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ORAL PRESENTATION

SÖZLÜ BİLDİRİLER

SB1- The Effect of Acceptance and Commitment Therapy on Interpersonal Problems and Life Satisfaction in Individuals with Complex Trauma: A Single-Case Experimental Study

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Objective: Acute, recurrent, or long-lasting traumatic experiences may lead to various enduring changes in individuals. Moreover, exposure to early interpersonal traumatic events or multiple trauma experiences can result in more complex clinical presentations that go beyond post-traumatic stress disorder (PTSD) symptoms and are defined as Complex Post-Traumatic Stress Disorder (CPTSD) (Cloitre et al., 2009; Herman, J. L. 1992; van der Kolk et al., 2005). Complex trauma encompasses not only PTSD symptoms but also marked difficulties in interpersonal functioning (World Health Organization [WHO], 2018). The aim of the present study is to examine within-person changes in interpersonal problems, depression–anxiety–stress, valued living, and experiential avoidance following an eight-session Acceptance and Commitment Therapy (ACT) intervention among individuals with complex trauma.

Method: This study was conducted using a nonconcurrent multiple baseline design, one of the single-case experimental designs. Accordingly, eight participants were included. In addition to the daily individual measurement items assessing experiential avoidance, value-directed behavior, and interpersonal problems, participants completed standardized measures at pre-test and post-test. These standardized measures included the Clinician-Administered PTSD Scale (CAPS-5), Acceptance and Action Questionnaire (AAQ-II), the Depression Anxiety Stress Scales–Short Form (DASS-21), the Engaged Living Scale (ELS), and the Inventory of Interpersonal Problems Circumplex Scales (IIP-C). For data analysis, visual analysis and Tau-U analysis were used for daily measurements, while clinically significant change and the reliable change index were used for standardized measures.

Ethical approval was obtained for the study from the Istanbul Medipol University Ethics Committee (Approval Date: 03/06/2024; Approval Number: 79).

Results: Statistical analyses of the daily measurements

revealed that changes in interpersonal problems, value-directed behavior, and experiential avoidance were statistically significant. Standardized measurement results indicated reliable change in interpersonal problems—the primary outcome measure—for four participants, and reliable change for most participants in experiential avoidance and valued living scores. However, changes in trauma scores were largely found to be unreliable. Visual analysis showed positive change across all participants, and Tau-U summary results demonstrated significant change in all variables based on weighted averages. Nevertheless, when within-person results were examined, all daily measurement outcomes were significant for only three participants, and the analyses indicated varying within-person patterns across different variables.

Conclusion: The findings indicate that ACT was effective in reducing interpersonal problems and experiential avoidance and in enhancing value-oriented living and overall quality of life among individuals with complex trauma. However, the intervention did not demonstrate sufficient effectiveness for trauma symptom scores. Comparison of standardized measures with daily measurement results showed substantial consistency overall. On the other hand, examination of within-person change revealed that the intervention was not significant for every participant, suggesting that individuals benefited from the intervention to varying degrees. These variations may stem from factors such as low baseline scores, the sensitivity of the standardized scales, contextual factors at the time of completing the assessments, or the possibility that the daily measurement items did not fully capture the targeted constructs. This study is notable as the first single-case experimental study on complex trauma conducted in Türkiye and is expected to inform future research in this field.

Keywords: Acceptance and commitment therapy, complex trauma, interpersonal problems, single case experimental design, experiential avoidance

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SB2 - The Effect of Repetitive Thinking and Shame on Trichotillomania and Skin Picking Disorder

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Objective: Trichotillomania (TTM) and Skin Picking Disorder (SPD) are characterized by recurrent hair or skin pulling behaviors that cannot be explained by a medical or other psychiatric condition (Snorrason et al., 2012). Processes such as shame, loneliness, and self-criticism are frequently observed in these disorders and have been reported to be associated with symptom severity (Houazene et al. 2020; Simeon et al, 1997). Although these behaviors are often explained through neurochemical mechanisms, studies examining their relationship with repetitive thinking patterns remain limited (Noble, 2012). This study aims to compare levels of repetitive thinking, worry, self-criticism, and shame in individuals diagnosed with TTM and healthy controls, and to investigate the relationship between these variables and symptom severity.

Method: The study included 16 individuals diagnosed with TTM and 17 healthy controls aged 18–65 years. All participants completed a sociodemographic data form, the Perseverative Thinking Questionnaire (PTQ), Penn State Worry Questionnaire (PSWQ), Forms of Self-Criticizing/Attacking and Self-Reassuring Scale (FSCRS), and the External and Internal Shame Scale (EISS). Symptom severity was assessed using the Massachusetts General Hospital Hairpulling Scale (MGH-HPS), and TTM diagnosis was confirmed with SCID-5. Normality was tested using the Shapiro–Wilk test, and group differences in PTQ, PSWQ, FSCRS, and EISS scores were analyzed using independent samples t-tests. Correlations between MGH-HPS scores and other variables were examined using Pearson correlation analysis. Ethical approval was obtained for the study from the Göztepe Prof. Dr. Süleyman Yalçın City Hospital Ethics Committee (Approval Date: 11/09/2025; Approval Number: 2025/0148).

Results: Preliminary findings indicate significantly higher levels of repetitive thinking, self-criticism, shame, and worry in

the TTM group compared to healthy controls. PTQ scores were significantly higher in the TTM group ($M=41.31$, $SD=12.39$) compared to controls ($M=15.59$, $SD=10.11$), $t(31)=6.54$, $p<.001$, $d=2.28$. Similarly, PSWQ scores were higher among individuals with TTM ($M=60.90$, $SD=13.74$) than controls ($M=40.65$, $SD=9.97$), $t(31)=4.86$, $p<.001$, $d=1.69$. The TTM group also had significantly higher FSCRS ($M=43.44$, $SD=17.08$) and EISS ($M=15.06$, $SD=8.50$) scores compared to controls ($M=24.29$, $SD=11.37$; $M=6.53$, $SD=4.96$, respectively), $t(31)=3.81$, $p<.001$, $d=1.33$; $t(31)=3.55$, $p=.001$, $d=1.24$. Correlation analyses showed significant positive associations between MGH-HPS scores and all examined variables.

Conclusion: These preliminary results demonstrate that individuals with TTM exhibit higher levels of repetitive thinking, self-criticism, shame, and worry, suggesting that TTM is not solely an impulsive behavior but also involves related cognitive and emotional processes. Considering these variables alongside the emotional distress and behavioral patterns frequently reported in TTM may contribute to the development of more comprehensive treatment approaches.

Keywords: Trichotillomania, repetitive thinking, worry, shame

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SB3 - Predictive Effects of Personality Traits and Psychological Resilience on PTSD Symptoms in Earthquake Survivors

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Objective: Many people are exposed to at least one traumatic event during their lifetime. Studies show that over 67% of the population will encounter a traumatic event, and 3.21% of individuals will develop Post-Traumatic Stress Disorder (PTSD) (Dückers et al., 2016). Why not every individual develops PTSD after a traumatic experience remains a subject of investigation in psychiatry. In the literature, personality traits and psychological resilience have been considered factors that may influence the risk of developing PTSD (Hu et al., 2015; Oshio et al., 2018). This study aims to examine the predictive effects of personality traits and psychological resilience on PTSD.

Materials and Methods: This study included 315 individuals living in Gaziantep who experienced the earthquake in the region on February 6, 2023. Participants were administered a Sociodemographic Data Form, the Big Five 50 Personality Questionnaire (BF50PQ), the Adult Resilience Measure (ARM), and the PTSD Checklist for the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (PCL-5). Ethical approval for the study was obtained from the Ethics Committee of Hasan Kalyoncu University (Approval Date: 29/08/2024; Approval Number: E-97105791-050.04-64068).

