 signified medium and large effect sizes, respectively.

Table 3.5. Between-group comparisons with posttreatment scores

	Experimental Group		Control Group		Mean Difference	95% CI of the Difference	df	<i>t</i>	Sig. (2-tailed)	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>						
DBT-WCCL										
DBT Skills Use	2.22	.42	1.88	.45	.34	.14, .55	70	3.33**	.001	0.78
Dysfunctional Coping	1.66	.85	2.49	1.22	-.83	.25, -1.34	55.56	-3.29**	.002	0.79
DASS										
Depression	6.70	7.62	11.88	9.42	-5.18	-9.18, -1.17	70	-2.58*	.012	0.60
Anxiety	7.13	5.62	11.36	10.42	-4.24	-8.31, -.16	47.27	-2.09*	.042	0.51
Stress	12.65	7.10	17.58	10.26	-4.92	-9.02, -.82	70	-2.40*	.019	0.56
Total	26.48	17.67	40.82	27.76	-14.33	-25.57, -3.10	52.49	-2.56*	.013	0.62
DERS										
Goals	14.15	4.54	16.06	4.24	-1.91	-3.99, .17	70	-1.83	.072	0.43
Strategy	15.18	5.87	18.06	5.73	-2.88	-5.62, -.14	70	-2.10*	.040	0.50
Nonacceptance	9.54	4.88	10.24	4.78	-.70	-2.98, 1.58	70	-.62	.540	0.14
Impulse	11.43	4.43	13.30	5.11	-1.88	-4.12, .37	70	-1.67	.099	0.39
Clarity	8.62	2.51	10.24	3.35	-1.63	-3.01, -.25	70	-2.36*	.021	0.55
Awareness	10.62	2.01	10.62	3.53	-.01	-1.33, 1.32	48.81	-.01	.997	0
Total	69.53	17.98	78.53	19.77	-9	-17.87, -.12	70	-2.02*	.047	0.48

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

Table 3.6. Within-group comparisons

		Pretreatment		Posttreatment		Mean Difference	95% CI of the Difference	df	<i>t</i>	Sig. (2-tailed)	Cohen's <i>d</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>						
DBT-WCCL											
DBT Skills Use											
Experimental Group		1.93	.39	2.22	.42	-.29	-.42, -.17	38	-4.78**	.000	0.77
Control Group		1.77	.45	1.88	.45	-.11	-.24, .02	32	-1.67	.104	0.29
Dysfunctional Coping											
Experimental Group		2.39	1.03	1.66	.85	.73	.45, 1.02	38	5.19**	.000	0.83
Control Group		2.36	1.03	2.49	1.22	-.12	-.46, .22	32	-.73	.470	0.13
DASS											
Depression											
Experimental Group		8.49	10.10	6.70	7.62	1.78	-.89, 4.46	38	1.35	.184	0.22
Control Group		10.45	8.28	11.88	9.42	-1.42	-4.01, 1.17	32	-1.12	.271	0.20
Anxiety											
Experimental Group		8.54	7.59	7.13	5.62	1.41	-1.02, 3.85	38	1.17	.248	0.19
Control Group		9.86	9.33	11.36	10.42	-1.50	-4.33, 1.32	32	-1.08	.287	0.19
Stress											
Experimental Group		14.62	10.22	12.65	7.10	1.96	-.86, 4.79	38	1.41	.168	0.23
Control Group		16.57	9.69	17.58	10.26	-1	-3.73, 1.72	32	-.75	.459	0.13
Total											
Experimental Group		31.64	25.06	26.48	17.67	5.16	-2.06, 12.37	38	1.45	.156	0.23
Control Group		36.89	24.86	40.82	27.76	-3.93	-11.07, 3.21	32	-1.12	.271	0.20
DERS											
Goals											
Experimental Group		14.90	4.48	13.15	4.54	1.74	.13, 3.36	38	2.18*	.035	0.35
Control Group		14.27	4.64	15.06	4.24	-.79	-2.66, 1.09	32	-.86	.398	0.15
Strategy											
Experimental Group		15.67	7.17	14.18	5.87	1.49	-.45, 3.42	38	1.56	.128	0.25
Control Group		16.58	5.51	17.06	5.73	-.49	-1.88, .91	32	-.71	.483	0.12
Nonacceptance											
Experimental Group		10.69	4.77	9.54	4.88	1.15	-.59, 2.89	38	1.34	.187	0.22
Control Group		10.21	4.68	10.24	4.78	-.03	-1.16, 1.10	32	-.05	.957	0

Impulse											
Experimental Group	12.28	5.59	10.43	4.43	1.86	.14, 3.57	38	2.20*	.034	0.35	
Control Group	11.64	4.65	12.30	5.11	-.67	-2.21, .88	32	-.88	.386	0.15	
Clarity											
Experimental Group	7.74	2.94	6.62	2.51	1.13	.31, 1.94	38	2.80**	.008	0.45	
Control Group	8.88	3.03	8.24	3.35	.64	-.43, 1.70	32	1.22	.233	0.21	
Awareness											
Experimental Group	5.77	3.47	5.62	2.01	.15	-.80, 1.11	38	.33	.746	0.05	
Control Group	6.38	4.23	5.62	3.53	.77	-.37, 1.91	32	1.37	.181	0.24	
Total											
Experimental Group	67.05	20.62	59.53	17.98	7.52	1.45, 13.60	38	2.51*	.017	0.40	
Control Group	67.96	17.46	68.53	19.77	-.57	-5.40, 4.27	32	-.24	.813	0.04	

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

3.3.1. DBT Skills Use and Dysfunctional Coping

As predicted, the independent samples *t*-tests with posttest data indicated that, following the intervention, participants in the experimental group ($M = 2.22$, $SD = .42$) scored significantly higher on DBT skills use than the control group ($M = 1.88$, $SD = .45$), $t(70) = 3.33$, $p < .01$, $d = 0.78$; while the control group ($M = 2.49$, $SD = 1.22$) had higher scores of dysfunctional coping than the experimental group ($M = 1.66$, $SD = .85$), $t(55.56) = -3.29$, $p < .01$, $d = 0.79$. The effect sizes for between-group comparisons for DBT skills use and dysfunctional coping were in the medium range.

Further in line with the predictions of the study, results of the paired-samples *t*-tests demonstrated that there was a significant increase in participants' DBT skills use after the DBT skills training program ($M = 2.22$, $SD = .42$) compared to before the intervention ($M = 1.93$, $SD = .39$), $t(38) = -4.78$, $p < .01$, $d = 0.77$. This increase was accompanied by a significant decrease in their dysfunctional coping after the intervention ($M = 1.66$, $SD = .85$) than before the intervention ($M = 2.39$, $SD = 1.03$), $t(38) = 5.19$, $p < .01$, $d = 0.83$. The effect sizes for within-group comparisons of participants in the experimental group were medium for their DBT skills use, and high for their dysfunctional coping. Results of the paired samples *t*-tests pointed out no significant differences between pretest and posttest data from the control group on these variables.

3.3.2. Mental Health Symptoms

Results of independent samples *t*-tests with posttest data indicated that there were statistically significant differences between the experimental group and the control group for participants' depression, anxiety, stress, and general psychological distress after the intervention in the expected directions, showing that participants in the experimental group had significantly lower levels of depression ($t(70) = -2.58, p < .05, d = 0.60$), anxiety ($t(47.27) = -2.09, p < .05, d = 0.51$), stress ($t(70) = -2.40, p < .05, d = 0.56$), and general psychological distress ($t(52.49) = -2.56, p < .05, d = 0.62$) than the control group. Effect sizes for the posttreatment differences between the two groups were of medium magnitude.

Although nonsignificant results of the paired samples *t*-tests measuring within-group differences between the pretest and posttest data from the control group for their depression, anxiety, stress, and general psychological distress levels were in agreement with the expectations of the study; results of the paired samples *t*-tests of within-group differences between pretreatment and posttreatment for participants in the experimental group on their depression, anxiety, stress, general psychological distress levels were in contradiction with the expectations of the study, indicating that there were not any statistically significant differences, and failing to demonstrate a treatment effect on these variables.

3.3.3. Emotion Regulation Difficulties

Concerning participants' difficulty engaging in goal-directed behavior under negative emotions, limited access to ER strategies, nonacceptance of negative emotions, impulse control difficulties, lack of emotional clarity, lack of emotional awareness, and global difficulties in ER; independent samples *t*-tests with posttreatment data of only three out of the seven outcome variables in question were statistically significant, while two of the analyses were marginally significant. The marginally significant and nonsignificant results were in opposition to the predictions of the study.

In terms of nonacceptance of negative emotions and lack of emotional awareness, mean differences between the study groups were nonsignificant. However, participants in the control group ($M = 18.06$, $SD = 5.73$) scored significantly more than those in the experimental group ($M = 15.18$, $SD = 5.87$) on limited access to ER strategies, $t(70) = -2.10$, $p < .05$, $d = 0.50$. Scores on lack of emotional clarity were significantly higher for the control group ($M = 10.24$, $SD = 3.35$) than they were for the experimental group ($M = 8.62$, $SD = 2.51$), $t(70) = -2.36$, $p < .05$, $d = 0.55$. The control group ($M = 78.53$, $SD = 19.77$) also scored significantly higher on global difficulties in ER than the experimental group ($M = 69.53$, $SD = 17.98$), $t(70) = -2.02$, $p < .05$, $d = 0.48$. Lastly, participants in the control group scored marginally significantly higher than participants in the experimental group on difficulty engaging in goal-directed behavior under negative emotions ($t(70) = -1.83$, $p = .072$, $d = 0.43$) and impulse control difficulties ($t(70) = -1.67$, $p = .099$, $d = 0.39$). Effect sizes of the significant between-group differences in scores on limited access to ER strategies and

lack of emotional clarity were in the medium range, while the significant between-group difference in scores on global difficulties with ER and the marginally significant between-group differences in scores on difficulty engaging in goal-directed behavior under negative emotions and impulse control difficulties were in the small range.

Results of the paired samples *t*-tests indicate that there were not any significant differences between pretreatment and posttreatment data from participants in the experimental group on their limited access to ER strategies, nonacceptance of negative emotions, and lack of emotional awareness. Failure to discern a treatment effect on these three facets of emotion regulation difficulties were contrary to the study predictions. However, the paired samples *t*-test for difficulty engaging in goal-directed behavior under negative emotions demonstrated that scores were significantly lower after the intervention ($M = 13.15$, $SD = 4.54$) compared to the pretreatment ($M = 14.90$, $SD = 4.48$), $t(38) = 2.18$, $p < .05$, $d = 0.35$. Participants' impulse control difficulties also showed a significant decrease after the intervention ($M = 10.43$, $SD = 4.43$) than before the intervention ($M = 12.28$, $SD = 5.59$), $t(38) = 2.20$, $p < .05$, $d = 0.35$. Participants' scores on lack of emotional clarity were significantly reduced after the training ($M = 6.62$, $SD = 2.51$) compared to their pretreatment scores ($M = 7.74$, $SD = 2.51$), $t(38) = 2.80$, $p < .01$, $d = 0.45$. Lastly, the paired samples *t*-test for global difficulties in emotion regulation pointed out a significant decrease in scores after the intervention ($M = 59.53$, $SD = 17.98$), than before the intervention ($M = 67.05$, $SD = 20.62$), $t(38) = 2.51$, $p < .05$, $d = 0.40$. Effect sizes of these significant within-group differences in the experimental group following the intervention were in the small range. As expected, results of the paired samples *t*-tests pointed out that there were not any

significant differences between pretest and posttest data from the control group on any of the outcome variables signifying emotion regulation difficulties.

3.4. Content Analysis

Qualitative data gathered from participants in the experimental group in the form of textual responses to open-ended and closed questions were analyzed with a content analytic approach. The pool of qualitative data involved responses to nine different open-ended and/or closed questions. At the pretest, participants were given one open-ended question asking them to list at least two reasons for participation in the program. At the posttest, participants responded to eight different open-ended and/or closed questions regarding the goals they had attained, the benefits they experienced, the skills they most benefited from, the thoughts and emotions they experienced, the changes they experienced in themselves and in their lives, the skills they deemed to be ineffective, how well they thought the program was conducted, and their thoughts about the group leaders.

Content analysis was opted as the method of qualitative analysis since it was most suited to the brief and precise responses of participants to the questions that targeted such answers, and the aim of the analysis, which was gauging trends in the qualitative data through the inspection of response frequencies. Qualitative data were described and interpreted employing an approach of descriptive content analysis outlined by Neuendorf (2017), which emphasizes manifest content over latent content and description over explanation.

The processes of coding and analysis followed the steps of qualitative analysis of textual responses to evaluative questions delineated by Taylor-Powell and Renner (2003). Upon familiarization with the data, the focus of analysis was chosen as questions rather than individuals due to the relatively large number of participants, and interest in response trends of the group rather than each participant's experience with the program. The unit of analysis was thematic distinctions for open-ended questions and categorical distinctions for closed questions. The coding scheme for each question was established with an inductive approach, generating novel and mutually exclusive categories based on the characteristics of each set of responses. After the establishment of coding schemes, participants' responses to each question were classified into the relevant categories or themes, and response frequencies for each category and theme were reported. Response examples were provided for each theme with the purpose of clarification of themes and insight into participants' individual experiences.

3.4.1. Reasons for Participation

In response to the question "What are your reasons for participation in the skills training?", participants provided a wide range of reasons for their participation. 39 participants reported a total of 89 reasons that fell under 11 different themes. Multiple responses belonging to the same theme by the same participant were collapsed into a single response. The three most commonly reported reasons for participation were increasing their level of mindfulness and acceptance (44%), learning and professional development (36%), and gaining self-knowledge and insight (31%). Table 3.7 summarizes and exemplifies participants' reasons for participation in the skills training.

Table 3.7. Reasons for participation in the program

Theme	Response Examples	Count	%
Increasing mindfulness and acceptance	“To be more mindful of ordinary things” “To learn to accept things mindfully and experience them as they are”	17/39	44
Learning and professional development	“To improve myself in terms of my degree” “I think it will help me after graduation”	14/39	36
Gaining self-knowledge and insight	“To better understand my thoughts” “To discover myself”	12/39	31
Intellectual interest in the training	“I am curious about it” “My interest in and curiosity about the training”	8/39	21
Regulating emotions	“To learn how to cope with difficult emotions” “To manage my emotions”	6/39	16
Personal development	“To improve myself” “I think it will help me improve myself”	6/39	16
Healing and therapeutic benefits	“To give my mind what it needs” “I think it will be good for me”	5/39	13
Understanding emotions	“To focus on myself and see how I really feel” “To better understand my emotions”	4/39	10
Gaining perspective	“To gain a more positive perspective” “To gain different perspectives to some thoughts”	3/39	8
Contribution to the study	“To contribute to the research” “To contribute to the study”	3/39	8
Improving relationships	“To be better to myself and those around me” “To apply the skills in my private life”	2/39	5

3.4.2. Personal Goals Attained

In answer to the question “Which personal goals have you attained or not attained at the end of the skills training?”, 77% ($n = 30/39$) of participants reported that they have attained their personal goals for the training, 5% ($n = 2/39$) stated that they attained their goals only partially, and 10% ($n = 4/39$) stated they did not, while 8% ($n = 3/39$) did not provide an answer. 29 participants out of a total of 39 specified

one or more goals they had attained at the end of the training. The specific goals they mentioned fell under 5 disparate themes. 52% ($n = 15/29$) of participants attained the personal goal of regulating their emotions (“I can take better notice of and control my emotions”), 38% ($n = 11/29$) of participants reached their goal of increasing their mindfulness and acceptance (“I am more attentive to and aware of things”), 17% ($n = 5/29$) of them attained their goal of improving relationships (“I paid closer attention to my language in my relationships”), 10% ($n = 3/29$) reached the goal of personal development (“I really think I am more effective in my life”), and 3% ($n = 1/29$) of them attained their goal of gaining self-knowledge and insight (“I reached my goal of getting to know myself better”).