Results: The analyses revealed that the PCL-5 score was positively correlated with personality traits, except for extraversion, with low effect size, and negatively and significantly correlated with psychological resilience (ARM). Regression analysis results showed that, in the first model, the personality trait of emotional instability had a predictive effect on PTSD symptoms (7%, $R^2=0.070$). In the second model, psychological resilience had a significant negative predictive effect on PTSD symptoms and increased the explained variance (21.6%, $R^2=0.216$).

Conclusion: The positive correlation between emotional instability and PTSD symptoms aligns with existing research, suggesting that neuroticism increases vulnerability to traumatic stress (Jakšić et al., 2012). Conversely, the significant negative correlation between psychological resilience and PTSD symptoms underscores the protective role of resilience in mitigating the impact of trauma (Hu et al., 2015). Furthermore, the regression analysis demonstrates that while emotional instability predicts PTSD symptoms to some extent, psychological resilience provides additional explanatory power by significantly reducing symptom severity. These findings emphasize the importance of fostering resilience through targeted interventions and considering personality traits when assessing PTSD risk, particularly in populations exposed to large-scale traumatic events such as natural disasters.

Keywords: Posttraumatic stress disorders, resilience, personality

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SB4 - Providing Mental Health Services during the Earthquake and Maximizing the Function and Scope of Services through Machine Learning, Artificial Intelligence and Mobile Applications Based on Acceptance and Commitment Therapy: An Overall Introduction and Preliminary Results

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Introduction: Providing evidence-based scientific mental health services to enable the people affected by the difficult processes (Tanhan, 2020; Tanhan et al., 2020) to act more functionally is important. People affected by the February 6th 2023 earthquakes experience a wide range of biopsychosocial, spiritual and economic issues at individual, family, couple and community level. Our main objectives of this oral presentation is to share the overall preliminary results of a TUBITAK-1001 project. Through this ongoing project, we have been providing Acceptance and Commitment Therapy (ACT; Tanhan, 2019) based individual, couple, group and bibliotherapy mental health services.

Objective: Ethical approval was obtained for the study from Adiyaman University Social and Human Sciences IRB committee with the approval date and number: 24/04/2024-39. We used quantitative and qualitative methods to understand the effect of ACT based services. We used Online Photovoice (OPV; Tanhan & Strack, 2020) as one of the emerging and comprehensive qualitative methods. Our participants were anyone who have been affected directly and indirectly by the February 6th 2023 earthquakes and could speak Turkish and at least at the age of 16th.

Method: Participants especially the ones effected by the earthquakes directly or indirectly fill in an online pretest that measures their overall wellbeing (e.g., acting toward values) and psychopathology (e.g., psychological inflexibility, post-traumatic stress disorder, depression). The participant also choose which ACT based mental health services they prefer. We first checked if the client has any suicide and/or homicidal tendencies. If that was the case then we provided services

to them without awaiting them. If that was not the case, we provided service to the ones assigned to the experimental group based on their mental health preferences.

Results: In this study, so far, we have provided the following ACT based services: (a) 8 individual sessions to 35 consultees/clients; (b) 8 couple sessions to 4 couples; (c) psychiatric services to more than 50 people/consultees who had self-harm or suicide/homicidal tendencies. In terms of ACT based Read, Reflect, Share (RRS) bibliotherapy, we have provided 14 sessions face-to-face (n=100), online (n=60), through an RRS app which we have developed (n=140) so far. The preliminary results showed that the ACT based mental health services have been effective and the consultees/clients have been satisfied with the services.

Conclusion: Our preliminary result align with the global ACT based mental health literature that ACT based services can be effective during the difficult and normal times (Tanhan et al., 2020). Based on the preliminary results, it seems comprehensive ACT based services were effective. Further detailed analyses are needed to understand the comprehensive effect of the services.

Keywords: Acceptance and commitment therapy, wellbeing, earthquake, online photovoice, mental health, psychopathology

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SB5 - The Effect of Acceptance and Commitment Therapy-Based Bibliotherapy On Parenting Behaviors: A Single-Case Experimental Study

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Introduction: EParental self-efficacy refers to caregivers' beliefs in their ability to engage in effective parenting behaviors (Jones & Prinz, 2005). These beliefs influence the effort parents invest in managing parenting challenges and their persistence in the face of obstacles (Bandura, 1977). Higher parenting self-efficacy is associated with continuing to provide responsive parenting even when experiencing challenging internal states such as exhaustion and fatigue (Chau & Giallo, 2015). One of the common method for acquiring effective parenting skills is parenting programs (Jones & Prinz, 2005; Viola et al., 2020). Parenting programs have positive effects on parenting behaviors and self-efficacy as a cost-effective approach (Viola et al., 2020). Acceptance and Commitment Therapy (ACT) is a third-wave school of Cognitive Behavioral Therapy that aims to develop the ability to accept negative experiences rather than struggle with them, and guide individuals towards functional and desired behaviors (Yavuz, 2015). From the ACT perspective, psychological flexibility involves the ability to consciously connect with the present moment and take action for valued goals (Hayes et al., 2006). Values are the chosen qualities and desirable characteristics of purposeful actions (Hayes et al., 2006). This study aimed to examine the effects of an ACT-based self-help book on mothers' daily parenting behaviors and psychological processes, with expected reductions in dysfunctional disciplinary practices and increases in value-oriented behavior, psychological flexibility, and parental self-efficacy.

Material and Methods

Design: In this study, a non-concurrent multiple baseline single-case experimental design (SCED) with and an ABC structure was used, consisting of baseline (A), intervention (B), and follow-up (C) phases. Participants were six mothers of children aged 4–6 years, recruited using criterion sampling. Inclusion criteria were being literate, serving as the child's primary caregiver, and demonstrating consistency in participation. Exclusion criteria were the presence of a diagnosed psychopathology and/or current use of psychiatric medication.

Measures: Both daily and standardized measures were used to capture change processes comprehensively. Daily measurements, derived from standardized forms as short forms, with inserted idiographic value questions. Dysfunctional

parenting practices were assessed using the Turkish version of the Parenting Scale (PS) (Arnold et al., 1993; adapted by Tüfekçi, 2014). Besides, Parental Self-Efficacy Scale (PSE) (Coleman & Karraker, 2000; adapted by Kotil, 2010), Turkish version of the Valued Living Questionnaire (VLQ) (Wilson & Groom, 2002; adapted by Çekici et al., 2018) and Turkish version of Parental Psychological Flexibility Questionnaire (PPFQ) (Burke & Moore, 2015; adapted by Diril & Aydın, 2023) was used.

Procedure: Ethical approval was obtained from Medipol University Ethics Committee (Approval Date: 8 July 2024; Approval Number: 100). Participants were contacted via announcement, and 6 out of 7 completed the study. After obtaining informed consent, the study was introduced in the initial session and idiographic parenting values were learned. Individualized short-form measures administered across phases. Data was collected every two days during the baseline until stabilization is achieved, and daily during the intervention and follow-up stages. The bibliotherapy intervention grounded in the “Keyifli Ebeveynlik (*The Joy of Parenting*)” (Coyne & Murrell, 2009/2021) was assisted by weekly phone call sessions over approximately two months. Standardized full-form measures were administered at pretest, posttest, and follow-up.

Result: The participants consisted of married mothers aged between 28 and 42 ($n=6$) with at least an associate degree ($M=34.83$, $SD=4.75$). Four of them were housewives; one had four children, and the others had two children each. Visual analysis and Tau-U statistic were used to examine the daily data. Reliable Change Index (RCI) analysis (Jacobson & Truax, 1991) was applied to the data of standardized scales. Dysfunctional parenting practices, value-oriented behavior and psychological flexibility were examined with visual analysis for each participant, resulting in a total of 18 time-series graphs. These daily measures indicated limited but meaningful intervention-related effects. For dysfunctional disciplinary practices, moderate to strong decreases of some participants reflected reductions in ineffective parenting practices following intervention onset. Statistically significant Tau-U values showed an increase in value-oriented parenting behaviors in several participants, primarily in the A-C and B-C comparisons. Significant Tau-U effects for parental psychological flexibility were

rare but showed increases especially for follow-up. RCI analyses based on full-form measures further supported the presence of individualized and variable intervention effects. In most cases improvements were strong in VLQ (particularly consistency subscale) and PSE, whereas changes in PPFQ and PS were more participant-specific. While changes in daily measures were only partially, standardized scale analyses more consistently yielded significant results, potentially reflecting differences between measurement approaches. Increases in psychological flexibility appeared to parallel improvements in value-oriented behaviors.

Conclusion: Mothers' internal challengers on parenting are often underrepresented in intervention research. ACT-based parenting literature indicated it has promising effects on parental well-being (Gharashi et al., 2019; Gould et al., 2018; Marufoğlu, 2025; Tümlü, 2021). Still, no research specifically focused on parenting and conducted using a single-case study method with mothers has been found. In this sense, this study is the first ACT-based bibliotherapy intervention using a single-case study method. Overall, findings suggest that the ACT-based bibliotherapy intervention was effective in promoting value-oriented behaviors and reducing dysfunctional disciplinary practices, with partial effects on parenting-related psychological flexibility. Tau-U findings are evaluated according to the effect size classification proposed by Vannest and Ninci (2015), and the effect sizes mostly have moderate (.20–.60) and strong (.60–.80) effects, although they occurred in a limited number of participants. This shows that the significant changes observed in the study are remarkable in terms of quality rather than quantity. The results also emphasizes individual variability in responsiveness to the intervention, which is consistent with the individualized focus of ACT-based interventions and the methodological assumptions of single-case experimental designs. This ACT-based bibliotherapy study offers a low-cost and accessible intervention alternative for parents with limited access to face-to-face support services. However, factors such as the limited sample size and the reliance on self-reported measurements limit the generalizability of the study.

Keywords: Acceptance and commitment therapy, bibliotherapy, discipline, parenting

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SB6- The Effect of Acceptance and Commitment Therapy-Based Intervention on the Perception of Stigmatization in Individuals Diagnosed with Cancer

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Objective: Cancer is a major public health problem worldwide and in Türkiye, with increasing incidence and mortality rates (World Health Organization, 2022). The diagnosis process often evokes intense emotional reactions and may lead to internalized stigma due to societal perceptions of cancer (Paltun and Bölükbaş, 2021; Doan et al., 1993). For individuals diagnosed during childhood, the post-treatment period poses significant psychosocial challenges (Steliarova-Foucher et al., 2017). Psychological flexibility is a key protective factor in coping with these difficulties. Acceptance and Commitment Therapy (ACT) aims to enhance psychological flexibility and support value-based living despite distress (Hayes et al., 2004). However, research on ACT-based interventions targeting self-stigma in cancer patients remains limited. This study aims to evaluate the effectiveness of an ACT-based intervention in reducing self-stigma and improving quality of life, psychological flexibility, and value-consistent behavior immediately after the intervention and at one-month follow-up.

Method: This study used a randomized controlled experimental design with a quantitative approach. A total of 30 participants were randomly assigned to either the experimental group (n=15) or the control group (n=15). The experimental group consisted of 66.7% women and 33.3% men, while the control group consisted of 73.3% women and 26.7% men (n=21, M=21.88, SD=1.787; n=9, M=21.30, SD=1.721). The study was conducted over a 3-month period, which included 2 weeks of preliminary interviews, a 6-week ACT-based intervention for the experimental group, a 1-week psychoeducation program for the control group, and a 1-month follow-up assessment. Five psychometric instruments were used: the Cancer Stigma Scale (CSS; So et al., 2017; Paltun & Bölükbaş, 2019; $\alpha=.89$), the Valuing Questionnaire (VQ; Smout et al., 2014; Aydın & Aydın, 2017; $\alpha=.78$), the Cancer Behavior Inventory–Short Version (CBI-B; Heitzmann et al., 2011; İyigün et al., 2017; single-factor, $\alpha=.87$), the Engaged Living Scale (ELS; Trompetter

et al., 2013; Işık & Bilge, 2013; $\alpha=.91$), and the Psychological Flexibility Scale (PFS; Francis et al., 2016; Karakuş & Akbay, 2020; $\alpha=.79$). Data were analyzed using SPSS version 21, and independent and paired samples t-tests were conducted with bootstrap resampling (N=1000). Ethical approval was obtained for the study from the Istanbul Medipol University Ethics Committee (Approval Date: 20/01/2025; Approval Number: E-43037191-604.01-5526).

Results: In terms of sociodemographic variables, the experimental and control groups did not differ significantly. Intergroup analyses indicated no significant differences between pre- and post-test scores ($p>.05$), whereas significant differences favoring the control group emerged at the one-month follow-up for the total CSS score and the discrimination subscale ($p<.05$). Within-group analyses showed that the experimental group had significantly higher VQ Progress scores at follow-up compared to pre-test, whereas the control group demonstrated significantly higher VQ Progress scores at pre-test than at follow-up. The experimental group showed significant improvements from pre-test to post-test and follow-up in the total ELS score and its subdimensions. Within-group comparisons for the CBI-B revealed no significant differences among pre-test, post-test, and follow-up scores in either the experimental or control group ($p>.05$). The CSS experimental group yielded results in favor of the experimental group in terms of the avoidance subscale averages; the CSS control group also yielded significant results in terms of the discrimination scale and total score. Finally, PFS results indicated that follow-up scores for the being in the moment subscale were significantly higher than pre-test scores, while ELS scores at post-test were significantly higher than those at follow-up.

Conclusions: TThis study aims to examine the effects of a 6-week ACT intervention on psychological flexibility, internalized cancer stigma, cancer-related behaviors, and value-oriented actions in individuals with cancer, compared

with a 1-week active psychoeducation control. Outcomes will be evaluated through within- and between-group comparisons and their interrelationships. Although no significant between-group differences were found in psychological flexibility, the experimental group showed improvements in the being in the moment and values dimensions, consistent with ACT's theoretical framework. Similar findings have been reported in previous ACT studies with cancer populations (Arch & Mitchell, 2016; Johns et al., 2020; Taylor et al., 2024). However, the results should be interpreted cautiously due to the small sample size and limited follow-up period (Serfaty et al., 2018).

No significant between-group differences were found in cancer stigma, and a short-term increase in stigma perception was observed in the experimental group, possibly due to increased awareness of stigmatizing experiences during the ACT process. This interpretation is consistent with ACT's emphasis on acceptance and exposure to difficult experiences (Hayes et al., 2012). Similarly, ACT-based studies in HIV/AIDS and LGBT populations reported improvements in psychological flexibility without significant reductions in stigma (Levin et al., 2014; Skinta et al., 2015), and comparable results were found among relatives of individuals with schizophrenia (Tunç, 2023).

No significant between-group differences were found in cancer behavior or self-efficacy, possibly due to the short intervention duration and sample characteristics. In contrast, Daneshvar et al. (2020) reported improved self-efficacy following an 8-week ACT intervention with breast cancer patients, underscoring the importance of intervention length, cancer type, post-diagnosis phase, and cultural context.

The experimental group showed significant increases in value progress and valued living, indicating that ACT facilitates values clarification and value-consistent behavior. Consistent with these findings, Mosher et al. (2017, 2020) reported that value-focused living becomes more challenging as symptom burden increases and is closely related to psychological flexibility in advanced breast cancer patients. Despite supporting previous research, the present study is limited by its small sample size and cultural context. Future studies should examine ACT across different cancer types with larger samples and longer follow-up periods.