3.4.3. Benefits of the Program

When asked “Do you think the skills training was helpful? If your answer is yes, in which ways did it help?”, 90% ($n = 35/39$) of participants responded that the training helped them, 5% ($n = 2/39$) of participants stated that the training partially helped, and the remaining 5% ($n = 2/39$) reported that it did not help. Out of a total of 39, 34 participants mentioned one or more benefits they experienced with the program. Their answers were categorized into 10 distinct themes. The four benefits experienced most prevalently among the participants were improvements in mindfulness and awareness (35%), emotion regulation (21%), communication and relationships (15%), and stress management (15%). Frequencies and examples of participants’ benefits from the program may be found in Table 3.8.

Table 3.8. Participants' benefits from the program

Theme	Response Examples	Count	%
Mindfulness and awareness	"I engage in my regular activities with awareness and being in the moment"	12/34	35
Emotion regulation	"It helped me regulate some of my emotions"	7/34	21
Communication and relationships	"I learned how to communicate with my friends and family in the 'I' language"	5/34	15
Stress management	"I learned different ways to manage stress"	5/34	15
Coping with problems, tasks, and challenges	"I learned how to cope with the difficulties and arguments I have"	4/34	12
Gaining perspective	"My view of and reactions to certain events became more mature"	3/34	9
Group support	"I saw that I was not alone"	3/34	9
Self-knowledge and insight	"It helped me get to know myself"	2/34	6
Connection with body	"I became more aware of my body"	2/34	6
Self-compassion	"I showed compassion to myself"	1/34	3

3.4.4. Relative Benefit of Skills

In response to the question "During the skills training, which topic or skill do you think helped you the most? Why?", participants pointed at one or more skill modules they benefited from the most, instead of disclosing specific skills with their names or acronyms. 67% ($n = 26/39$) of participants reported that the most beneficial module for them was the mindfulness module ("It was mindfulness because it gave me a different perspective"), 21% ($n = 8/39$) of participants benefited from the emotion regulation module the most ("Controlling and regulating emotions"), 21% ($n = 8/39$) of them mentioned interpersonal effectiveness as the most beneficial module ("Managing close relationships"), and 3% ($n = 1/39$) responded with the distress tolerance module ("Calming myself down when I'm distressed"). 20 participants provided one or more specific mindfulness practices they most benefited from in their

answers. Of those 20 participants, 50% ($n = 10/20$) mentioned benefiting from the body scan, 35% ($n = 7/20$) disclosed benefiting from mindful breathing, and 25% ($n = 5/20$) reported benefiting from mindful eating practices.

3.4.5. Experiences with the Program

36 participants responded the question “What thoughts and feelings did you experience during the skills training?” with answers that had a positive (75%, $n = 27/36$) or mixed (25%, $n = 9/36$) valence, while 3 participants did not answer the question. None of the answers were exclusively negative in valence. Responses to this question were coded according to the specific words chosen by participants to denote their thoughts and feelings. 13 positive and 6 negative words were identified. In the class of participants’ positive experiences with the program, the three most commonly reported were awareness (33%), relaxation (25%), and peace (17%). Among their much less common negative experiences, participants reported tension (6%), difficulty (6%), and boredom (6%). The thoughts and feelings participants experienced during the training are summarized in Table 3.9.

Table 3.9. Participants’ experiences with the program in their words

Positive Words	Count	%	Negative Words	Count	%
Awareness	12/36	33	Tension	2/36	6
Relaxation	9/36	25	Difficulty	2/36	6
Peace	6/36	17	Boredom	2/36	6
Happiness	4/36	11	Anger	1/36	3
Surprise	3/36	8	Anxiety	1/36	3
Joy	3/36	8	Confusion	1/36	3
Calmness	1/36	3			
Confidence	1/36	3			
Control	1/36	3			

Curiosity	1/36	3
Excitement	1/36	3
Freedom	1/36	3
Optimism	1/36	3

3.4.6. Changes in Participants and Their Lives

Responses to the questions “Do you experience changes and differences in yourself after the skills training? If your answer is yes, what kind of changes and differences do you experience?” and “What kind of changes happened in your life after the skills training?” were collapsed because participants did not differentiate between the changes they experience in themselves and their lives, rendering the resulting themes from responses to these questions identical. Another reason was that a number of participants did not answer the latter question or noted that their answer was the same as above. Based on the collapsed responses, 34 participants (87%) responded positively and reported experiencing changes and differences in themselves and their lives after the training, while 5 participants (13%) responded negatively, reporting not experiencing any changes or differences. Three participants who reported not experiencing any change or difference in the first question provided an answer to the second question. Based on 85 answers obtained from 37 participants, 19 distinct themes of change they experienced in themselves and their lives after the training were generated. The three most commonly reported changes were improvement in communication and relationships (35%), achieving calmness (27%), and increased mindfulness and awareness (24%). The changes and differences the participants experienced in themselves and their lives following the training are illustrated and exemplified in detail in Table 3.10.

Table 3.10. Changes in participants and their lives after the program

Theme	Response Examples	Count	%
Improvement in communication and relationships	"I think it had a good effect on my relationships"	13/37	35
Achieving calmness	"It helped me stay calm in some situations"	10/37	27
Increased mindfulness and awareness	"My ordinary, everyday activities have gained meaning"	9/37	24
Understanding and naming emotions	"It is easier to identify my emotions"	8/37	22
Change in perspective	"I can take a different look at what I have gone through"	7/37	19
Being in the present moment	"I bring myself to the present moment more often"	6/37	16
Ability to relax	"When I try to apply the skills, they help me relax"	4/37	11
Being in control	"I feel a bit more in control"	4/37	11
Coping and problem solving	"I overcome challenging situations more easily"	3/37	8
Less anxiety	"My constant anxiety has abated"	3/37	8
Better sleep	"I fall asleep more easily"	3/37	8
Better eating	"My eating habits are better"	3/37	8
Increased empathy	"I am more empathetic in my relationships"	2/37	5
Increased self-knowledge and insight	"I know myself better"	2/37	5
Less anger	"My bursts of anger have decreased"	2/37	5
Connection with body	"I listen more to what my body and my mind are trying to tell me"	2/37	5
Less aching	"It helped with my backaches and headaches"	2/37	5
Less judgment	"I judge less"	1/37	3
Being happier	"I feel that I am happier"	1/37	3

3.4.7. Evaluation of Group Leaders

In response to the question "Do you think the skills training was run effectively?"

What would you like to say about the group leaders?" 23 participants provided feedback about the training process, 27 participants evaluated the group leaders, and 3

participants did not give an answer. There was not any negative feedback about the training process or the group leaders. Participants' feedback regarding how the training was run was allocated into the three categories of 'good', 'efficient', and 'well-organized', based on the common words found in their responses. Of the 23 participants that provided feedback, 87% ($n = 20/23$) evaluated the training process to be good ("Everything was very good"), 13% ($n = 3/23$) judged the process to be efficient ("It was run very efficiently"), and 9% ($n = 2/23$) deemed it well-organized ("It was run in a well-organized, systematical and step-by-step manner").

Responses that included feedback for the group leaders were classified into 12 categories based on the adjectives and phrases chosen by participants to evaluate the leaders. The three words most commonly mentioned to describe the group leaders were "helpful" (26%, $n = 7/27$), "successful" (22%, $n = 6/27$), and "knowledgeable" (22%, $n = 6/27$). Other words and phrases used by participants to evaluate the group leaders were "favorable tone of voice" (15%, $n = 4/27$), "trustworthy" (11%, $n = 3/27$), "experienced" (7%, $n = 2/27$), "sensitive" (7%, $n = 2/27$), "understanding" (7%, $n = 2/27$), "disciplined" (7%, $n = 2/27$), "attentive" (4%, $n = 1/27$), "patient" (4%, $n = 1/27$), and "charismatic" (4%, $n = 1/27$).

3.4.8. Suggestions for Improvement

In answer to the question "In your opinion, what skills and methods in the program was not effective and helpful? Which methods and tools could be used instead?", none of the participants mentioned skills or methods they deemed to be

ineffective or unhelpful. 59% of participants ($n = 23/39$) reported that there were not any skills or methods that was ineffective or unhelpful for them, 8% of them ($n = 3/39$) stated that they were not sure or could not think of any at that moment, and the remaining 33% ($n = 13/39$) did not answer the question. 10 participants provided specific suggestions for development by mentioning tools that could be utilized or changes that could be made in the skills training process. The most prevalent suggestion was that the overall length of the training could be longer (40%, $n = 4/10$). Participants also suggested that the length of sessions could be longer (20%, $n = 2/10$), the training setting could be more comfortable (20%, $n = 2/10$), the group size could be smaller with less number of participants (20%, $n = 2/10$), more visual aids could be utilized in the training (10%, $n = 1/10$), previous participants of the training could share their experiences and feedback with new participants (10%, $n = 1/10$), and more time could be allocated to in-session meditation practices (10%, $n = 1/10$).

CHAPTER 4

DISCUSSION

DBT skills training as stand-alone treatment is an effective intervention extensively studied with a wide range of problems, disorders, populations, and settings (Valentine et al., 2015). The preventive usage of DBT skills training as stand-alone treatment with nonclinical populations, such as the general college student population, is the most recent streak within DBT research with a limited number of studies reporting promising results in terms of effectiveness, feasibility, and acceptability (Üstündağ-Budak & Özeke-Kocabaş, 2019). The aim of the current study was to determine the preventive effectiveness of an adapted 9-week DBT skills training program on Turkish university students' DBT skills use, dysfunctional coping, mental health symptoms (depression, anxiety, stress), and emotion regulation difficulties. In this chapter, results of quantitative analyses which had the purpose of discerning the reliability and validity of the Turkish form of DBT-WCCL utilized in the study and the effectiveness of the program on the outcome variables, and qualitative analyses that aimed to describe participants' experiences with the program in terms of benefits

and life changes, its acceptability for them, and their suggestions for its further development, are discussed in light of previous findings from the literature.

4.1. Reliability of the Turkish Form of the DBT-WCCL

In the current study, the DBT-WCCL was translated to Turkish in accordance with guidelines for measurement translation in psychological research (Lenz et al., 2017), however, it was not adapted to the Turkish language and culture with an adaptation study. In order to gain insight into how reliably the Turkish translation used in the current study operated in this sample, detailed reliability analyses in the form of calculation of internal consistency indices were provided. The two subscales of DBT Skills and Dysfunctional Coping in the translated form demonstrated good to excellent Cronbach's alpha values comparable to those reported in the scale development study (Neacsiu et al., 2010). Other selected indices of internal consistency, namely Cronbach's alpha if item deleted, inter-item correlations, and corrected item-scale correlations for the two subscales of the DBT-WCCL pointed at high degrees of reliability of the subscales with no problematic items significantly positively affecting Cronbach's alpha if they were deleted, and large percentages of inter-item and item-scale correlations meeting the requirements for satisfactory internal consistency, indicating that items were mostly optimally correlated to each other and highly correlated with their corresponding subscales.

The findings that the DBT Skills subscale, the measure of participants' DBT skills acquisition and usage, was negatively correlated with the outcome variables

representing mental health symptoms and emotion regulation difficulties, and the Dysfunctional Coping subscale, the measure of participants' usage of maladaptive coping strategies, was positively correlated with the outcome variables signifying mental health symptoms and emotion regulation difficulties demonstrate that the two subscales of the DBT-WCCL had linear relationships with other outcome variables in the expected directions, which support that the Turkish translation employed in the current study fit the model of the study and produced reliable results in terms of representing participants' treatment gains on these two dimensions. High reliability coefficients of the original form of the DBT-WCCL, high reliability coefficients of its Turkish translation used in the current study, and the goodness of the fit between the results obtained with its Turkish translation and the model of the study may vouch for the usage of the Turkish form of the DBT-WCCL without a complete adaptation.

4.2. Effectiveness of the Program

The current study involved an experimental group which underwent the adapted 9-week DBT skills training, and a no-treatment control group. Data from the study groups were collected at two time points, before the intervention and after the intervention. In order to increase the confidence with which changes in the outcome variables could be attributed to the intervention, the effect of potential third factors that could influence the outcome variables, namely gender, department, previous mindfulness training experience, currently applicable medical or psychiatric diagnoses, current regular or psychiatric medication use, currently being in psychotherapy, and receiving a psychiatric diagnosis or starting psychotherapy during the intervention, were controlled. The bivariate relationships between the outcome

variables were in the expected directions, supporting the fit of the data to the model of the study in terms of the nature of the intervariable relationships. Incorporation of a control group and comparing the data from this group to the experimental group at the two time points of measurement also strengthens the accuracy of the results and the inferences made based on these results.

Results of within-group comparisons of data from the experimental group indicate that the adapted 9-week DBT skills training was significantly effective in increasing participants' DBT skills use as well as decreasing their use of dysfunctional coping strategies and difficulties with emotion regulation. Results of between-group comparisons with posttest data from the study groups on these outcome variables also point out the superiority of the intervention over the control condition. In addition to the significant treatment effect on global difficulties with emotion regulation, represented by the DERS total score, specific difficulties with emotion regulation that the training was effective in reducing were difficulty engaging in goal-directed behavior under negative emotions, impulse control difficulties, and lack of emotional clarity, represented by the corresponding subscales of the DERS.

The significantly positive effects of the program on participants' DBT skills use and dysfunctional coping are in line with findings from the studies that employ adapted versions of the DBT skills training as stand-alone treatment for university students, such as Uliaszek and colleagues' (2016) RCT of DBT skills training vs positive group psychotherapy for college students with BPD, Rizvi and Steffel's (2014) study

comparing the efficacy two different adaptations of DBT skills training for emotionally dysregulated college students, Muhomba and colleagues' (2017) investigation of DBT-based distress tolerance skills groups students with suicidal, self-harm, drug abuse, or other seriously dysregulated behaviors, and Chugani and associates' (2013) study of adapted DBT skills training for Cluster B personality disordered college students.

Although all of the studies investigating the use of DBT skills training with university students reported significantly favorable results on DBT skills use and dysfunctional coping if they had included the DBT-WCCL in their research design, not many studies have incorporated this instrument as their operationalization of functional and dysfunctional coping. A number of studies do not measure functional and dysfunctional coping at all, or they may use an adult coping measure other than the DBT-WCCL, such as Meaney-Tavares and Hasking's (2013) investigation of the effectiveness of a modified DBT skills training for college students with BPD. Furthermore, none of the studies that examined the preventive value of DBT skills training had included the DBT-WCCL in their research design to measure participants' DBT skills use and dysfunctional coping, marking the contribution of the current study to the existing preventive literature with the inclusion of the DBT-WCCL, the instrument recommended by Linehan (2015a), the treatment developer, for the measurement of treatment gains from the DBT skills training.

The significant treatment effect of the adapted DBT skills training employed in the current study on participants' difficulties with emotion regulation is also in parallel to findings from the literature. As an intervention addressing emotion dysregulation as a major area of dysregulation for the targeted populations, many studies of DBT and its skills training component have integrated emotion regulation difficulties as an outcome variable, usually measured by the DERS as a reliable, valid, and widely used instrument, in their research design (Linehan, 2015a; Sayrs & Linehan, 2018). Among the studies investigating the stand-alone use of DBT skills training in educational settings, those that measured emotion regulation difficulties all report significant reductions in this variable (Chugani et al., 2013; Rizvi & Steffel, 2014; Gülgez & Gündüz, 2015; Uliaszek et al., 2016; Muhomba et al., 2017), except for Burckhardt and colleagues' (2018) research on the prevention of mental health symptoms in adolescents with a 6-week adapted DBT skills program. The authors discuss the absence of significant treatment effects on participants' difficulties with emotion regulation in terms of the influence of mindfulness-based practices on emotions, in that participants may have become more aware of their negative emotional states and their difficulties in coping with them, however, due to the brevity of the program, their increased awareness had not been corresponded by an increase in effective coping strategies that could be detected by the DERS. Moreover, results of qualitative analyses of participants' program feedback suggest that as much as 78% of them gained emotion regulation skills (Burckhardt et al., 2018).

Since the aforementioned studies only report effectiveness of their respective skills training programs on difficulties with emotion regulation with the DERS total

score, representing global difficulties with emotion regulation, and leaving out the six facets of emotion regulation difficulties measured by the DERS, the significantly positive findings of the current study on participants' difficulty engaging in goal-directed behavior under negative emotions, impulse control difficulties, and lack of emotional clarity could not be discussed in light of findings from the literature. However, these findings suggest that the adapted DBT skills training utilized in the current study was especially effective on the acquisition of DBT skills having to do with these three facets of difficulties with emotion regulation, included in the emotion regulation (emphasizing emotional clarity and engaging in goal-directed, effective behavior despite negative emotions) and distress tolerance (emphasizing impulse control) modules of the training.

The hypothesized preventive effect of DBT skills training on students' mental health symptoms was one of the primary concerns of the current study. However, within-group comparisons of experimental group data did not detect an effect of the intervention on participants' mental health symptoms in the form of depression, anxiety, stress, and general psychological distress. Nonetheless, there were nonsignificant reductions with small effect sizes in these variables between the pretest and posttest measurements, and between-group comparisons with posttest data indicated that skills training participants' levels of depression, anxiety, stress, and general psychological distress were significantly lower than their no-treatment counterparts. These findings suggest that there were trends towards reduction of mental health symptoms after the intervention that did not achieve statistical significance.

Although two previous studies also fail to report changes in mental health symptoms in the form of participants' depression and anxiety levels following adapted versions of the DBT skills training (Fleming et al., 2015; Burckhardt, et al., 2018), absence of a significant treatment effect on participants' mental health symptoms following the adapted DBT skills program of the current study is in contradiction with many other findings from the literature. Meaney-Tavares and Hasking's (2013) study of the effectiveness of a modified DBT skills training for college students with BPD, Rizvi and Steffel's (2014) study comparing the efficacy two different adaptations of DBT skills training for emotionally dysregulated college students, and Uliaszek and associates' (2016) RCT of DBT skills training vs positive group psychotherapy for college students with BPD reported significant improvements in their participants' depressive symptoms. In terms of participants' anxiety levels, results from Lothes and colleagues' (2019) investigation of the effectiveness of a DBT skills-informed mindfulness training on college students' test anxiety, Meaney-Tavares and Hasking's (2013) study, Rizvi and Steffel's (2014) study, and Uliaszek and colleagues' (2016) RCT indicated significant treatment effects of adapted DBT skills programs. Rizvi and Steffel's (2014) study also reported significant reductions in stress levels following the two forms of DBT skills training offered to college students. Concerning general mental health symptoms, Lee and Mason's (2019) study examining the effectiveness of an adapted DBT skills program in building resilience for college students presents significant improvements in participants' global mental health scores; and results from Üstündağ-Budak and colleagues' (2019) investigation of the effectiveness of an adapted 8-week DBT skills training and a 3-month DBT skills-graduate follow-up training for university students demonstrate significant increases in participants'

psychological well-being in the form of reduced mental health symptoms. It is noteworthy that the present study was unsuccessful in reporting significant changes in mental health symptoms, since the adaptation of the DBT skills training utilized in the current study was similar to Üstündağ-Budak and colleagues' (2019) adaptation apart from the addition of a one-week distress tolerance module, and one of the proposed contributions of the present study was the replication of their results.

Potential reasons for failure to detect a significant effect on mental health symptoms in the current study despite downward trends in scores are the nonclinical nature of the general university student sample, rendering their pretest scores on mental health symptoms lower and the effects of interventions less drastic; small sample size, giving the analyses limited power; the pretest-posttest design of the study, which could lead to the potential oversight of significant effects that could be detected with multiple assessment points; the brevity of the particular 9-week adaptation utilized in the current study, the extension of which could result in significant effects on mental health symptoms; concurrence of posttest data collection with the finals, a period of heightened stress for university students, and the upcoming graduation of a number of senior student participants at the end of the semester, which could induce anxiety and worry regarding their lives after university and transition to graduate studies and/or professional life. The latter explanations of elevated levels of stress are supported by some participants' responses to evaluative open-ended questions. They reported that, with the help of the DBT skills training, they "could be aware of themselves when they are studying for exams and are in great stress," "could relax

and be happy once a week in this period of stress,” and “are calmer than before although the number of situations that cause stress have increased.”

Although the DBT skills training was effective in reducing difficulties with emotion regulation and three of its facets, a significant treatment effect was not observed for the remaining three facets of difficulties with emotion regulation, namely limited access to emotion regulation strategies, nonacceptance of negative emotions, and lack of emotional awareness. These findings were contrary to the predictions of the study in that (1) emotion regulation module of the DBT skills training specifically targets expanding one’s repertoire of emotion regulation strategies and one’s ability to and confidence in utilizing them effectively; thus, it was expected that the program would positively affect access to emotion regulation strategies, (2) as an acceptance-based skill module, mindfulness within the DBT skills training emphasizes acceptance and awareness of emotional states; thus, it was expected that the program would significantly mitigate nonacceptance of negative emotions and lack of emotional awareness.

Absence of a significant treatment effect on these three facets of emotion regulation difficulties may be due to the small sample size, decreasing the power of analyses, or the pretest-posttest design of the study, which could potentially cause oversight of effects that would be detected with multiple points of assessment. It is also possible that the participants did not acquire and internalize the mindfulness and emotion regulation skills relevant to these three facets of emotion regulation

difficulties with the particular adaptation of the DBT skills training incorporated in the current study. Other DBT skills programs with differing overall length, length of the skill modules, and skills covered in each module, or programs that include a DBT skills-graduate follow-up group could be significantly effective on these outcome variables that the present program failed to change. The finding that the program utilized in the current study was unsuccessful in positively affecting participants' limited access to emotion regulation strategies, nonacceptance of negative emotions, and lack of emotional awareness could be canalized into developing and reviewing the program in the direction of emphasis and spending more time on the DBT skills and skills modules that have to do with access to emotion regulation skills, and acceptance and awareness of emotional states.

4.3. Participants' Experiences with the Program

Results from descriptive content analysis of participants' responses to evaluative questions about the adapted DBT skills program indicated that, overall, the program was highly acceptable and beneficial for the participants, with 77% of participants reporting that they attained their personal goals for the program, 90% of participants reporting that they were helped by the program, 75% reporting exclusively positive experiences with the program, 87% reporting experiencing changes in themselves and their lives after the program, and none of the participants evaluating the group leaders negatively or mentioning skills and methods that were unhelpful for them. These results of high acceptability and beneficiality of the program as evaluated by participants are in parallel to findings from studies investigating the use of adapted DBT skills training in educational settings that involve a qualitative component. In

Üstündağ-Budak and colleagues' (2019) study of the preventive effectiveness of an adapted 8-week DBT skills training and a 3-month DBT skills-graduate follow-up training for university students, participants provided positive feedback regarding the structure of the training and their benefits from the skill modules. In Burckhardt and associates' (2018) study aiming to the prevent mental health symptoms in adolescents with an adapted DBT skills program, qualitative analyses of participants' feedback for the program revealed that 74% of participants responded positively to the program, 30% of them experienced life changes following the program, and 78% reported acquiring emotion regulation skills with the program. Robins and colleagues' (2019) investigation of the preventive value of an adapted DBT skills program for stress and burnout in graduate psychology students also presented favorable qualitative findings in that 95% of participants evaluated the program as useful, and among the emerging themes were DBT skills as handy coping strategies and improved well-being as a result of skill acquisition.

In the current study, students' most commonly reported reasons for participation in the program that were gathered before the training largely coincided with the most prevalent mentions of personal goals they attained following the training. The same themes of increasing mindfulness and acceptance, gaining self-knowledge and insight, regulating emotions, improving relationships, and personal development emerged from both categories, suggesting that their expectations from the training were largely answered. In terms of the benefits participants reported to gain from the program, it may be argued that response themes partially correspond to areas of dysregulation targeted by DBT and the DBT skills training (Linehan, 1993a), and that, with the help

of the program, participants moved towards emotion regulation, indicated by the “emotion regulation” and “stress management” themes; behavioral regulation, implied by the theme of “coping with problems, tasks, and challenges”; interpersonal regulation, marked by the themes of “communication and relationships” and “group support”; cognitive regulation, specified by the “mindfulness and awareness” and “gaining perspective” themes; and self-regulation, indicated by the “self-knowledge and insight”, “self-compassion”, and “connection with body” themes. Participants’ responses to evaluative questions regarding changes in themselves and their lives after the adapted DBT skills program induced the largest number of themes capturing the broad spectrum of changes they experienced through their participation in the program, including better eating and sleep, less aching, ability to relax, achieving calmness, and being in the present moment, among others.

Although the DBT Skills subscale of the DBT-WCCL was not able to capture participants’ relative acquisition and use of skills from the four modules of the DBT skills training (Neacsiu et al., 2010), their response frequencies to the question regarding the topics or skills within the training they benefited from the most was conducive to discerning the relative usefulness of the four skill modules for them. Participants disclosed benefiting from mindfulness skills the most, followed by equally benefiting from emotion regulation and interpersonal effectiveness skills, and lastly, from distress tolerance skills. These results are in parallel to participants’ reports of reasons for participating in, benefits from, and life changes following the program in which themes about mindfulness and awareness were among the most prevalent. Together with the frequency of themes of mindfulness and awareness in participants’

responses to various other questions, and their mentions of specific skills and practices they most benefited from only for mindfulness practices such as mindful breathing and body scan, it is evident that the participants of the current study regarded the adapted DBT skills program as a primarily mindfulness-based intervention.

Even though their results could not be compared to the findings of the current study due to differences in population characteristics and treatment programs, three previous studies documenting the relative use of skills by adolescent and adult patients in standard DBT programs list emotion regulation and interpersonal effectiveness skills (Dewe & Krawitz, 2007), and mindfulness and distress tolerance skills (Miller, Wyman, Huppert, Glassman, & Rathus, 2000; Lindenboim, Comtois, & Linehan, 2007) as practiced the most by participants, respectively. As discussed by Dewe and Krawitz (2007), it is highly likely that participants' relative practice of DBT skills will change for each sample and for each observation from a particular sample, as a function of sample characteristics and needs, stage in treatment, and existing experience with DBT skills.

In addition to attaining their goals, experiencing favorable changes in themselves and their lives, and benefiting from the program in great percentages, participants' reports of exceedingly positive experiences with the program, their evaluation of the training process as efficient and well-organized, and their affirmative feedback for the group leaders suggest that the adapted DBT skills program utilized in the present study was highly acceptable and beneficial for the participants. However, their responses

were not without criticisms of the program and suggestions for its further development. The participants who provided criticisms and suggestions emphasized need for longer overall length of the training, longer length of sessions, longer length of in-session meditation practices, a more comfortable training setting, smaller groups with less number of participants, and higher utilization of visual aids.

4.4. Feasibility of the Program

3 participants out of a total of 47 (6,38%) in the initial pool of participants of the DBT skills training program did not attend any session after the pretreatment session in which participants had been informed about the program, given informed consent, and provided pretest data, and were considered dropouts. 5 other participants attended the program for five or less sessions, while the remaining 39 participants attended for six or more sessions. They showed excellent participation by attending 7.79 sessions of the program on average. This low percentage of attrition and overall high attendance, together with participants' positive feedback for the program discussed in the previous section, provides evidence for the feasibility of the adaptation of DBT skills training administered in the current study. The program taking place within a course given by the DBT skills group leader made way for easier access to a nonclinical sample of participants, whose recruitment could have been more difficult if the program had been advertised and taken place at the college counseling center due to their limited outreach or the stigma associated with seeking psychological help. Preventive programs that are integrated into the curricula may be more feasible and conducive for usage with the nonclinical college student population.

4.5. Limitations and Future Suggestions

Findings of the present study should be interpreted with recognition the limitations of the study. The first set of limitations is concerned with the methodological rigor of the research design. One of the major limitations of the study in this regard is using the Turkish form of the DBT-WCCL without a complete adaptation. Future studies investigating properties of DBT and the DBT skills training with Turkish-speaking samples should ensure the incorporation of the culturally adapted Turkish form of the instrument. Although inclusion of a control group contributes to the methodological rigor of the current study, lack of randomization in participants' assignment to the study groups and utilization of nonequivalent groups are among the limitations of the study. Randomized controlled trials are the gold standard of treatment outcome research, warranting higher precision of study findings and confidence in the interpretation of those findings. The choice of an analytic design consisting of multiple comparisons, which could lead to an inflated familywise error rate, represents another limitation. The small number of participants is another constraint as well. Given that some participants in the current study criticized the number of students in the DBT skills group as too much and suggested running smaller groups, larger sample sizes could be achieved with multisite trials or conducting the study in multiple phases. In future studies, larger number of participants will increase the power of the analyses of effectiveness and allow for regression and mediation analyses to be conducted with data from the outcome variables, elucidating pathways and mechanisms of change within various adaptations of the DBT skills training.

The sample of the current study largely comprises senior female psychology students in a private university. The representativeness of this sample is low in terms of participants' gender, socioeconomic status, department, and current year in academic studies. Future studies should improve the representativeness of their samples in these regards to better approximate the general university student population. The pretest-posttest design of the study decreases the precision of the results through the possible introduction of history effects to the data. There is a need for additional measurement points between the pretreatment and the posttreatment. Incorporation of a follow-up group also would improve methodological rigor in this respect and provide information on the persistence of treatment gains after the intervention. Although a number of potential extraneous variables were controlled for in the present study, the effect of additional factors such as socioeconomic status and receiving or not receiving scholarship for tuition fees that could have an impact on outcome variables could also be controlled.

The second set of limitations of the present study is relevant to the scope of outcome variables included in the study. Given that the DBT Skills subscale of the DBT-WCCL is unable to discriminate between the degree of acquisition of skills from different skill modules within the DBT skills training (Neacsiu et al., 2010), additional measures of mindfulness, interpersonal effectiveness, and distress tolerance could be incorporated in the manner that a separate measure of difficulties with emotion regulation had been incorporated. A number of reviewed studies investigating the use of DBT skills training for university students and the preventive value of DBT skills training for different populations and settings contain separate measurements of

mindfulness in their research designs (Rizvi & Steffel, 2014; Fleming et al., 2015; Uliaszek et al., 2016; Lothes et al., 2019; Robins et al., 2019). In addition to the primary outcome variables pertinent to functional and dysfunctional coping, emotion regulation difficulties, and mental health symptoms, there could also be secondary outcome variables such as quality of life and global functioning of participants the changes in which following the DBT skills training could be examined.

In summary, future studies investigating the effectiveness of DBT skills training should pay attention to the methodological rigor of their research design with respect to sample size, sample representativeness, randomization, number of measurement points, control of possible extraneous variables; and the scope of their outcome variables in capturing the manifold effects of DBT skills training on participants and their lives. Participants' suggestions for further development of the adapted DBT skills program utilized in the current study, presented in the previous section, will also shed light on what could be done in future studies in terms of the design and implementation of adapted DBT skills programs.

4.6. Conclusion

In line with the most recent strain within DBT research increasingly highlighting the preventive value of DBT skills training as a stand-alone intervention, the aim of the current study was to investigate the preventive effectiveness of an adapted 9-week DBT skills program on the DBT skills use, dysfunctional coping, emotion regulation difficulties, and mental health symptoms of a nonclinical Turkish university student

sample. The results of the study suggest that the program was significantly effective in increasing participants' DBT skills use, decreasing their use of dysfunctional coping strategies, and reducing their difficulties with emotion regulation compared to the no-treatment control condition. There was also a nonsignificant trend for reduction of mental health symptoms after the program. Content analysis of qualitative data indicated that the 9-week adapted DBT skills program was acceptable and beneficial for the participants with frequent reports of positive experiences with the program, large percentages of benefits, attainment of goals, and positive life changes experienced following the program, and positive and constructive feedback for the program and its further development. Together with this positive feedback, participants' low attrition and high attendance rates were evidential for the feasibility of the program. Not without its limitations, the current study contributes to the limited literature on the preventive usage of DBT skills training in the nonclinical college student population for promoting adaptive coping, resilience, and psychological well-being in the face of stressors and risk factors associated with this stage of life to help protect from the development of mental health symptoms, and presents a feasible and acceptable program for curriculum developers and treatment providers, such as college counseling centers, dealing with this population that could benefit from such preventive interventions.