The limited number of experimental stigma studies, particularly in psycho-oncology, highlights the need for further research. Longitudinal studies including patients both during and after treatment are essential for obtaining more generalizable data. The findings suggest that ACT is a promising intervention, warranting validation through larger randomized controlled trials.

Keywords: Acceptance and commitment therapy, cancer, stigmatization, psychological flexibility, childhood cancer

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SB7 - Development of an Online Social Cognitive Remediation Training Program for Türkiye

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Objective: Cognitive remediation (CR) is a behavioral intervention designed to improve cognitive abilities such as attention, memory, and flexible thinking, commonly referred to as executive functions (EFs). In recent years, CR programs have expanded to include social and emotional components, especially through digital formats. This evolution has led to Social Cognitive Remediation Training (SCRT), which aims to enhance social understanding, empathy, and emotional awareness through structured and task-based exercises (Saure et al., 2022; Théorand et al., 2021). Although global interest in SCRT is growing, there is a lack of digital programs designed specifically for social and cognitive development in Türkiye (Akgün et al., 2019). This study aimed to develop a culturally adapted SCRT program in the Turkish language. The training focuses on improving executive functions such as working memory, cognitive flexibility, and impulse control, alongside social skills like emotion recognition and empathy. These skills are key to promoting healthy relationships, academic achievement, and mental well-being (Allemand et al., 2015; Diamond, 2013). The current abstract presents the main phase results of a newly developed Turkish online SCRT program aiming to improve mental health symptoms in non-clinical sample.

Methods: A 6-week online SCRT program was developed in Turkish to enhance executive and social cognitive functioning. The aim was to create an engaging, culturally relevant, and accessible tool for clinical and non-clinical populations. This study is part of Dilruba Sönmez's doctoral research in Clinical Psychology, supervised by Timothy Jordan, and was approved by the ethics committee and registered in Clinical Trials (Sönmez, 2024; Trial registration: ClinicalTrials.gov Identifier: NCT06213194 and Ethical Committee of Ibn Haldun University (No. E-71395021-050.06.04-34359).

The development process included:

- Reviewing the literature to determine five core components (working memory, inhibitory control, cognitive flexibility, cognitive empathy, affective empathy),
- Designing tasks that specifically target these components,

- Integrating simple visuals and interactive features to enhance engagement,
- Creating a user-friendly, fully online program structure.

The main study included 65 participants aged between 18 to 45 (8 = male participants) randomly assigned to an experimental group (SCRT program) or a control group (waitlist condition). The SCRT intervention lasted 6 weeks, with modular tasks targeting: Executive Functions (Working memory, Inhibitory control, Cognitive flexibility) and Social Cognition (Cognitive empathy and Affective empathy).

Result: Preliminary results from the main study demonstrated a significant time $\times$ group interaction on mental health symptoms, $F(1, 61)=7.91$, $p<.01$, $\eta^2=.12$, indicating that participants in the SCRT group showed greater reductions in mental health symptoms compared to the control group. Pairwise comparisons confirmed that post-test symptoms were significantly lower in the SCRT group ($p < .05$). No adverse effects were reported.

Conclusions: Online Social Cognitive Remediation Training (SCRT) shows promise as an integrative and preventive approach to improving mental health by training both executive and social-cognitive processes in non-clinical populations. Although only the interaction effect was found, the observed interaction patterns and improvements in mental health symptoms highlight the dynamic interplay between cognition, emotion, and social understanding, underscoring the value of multidimensional digital interventions. This program is one of the first digital SCRT efforts designed specifically for Türkiye. It fills a clear gap in digital mental health resources and demonstrates how SCRT methods can be adapted across cultures. More studies are needed to test its effectiveness across different populations, including both clinical and non-clinical samples.

Keywords: Internet-based intervention, cognitive remediation therapy, executive function, social cognition, mental health

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SB8 – Acceptance and Commitment Therapy for Maladaptive Daydreaming Among University Students: A Case Series

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Objective: This study examines the feasibility and effectiveness of a seven-session Acceptance and Commitment Therapy (ACT) intervention for maladaptive daydreaming among university students. As the first ACT-based intervention study targeting maladaptive daydreaming, it primarily serves as a feasibility investigation. The study evaluates the practicability and acceptability of ACT for this population.

Methods: This feasibility case series employed naturally staggered baseline periods, arising from practical scheduling constraints, along with repeated measurement of process variables to evaluate the acceptability and preliminary effectiveness of a seven-session ACT intervention for maladaptive daydreaming. Eight university students with clinically significant maladaptive daydreaming participated in a seven-session individual ACT intervention. Participants completed standardized self-report measures administered at both the pre- and post-intervention periods. The Maladaptive Daydreaming Scale (MDS-16) assessed the frequency and severity of maladaptive daydreaming symptoms. Psychological inflexibility was measured with the Acceptance and Action Questionnaire-II (AAQ-II). Valued living was evaluated using the Engaged Living Scale (ELS), and committed action was assessed with the Committed Action Questionnaire-8 (CAQ-8). Experiential avoidance was measured with the Brief Experiential Avoidance Questionnaire (BEAQ). To monitor changes in psychological flexibility processes during therapy, participants completed brief assessments twice a week during the baseline, intervention, and post-intervention phases. Assessments were composed of items representing the three core subdomains of the CompACT-10: behavioral awareness, openness to experience, and values-based action. At the final session, a semi-structured interview (approximately 30 minutes) was conducted with each participant to explore their subjective experiences and perceptions of the intervention. Quantitative analyses included Reliable Change Index, Clinically Significant Change, Tau-U, and single-case visual inspection, while qualitative data from final-session interviews were examined using thematic analysis. Ethical approval was obtained from the Boğaziçi University Social Sciences and Humanities Research Ethics Committee (SBİNAREK) on

03/12/2024 (Approval No. 2024/09). All participants were informed about the aims and procedures of the study and provided written informed consent prior to participation.

Result: Quantitative analyses revealed clinically meaningful reductions in maladaptive daydreaming symptoms for most participants, as determined by Reliable Change Index and Clinically Significant Change analyses. Four clients demonstrated reliable improvements in maladaptive daydreaming severity, three showed no reliable change, and one exhibited deterioration. Improvements in psychological inflexibility were observed in two clients, whereas five showed no reliable change and one deteriorated. With respect to valued living and life fulfillment, four clients demonstrated reliable improvement, while the remaining participants showed no meaningful change. Three clients showed improvements in committed action, three remained unchanged, and one deteriorated. Finally, five clients exhibited meaningful reductions in experiential avoidance, whereas the remaining participants showed no reliable change.

Visual analyses revealed that weekly process measures showed varied trends. Four clients improved in behavioral awareness, two remained unchanged, and one deteriorated. Three clients improved in valued action, two remained unchanged, and three deteriorated. Four clients showed improvements in openness to experience, whereas four deteriorated. Thematic analysis of final-session interviews identified three themes and seven subthemes that encapsulate participants'

experiences with MD and the skills, awareness, and perspectives they reported gaining throughout the intervention process. Qualitative findings suggest that participants redefined their relationship with maladaptive daydreaming, developed more awareness and self-compassion, and started engaging in more meaningful, value-driven behaviors.

Conclusions: This study is the first attempt to evaluate the feasibility and potential effects of a seven-session ACT intervention for university students experiencing maladaptive daydreaming. The non-significant Tau-U findings may partly reflect methodological constraints. For some participants, the presence of fewer than three data points in the baseline

or follow-up phases, which is considered the minimum requirement to meet statistical power standards in single-case designs (Horner et al., 2005), may have limited the reliability of single-case effect size calculations and reduced statistical power.

Additionally, heterogeneity in weekly process measurements may be attributed to the ongoing socio-political protests in Türkiye during the intervention period, as they may have functioned as external stressors that negatively influenced participants' emotional well-being and the development of psychological flexibility skills. Recent network analyses suggest that external stressors and negative affect are significant triggers for MD (Nowacki & Pyszkowska, 2024). Therefore, the lack of improvement in some process variables might reflect an exacerbation of MD engagement, as an avoidance strategy, due to external stress rather than a failure of the intervention itself.