REFERENCES

- Alford, B. A., & Norcross, J. C. (1991). Cognitive therapy as integrative therapy. *Journal of Psychotherapy Integration*, 1(3), 175-189.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Angélico, A. P., Crippa, J. A., & Loureiro, S. R. (2013). Social anxiety disorder and social skills: A critical review of the literature. *International Journal of Behavioral Consultation and Therapy*, 7(4), 16-23.
- Arango, C., Diaz-Caneja, C. M., McGorry, P. D., Rapoport, J., Sommer, I. E., Vorstman, J. A., . . . Carpenter, W. (2018). Preventive strategies for mental health. *Lancet Psychiatry*, 5, 591-604.
- Aşçı, Ö., Hazar, G., Kılıç, E., & Korkmaz, A. (2015). Üniversite öğrencilerinde stres nedenlerinin ve stresle başa çıkma biçimlerinin belirlenmesi. *Uşak Üniversitesi Sosyal Bilimler Dergisi*, 8(4), 213-231.
- Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, 25(24), 3186-3191.
- Beaulac, J., Sandre, D., & Mercer, D. (2019). Impact on mindfulness, emotion regulation, and emotional overeating of a DBT skills training group: A pilot study. *Eating and Weight Disorders*, 24(2), 373-377.
- Beckstead, D. J., Lambert, M. J., DuBose, A. P., & Linehan, M. M. (2015). Dialectical behavior therapy with American Indian/Alaska Native adolescents diagnosed with substance use disorders: Combining and evidence-based treatment with cultural, traditional and spiritual beliefs. *Addictive Behaviors*, 51, 84-87.
- Bhui, K., & Dinos, S. (2011). Preventive psychiatry: A paradigm to improve population mental health and well-being. *The British Journal of Psychiatry*, 198, 417-419.

- Bilgel, N., & Bayram, N. (2010). Turkish version of the Depression Anxiety Stress Scale (DASS-42): Psychometric properties. *Archives of Neuropsychiatry*, 47, 118-126.
- Blackford, J. U., & Love, R. (2011). Dialectical behavior therapy group skills training in a community mental health setting: A pilot study. *International Journal of Group Psychotherapy*, 61(4), 645-657.
- Bohus, M., Dyer, A. S., Priebe, K., Krüger, A., Kleindienst, N., Schmahl, C., . . . Steil, R. (2013). Dialectical behaviour therapy for post-traumatic stress disorder after childhood sexual abuse in patients with and without borderline personality disorder: A randomised controlled trial. *Psychotherapy and Psychosomatics*, 82, 221-233.
- Bozkurt, N. (2004). Bir grup üniversite öğrencisinin depresyon ve kaygı düzeyleri ile çeşitli değişkenler arasındaki ilişkiler. *Eğitim ve Bilim*, 29(133), 52-59.
- Bradley, R. G., & Follingstad, D. R. (2003). Group therapy for incarcerated women who experienced interpersonal violence: A pilot study. *Journal of Traumatic Stress*, 16(4), 337-340.
- Brodsky, B. S., & Stanley, B. (2013). *The dialectical behavior therapy primer: How DBT can inform clinical practice*. Oxford, U.K.: Wiley-Blackwell.
- Bullock, K. D., Mirza, N., Forte, C., & Trockel, M. (2015). Group dialectical-behavior therapy skills training for conversion disorder with seizures. *Journal of Neuropsychiatry and Clinical Neurosciences*, 27(3), 240-243.
- Burckhardt, R., Manicavasagar, V., Shaw, F., Fogarty, A., Batterham, P. J., Dobinson, K., & Karpin, I. (2018). Preventing mental health symptoms in adolescents using dialectical behaviour therapy skills group: A feasibility study. *International Journal of Adolescence and Youth*, 23(1), 70-85.
- Canclan, A. C., de Souza, L. A., Liboni, R. P., Machado, W. D., & Oliveira, M. D. (2019). Effects of a dialectical behavior therapy-based skills group intervention for obese individuals: A Brazilian pilot study. *Eating and Weight Disorders*, 24(6), 1099-1111.

- Carmel, A., & Rose, M. L. (2015). Implementing the modes of dialectical behavior therapy in community-based settings: Setbacks and strategies for moving forward with fidelity. *Journal of Psychiatric Administration and Management*, 4(2), 31-43.
- Carter, G. L., Willcox, G. H., Lewin, T. J., Conrad, A. M., & Bendit, N. (2010). Hunter DBT project: Randomized controlled trial of dialectical behaviour therapy in women with borderline personality disorder. *Australian and New Zealand Journal of Psychiatry*, 44, 162-173.
- Chapman, A. L. (2006). Dialectical behavior therapy: Current indications and unique elements. *Psychiatry*, 3(9), 62-68.
- Chapman, A. L. (2018). Behavioural foundations of DBT: Applying behavioural principles to the challenge of suicidal behaviour and non-suicidal self-injury. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behavior therapy* (pp. 69-90). Oxford, U.K.: Oxford University Press.
- Chen, E. Y., Matthews, L., Allen, C., Kuo, J. R., & Linehan, M. M. (2008). Dialectical behavior therapy for clients with binge-eating disorder or bulimia nervosa and borderline personality disorder. *International Journal of Eating Disorders*, 41, 505-512.
- Chen, E. Y., Segal, K., Weissman, J., Zeffiro, T. A., Gallop, R., Linehan, M. M., . . . Lynch, T. R. (2015). Adapting dialectical behavior therapy for outpatient adult anorexia nervosa: A pilot study. *International Journal of Eating Disorders*, 48(1), 123-132.
- Chugani, C. D. (2017). Adapting dialectical behavior therapy for college counseling centers. *Journal of College Counseling*, 20, 67-80.
- Chugani, C. D., & Landes, S. J. (2016). Dialectical behavior therapy in college counseling centers: Current trends and barriers to implementation. *Journal of College Student Psychotherapy*, 30(3), 176-186.
- Chugani, C. D., Ghali, M. N., & Brunner, J. (2013). Effectiveness of short term dialectical behavior therapy skills training in college students with cluster B

personality disorders. *Journal of College Student Psychotherapy*, 27, 323-336.

- Clarke, S., Taylor, G., Bolderston, H., Lancaster, J., & Remington, B. (2015). Ameliorating patient stigma amongst staff working with personality disorder: Randomized controlled trial of self-management versus skills training. *Behavioural and Cognitive Psychotherapy*, 43, 692-704.
- Cleary, M., Walter, G., & Jackson, D. (2011). "Not always smooth sailing": Mental health issues associated with the transition from high school to college. *Issues in Mental Health Nursing*, 32, 250-254.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cole, P., Weibel, S., Nicastro, R., Hasler, R., Dayer, A., Aubry, J. M., . . . Perroud, N. (2016). CBT/DBT skills training for adults with attention deficit hyperactivity disorder (ADHD). *Psychiatria Danubina*, 28(1), 103-107.
- Cowperthwait, C. M., Wyatt, K. P., Fang, C. M., & Neacsiu, A. D. (2018). Skills training in DBT: Principles & practicalities. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behavior therapy* (pp. 171-209). Oxford, U.K.: Oxford University Press.
- Crossland, T., Hewitt, O., & Walden, S. (2017). Outcomes and experiences of an adapted dialectic behaviour therapy skills training group for people with intellectual disabilities. *British Journal of Learning Disabilities*, 45, 208-216.
- Crowell, S. E., Beauchaine, T. P., & Linehan, M. M. (2009). A biosocial developmental model of borderline personality: Elaborating and extending Linehan's theory. *Psychological Bulletin*, 135(3), 495-510.
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Dewe, C., & Krawitz, R. (2007). Component analysis of dialectical behavior therapy skills training. *Australasian Psychiatry*, 15(3), 222-225.

- Dimeff, L., & Linehan, M. M. (2001). Dialectical behavior therapy in a nutshell. *The California Psychologist*, 34, 10-13.
- Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining wellbeing. *Journal of Wellbeing*, 2(3), 222-235.
- Drossel, C., Fisher, J. E., & Mercer, V. (2011). A DBT skills training group for family caregivers of persons with dementia. *Behavior Therapy*, 42, 109-119.
- DuBose, A. P., Botanov, Y., Navarro-Haro, M. V., & Linehan, M. M. (2018). Evidence-based training: The intensive model of training in dialectical behavior therapy. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behavior therapy* (pp. 965-980). Oxford, UK: Oxford University Press.
- Dupont, S. (2018). *Psikanaliz hareketinin kendini imhası*. İstanbul: Yapı Kredi Yayınları.
- Dvir, Y., Ford, J. D., Hill, M., & Frazier, J. A. (2014). Childhood maltreatment, emotion dysregulation, and psychiatric comorbidities. *Harvard Review of Psychiatry*, 22(3), 149-161.
- Eisenberg, D., Golberstein, E., & Hunt, J. B. (2009). Mental health and academic success in college. *The B.E. Journal of Economic Analysis & Policy*, 9(1), Article 40.
- Eisner, L., Eddie, D., Harley, R., Jacobo, M., Nierenberg, A. A., & Deckersbach, T. (2017). Dialectical behavior therapy group skills training for bipolar disorder. *Behavior Therapy*, 48(4), 557-566.
- Ekinci, C. E., & Burgaz, B. (2007). Hacettepe Üniversitesi öğrencilerinin bazı akademik hizmetlere ilişkin beklenti ve memnuniyet düzeyleri. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 33, 120-134.
- Engle, E., Gadischkie, S., Roy, N., & Nunziato, D. (2013). Dialectical behavior therapy for a college population: Applications at Sarah Lawrence College and beyond. *Journal of College Student Psychotherapy*, 27(1), 11-30.

- Erkan, S., Cihangir-Çankaya, Z., Terzi, Ş., & Özbay, Y. (2011). Üniversite psikolojik danışma ve rehberlik merkezlerinin incelenmesi. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 11(22), 174-198.
- Erkan, S., Özbay, Y., Cihangir-Çankaya, Z., & Terzi, Ş. (2012). Üniversite öğrencilerinin yaşadıkları problemler ve psikolojik yardım arama gönüllülükleri. *Eğitim ve Bilim*, 37(164), 94-107.
- Erözkan, A. (2005). Üniversite öğrencilerinin kişilerarası duyarlılık ve depresyon düzeylerinin bazı değişkenlere göre incelenmesi. *Muğla Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 14, 1-27.
- Federici, A., & Wisniewski, L. (2013). An intensive DBT program for patients with multidagnostic eating disorder presentations: A case series analysis. *International Journal of Eating Disorders*, 46(4), 322-331.
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed). Thousand Oaks, CA: Sage Publications.
- Fishman, D. B., & Franks, C. M. (1992). Evolution and differentiation within behavior therapy: A theoretical and epistemological review. In D. K. Freedheim (Ed.), *History of psychotherapy: A century of change* (pp. 159-196). Washington, DC: American Psychological Association.
- Fleischhaker, C., Böhme, R., Sixt, B., Brück, C., Schneider, C., & Schulz, E. (2011). Dialectical behavior therapy for adolescents (DBT-A): A clinical trial for patients with suicidal and self-injurious behavior and borderline symptoms with a one-year follow-up. *Child and Adolescent Psychiatry and Mental Health*, 5(3), 1-10.
- Fleming, A. P., McMahon, R. J., Moran, L. R., Peterson, A. P., & Dreessen, A. (2015). Pilot randomized controlled trial of dialectical behavior therapy group skills training for ADHD among college students. *Journal of Attention Disorders*, 19(3), 260-271.
- Flynn, D., Joyce, M., Weichrauch, M., & Corcoran, P. (2018). Innovations in practice: Dialectical behavior therapy – skills training for emotional problem

solving for adolescents (DBT STEPS-A): Evaluation of a pilot implementation in Irish post-primary schools. *Child and Adolescent Mental Health*, 23(4), 376-380.

Fruzzetti, A. E., & Ruork, A. K. (2018). Validation principles and practices in dialectical behavior therapy. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behavior therapy* (pp. 341-365). Oxford, U.K.: Oxford University Press.

Frydenberg, E., Lewis, R., Bugalski, K., Cotta, A., McCarthy, C., Luscombe-Smith, N., & Poole, C. (2004). Prevention is better than cure: Coping skills training for adolescents at school. *Educational Psychology in Practice*, 20(2), 117-134.

Gibson, J., Booth, R., Davenport, J., Keogh, K., & Owens, T. (2014). Dialectical behaviour therapy-informed skills training for deliberate self-harm: A controlled trial with 3-month follow-up data. *Behaviour Research and Therapy*, 60, 8-14.

Gilmartin, T., & Valladares, D. (2019). Introducing radically open-DBT (RO-DBT) as a treatment of maladaptive over-control. *Australian Clinical Psychologist*, 2, 1-4.

Gizir, C. A. (2005). Ortadoğu Teknik Üniversitesi son sınıf öğrencilerinin problemleri üzerine bir çalışma. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 1(2), 196-213.

Goldstein, T. R., Axelson, D. A., Birmaher, B., & Brent, D. A. (2007). Dialectical behavior therapy for adolescents with bipolar disorder: A 1-year open trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, 46(7), 820-830.

Goldstein, T. R., Fersch-Podrat, R. K., Rivera, M., Axelson, D. A., Merranko, J., Yu, H., . . . Birmaher, B. (2015). Dialectical behavior therapy for adolescents with bipolar disorder: Results from a pilot randomized trial. *Journal of Child and Adolescent Psychopharmacology*, 25(2), 140-149.

- Gordon, R. S. (1983). An operational classification of disease prevention. *Public Health Reports*, 98(2), 107-109.
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment*, 26(1), 41-54.
- Grove, J. L., & Crowell, S. E. (2018). Invalidating environments and the development of borderline personality disorder. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behavior therapy* (pp. 149-177). Oxford, U.K.: Oxford University Press.
- Groves, S., Backer, H. S., van den Bosch, W., & Miller, A. (2012). Review: Dialectical behaviour therapy with adolescents. *Child and Adolescent Mental Health*, 17(2), 65-75.
- Gunderson, J. G. (2011). Borderline personality disorder. *The New England Journal of Medicine*, 364(21), 2037-2042.
- Gülgez, Ö., & Gündüz, B. (2015). Diyalektik davranış terapisi temelli duygu düzenleme programının üniversite öğrencilerinin duygu düzenleme güçlüklerini azaltmadaki etkisi. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi*, 44(2), 191-208.
- Güney, S., Kalafat, T., & Boysan, M. (2010). Dimensions of mental health: life satisfaction, anxiety and depression: a preventive mental health study in Ankara University students population. *Procedia Social and Behavioral Sciences*, 2, 1210-1213.
- Gürkan, U. (2014). Üniversite öğrencilerinin yılmazlık ve iyilik halinin bazı değişkenlere göre incelenmesi. *NWSA Education Sciences*, 9(1), 18-35.
- Hancıoğlu, Y. (2017). Üniversite öğrencilerinin algıladıkları stres düzeyleri ile stresle başa çıkma tarzları arasındaki ilişkinin incelenmesi. *Yönetim ve Ekonomi Araştırmaları Dergisi*, 15(1), 130-149.

- Harley, R., Sprich, S., Safren, S., Jacobo, M., & Fava, M. (2008). Adaptation of dialectical behavior therapy skills training group for treatment-resistant depression. *The Journal of Nervous and Mental Disease*, 196(2), 136-143.
- Harned, M. S., & Botanov, Y. (2016, March 31). Dialectical behavior therapy skills is effective intervention. *Psychiatric Times*, 33(3), 1-2. Retrieved from <https://www.psychiatrictimes.com/special-reports/dialectical-behavior-therapy-skills-training-effective-intervention/page/0/1>.
- Harned, M. S., Korslund, K. E., & Linehan, M. M. (2014). A pilot randomized controlled trial of dialectical behavior therapy with and without the dialectical behavior therapy prolonged exposure protocol for suicidal and self-injuring women with borderline personality disorder and PTSD. *Behaviour Research and Therapy*, 55, 7-17.
- Harned, M. S., Korslund, K. E., Foa, E. B., & Linehan, M. M. (2012). Treating PTSD in suicidal and self-injuring women with borderline personality disorder: Development and preliminary evaluation of a dialectical behavior therapy prolonged exposure protocol. *Behaviour Research and Therapy*, 50, 381-386.
- Hayes, S. C. (2004a). Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies. *Behavior Therapy*, 35, 639-665.
- Hayes, S. C. (2004b). Acceptance and commitment therapy and the new behavior therapies. In S. C. Hayes, V. M. Follette, & M. M. Linehan, *Mindfulness and acceptance: Expanding the cognitive-behavioral tradition* (pp. 1-29). New York, NY: The Guilford Press.
- Hayes, S. C., & Hofmann, S. G. (2017). The third wave of cognitive behavioral therapy and the rise of process-based care. *World Psychiatry*, 16(3), 245-246.
- Haynos, A. F., Fruzzetti, A. E., Anderson, C., Briggs, D., & Walenta, J. (2016). Effects of dialectical behavior therapy skills training on outcomes for mental

health staff in a child and adolescent residential setting. *Journal of Hospital Administration*, 5(2), 55-61.

Haynos, A. F., Roberto, C. A., & Attia, E. (2015). Examining the associations between emotion regulation difficulties, anxiety, and eating disorder severity among inpatients with anorexia nervosa. *Comprehensive Psychiatry*, 60, 93-98.

Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*, 44, 227-239.

Herbert, J. D., & Forman, E. B. (2010). The evolution of cognitive behaviour therapy: The rise of psychological acceptance and mindfulness. In J. D. Herbert, & E. B. Forman (Eds.), *Acceptance and mindfulness in cognitive behaviour therapy: Understanding and applying the new therapies* (pp. 3-25). New Jersey, NJ: John Wiley & Sons.

Hirvikoski, T., Waaler, E., Alfredsson, J., Pihlgren, C., Holmström, A., Johnson, A., . . . Nordström, A. L. (2011). Reduced ADHD symptoms in adults with ADHD after structured skills training group: Results from a randomized controlled trial. *Behaviour Research and Therapy*, 49, 175-185.

Hisli-Şahin, N., & Durak-Batıgün, A. (2009). Lise ve üniversite öğrencilerinde intihar riskini belirlemeye yönelik bir modelin sınanması. *Türk Psikiyatri Dergisi*, 20(1), 28-36.

Hoffman, S. G., Asmundson, G. J., & Beck, A. T. (2013). The science of cognitive therapy. *Behavior Therapy*, 44, 199-212.

Hofmann, S. G., Sawyer, A. T., & Fang, A. (2010). The empirical status of the "new wave" of cognitive behavioral therapy. *Psychiatric Clinics of North America*, 33, 701-710.

- Huffman, J. C., Stern, T. A., Harley, R. M., & Lundy, N. A. (2005). The use of DBT skills in the treatment of difficult patients in the general hospital. *FOCUS*, 3(2), 252-260.
- İkiz, F. E., & Mete-Otlu, B. (2015). Üniversite yaşamına uyum sürecinde yaşanan sorunlar ve başa çıkma yolları. *Celal Bayar Üniversitesi Sosyal Bilimler Dergisi*, 13(4), 35-51.
- Iverson, K. M., Shenk, C., & Fruzzetti, A. E. (2009). Dialectical behavior therapy for women victims of domestic abuse: A pilot study. *Professional Psychology: Research and Practice*, 40(3), 242-248.
- James, A. C., Taylor, A., Winmill, L., & Alfoadari, K. (2008). A preliminary community study of dialectical behaviour therapy (DBT) with adolescent females displaying persistent, deliberate self-harm (DSH). *Child and Adolescent Mental Health*, 13(3), 148-152.
- Kahl, K. G., Winter, L., & Schweiger, U. (2012). The third wave of cognitive behavioural therapies: What is new and what is effective? *Current Opinion in Psychiatry*, 25(6), 522-528.
- Katz, L. Y., Cox, B. J., Gunasekara, S., & Miller, A. L. (2004). Feasibility of dialectical behavior therapy for suicidal adolescent inpatients. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43(3), 276-282.
- Kavakcı, Ö., Güler, A. S., & Çetinkaya, S. (2011). Sınav kaygısı ve ilişkili psikiyatrik belirtiler. *Klinik Psikiyatri*, 14, 7-16.
- Kaya, Ö. S., & Demir, E. (2017). Kendini toparlama gücü ve stresle başa çıkma stratejilerinin mutluluk düzeyini yordama gücü. *Sakarya Üniversitesi Eğitim Fakültesi Dergisi*, 33, 18-33.
- Kazdin, A. E. (1982). History of behavior modification. In A. S. Bellack, M. Hersen, & A. E. Kazdin (Eds.), *International handbook of behavior modification and therapy* (pp. 3-32). New York, NY: Plenum Press.
- Kazdin, A. E., & Hersen, M. (1980). The current status of behavior therapy. *Behavior Modification*, 4(3), 283-302.

- Keogh, K., Booth, R., Baird, K., & Gibson, J. (2016). The radical openness group: A controlled trial with 3-month follow-up. *Practice Innovations, 1*(2), 129-143.
- Kızıldağ, S., Demirtaş-Zorbaz, S., Gençtanırım, D., & Arıcı, F. (2012). Hacettepe Üniversitesi öğrencilerinin psikolojik danışma yardımı almaya ve bu yardımın sunulduğu birime ilişkin görüşleri. *Mersin Üniversitesi Eğitim Fakültesi Dergisi, 8*(3), 185-196.
- Klein, A. S., Skinner, J. B., & Hawley, K. M. (2013). Targeting binge eating through components of dialectical behavior therapy: Preliminary outcomes for individually supported diary card self-monitoring versus group-based DBT. *Psychotherapy, 50*(4), 543-552.
- Kliem, S., Kröger, C., & Kosfelder, J. (2010). Dialectical behavior therapy for borderline personality disorder: A meta-analysis using mixed-effects modeling. *Journal of Consulting and Clinical Psychology, 78*(6), 936-951.
- Koerner, K. (2012). *Doing dialectical behavior therapy: A practical guide*. New York, NY: The Guilford Press.
- Koerner, K. (2013). What must you know and do to get good outcomes with DBT? *Behavior Therapy, 44*, 568-579.
- Koerner, K., & Dimeff, L. A. (2007). Overview of dialectical behavior therapy. In L. A. Dimeff, & K. Koerner (Eds.), *Dialectical behavior therapy in clinical practice: Applications across disorders and settings* (pp. 1-18). New York, NY: The Guilford Press.
- Krasner, L. (1971). Behavior therapy. *Annual Review of Psychology, 22*, 483-532.
- Kuo, J. R., Khoury, J. E., Metcalfe, R., Fitzpatrick, S., & Goodwill, A. (2015). An examination of the relationship between childhood emotional abuse and borderline personality disorder features: The role of difficulties with emotion regulation. *Child Abuse & Neglect, 39*, 147-155.
- Lavender, J. M., Tull, M. T., DiLillo, D., Messman-Moore, T., & Gratz, K. L. (2017). Development and validation of a state-based measure of emotion

- dysregulation: The State Difficulties in Emotion Regulation Scale (S-DERS). *Assessment*, 24(2), 197-209.
- Lee, S., & Mason, M. (2019). Effectiveness of brief DBT-informed group therapy on psychological resilience: A preliminary naturalistic study. *Journal of College Student Psychotherapy*, 33(1), 25-37.
- Lenz, A. S., Soler, I. G., Dell'Aquilla, J., & Uribe, P. M. (2017). Translation and cross-cultural adaptation of assessments for use in counseling research. *Measurement and Evaluation in Counseling and Development*, 50(4), 224-231.
- Lieb, K., Zanarini, M. C., Schmahl, C., Linehan, M. M., & Bohus, M. (2004). Borderline personality disorder. *The Lancet*, 364, 453-461.
- Lindenboim, N., Comtois, K. A., & Linehan, M. M. (2007). Skills practice in dialectical behavior therapy for suicidal women meeting criteria for borderline personality disorder. *Cognitive and Behavioral Practice*, 14, 147-156.
- Linehan, M. M. (1993a). *Cognitive-behavioral treatment of borderline personality disorder*. New York, NY: The Guilford Press.
- Linehan, M. M. (1993b). *Skills training manual for treating borderline personality disorder*. New York, NY: The Guilford Press.
- Linehan, M. M. (2015a). *DBT skills training manual* (2nd ed.). New York, NY: The Guilford Press.
- Linehan, M. M. (2015b). *DBT skills training handouts and worksheets*. New York, NY: The Guilford Press.
- Linehan, M. M. (2018). *Introduction to DBT Skills*. Retrieved from DBT Skills Online Training: <https://psychwire.com/linehan/dbt-skills>
- Linehan, M. M. (2020). *Building a life a worth living: A memoir*. New York, NY: Penguin Random House.

- Linehan, M. M., & Wilks, C. R. (2015). The course and evolution of dialectical behavior therapy. *American Journal of Psychotherapy*, 69(2), 97-110.
- Linehan, M. M., Armstrong, H. E., Suarez, A., Allmon, D., & Heard, H. L. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry*, 48, 1060-1064.
- Linehan, M. M., Comtois, K. A., & Ward-Ciesielski, E. F. (2012). Assessing and managing risk with suicidal individuals. *Cognitive and Behavioral Practice*, 19, 218-232.
- Linehan, M. M., Comtois, K. A., Murray, A. M., Brown, M. Z., Gallop, R. J., Heard, H. L., . . . Lindenboim, N. (2006). Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. *Archives of General Psychiatry*, 63, 757-766.
- Linehan, M. M., Heard, H. L., & Armstrong, H. E. (1993). Naturalistic follow-up of a behavioral treatment for chronically suicidal borderline patients. *Archives of General Psychiatry*, 50, 971-974.
- Linehan, M. M., Korslund, K. E., Harned, M. S., Gallop, R. J., Lungu, A., Neacsiu, A. D., . . . Murray-Gregory, A. M. (2015). Dialectical behavior therapy for high suicide risk in individuals with borderline personality disorder: A randomized clinical trial and component analysis. *JAMA Psychiatry*, 72(5), 475-482.
- Linehan, M. M., Schmidt, H., Dimeff, L. A., Craft, J. C., Kanter, J., & Comtois, K. A. (1999). Dialectical behavior therapy for patients with borderline personality disorder and drug-dependence. *The American Journal on Addictions*, 8, 279-292.
- Litwin, M. S. (2003). *The survey kit: How to assess and interpret survey psychometrics* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Lothes, J., Mochrie, K., Wilson, M., & Hakan, R. (2019, 03 06). The effect of DBT-informed mindfulness skills (What and How skills) and mindfulness-based

stress reduction practices on test anxiety in college students: A mixed design study. *Current Psychology*. doi:10.1007/s12144-019-00207-y

Lovibond, P. F. (1998). Long-term stability of depression, anxiety, and stress syndromes. *Journal of Abnormal Psychology*, 107(3), 520-526.

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behavior Research & Therapy*, 33(3), 335-343.

Lu, Z. L., & Yuan, K. (2010). Welch's *t*-test. In N. J. Salkind (Ed.), *Encyclopedia of research design* (pp. 1620-1623). Thousand Oaks, CA: Sage Publishing.

Lynch, T. R. (2018). *Radically open dialectical behavior therapy: Theory and practice for treating disorders of overcontrol*. Oakland, CA: Context Press.

Lynch, T. R., Gray, K. L., Hempel, R. J., Titley, M., Chen, E. Y., & O'Mahen, H. A. (2013). Radically open-dialectical behavior therapy for adult anorexia nervosa: feasibility and outcomes from an inpatient program. *BioMed Central Psychiatry*, 13(293), 1-17.

Lynch, T. R., Hempel, R. J., Whalley, B., Byford, S., Chamba, R., Clarke, P., . . . Russell, I. T. (2018). Radically open dialectical behaviour therapy for refractory depression: the RefraMED RCT. *Efficacy and Mechanism Evaluation*, 5(7), 1-111.

Lynch, T. R., Morse, J. Q., Mendelson, T., & Robins, C. J. (2003). Dialectical behavior therapy for depressed older adults: A randomized pilot study. *The American Journal of Geriatric Psychiatry*, 11(1), 33-45.

Macklem, G. L. (2014). *Preventive mental health at school: Evidence-based services for students*. New York, NY: Springer.

Maffei, C., Cavicchioli, M., Movalli, M., Cavallaro, R., & Fossati, A. (2018). Dialectical behavior therapy skills training in alcohol dependence treatment: Findings based on an open trial. *Substance Use & Misuse*, 53(14), 2368-2385.

- May, J. M., Richardi, T. M., & Barth, K. S. (2016). Dialectical behavior therapy as treatment for borderline personality disorder. *The Mental Health Clinician*, 6(2), 62-67.
- Mazza, J. J., & Dexter-Mazza, E. T. (2018). DBT skills in schools: Implementation of the DBT STEPS-A social emotional curriculum. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behaviour therapy* (pp. 719-734). Oxford, UK: Oxford University Press.
- Mazza, J. J., & Dexter-Mazza, E. T. (2018). DBT skills in schools: Implementation of the DBT STEPS-A social emotional curriculum. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behaviour therapy* (pp. 719-734). Oxford, U.K.: Oxford University Press.
- Mazza, J. J., Dexter-Mazza, E. T., Miller, A. L., Rathus, J. H., & Murphy, H. E. (2016). *DBT skills in schools: Skills training for emotional problem solving for adolescents (DBT STEPS-A)*. New York, NY: The Guilford Press.
- McCauley, E., Berk, M. S., Asarnow, J. R., Adrian, M., Cohen, J., Korslund, K., . . . Linehan, M. M. (2018). Efficacy of dialectical behavior therapy for adolescents at high risk for suicide: A randomized clinical trial. *JAMA Psychiatry*, 75(8), 777-785.
- McMain, S. F., Guimond, T., Barnhart, R., Habinski, L., & Streiner, D. L. (2017). A randomized trial of brief dialectical behaviour therapy skills training in suicidal patients suffering from borderline disorder. *Acta Psychiatrica Scandinavica*, 135(2), 138-148.
- Meaney-Tavares, R., & Hasking, P. (2013). Coping and regulating emotions: A pilot study of a modified dialectical behavior therapy group delivered in a college counseling service. *Journal of American College Health*, 61(5), 303-309.
- Mehlum, L., Ramberg, M., Tørmoen, A. J., Haga, E., Diep, L. M., Stanley, B. H., . . . Grøholt, B. (2016). Dialectical behavior therapy compared with enhanced usual care for adolescents with repeated suicidal and self-harming behavior: Outcomes over a one-year follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry*, 55(4), 295-300.