Despite these limitations, the findings demonstrate that the ACT intervention was feasible and well-accepted, with most participants engaging consistently throughout the process. The current study's finding, that reductions in experiential avoidance (measured by the BEAQ) often co-occurred with reductions in MD severity, empirically supports the argument in the literature that MD serves as a primary avoidance function, particularly in managing distressing emotions and coping with loneliness (Somer et al., 2016)

Given the literature indicating that individuals with maladaptive daydreaming often experience deficits in self-compassion (Pourmoazzen et al., 2025) and hold self-labels such as a *dreary and dysfunctional sense of existence* (Somer et al, 2019), the inclusion of self-related processes (e.g., self-as-context and cognitive defusion) within ACT may have

contributed to improvements in self-compassion. Future studies should further examine the relationship between MD and self-processes.

Overall, the study suggests that adapting ACT for MD is feasible. However, the findings highlight the importance of developing longer interventions that allow for a more precise identification of clients' therapeutic needs and enable the delivery of targeted, need-specific techniques. Future studies should focus on developing intervention programs designed to address the diverse needs of different populations.

Keywords: Maladaptive daydreaming, acceptance and commitment therapy, psychological flexibility, single-case design

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SB9 - Analysis of the Effects of Deictic and Hierarchical Frame Interventions on Cognitive Fusion

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Objective: Acceptance and Commitment Therapy (ACT), grounded in Relational Frame Theory, seeks to enhance psychological flexibility by altering the contextual functions of language and cognition (Hayes, 2004). The self-as-context and cognitive defusion are fundamental components of this approach. Although several studies have compared these interventions in the literature (Foody et al., 2013; López-López & Luciano, 2017), no study to date has examined the effects of deictic and hierarchical interventions in individuals exhibiting high levels of cognitive fusion and a highly conceptualized self. In this regard, the present study examined the effects of based deictic and hierarchical interventions on cognitive defusion across four groups defined according to levels of self-as-context and cognitive fusion. Participants were identified using the Self-as-context Scale and the State Cognitive Fusion Questionnaire, and individuals with low self-as-context ($n=20$) and high cognitive fusion scores ($n=20$) were assigned to four groups: (1) Deictic1 (low self-as-context), (2) Hierarchical1 (low self-as-context), (3) Deictic2 (high cognitive fusion), and (4) Hierarchical2 (high cognitive fusion). Deictic interventions were administered to the Deictic1 and Deictic2 groups, whereas hierarchical interventions were applied to the Hierarchical1 and Hierarchical2 groups. The findings indicated that both deictic- and hierarchical-framing-based interventions were effective in reducing cognitive fusion, and that the effects of these interventions were sensitive to individual differences.

Method: A total of 40 young adults (37 women, 3 men) participated in the study ($M_{age} = 22.23$). All participants were students at Medipol University. The study employed a four-group experimental pretest–posttest design. Participants completed the Demographic Information Form, the State Cognitive Fusion Questionnaire (SCFQ), the Cognitive Fusion Questionnaire (CFQ), the Self-as-context Scale (SCS), the Visual Analog Scale (VAS), and the Experimental Screening Questionnaire (ESQ). Participants were selected based on their mean scores on the SCS and the CFQ. Twenty individuals with low SCS scores and twenty individuals with high CFQ scores were identified and randomly assigned to one of four groups: Deictic1, Hierarchical1, Deictic2, and Hierarchical2 ($n = 10$ per group). Inclusion criteria were being between 18 and 65 years of age, having no current or past psychiatric diagnosis or

treatment history, and providing voluntary informed consent to participate. All interventions were delivered individually, face-to-face, in a single session.

The aim of the present study was to examine the relative effectiveness of two self-based interventions—deictic and hierarchical—on cognitive defusion in individuals with low levels of contextual self and high levels of cognitive fusion. Both interventions were adapted from the protocol developed by Foody et al. (2013), which constitutes a brief adaptation of the interventions originally developed by Luciano et al. (2011).

Results: The results indicated a significant difference among the Deictic1, Deictic2, Hierarchical1, and Hierarchical2 groups with respect to posttest scores on the State Cognitive Fusion measure. Tukey's HSD post hoc analyses revealed that the Deictic2 group scored significantly higher than both the Deictic1 and Hierarchical1 groups (see Table 1). Significant group differences were also observed in posttest scores on the Cognitive Fusion Questionnaire. According to the Tukey post hoc test, the Deictic2 group obtained significantly higher scores compared to the Hierarchical1 group.

An ANCOVA conducted on State Cognitive Fusion posttest scores, with pretest scores entered as a covariate, demonstrated a significant effect of group. This difference was particularly evident in favor of the Hierarchical1 group.

Conclusion: The present study examined the effects of single-session deictic and hierarchical framing interventions on cognitive defusion as a function of individuals' levels of self-as-context and cognitive fusion. The findings suggest that the effectiveness of these intervention types varies depending on individual differences. In particular, deictic interventions appeared to be more effective in reducing cognitive fusion among individuals with low levels of self-as-context.

This finding may be attributed to the concrete and experiential nature of deictic framing, which may facilitate an external perspective on thoughts and thereby support cognitive defusion. In contrast, hierarchical interventions, by offering a more abstract framework, appeared to enhance self-awareness but demonstrated more limited effects in short-term applications.

Accordingly, the limited impact of single-session interventions may be explained by the entrenched nature of cognitive fusion. Future studies employing interventions of longer duration or repeated sessions may yield more robust and sustained effects. Overall, the findings indicate that deictic and hierarchical framings may exert differential effects across individuals with distinct cognitive profiles. In this respect, the present study highlights the importance of tailoring ACT-based interventions to individual differences.

Keywords: Self-as-context, self, cognitive defusion, cognitive fusion, relational frame theory, acceptance and commitment therapy

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Table 1. One-Way ANOVA Results for Posttest Scores Across the Deictic1, Deictic2, Hierarchical1, and Hierarchical2 Groups

Variable	Group	N	Mean	SS	F(3,36)	p	η ²
State Cognitive Fusion	Deictic1	10	21.10	8.16	5.180	.004	.464
	Deictic 2	10	32.10	11.48			
	Hierarchical 1	10	18.00	6.48			
	Hierarchical 2	10	23.20	6.62			
Cognitive Fusion	Deictic 1	10	20.80	8.03	3.255	.029	.385
	Deictic 2	10	30.40	11.86			
	Hierarchical 1	10	18.20	9.31			
	Hierarchical 2	10	21.10	6.95			

$p < .05$

SB10 - Effectiveness and Feasibility of an Acceptance and Commitment Therapy–Based Online Group Intervention for Fear of Cancer Recurrence

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Objective: Despite advances in treatment options and survival rates, many cancer patients continue to face the possibility of disease recurrence (Simard and Savard, 2009). Fear of cancer recurrence is one of the most frequently reported concerns among cancer survivors and is considered one of their most common unmet needs (Herschbach et al., 2010). The aim of the present study is to examine the effects of an Acceptance and Commitment Therapy (ACT)-based online group intervention on fear of cancer recurrence, psychological inflexibility, functioning, and levels of depression, stress, and anxiety among individuals who have completed cancer treatment and are currently in remission.

Method: This study employed an experimental, quantitative, randomized controlled design consisting of an intervention group and a control group. Participants assigned randomly to each group completed pre-test, post-test, and one-month follow-up assessments. To collect data from participants in both groups, the Fear of Cancer Recurrence Inventory, Acceptance and Action Questionnaire-II, Valued Living Questionnaire, Depression Anxiety Stress Scale, and Therapy Satisfaction Questionnaire were administered. A total of 24 eligible and voluntarily participating individuals were randomly allocated to the intervention (n=12) and control (n=12) groups. Both groups attended six weekly online sessions, each lasting 90 minutes. While the intervention group received Acceptance and Commitment Therapy, the control group received a social support intervention. Ethical approval was obtained for the study from the Haliç University Non-Interventional Clinical Research Ethics Committee (Approval Date: 04/07/2024; Approval Number: 2024/62).