- Mehlum, L., Tørmoen, J. A., Ramberg, M., Haga, E., Diep, L. M., . . . Grøholt, B. (2014). Dialectical behavior therapy for adolescents with repeated suicidal and self-harming behavior: A randomized trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, 53(10), 1082-1091.
- Mercan, Ç. S., & Yıldız, S. A. (2011). Eğitim fakültesi birinci sınıf öğrencilerinin üniversiteye uyum düzeylerinin farklı değişkenler açısından incelenmesi. *Hasan Ali Yücel Eğitim Fakültesi Dergisi*, 16(2), 135-154.
- Miller, A. L., Rathus, J. H., & Linehan, M. M. (2007). *Dialectical behavior therapy with suicidal adolescents*. New York, NY: The Guilford Press.
- Miller, A. L., Wyman, S. E., Huppert, J. D., Glassman, S. L., & Rathus, J. H. (2000). Analysis of behavioral skills utilized by suicidal adolescents receiving dialectical behavior therapy. *Cognitive and Behavioral Practice*, 7, 183-187.
- Mrazek, P. J., & Haggerty, R. J. (1994). *Reducing risks for mental disorders: Frontiers for preventive intervention research*. Washington, D.C.: National Academy Press.
- Muhomba, M., Chugani, C. D., Uliaszek, A. A., & Kannan, D. (2017). Distress tolerance skills for college students: A pilot investigation of a brief DBT group skills training program. *Journal of College Student Psychotherapy*, 31(3), 247-256.
- Muld, B. B., Jokinen, J., Bölte, S., & Hirvikoski, T. (2016). Skills training groups for men with ADHD in compulsory care due to substance use disorder: a feasibility study. *Attention Deficit and Hyperactivity Disorders*, 8(3), 159-172.
- Neacsiu, A. D., Bohus, M., & Linehan, M. M. (2015). Dialectical behavior therapy: An intervention for emotion dysregulation. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 491-507). New York, NY: Guilford Press.
- Neacsiu, A. D., Eberle, J. W., Kramer, R., Wiesmann, T., & Linehan, M. M. (2014). Dialectical behavior therapy skills for transdiagnostic emotion dysregulation:

- A pilot randomized controlled trial. *Behaviour Research and Therapy*, 59, 40-51.
- Neacsiu, A. D., Rizvi, S. L., Vitaliano, P. P., Lynch, T. R., & Linehan, M. M. (2010). The Dialectical Behavior Therapy Ways of Coping Checklist: Development and psychometric properties. *Journal of Clinical Psychology*, 66(6), 563-582.
- Nelson-Gray, R. O., Keane, S. P., Hurst, R. M., Mitchell, J. T., Warburton, J. B., Chok, J. T., & Cobb, A. R. (2006). A modified DBT skills training program for oppositional defiant adolescents: Promising preliminary findings. *Behaviour Research and Therapy*, 44, 1811-1820.
- Niedtfeld, I., & Bohus, M. (2018). Understanding the bio in the biosocial theory of BPD: Recent developments and implications for treatment. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behavior therapy* (pp. 120-148). Oxford, U.K.: Oxford University Press.
- Neuendorf, K. A. (2017). *The content analysis guidebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Odacı, H., & Çıkrıkçı, Ö. (2017). Problemlı İnternet kullanımında depresyon, kaygı ve stres düzeyine dayalı farklılıklar. *Addicta: The Turkish Journal on Addictions*, 4, 41-61.
- Otrar, M., Ekşi, H., Dilmaç, B., & Şirin, A. (2002). Türkiye'de öğrenim gören Türk ve akraba topluluk öğrencilerinin stres kaynakları, başaıkma tarzları ile ruh sağlığı arasındaki ilişki üzerine bir araştırma. *Educational Sciences: Theory and Practice*, 2(2), 1-25.
- Özbay, Y., Palancı, M., Kandemir, M., & Çakır, O. (2012). Üniversite öğrencilerinin öznel iyi oluşlarının duygusal düzenleme, mizah, sosyal öz-yeterlik ve başaıkma davranışları ile yordanması. *Türk Eğitim Bilimleri Dergisi*, 10(2), 325-345.
- Özgüven, İ. E. (1992). Üniversite öğrencilerinin sorunları ve başetme yolları. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 7, 5-13.

- Panepinto, A. R., Uschold, C. C., Olandese, M., & Linn, B. K. (2015). Beyond borderline personality disorder: Dialectical behavior therapy in a college counseling center. *Journal of College Student Psychotherapy*, 29, 211-226.
- Panos, P. T., Jackson, J. W., Hasan, O., & Panos, A. (2014). Meta-analysis and systematic review assessing the efficacy of dialectical behavior therapy (DBT). *Research on Social Work Practice*, 24(2), 213-223.
- Parry, G., Cape, J., & Pilling, S. (2003). Clinical practice guidelines in clinical psychology and psychotherapy. *Clinical Psychology and Psychotherapy*, 10, 337-351.
- Perepletchikova, F. (2018). Dialectical behavior therapy for pre-adolescent children. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behaviour therapy* (pp. 691-718). Oxford, U.K.: Oxford University Press.
- Perepletchikova, F., Axelrod, S. R., Kaufman, J., Rounsaville, B. J., Douglas-Palumberi, H., & Miller, A. L. (2011). Adapting dialectical behaviour therapy for children: Towards a new research agenda for paediatric suicidal and non-suicidal self-injurious behaviours. *Child and Adolescent Mental Health*, 16(2), 116-121.
- Perepletchikova, F., Nathanson, D., Axelrod, S. R., Merrill, C., Walker, A., Grossman, M., . . . Walkup, J. (2017). Randomized clinical trial of dialectical behavior therapy for preadolescent children with disruptive mood dysregulation disorder: Feasibility and outcomes. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56(10), 832-840.
- Pistorello, J., Fruzzetti, A. E., MacLane, C., & Gallop, R. (2012). Dialectical behavior therapy (DBT) applied to college students: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 80(6), 982-994.
- Priebe, S., Bhatti, N., Barnicot, K., Bremner, S., Gaglia, A., Katsakou, C., . . . Zinkler, M. (2012). Effectiveness and cost-effectiveness of dialectical behaviour therapy for self-harming patients with personality disorder: A pragmatic randomised controlled trial. *Psychotherapy and Psychosomatics*, 81, 356-365.

- Prince, J. P. (2015). University student counseling and mental health in the United States: Trends and challenges. *Mental Health & Prevention*, 3, 5-10.
- Rachman, S. (2015). The evolution of behaviour therapy and cognitive behaviour therapy. *Behaviour Research and Therapy*, 64, 1-8.
- Rathus, J. H., Miller, A. L., & Bonavitacola, L. (2018). DBT with adolescents. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behaviour therapy* (pp. 547-572). Oxford, U.K.: Oxford University Press.
- Ritschel, L. A., Tone, E. B., Schoemann, A. M., & Lim, N. E. (2015). Psychometric properties of the Difficulties in Emotion Regulation Scale across demographic groups. *Psychological Assessment*, 27(3), 944-954.
- Rizvi, S. L. (2011). Treatment failure in dialectical behavior therapy. *Cognitive and Behavioral Practice*, 18(3), 403-412.
- Rizvi, S. L., & Steffel, L. M. (2014). A pilot study of 2 brief forms of dialectical behavior therapy skills training for emotion dysregulation in college students. *Journal of American College Health*, 62(6), 434-439.
- Rizvi, S. L., Steffel, L. M., & Carson-Wong, A. (2013). An overview of dialectical behavior therapy for professional psychologists. *Professional Psychology: Research and Practice*, 44(2), 73-80.
- Robins, C. J. (2002). Zen principles and mindfulness practice in dialectical behavior therapy. *Cognitive and Behavioral Practice*, 9, 50-57.
- Robins, C. J., Zerubavel, N., Ivanoff, A. M., & Linehan, M. M. (2018). Dialectical behavior therapy. In W. J. Livesley, & R. Larstone (Eds.), *Handbook of personality disorders: Theory, research, and treatment* (pp. 527-540). New York, NY: The Guilford Press.
- Robins, T. G., Roberts, R. M., & Sarris, A. (2019). The effectiveness, feasibility, and acceptability of a dialectical behaviour therapy skills training group in reducing burnout and psychological distress in psychology trainees: A pilot study. *Australian Psychologist*, 54(4), 292-301.

- Roosen, M. A., Safer, D., Adler, S., Cebolla, A., & van Strien, T. (2012). Group dialectical behavior therapy adapted for obese emotional eaters: A pilot study. *Nutrición Hospitalaria*, 27(4), 1141-1147.
- Rugancı, R. N., & Gençöz, T. (2010). Psychometric properties of a Turkish version of the Difficulties in Emotion Regulation Scale. *Journal of Clinical Psychology*, 66(4), 442-455.
- Ruggiero, G. M., Spada, M. M., Caselli, G., & Sassaroli, S. (2018). A historical and theoretical review of cognitive behavioral therapies: From structural self-knowledge to functional process. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 36(4), 378-403.
- Sabers, D., & Gochyyev, P. (2010). Item-test correlation. In N. J. Salkind (Ed.), *Encyclopedia of research design* (pp. 651-653). Thousand Oaks, CA: Sage Publications.
- Safer, D. L., Robinson, A. H., & Jo, B. (2010). Outcome from a randomized controlled trial of group therapy for binge eating disorder: Comparing dialectical behavior therapy adapted for binge eating to an active comparison group therapy. *Behavior Therapy*, 41, 106-120.
- Sakdalan, J. A., Shaw, J., & Collier, V. (2010). Staying in the here-and-now: A pilot study on the use of dialectical behaviour therapy group skills training for forensic clients with intellectual disability. *Journal of Intellectual Disability Research*, 54(6), 568-572.
- Salbach-Andrae, H., Bohnkamp, I., Pfeiffer, E., Lehmkuhl, U., & Miller, A. L. (2008). Dialectical behavior therapy of anorexia and bulimia nervosa among adolescents: A case series. *Cognitive and Behavioral Practice*, 15(4), 415-425.
- Salzer, M. S. (2012). A comparative study of campus experiences of college students with mental illnesses versus a general college sample. *Journal of American College Health*, 60(1), 1-7.

- Sargın, M., & Sargın, A. E. (2015). "Yaşamaya değer bir hayat için": Diyalektik davranışçı terapisinin gelişimi ve temel ilkeleri. *Türkiye Klinikleri Psychiatry - Special Topics*, 8(2), 64-70.
- Savcı, M., & Aysan, F. (2014). Üniversite öğrencilerinde algılanan stres düzeyi ile stresle başa çıkma stratejileri arasındaki ilişki. *Uluslararası Türk Eğitim Bilimleri Dergisi*, 10, 44-56.
- Sayrs, J. H. (2018). Running an effective DBT consultation team: Principles and challenges. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behavior therapy* (pp. 147-166). Oxford, U.K.: Oxford University Press.
- Sayrs, J. H., & Linehan, M. M. (2018). Modifying CBT to meet the challenge of treating emotion dysregulation: Utilizing dialectics. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behavior therapy* (pp. 107-119). Oxford, U.K.: Oxford University Press.
- Schiraldi, G. R., & Brown, S. L. (2002). Preventive mental health education for functioning adults: Stress, coping, and mental health courses at the University of Maryland. *International Journal of Emergency Mental Health*, 4(1), 57-64.
- Schmidt, H., & Russo, J. C. (2018). The structure of DBT programmes. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behavior therapy* (pp. 121-146). Oxford, U.K.: Oxford University Press.
- Schorr, A. (1987). Behavior modification. In H. J. Eysenck, & I. Martin (Eds.), *Theoretical foundations of behavior therapy* (pp. 37-56). New York, NY: Springer.
- Simon, W. (2009). Follow-up psychotherapy outcome of patients with dependent, avoidant and obsessive-compulsive personality disorders: A meta-analytic review. *International Journal of Psychiatry in Clinical Practice*, 13(2), 153-165.
- Smith, T. E., Bellack, A. S., & Liberman, R. P. (1996). Social skills training for schizophrenia: Review and future directions. *Clinical Psychology Review*, 16(7), 599-617.

- Soler, J., Pascual, J. C., Tiana, T., Cebria, A., Barrachina, J., Campins, M. J., . . . Perez, V. (2009). Dialectical behaviour therapy skills training compared to standard group therapy in borderline personality disorder: A 3-month randomised controlled clinical trial. *Behaviour Research and Therapy*, 47, 353-358.
- Stein, A. T., Hearon, B. A., Beard, C., Hsu, K. J., & Björgvinsson, T. (2016). Properties of the Dialectical Behavior Therapy Ways of Coping Checklist in a diagnostically diverse partial hospital sample. *Journal of Clinical Psychology*, 72(1), 49-57.
- Storrie, K., Ahern, K., & Tuckett, A. (2010). A systematic review: Students with mental health problems—A growing problem. *International Journal of Nursing Practice*, 16, 1-6.
- Swales, M. A. (2018). Dialectical behavior therapy: Development & distinctive features. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behavior therapy* (pp. 3-22). Oxford, U.K.: Oxford University Press.
- Swales, M., Heard, H. L., & Williams, J. M. (2000). Linehan's dialectical behavior therapy (BDT) for borderline personality disorder: Overview and adaptation. *Journal of Mental Health*, 9(1), 7-23.
- Sweet, S. A., & Grace-Martin, K. A. (2011). *Data analysis with SPSS: A first course in applied statistics* (4th ed.). Boston, MA: Allyn & Bacon.
- Swenson, C. R. (2007). Foreword. In A. L. Miller, J. H. Rathus, & M. M. Linehan (Eds.), *Dialectical behavior therapy with suicidal adolescents* (pp. 9-11). New York, NY: The Guilford Press.
- Swenson, C. R. (2016). *DBT principles in action: Acceptance, change, and dialectics*. New York, NY: The Guilford Press.
- Taylor-Brown, S., Johnson, K. H., Hunter, K., & Rockowitz, R. J. (1982). Stress identification for social workers in health care: A preventive approach to burn-out. *Social Work in Health Care*, 7(2), 91-100.

- Taylor-Powell, E., & Renner, M. (2003). Analyzing qualitative data. *Program Development and Evaluation*, 1-12. Retrieved from <https://deltastate.edu/docs/irp/Analyzing%20Qualitative%20Data.pdf>
- Telch, C. F., Agras, W. S., & Linehan, M. M. (2001). Dialectical behavior therapy for binge eating disorder. *Journal of Consulting and Clinical Psychology*, 69(6), 1061-1065.
- Terzi, Ş. (2013). Secure attachment style, coping with stress and resilience among university students. *The Journal of Happiness & Well-Being*, 1(2), 101-114.
- Thoma, N., Pilecki, B., & McKay, D. (2015). Contemporary cognitive behavior therapy: A review of theory, history, and evidence. *Psychodynamic Psychiatry*, 43(3), 423-462.
- Trochim, W. M. K. (2020). *Internal consistency reliability*. Retrieved from Research Methods Knowledge Base: <https://conjointly.com/kb/types-of-reliability/#internal-consistency-reliability>
- Trupin, E. W., Stewart, D. G., Beach, B., & Boesky, L. (2002). Effectiveness of a dialectical behaviour therapy program for incarcerated female juvenile offenders. *Child and Adolescent Mental Health*, 7(3), 121-127.
- Uliaszek, A. A., Chugani, C. D., & Williams, G. E. (2018). Dialectical behaviour therapy in college counselling centres. In M. A. Swales (Ed.), *The Oxford handbook of dialectical behaviour therapy* (pp. 671-690). Oxford, UK: Oxford University Press.
- Uliaszek, A. A., Rashid, T., Williams, G. E., & Gulamani, T. (2016). Group therapy for university students: A randomized controlled trial of dialectical behavior therapy and positive psychotherapy. *Behaviour Research and Therapy*, 77, 78-85.
- Üstündağ-Budak, A. M., & Özeke-Kocabaş, E. (2019). Dialectical behavior therapy and skill training: Areas of use and importance in preventive mental health. *Current Approaches in Psychiatry*, 11(2), 192-204.

- Üstündağ-Budak, A. M., Özeke-Kocabaş, E., & Ivanoff, A. (2019). Dialectical behaviour therapy skills training to improve Turkish college students' psychological well-being: A pilot feasibility study. *International Journal for the Advancement of Counseling, 41*, 580-597.
- Valentine, S. E., Bankoff, S. M., Poulin, R. M., Reidler, E. B., & Pantalone, D. W. (2015). The use of dialectical behavior therapy skills training as stand-alone treatment: A systematic review of the treatment outcome literature. *Journal of Clinical Psychology, 71*(1), 1-20.
- Van Dijk, S., Jeffrey, J., & Katz, M. R. (2013). A randomized, controlled, pilot study of dialectical behavior therapy skills in a psychoeducational group for individuals with bipolar disorder. *Journal of Affective Disorders, 145*, 386-393.
- Verheul, R., Van Den Bosch, L. M., Koeter, M. W., De Ridder, M. A., Stijnen, T., & Van Den Brink, W. (2003). Dialectical behaviour therapy for women with borderline personality disorder: 12-month, randomised clinical trial in the Netherlands. *British Journal of Psychiatry, 182*, 135-140.
- Vickers, J. (2016). Assessing a six-month dialectical behaviour therapy skills-only group. *Mental Health Practice, 19*(8), 26-30.
- Watkins, D. C., Hunt, J. B., & Eisenberg, D. (2011). Increased demand for mental health services on college campuses: Perspectives from administrators. *Qualitative Social Work, 11*(3), 319-337.
- Wilson, K. G. (1997). Science and treatment development: Lessons from the history of behavior therapy. *Behavior Therapy, 28*, 547-558.
- Wittchen, H. U., Lieb, R., Pfister, H., & Schuster, P. (2000). The waxing and waning of mental disorders: Evaluating the stability of syndromes of mental disorders in the population. *Comprehensive Psychiatry, 41*(2), 122-132.
- Wolbert, R. (2018). Modifying behaviour therapy to meet the challenge of treating borderline personality disorder: Incorporating Zen and mindfulness. In M. A.