Results: The findings of the study indicate that the 6-week online group therapy intervention, designed in accordance with ACT principles, was effective in reducing fear of cancer recurrence among participants who completed the intervention and were in a state of well-being. The same intervention was also found to be effective in reducing participants' levels of psychological inflexibility. Although these changes were significant within groups, no statistically significant differences were detected between groups.

Regarding the other variables measured in the study—functioning, depression, anxiety, and stress—no statistically significant differences were found either within or between groups. However, pre-test and post-test comparisons revealed increases or decreases in these measures, although these changes did not reach statistical significance. The decreases in stress, depression, and anxiety scores, together with the increase in functioning scores, are noteworthy in demonstrating the potential impact of the 6-week ACT online group intervention.

Conclusions: The findings of this study support the notion that ACT-based online group interventions produce significant effects on fear of cancer recurrence and psychological inflexibility. However, the absence of significant differences in additional psychosocial variables—such as functioning, depression, anxiety, and stress—may be explained by factors including the lack of cutoff scores, the limited number of sessions, the online group therapy format, the small sample size, and the selection of measurement instruments.

These results suggest that 6-week, online ACT group interventions may be particularly effective in influencing core ACT processes such as fear of recurrence and psychological inflexibility. Nevertheless, to produce significant changes in broader psychological variables, longer-term and face-to-face interventions, larger samples, and multi-method assessment approaches may be required.

Keywords: Acceptance and commitment therapy, fear of cancer recurrence, psychological flexibility, depression, anxiety, stress

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SB11 - The Effect of an Acceptance and Commitment Therapy-Based Psychoeducational Program on the Depression, Anxiety, and Stress Levels of Relatives of Individuals Diagnosed with Cancer

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ABSTRACT

Objective: Cancer deeply affects not only patients but also their relatives, often leading to emotional difficulties such as anxiety and depression. As caregiving responsibilities extend over time, caregivers tend to experience higher levels of psychological distress. Therefore, preventive interventions for caregivers are critically important for improving their well-being. This study aimed to develop an ACT-based psychoeducation program and examine its effects on depression, anxiety, and stress levels among first-degree relatives of individuals diagnosed with cancer within the past three years. Additionally, the study evaluated the program's impact on participants' psychological flexibility and valued living.

Method: A 2×3 mixed design was employed. Data were collected using the Depression, Anxiety and Stress Scale (DASS-21), Psychological Flexibility Scale (PFS), and the Valued Living Questionnaire (VLQ). Twenty-four participants meeting the inclusion criteria were selected through purposive sampling and randomly assigned to either the experimental group (n = 12; 9 females, 3 males) or the control group (n = 12; 9 females, 3 males). The mean age of participants was

30.54 (SD = 9.16). While the experimental group received a six-session ACT-based psychoeducation program, the control group received no intervention. Mixed-design ANOVA and pairwise comparison tests were used to assess the program's effectiveness.

Results: Results indicated that DASS-21 post-test scores significantly decreased in the experimental group, and this reduction was maintained during the one-month follow-up period. No significant differences were observed in the control group. Similarly, PFS and VLQ scores significantly increased in the experimental group at post-test and follow-up, whereas no significant changes were found in the control group.

Conclusion: These findings demonstrate that ACT-based psychoeducation programs for relatives of cancer patients represent a feasible and effective intervention model within psychosocial oncology. Integrating ACT-based approaches into clinical practice may substantially support caregivers and ultimately enhance the quality of life of both patients and their families.

Keywords: Psychological flexibility, caregiver, acceptance and commitment therapy, psychooncology

INTRODUCTION

Caregivers of individuals with cancer assume multifaceted roles that, in addition to managing their own life responsibilities, involve providing physical, social, and emotional support to the patient (Applebaum & Breitbart, 2013). These multifaceted roles place caregivers under substantial stress and emotional strain (Hulbert-Williams et al., 2021), resulting in elevated levels of depression, anxiety, and stress (Kim & Schulz, 2007; Li et al., 2022; Geng et al., 2018; Northouse et al., 2012). For example, according to the systematic review by Hodges and colleagues (2005), the prevalence of anxiety among primary caregivers of cancer patients is comparable to that of patients, whereas the prevalence of depression in some samples is even higher among caregivers than among patients. Research highlights

the importance of goal-oriented, time-limited, and structured intervention programs in mitigating these challenges (Applebaum & Breitbart, 2013). Acceptance and Commitment Therapy (ACT) offers an approach aimed at enhancing individuals' psychological flexibility, thereby enabling them to take action in alignment with their values (Hayes et al., 2011). Evidence indicates that ACT improves psychological flexibility and reduces emotional burden among cancer patients (Feros et al., 2013), with particular efficacy in alleviating anxiety and depression (Rost et al., 2012). Furthermore, ACT has emerged as an effective method for increasing psychological flexibility and reducing anxiety, depression, and stress among caregivers of cancer patients (Han et al., 2021; Fawson et al., 2024). The present study aims to develop an ACT-

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based psychoeducational program for caregivers of cancer patients and to examine its effectiveness in reducing levels of depression, anxiety, and stress. The program is expected to contribute to the literature and to serve as an important guide for mental health professionals working with chronic illnesses.

METHODS

Research Design

This study was conducted using an experimental research method with a 2×3 mixed design.

Participants

The study was carried out with 24 participants selected through purposive sampling (12 in the experimental group and 12 in the control group). The experimental group comprised 9 women and 3 men; the control group comprised 9 women and 3 men. The mean age of participants was 30.54 (SD = 9.16). Inclusion criteria were: (1) having a first-degree relative diagnosed with cancer, (2) being between 18 and 65 years of age, and (3) volunteering to participate in the study. Individuals receiving any psychiatric/psychological treatment were excluded.

At the initial stage, 32 individuals applied to participate; 30 who met the inclusion criteria were randomly assigned to the experimental (15) and control (15) groups. During the process, three participants from each group withdrew, and the study was completed with 24 participants.

Data Collection Instruments

Depression Anxiety and Stress Scale (DASS-21): Developed by Lovibond and Lovibond (1995) to assess levels of depression, anxiety, and stress. The scale consists of 21 items and uses a 5-point Likert format. The Turkish adaptation was conducted by Yılmaz et al. (2017). The Cronbach's alpha internal consistency coefficients range between 0.75 and 0.82 (Yılmaz et al., 2017).

Psychological Flexibility Questionnaire (PFQ): Developed by Francis et al. (2016) and adapted into Turkish by Karakuş and Akbay (2020). The scale comprises 28 items on a 7-point Likert scale. The Cronbach's alpha internal consistency coefficient was found to be .79 (Karakuş & Akbay, 2020).

Valued Living Questionnaire (VLQ): Developed by Trompetter et al. (2013) to measure value-oriented living and adapted into Turkish by Işık and Bilge (2023). The scale consists of 16 items with a 5-point Likert format. In the adaptation study, the Cronbach's alpha internal consistency coefficient was found to be 0.90 (Işık & Bilge, 2023).

Psychoeducational Program

The six-session psychoeducational program, "Compass in the Storm: An Embracing Journey," aims in its first session to reconceptualize cancer not as a battle but as a natural part of life, thereby fostering an acceptance-focused approach to illness. Subsequent sessions sequentially target the development of skills in values clarification, flexible contact with the present moment, cognitive defusion, committed action, and the contextual self.