Swales (Ed.), *The Oxford handbook of dialectical behavior therapy* (pp. 91-106). Oxford, U.K.: Oxford University Press.

Woodberry, K. A., & Popenoe, K. J. (2008). Implementing dialectical behavior therapy with adolescents and their families in a community outpatient clinic. *Cognitive and Behavioral Practice, 15*, 277-286.

Zapolski, T. C., & Smith, G. T. (2017). Pilot study: Implementing a brief DBT skills program in schools to reduce health risk behaviors among early adolescents. *The Journal of School Nursing, 33*(3), 198-204.

Zepf, S. (2018). Psychoanalysis today—A pseudoscience? A critique of the arbitrary nature of psychoanalytic theories and practice. *Psychodynamic Psychiatry, 46*(1), 115-134.

APPENDICES

Appendix A

Informed Consent Form

Bu araştırmanın amacı diyalektik davranışçı terapi (DDT) beceri eğitiminden geçmenin üniversite öğrencilerinin işlevsel ve işlevsel olmayan beceri kullanımına ve psikolojik iyi oluşlarına etkisini incelemektir. Çalışma Dr. Öğr. Üyesi Ayşe Meltem Budak tarafından yürütülmekte ve araştırmacı Ayşenur Alkan tarafından asiste edilmektedir. DDT beceri eğitimi almakta olduğunuz PSY4069 kodlu dersin her oturumunun ikinci yarısında Dr. Budak liderliğinde verilecektir. Eğitim grup formatındadır ve 9 hafta sürecektir. Bilinçli farkındalık, duygu düzenleme, kişilerarası ilişkilerde etkinlik ve distres toleransı olmak üzere dört ayrı beceri modülünden oluşmaktadır. Katılımcıların tüm oturumlara katılmaları ve her hafta verilen pratikleri düzenli yapmaları beklenmektedir.

Araştırmanın veri toplama ve analizi de dahil tüm süreçleri gizlilik ilkesiyle uyumludur. Toplanan veri bireysel değerlendirme amacıyla kullanılmayacak; yalnızca araştırma amacıyla kullanılacaktır. Araştırmaya katılım gönüllülük esasına dayalıdır. DDT beceri eğitimi, katılımcıları olumsuz etkileyecek herhangi bir pratik veya süreç içermemektedir. Ancak kendinizi herhangi bir nedenle rahatsız hissederseniz, araştırmaya katılımdan tamamen çekilebilir ya da yalnızca sizi rahatsız eden oturum veya modüle katılmayabilirsiniz. Bununla birlikte araştırmanın ve araştırmadan yapılacak çıkarımların sağlıklı ve kaliteli olması için elinizden geldiğinizde çok oturuma katılmanız önemlidir.

Bilinçli farkındalık ve kabul temelli uygulamalar bazen katılımcılara kendilerini daha kırılgan hissettirebilir. Bu yönde bir deneyiminiz olursa beceri eğitimi lideri veya asistanını bilgilendirmelisiniz. DDT beceri eğitimi psikiyatrik veya psikososyal müdahalelere bir alternatif değildir. Araştırma hakkında sormak istedikleriniz için araştırmacılara aysemeltem.budak@eas.bau.edu.tr veya aysenur.alkan@bahcesehir.edu.tr e-posta adreslerinden ulaşabilirsiniz.

Onam

Yukarıda yer alan ve araştırmadan önce katılımcıya verilmesi gereken bilgileri okudum ve katılmam istenen çalışmanın kapsamını ve amacını, gönüllü olarak üzerime düşen sorumlulukları anladım. Çalışma hakkında yazılı açıklama aşağıda adı belirtilen araştırmacı tarafından yapıldı. Kişisel bilgilerimin özenle korunacağı konusunda yeterli güven verildi.

Bu kořullarda söz konusu arařtırmaya kendi iřteęimle, hiębir baskı ve telkin olmaksızın katılmayı kabul ediyorum.

Katılımcının Adı Soyadı _____

Tarih _____

İmzası _____

Arařtırmacının Adı Soyadı _____

İmzası _____



Appendix B

Demographic Information Form for Pretest Data from the Experimental Group

Cinsiyetiniz: _____

Yaşınız: _____

Rumuz: _____

Hatırlayabileceğiniz bir rumuz seçmeniz önemlidir. Eğer bir rumuzunuz yoksa aşağıdaki formülü kullanarak sonradan erişim sağlayabileceğiniz bir rumuz oluşturun.

Doğum yeri (ilk iki harf) + Hangi ayda doğduğu (ilk iki harf) + İsminin baş harfi

Örneğin:

İstanbul + Şubat + Meltem

Rumuz: İstŞuM

1. Daha önce mindfulness (bilinçli farkındalık) eğitimi aldınız mı? (Evet) / (Hayır)
2. Almış olduğunuz tıbbi bir tanı var mı? (Evet) / (Hayır)
2a. Cevap evet ise lütfen tanınızı belirtiniz. _____
3. Düzenli kullandığınız bir ilaç var mı? (Evet) / (Hayır)
4. Almış olduğunuz psikiyatrik bir tanı var mı? (Evet) / (Hayır)
4a. Cevap evet ise lütfen tanınızı belirtiniz. _____
5. Kullandığınız psikiyatrik bir ilaç var mı? (Evet) / (Hayır)
6. Şu an psikolojik yardım alıyor musunuz (örn. psikoterapi)? (Evet) / (Hayır)

Bu beceri eğitimine katılmadaki amacınız nedir? (En az iki neden yazınız.)

1.

2.

3.

Appendix C

Demographic Information Form for Posttest Data from the Experimental Group

Cinsiyetiniz: _____

Yaşınız: _____

Rumuz: _____

1. 9 haftalık beceri eğitimi sürecimiz sırasında almış olduğunuz psikiyatrik bir tanı var mı? (Evet) / (Hayır)

1a. Cevap evet ise lütfen tanınızı belirtiniz. _____

2. 9 haftalık beceri eğitimi sürecimiz sırasında başladığınız bir psikolojik yardım (örn. bireysel psikoterapi, grup psikoterapisi vb.) süreci var mı? (Evet) / (Hayır)

DBT BECERİ EĞİTİMİ DEĞERLENDİRME SORULARI

Değerli katılımcılar,

Sizlerle birlikte yürüttüğümüz diyalektik davranışçı terapi beceri eğitimi ile ilgili olarak aşağıdaki soruları cevaplamanızı rica ederiz. Katkılarınız için teşekkür ederiz.

1. Bu grup çalışmasının sonunda hangi kişisel hedeflerinize ulaştınız veya ulaşamadınız?

2. Bu grup çalışmasının faydalı olduğunu düşünüyor musunuz? Cevabınız evet ise ne şekilde faydalı oldu?

3. Grup çalışmasında en çok faydalandığınızı düşündüğünüz konu veya beceri neydi? Neden?

4. Bu çalışma sırasında yaşadığınız duygu ve düşüncelerinizi belirtir misiniz?

5. Kendinizde değişiklikler, farklılıklar hissediyor musunuz, yaşıyor musunuz? Cevabınız evet ise ne gibi değişiklikler, farklılıklar yaşıyorsunuz?

6. Bu çalışmadan sonra hayatınızda ne gibi değişiklikler olduğunu düşünüyorsunuz?

7. Programda etkili olmadığını düşündüğünüz beceriler veya yöntemler hangileridir? Başka hangi eğitim yöntem ve araçlar kullanılabilir?

8. Bu grup çalışmasının nasıl yönetildiğini düşünüyorsunuz? Bu çalışmanın grup liderleri ile ilgili neler söylemek istersiniz?

Diğer yorum ve değerlendirmeleriniz:

Appendix D

Demographic Information Form for the Control Group

Cinsiyetiniz: _____

Yaşınız: _____

Rumuz: _____

Hatırlayabileceğiniz bir rumuz seçmeniz önemlidir. Eğer bir rumuzunuz yoksa aşağıdaki formülü kullanarak sonradan erişim sağlayabileceğiniz bir rumuz oluşturun.

Doğum yeri (ilk iki harf) + Hangi ayda doğduğu (ilk iki harf) + İsminin baş harfi

Örneğin:

İstanbul + Şubat + Meltem

Rumuz: İstŞuM

1. Daha önce mindfulness (bilinçli farkındalık) eğitimi aldınız mı? (Evet) / (Hayır)
2. Almış olduğunuz tıbbi bir tanı var mı? (Evet) / (Hayır)
2a. Cevap evet ise lütfen tanınızı belirtiniz. _____
3. Düzenli kullandığınız bir ilaç var mı? (Evet) / (Hayır)
4. Almış olduğunuz psikiyatrik bir tanı var mı? (Evet) / (Hayır)
4a. Cevap evet ise lütfen tanınızı belirtiniz. _____
5. Kullandığınız psikiyatrik bir ilaç var mı? (Evet) / (Hayır)
6. Şu an psikolojik yardım alıyor musunuz (örn. psikoterapi)? (Evet) / (Hayır)

Appendix E

Dialectical Behavior Therapy Ways of Coping Checklist (DBT-WCCL)

The items below represent ways that you may have coped with stressful events in your life. We are interested in the degree to which you have used each of the following thoughts or behavior to deal with problems and stresses.

Think back on the **LAST ONE MONTH** in your life. Then check the appropriate number if the thought/behavior is: never used, rarely used, sometimes used, or regularly used (i.e., at least 4 to 5 times per week). Don't answer on the basis of whether it seems to work to reduce stress or solve problems—just whether or not you use the coping behavior. Use the response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

0 Never Used

1 Rarely Used

2 Sometimes Used

3 Regularly Used

I have:

1	Bargained or compromised to get something positive from the situation.	0	1	2	3
2	Counted my blessings.	0	1	2	3
3	Blamed myself.	0	1	2	3
4	Concentrated on something good that could come out of the whole thing.	0	1	2	3
5	Kept feelings to myself.	0	1	2	3
6	Made sure I'm responding in a way that doesn't alienate others.	0	1	2	3
7	Figured out who to blame.	0	1	2	3
8	Hoped a miracle would happen.	0	1	2	3
9	Tried to get centered before taking any action.	0	1	2	3

10	Talked to someone about how I've been feeling.	0	1	2	3
11	Stood my ground and fought for what I wanted.	0	1	2	3
12	Refused to believe that it had happened.	0	1	2	3
13	Treated myself to something really tasty.	0	1	2	3
14	Criticized or lectured myself.	0	1	2	3
15	Took it out on others.	0	1	2	3
16	Came up with a couple of different solutions to my problem.	0	1	2	3
17	Wished I were a stronger person —more optimistic and forceful.	0	1	2	3
18	Accepted my strong feelings, but not let them interfere with other things too much.	0	1	2	3
19	Focused on the good things in my life.	0	1	2	3
20	Wished that I could change the way I felt.	0	1	2	3
21	Found something beautiful to look at to make me feel better.	0	1	2	3
22	Changed something about myself so that I could deal with the situation better.	0	1	2	3
23	Focused on the good aspects of my life and gave less attention to negative thoughts or feelings.	0	1	2	3
24	Got mad at the people or things that caused the problem.	0	1	2	3
25	Felt bad that I couldn't avoid the problem.	0	1	2	3
26	Tried to distract myself by getting active.	0	1	2	3
27	Been aware of what has to be done, so I've been doubling my efforts and trying harder to make things work.	0	1	2	3
28	Thought that others were unfair to me.	0	1	2	3
29	Soothed myself by surrounding myself with a nice fragrance of some kind.	0	1	2	3

30	Blamed others.	0	1	2	3
31	Listened to or played music that I found relaxing.	0	1	2	3
32	Gone on as if nothing had happened.	0	1	2	3
33	Accepted the next best thing to what I wanted.	0	1	2	3
34	Told myself things could be worse.	0	1	2	3
35	Occupied my mind with something else.	0	1	2	3
36	Talked to someone who could do something concrete about the problem.	0	1	2	3
37	Tried to make myself feel better by eating, drinking, smoking, taking medications, etc.	0	1	2	3
38	Tried not to act too hastily or follow my own hunch.	0	1	2	3
39	Changed something so things would turn out right.	0	1	2	3
40	Pampered myself with something that felt good to touch (e.g., a bubble bath or a hug).	0	1	2	3
41	Avoided people.	0	1	2	3
42	Thought how much better off I was than others.	0	1	2	3
43	Just took things one step at a time.	0	1	2	3
44	Did something to feel a totally different emotion (like gone to a funny movie).	0	1	2	3
45	Wished the situation would go away or somehow be finished.	0	1	2	3
46	Kept others from knowing how bad things were.	0	1	2	3
47	Focused my energy on helping others.	0	1	2	3
48	Found out what other person was responsible.	0	1	2	3
49	Made sure to take care of my body and stay healthy so that I was less emotionally sensitive.	0	1	2	3

50	Told myself how much I had already accomplished.	0	1	2	3
51	Made sure I respond in a way so that I could still respect myself afterwards.	0	1	2	3
52	Wished that I could change what had happened.	0	1	2	3
53	Made a plan of action and followed it.	0	1	2	3
54	Talked to someone to find out about the situation.	0	1	2	3
55	Avoided my problem.	0	1	2	3
56	Stepped back and tried to see things as they really are.	0	1	2	3
57	Compared myself to others who are less fortunate.	0	1	2	3
58	Increased the number of pleasant things in my life so that I had a more positive outlook.	0	1	2	3
59	Tried not to burn my bridges behind me, but leave things open somewhat.	0	1	2	3

Appendix F

Turkish Form of the Dialectical Behavior Therapy Ways of Coping Checklist (DBT-WCCL)

Aşağıdaki maddeler hayatınızdaki stresli olaylar ile başa çıkmak için izlemiş olabileceğiniz yolları belirtmektedir. Sorunlarınızla ve stresle başa çıkmak için bu düşünce ve davranışlardan her birine ne sıklıkla başvurduğunuzu öğrenmek istiyoruz.

Hayatınızın SON BİR AYINI düşünün. Maddelerde bahsedilen başa çıkma yollarının her birini kullanma sıklığınızı 0 ile 3 arasında bir rakam ile değerlendirin. Belirtilen başa çıkma yolunu hiç kullanmadıysanız 0, nadiren kullandıysanız 1, bazen kullandıysanız 2, devamlı kullandıysanız (örn. haftada 4-5 kez) 3'ü işaretleyin. Maddeleri bu başa çıkma yollarının stres azaltma veya problem çözmede işe yarayıp yaramayacağına dair düşüncelerinize dayanarak değil, bu yolları gerçekte kullanıp kullanmadığınıza dayanarak cevaplandırın. Verilen cevap seçeneklerini kullanın. Zihninizde her bir maddeyi ayrı değerlendirmeye çalışın. Önemli olan cevaplarınızın SİZİN İÇİN ne derece doğru olduğudur.