Procedure

Participants were recruited through announcements disseminated via social media and healthcare providers. The interventions were conducted between June and August 2025. Prior to commencing the study, ethical approval was obtained from the Hasan Kalyoncu University Ethics Committee (Approval No: E-31055891-050.04-84334) on July 21, 2025.

RESULTS

Descriptive statistical findings for the scale scores used in the study are presented in Table 1.

Skewness and kurtosis coefficients were divided by their standard errors to compute Z scores. When the sample size is fewer than fifty, values smaller than 1.96 indicate that the distribution is normal (Kim & Seo, 2013).

Independent samples t-tests were conducted to examine whether pretest scores on the DASS-21, PFQ, and VLQ differed between the experimental and control groups. No significant difference was found between the groups in DASS-21 scores, $t(22)=0.33$, $p=0.97$, $\eta^2=.01$. Similarly, no statistically significant difference was observed between the groups in psychological flexibility levels, $t(22)=1.62$, $p=0.13$, $\eta^2=0.19$. Likewise, no significant difference was obtained for valued living scores,

Table 1. Normality of Participants' Pretest Scores

	Group		n	M	Skewness/SE	Z	Kurtosis/SE	Z
Pre-Test	Experimental Group	DASS-21	15	1.25	-.15/.45	-.33	-.95/.85	-1.10
		PFQ	15	4.55	.74/.43	1.75	1.05/.83	.01
		VLQ	15	3.10	.01/.43	.02	-1.35/.85	-1.60
	Control Group	DASS-21	15	1.17	-.14/.40	-.36	-.94/.79	-1.20
		PFQ	15	4.47	.73/.41	1.73	1.04/.81	.00
		VLQ	15	3.02	.00/.40	.01	-1.34/.79	-1.65

$t(22)=-0.18$, $p=0.85$, $\eta^2=0.03$. These findings indicate that the groups were equivalent in terms of their pretest scores.

The scores obtained from the pretest, posttest, and follow-up assessments administered to the experimental and control groups are presented in detail in Table 2. In line with the findings, differences were observed between pretest and posttest scores in the experimental group, whereas a comparable change was not observed in the control group.

To examine whether there were significant differences in participants' post-intervention scores on the DASS-21, PFQ, and VLQ across the experimental and control groups, a Mixed Measures ANOVA was conducted. The Mixed Measures ANOVA results for DASS-21 are provided in Table 3.

Upon examination of Table 2, the results for the Group $\times$ Measurement interaction—reflecting differences across intervention groups and time points—indicate that the mean scores obtained from the DASS-21 at pretest, posttest, and follow-up significantly differed between participants in the experimental and control groups ($F(2, 44)=24.59$, $p<0.05$, $\eta^2=0.52$).

For the Psychological Flexibility Questionnaire (PFQ), mixed measures ANOVA examining pretest and posttest scores likewise revealed a significant Group $\times$ Measurement interaction, demonstrating that the mean PFQ scores at pretest, posttest, and follow-up significantly differed between

the experimental and control groups ($F(2, 44)=3.20$, $p<0.05$, $\eta^2=0.13$).

Similarly, for the Valued Living Questionnaire (VLQ), mixed measures ANOVA results showed a significant Group $\times$ Measurement interaction, indicating that mean VLQ scores at pretest, posttest, and follow-up significantly differed between the experimental and control groups ($F(2, 44)=17.84$, $p<0.05$, $\eta^2=0.44$).

To identify the source of the interaction effect, pairwise comparisons were conducted (Jaccard et al., 1984). In pairwise comparisons, a higher posttest score indicates that the significant difference originates from the posttest (Jaccard et al., 1984). The comparisons revealed that, in the experimental group, posttest DASS-21 scores were significantly higher than pretest scores ($\delta=0.917^*$, $p=0.00$). No significant difference was observed between posttest and follow-up scores. For the PFQ, posttest scores in the experimental group were significantly higher than pretest scores ($\delta=0.333^*$, $p=0.04$), with no significant difference between posttest and follow-up. For the VLQ, experimental group posttest scores were significantly higher than pretest scores ($\delta=0.667^*$, $p=0.00$), and no significant difference was found between posttest and follow-up.

These findings suggest that the ACT-based psychoeducational program was effective in improving participants' outcomes—specifically, reducing depression, anxiety, and stress, and enhancing psychological flexibility and valued living.

Table 2. Descriptive Statistics for Pretest, Posttest, and Follow-up Test in the Experimental and Control Groups

			n	M	Sd
Experimental Group	DASS-21	Pre-Test	12	25.33	.11.61
		Post-Test	12	7.25	5.20
		Follow-Up Test	12	7.00	5.20
	PFQ	Pre-Test	12	131.17	15.33
		Post-Test	12	121.92	11.16
		Follow-Up Test	12	121.92	11.16
	VLQ	Pre-Test	12	42.47	12.25
		Post-Test	12	67.58	8.42
		Follow-Up Test	12	68.54	8.35
Control Group	DASS-21	Pre-Test	12	25.17	12.09
		Post-Test	12	25.17	12.09
		Follow-Up Test	12	26.34	14.03
	PFQ	Pre-Test	12	133.25	17.13
		Post-Test	12	131.21	15.43
		Follow-Up Test	12	131.21	15.43
	VLQ	Pre-Test	12	48.42	16.08
		Post-Test	12	44.37	17.10
		Follow-Up Test	12	43.03	17.61

Table 3. Mixed Measures ANOVA Results for Pretest and Posttest DASS-21 Scores in the Experimental and Control Groups

Source of Variance		df	MS	F	p	η^2
Between Subjects	14.329					
Group	4.44	1	4.44	9.90	.01*	.31
Error	9.88	22	.44			
Within Subjects	14.00					
Measurement (Pre–Post–Follow-up)	3.52	2	1.76	15.69	.00*	.41
Group X Measurement	5.52	2	2.76	24.59	.00*	.52
Error	4.94	44	.11			
Total	28,329					

DISCUSSION

The findings of this study indicate that the implemented psychoeducational program was effective in reducing levels of depression, anxiety, and stress among caregivers of individuals with cancer, and that these effects were maintained over a one-month follow-up period. In contrast, no significant changes were observed in the posttest and follow-up scores of the control group. These results are consistent with prior research demonstrating that increased psychological flexibility and valued living are associated with reductions in depression, anxiety, and stress among caregivers of cancer patients (Gu et al., 2025; Mosher et al., 2022; Han et al., 2021; Gibson Watt et al., 2023).

ACT-based interventions grounded in psychological flexibility have been shown to alleviate depressive, anxiety, and stress symptoms in caregivers through processes of acceptance, values-guided action, and flexible contact with the present moment (Mosher et al., 2022). Systematic reviews and randomized controlled trials further suggest that valued living contributes to meaning-making in the caregiving role and reduces the emotional distress associated with that role (Gu et al., 2025).

The present study included only individuals whose first-degree relatives had received a cancer diagnosis within the past three years; variables such as specific cancer types and patients' health status were not incorporated. Moreover, the follow-up assessment was limited to one month. Future research should design studies that examine the long-term effects of ACT interventions delivered to relatives of cancer patients. In conclusion, ACT appears to be an effective option for addressing the psychological challenges experienced by relatives of individuals with cancer.