- 0 Hiç kullanmadım
- 1 Nadiren kullandım
- 2 Bazen kullandım
- 3 Devamlı kullandım

1	Durumdan olumlu bir şey elde etmek için uzlaşmaya veya orta yol bulmaya çalıştım.	0	1	2	3
2	Sahip olduklarım için şükrettim.	0	1	2	3
3	Kendimi suçladım.	0	1	2	3
4	Yaşadıklarımın çıkabilecek olumlu sonuçlara odaklandım.	0	1	2	3
5	Duygularımı kendime sakladım.	0	1	2	3
6	İnsanları kendimden uzaklaştırmayacak bir şekilde davrandığıma emin oldum.	0	1	2	3
7	Suçlayacak birini buldum.	0	1	2	3
8	Bir mucize gerçekleşmesini umdum.	0	1	2	3

9	Harekete geçmeden önce iç dengemi bulmaya çalıştım.	0	1	2	3
10	Hissettiklerimi biriyle paylaştım.	0	1	2	3
11	Direndim ve istediklerimi elde etmek için mücadele ettim.	0	1	2	3
12	Olanlara inanmak istemedim.	0	1	2	3
13	Kendimi sevdiğim lezzetli bir yiyecekla ödüllendirdim.	0	1	2	3
14	Kendimi eleştirdim veya azarladım.	0	1	2	3
15	Öfkemi başkalarından çıkardım.	0	1	2	3
16	Sorunum için birkaç farklı çözüm yolu buldum.	0	1	2	3
17	Daha güçlü –daha iyimser ve etkin– bir insan olmak istedim.	0	1	2	3
18	Hissettiğim güçlü duyguların varlığını kabul ettim, fakat hayatımdaki diğer şeyleri fazla etkilemelerine izin vermedim.	0	1	2	3
19	Hayatımdaki iyi şeylere odaklandım.	0	1	2	3
20	Hissettiklerimi değiştirebilmeyi diledim.	0	1	2	3
21	Daha iyi hissetmek için bakacak güzel şeyler buldum.	0	1	2	3
22	Durumla daha iyi başa çıkabilmek için kendimde bir değişiklik yaptım.	0	1	2	3
23	Hayatımın iyi yönlerine odaklanıp olumsuz duygu ve düşüncelere daha az önem verdim.	0	1	2	3
24	Sorunun ortaya çıkmasına neden olan şeylere ya da kişilere kızdım.	0	1	2	3
25	Sorunu önleyemediğim için kendimi kötü hissettim.	0	1	2	3
26	Çeşitli aktivitelerle dikkatimi dağıtmaya çalıştım.	0	1	2	3
27	Ne yapılması gerektiğinin farkındaydım ve işleri yoluna koymak için fazladan çaba sarf ettim.	0	1	2	3
28	Haksızlığa uğradığımı düşündüm.	0	1	2	3

29	Güzel bir şeyler koklayarak kendimi yatıştırdım.	0	1	2	3
30	Başkalarını suçladım.	0	1	2	3
31	Rahatlatıcı bulduğum müzikler dinledim veya çaldım.	0	1	2	3
32	Hiçbir şey olmamış gibi davrandım.	0	1	2	3
33	İstediğim şeyden sonraki en iyi seçeneği kabul ettim.	0	1	2	3
34	Kendime her şeyin daha kötü olabileceğini söyledim.	0	1	2	3
35	Zihnimi başka bir şeyle meşgul ettim.	0	1	2	3
36	Sorun hakkında somut adımlar atabilecek biriyle konuştum.	0	1	2	3
37	Yemek, içki, sigara veya ilaçlarla kendimi daha iyi hissetmeye çalıştım.	0	1	2	3
38	Acele etmemeye ve sezgilerimle hareket etmemeye çalıştım.	0	1	2	3
39	Her şeyin yolunda gitmesi için bazı değişiklikler yaptım.	0	1	2	3
40	Temas ettiğimde iyi hissettiren şeyler (örn. sıcak bir duş veya birine sarılmak) ile kendimi şımarttım.	0	1	2	3
41	İnsanlardan kaçındım.	0	1	2	3
42	Durumumun çoğu insanınkinden daha iyi olduğunu düşündüm.	0	1	2	3
43	İşleri adım adım yaptım.	0	1	2	3
44	Tamamen farklı bir duygu hissetmek için bir şey yaptım (örn. komedi filmine gittim).	0	1	2	3
45	Durumun kendi kendine çözülmesini veya bir şekilde sona ermesini diledim.	0	1	2	3
46	Durumun ne kadar kötü olduğunu başkalarından sakladım.	0	1	2	3
47	Enerjimi başkalarına yardım etmeye harcadım.	0	1	2	3
48	Durumdan başka kimin sorumlu olduğunu öğrendim.	0	1	2	3

49	Duygusal hassasiyetimi azaltmak için bedenime ve sağlığıma dikkat ettim.	0	1	2	3
50	Şimdiye kadar ne çok şey başardığımı düşündüm.	0	1	2	3
51	Kendime olan saygımı kaybetmeyeceğim bir şekilde tepki verdiğimden emin oldum.	0	1	2	3
52	Keşke olanları değiştirebilseydim, diye düşündüm.	0	1	2	3
53	Bir eylem planı hazırladım ve uyguladım.	0	1	2	3
54	Durumu daha iyi anlayabilmek için birileriyle konuştum.	0	1	2	3
55	Sorunumu ele almaktan kaçındım.	0	1	2	3
56	Durup olanlara dışarıdan bir gözle bakmaya çalıştım.	0	1	2	3
57	Kendimi benden daha şanssız insanlarla karşılaştırdım.	0	1	2	3
58	Daha olumlu bir bakış açısına sahip olabilmek için hayatımda bana keyif veren şeylerin sayısını artırdım.	0	1	2	3
59	İlişkilerimde köprüleri yakmamaya ve açık kapı bırakmaya çalıştım.	0	1	2	3

Appendix G

Turkish Form of the Depression Anxiety Stress Scale (DASS)

Lütfen aşağıdaki her bir madde için, son bir haftadaki durumunuza en yakın olan rakamı işaretleyiniz. Doğru veya yanlış cevap yoktur. Hiçbir madde üzerinde fazla zaman harcamayınız.

- 0 Hiçbir zaman
1 Bazen / Ara sıra
2 Oldukça sık
3 Her zaman

1	Oldukça önemsiz şeyler için üzüldüğümü fark ettim.	0	1	2	3
2	Ağzımda kuruluk olduğunu fark ettim.	0	1	2	3
3	Hiç olumlu duygu yaşayamadığımı fark ettim.	0	1	2	3
4	Soluk almada zorluk çektim (örneğin fizik/beden egzersizi yapmadığım halde aşırı hızlı nefes alma, nefessiz kalma gibi).	0	1	2	3
5	Hiçbir şey yapamaz oldum.	0	1	2	3
6	Olaylara aşırı tepki vermeye meyilliyim.	0	1	2	3
7	Bir sarsaklık duygusu vardı (sanki bacaklarım beni taşıyamayacakmış gibi).	0	1	2	3
8	Kendimi gevşetip salıvermek zor geldi.	0	1	2	3
9	Kendimi, beni çok tedirgin ettiği için sona erdiğinde çok rahatladığım durumların içinde buldum.	0	1	2	3
10	Hiçbir beklentimin olmadığı hissine kapıldım.	0	1	2	3
11	Keyfimin pek kolay kaçırılabilirdiği hissine kapıldım.	0	1	2	3
12	Sinirsel enerjimi çok fazla kullandığımı hissettim.	0	1	2	3
13	Kendimi üzgün ve depresif hissettim.	0	1	2	3

14	Herhangi bir şekilde geciktirildiğimde (asansörde, trafik ışıklarında, bekletildiğimde) sabırsızlandığımı hissettim.	0	1	2	3
15	Baygınlık hissine kapıldım.	0	1	2	3
16	Neredeyse her şeye karşı olan ilgimi kaybettiğimi hissettim.	0	1	2	3
17	Birey olarak değersiz olduğumu hissettim.	0	1	2	3
18	Alınan olduğumu hissettim.	0	1	2	3
19	Fizik egzersiz veya aşırı sıcak hava olmasa bile belirgin biçimde terlediğimi gözledim (örneğin ellerim terliyordu).	0	1	2	3
20	Geçerli bir neden olmadığı halde korktuğumu hissettim.	0	1	2	3
21	Hayatın değersiz olduğunu hissettim.	0	1	2	3
22	Gevşeyip rahatlamakta zorluk çektim.	0	1	2	3
23	Yutma güçlüğü çektim.	0	1	2	3
24	Yaptığım işlerden zevk almadığımı fark ettim.	0	1	2	3
25	Fizik egzersiz söz konusu olmadığı halde kalbimin hareketlerini hissettim (kalp atışlarımın hızlandığını veya düzensizleştiğini hissettim).	0	1	2	3
26	Kendimi perişan ve hüzünlü hissettim.	0	1	2	3
27	Kolay sinirlendirilebildiğimi fark ettim.	0	1	2	3
28	Panik haline yakın olduğumu hissettim.	0	1	2	3
29	Bir şey canımı sıktığında kolay sakinleşemediğimi fark ettim.	0	1	2	3
30	Önemsiz fakat alışkın olmadığım bir işin altından kalkamayacağım korkusuna kapıldım.	0	1	2	3
31	Hiçbir şey bende heyecan uyandırmıyordu.	0	1	2	3
32	Bir şey yaparken ikide bir rahatsız edilmeyi hoş göremediğimi fark ettim.	0	1	2	3
33	Sinirlerimin gergin olduğunu hissettim.	0	1	2	3

34	Oldukça değersiz olduğumu hissettim.	0	1	2	3
35	Beni yaptığım işten alıkoyan şeylere dayanamıyordum.	0	1	2	3
36	Dehşete düştüğümü hissettim.	0	1	2	3
37	Gelecekte ümit veren bir şey göremedim.	0	1	2	3
38	Hayatın anlamsız olduğu hissine kapıldım.	0	1	2	3
39	Kışkırtılmakta olduğumu hissettim.	0	1	2	3
40	Panikleyip kendimi aptal durumuna düşüreceğim durumlar nedeniyle endişelendim.	0	1	2	3
41	Vücudumda (örneğin ellerimde) titremeler oldu.	0	1	2	3
42	Bir iş yapmak için gerekli olan ilk adımı atmada zorlandım.	0	1	2	3

Appendix H

Turkish Form of the Difficulties in Emotion Regulation Scale (DERS)

Aşağıdaki cümlelerin size ne sıklıkla uyduğunu altlarında belirtilen 5 dereceli ölçek üzerinde değerlendiriniz. Her bir cümlenin altındaki 5 noktalı ölçekten, size uygunluk yüzdesini de dikkate alarak, yalnızca bir tek rakamı yuvarlak içine alarak işaretleyiniz.

- 1 Hemen hemen hiç (%0-%10)
- 2 Bazen (%11-%35)
- 3 Yaklaşık yarı yarıya (%36-65)
- 4 Çoğu zaman (%66-%90)
- 5 Hemen hemen her zaman (%91-%100)

1	Ne hissettiğim konusunda netimdir.	1	2	3	4	5
2	Ne hissettiğimi dikkate alırım.	1	2	3	4	5
3	Duygularım bana dayanılmaz ve kontrolsüz gelir.	1	2	3	4	5
4	Ne hissettiğim konusunda hiçbir fikrim yoktur.	1	2	3	4	5
5	Duygularıma bir anlam vermekte zorlanırım.	1	2	3	4	5
6	Ne hissettiğime dikkat ederim.	1	2	3	4	5
7	Ne hissettiğimi tam olarak bilirim.	1	2	3	4	5
8	Ne hissettiğimi önemserim.	1	2	3	4	5
9	Ne hissettiğim konusunda karmaşa yaşarım.	1	2	3	4	5
10	Kendimi kötü hissetmeyi kabullenebilirim.	1	2	3	4	5
11	Kendimi kötü hissettiğimde böyle hissettiğim için kendime kızarım.	1	2	3	4	5
12	Kendimi kötü hissettiğim için utanırım.	1	2	3	4	5
13	Kendimi kötü hissettiğimde işlerimi bitirmekte zorlanırım.	1	2	3	4	5
14	Kendimi kötü hissettiğimde kontrolden çıkarım.	1	2	3	4	5

15	Kendimi kötü hissettiğimde uzun süre böyle kalacağıma inanırım.	1	2	3	4	5
16	Kendimi kötü hissetmemin yoğun depresif duyguyla sonuçlanacağına inanırım.	1	2	3	4	5
17	Kendimi kötü hissettiğimde duygularımın yerinde ve önemli olduğuna inanırım.	1	2	3	4	5
18	Kendimi kötü hissederken başka şeylere odaklanmakta zorlanırım.	1	2	3	4	5
19	Kendimi kötü hissederken kontrolden çıktığım duygusu yaşarım.	1	2	3	4	5
20	Kendimi kötü hissediyor olsam da çalışmayı sürdürebilirim.	1	2	3	4	5
21	Kendimi kötü hissettiğimde bu duygumdan dolayı kendimden utanırım.	1	2	3	4	5
22	Kendimi kötü hissettiğimde eninde sonunda kendimi daha iyi hissetmenin bir yolunu bulacağımı bilirim.	1	2	3	4	5
23	Kendimi kötü hissettiğimde zayıf biri olduğum duygusuna kapılırım.	1	2	3	4	5
24	Kendimi kötü hissettiğimde de davranışlarım kontrolümün altındadır.	1	2	3	4	5
25	Kendimi kötü hissettiğim için suçluluk duyarım.	1	2	3	4	5
26	Kendimi kötü hissettiğimde konsantre olmakta zorlanırım.	1	2	3	4	5
27	Kendimi kötü hissettiğimde davranışlarımı kontrol etmekte zorlanırım.	1	2	3	4	5
28	Kendimi kötü hissettiğimde daha iyi hissetmem için yapacağım hiçbir şey olmadığına inanırım.	1	2	3	4	5
29	Kendimi kötü hissettiğimde böyle hissettiğim için kendimden rahatsız olurum.	1	2	3	4	5
30	Kendimi kötü hissettiğimde kendimle ilgili olarak çok fazla endişelenmeye başlarım.	1	2	3	4	5

31	Kendimi kötü hissettiğimde, kendimi bu duyguya bırakmaktan başka çıkar yol olmadığına inanırım.	1	2	3	4	5
32	Kendimi kötü hissettiğimde davranışlarım üzerindeki kontrolümü kaybederim.	1	2	3	4	5
33	Kendimi kötü hissettiğimde başka bir şey düşünmekte zorlanırım.	1	2	3	4	5
34	Kendimi kötü hissettiğimde duygumun gerçekte ne olduğunu anlamak için zaman ayırırım.	1	2	3	4	5
35	Kendimi kötü hissettiğimde, kendimi daha iyi hissetmem uzun zaman alır.	1	2	3	4	5
36	Kendimi kötü hissettiğimde duygularım dayanılmaz olur.	1	2	3	4	5

Appendix I

Ethical Approval from the Scientific Research and Publication Ethics Committee of Bahçeşehir University

Evrak Tarih ve Sayı: 27/12/2018-E.4634



HİZMETE ÖZEL

T.C.

BAHÇEŞEHİR ÜNİVERSİTESİ REKTÖRLÜĞÜ

Sayı : 20021704-604.01.01-4634

27/12/2018

Konu : Proje Başvurusu

SAYIN DR. ÖĞR. ÜYESİ A. MELTEM BUDAK
İktisadi, İdari ve Sosyal Bilimler Fakültesi
Psikoloji Bölümü

Bilimsel Araştırma ve Yayın Etiği Kurulu'nun 12.12.2018 tarih ve 2018/10 sayılı toplantısında tez danışmanlığını yürütmekte olduğunuz Klinik Psikoloji Yüksek Lisans programı öğrencisi Ayşenur ALKAN'ın "Diyalektik Davranışçı Terapi Başa Çıkma Yolları Envanteri (DDT-BÇYE)'nin Türkçeye Uyarlanması ve Üniversite Öğrencileri İçin Bir Diyalektik Davranışçı Terapi (DDT) Beceri Eğitimi Programı" başlıklı tez araştırması incelenmiş olup, Bilimsel Araştırma ve Yayın Etiği'ne aykırılık içermediği anlaşılmıştır. Bilgilerinize rica ederim.

BELGENİN ASLI ELEKTRONİK İMZALIDIR	
28.12.2018	
Adı Soyadı	Meltem AKKAYA
Unvanı	Yazı İşleri ve Arşiv Koordinatörü ✓.
İmza	

Prof.Dr. Faik Tunç BOZBURA
Rektör a.
Rektör Yardımcısı

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Pin : 89122

HİZMETE ÖZEL

Çırağan Caddesi, Osmanpaşa Mektebi Sokak, No: 4-6 34353- Beşiktaş -İstanbul
KEP : bahcesehiruniversitesi@hs01.kep.tr
Telefon:0212 381 01 61 Fax:0212 381 01 44
İrtibat Email: meltem.akkaya@bau.edu.tr

Ayrıntılı bilgi için irtibat:Meltem AKKAYA
Elektronik Ağ: www.bahcesehir.edu.tr

Bu belge, 5070 sayılı Elektronik İmza Kanununa göre Güvenli Elektronik İmza ile imzalanmıştır.
Evrak sorgulaması <https://ebys.bahcesehir.edu.tr/enVision/Dogrula/AC3TZ3R> adresinden yapılabilir. (PIN:89122)