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SB12 - The Effects of Relationship-Focused Dialectical Behavior Therapy Skills Training: A Pilot Study

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Objective: Difficulties in emotion regulation often lead to impairment in relationship functioning and individual well-being. Many family therapy models focus on developing couples' emotional skills to decrease conflict between partners and increase relationship satisfaction and relational closeness (Bloch et al., 2014). Given the bidirectional relationship between emotion regulation problems and relationship functioning, it is considered important to support emotion regulation skills within interpersonal and intimate relationship contexts as well (Fruzzetti, 2006). Dialectical Behavior Therapy (Linehan, 1993), an emotion regulation model, emphasizes mechanisms of change within therapy in a way that makes transdiagnostic applications possible beyond diagnostic categories (Zalewski et al., 2018). Dialectical Behavior Therapy Skills Training (DBT-ST) is a method that has been shown to increase emotion regulation skills and individual functioning. However, to our knowledge, no study has explored the application of DBT-ST in the context of romantic relationships. The current study seeks to implement DBT-ST to help women facing relationship issues and assess its impact on emotional challenges, individual well-being, and relationship functioning. Method: The 12-week group DBT-ST pilot study involved nine women in the relationship-oriented intervention group and 11 women in a comparison group receiving no treatment. Participants in the intervention group were between 28 and 48 years old ($M=35$, $SD=6.65$), while those in the comparison group ranged from 29 to 50 years ($M=35.54$, $SD=5.68$). Both groups reported an average of two children. Length of marriage for the intervention group was between 3 and 22 years ($M=11.89$, $SD=8.10$), and between 2 and 34 years for the comparison group ($M=12.00$, $SD=9.57$). The participants were screened via phone call, followed by the application of the SCID-5-CV. The participants' emotion regulation, relationship functioning (couple adjustment, relationship satisfaction, intimacy, and attachment), and individual functioning (stress tolerance, mindfulness, interpersonal problem-solving skills, and life satisfaction) were evaluated three times, at the beginning and end of the study and six months after the study.

The Fatih Sultan Mehmet University Ethics Committee approved the study protocol with number: 21/09/2020-21.

Results: Pre-post results related to relationship functioning indicated that couple adjustment ($F_{(2,16)}=13.53$, $p=0.00$, η_p^2

$=0.63$), relationship satisfaction ($F_{(2,16)}=11.73$, $p=0.00$, $\eta_p^2=0.57$), and intimacy levels ($F_{(2,16)}=14.78$, $p=0.00$, $\eta_p^2=0.65$) significantly increased and avoidant attachment levels ($F_{(2,16)}=3.25$, $p=0.04$, $\eta_p^2=0.29$) decreased in the intervention group. Subsequent follow-up evaluations revealed that the elevated levels of couple adjustment and intimacy persisted six months post-intervention. Pre-post findings on individual functioning revealed a significant increase in life satisfaction ($F_{(2,16)}=8.67$, $p=0.00$, $\eta_p^2=0.52$) in the intervention group, as well as notable improvements in mindfulness ($F_{(2,14)}=30.23$, $p=0.00$, $\eta_p^2=0.81$) and insistent-persevering interpersonal problem-solving skills ($F_{(2,16)}=12.61$, $p=0.00$, $\eta_p^2=0.61$). No significant changes were observed in emotion regulation and stress tolerance skills.

Discussion: The findings indicate that DBT-ST can lead to meaningful improvements both in relationship functioning and several individual domains, suggesting that the intervention may enhance relationship quality. Given the transactional nature of DBT, gains in relational awareness and dialectical problem-solving skills among participating women may have facilitated changes in both partners, contributing to increases in relationship quality, couple adjustment, and romantic intimacy. The findings suggested that DBT-ST might benefit couples by increasing relationship quality, fitting into the field's growing interest in transdiagnostic interventions. However, future randomized controlled trials with larger samples, including couples, are essential to further understand the effectiveness of relationship-focused DBT-ST.

Keywords: Dialectical behavioral therapy, emotion regulation, relationship quality, transdiagnostic approach

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SB13 - The Relationship Between Psychological Flexibility and Parental Burnout in Parents of Children Diagnosed with Autism Spectrum Disorder (ASD): The Mediating and Moderating Roles of Emotional Reactivity

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Objective: Autism Spectrum Disorder (ASD) is a neurodevelopmental condition characterized by difficulties in social communication and repetitive behaviors (APA, 2013). Global prevalence has increased over the past decade, currently estimated at 1–2% (Baxter et al., 2015). Children with ASD often require extensive academic, psychosocial, and medical support, while also experiencing emotional and behavioral challenges. These demands place significant stress on parents, increasing their risk for anxiety, depression, and parental burnout, which is marked by emotional exhaustion, detachment, and reduced parenting efficacy (Adams, Paynter, Clark, Roberts, & Keen, 2019).

Psychological flexibility—the ability to adapt to change, shift perspectives, and act according to values despite emotional distress—is a key protective factor (Hayes, Pistorello, & Levin, 2012). Higher psychological flexibility helps parents cope effectively with caregiving stress and maintain well-being. Conversely, emotional reactivity, or heightened sensitivity to emotional stimuli, can worsen outcomes when psychological flexibility is low (Cobos-Sánchez, Flujas-Contreras, & Becerra, 2022). Parents with low flexibility may struggle to regulate emotions, making them more vulnerable to burnout.

Understanding how psychological flexibility and emotional reactivity interact is crucial for developing interventions to reduce parental burnout and support the well-being of families raising children with ASD.

Method: This study employed convenience sampling and included 230 parents of children diagnosed with ASD, consisting of 172 mothers (74.8%) and 58 fathers (25.2%). Participants were between 24 and 60 years old, with a mean age of 40.14 years ($SD=8.274$). Data were obtained through face-to-face interviews using a structured self-report questionnaire, and participation was entirely voluntary. All participants provided informed consent prior to taking part in the research. Individuals were eligible if they were literate, had at least one child diagnosed with ASD, and did not have

any diagnosed psychiatric disorders. No compensation was offered to participants for their involvement in the study. The Acceptance and Action Questionnaire-II (Yavuz et al., 2016) the Emotional Reactivity Scale (Veilleux, Schreiber, Warner, & Brott, 2024) and the Parental Burnout Scale (Ardıç & Olçay, 2019) were used as measurement instruments. In this study, preliminary analyses were carried out first. As part of these analyses, descriptive statistics for the participants were reviewed, followed by assessments of normality and reliability for all variables. Additionally, correlations among the variables were examined. After completing the preliminary analyses, mediation and moderation models were tested using the PROCESS v4.1 macro (Hayes, 2018). All analyses were conducted using SPSS 25.0, the PROCESS v4.1 macro plugin, and JASP 0.18.3.0.

Ethical approval for the study was obtained from the İstanbul University–Cerrahpaşa Social Sciences and Humanities Research Ethics Committee (Date: 04.02.2024; Reference No.: 2024/88). Furthermore, all procedures were conducted in accordance with the ethical principles set forth in the Declaration of Helsinki.

Results: The preliminary analyses showed that all variables were normally distributed, reliable, and significantly correlated with each other, with psychological flexibility positively related to emotional reactivity ($r=0.43$, $p<0.001$) and parental burnout ($r=0.56$, $p<0.001$), and emotional reactivity positively associated with parental burnout ($r=0.70$, $p<0.001$). Mediation analysis indicated that psychological flexibility predicted parental burnout both directly (standardized direct effect=0.324) and indirectly through emotional reactivity ($\beta=0.449 \rightarrow \beta=0.558$; bootstrap=0.250, 95% CI=0.179–0.328), suggesting partial mediation. Moderation analysis revealed that emotional reactivity significantly moderated the relationship between psychological flexibility and parental burnout (interaction CI = 0.01, 0.13), with the interaction term contributing to a significant increase in explained variance ($\Delta R^2=0.009$, $p=0.025$), indicating that higher emotional

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reactivity strengthens the link between lower psychological flexibility and greater parental burnout.

Discussion: This study explores the interplay between psychological flexibility, emotional reactivity, and parental burnout, contributing to research on the well-being of parents raising children with ASD. Results showed that psychological flexibility predicts parental burnout, while emotional reactivity serves as both a mediator and moderator. Parents with higher psychological flexibility and better emotion regulation cope more effectively with caregiving stress, reducing burnout risk (Golan & Gur, 2024). The findings suggest that interventions developed within the framework of contextual behavioral science may be effective in reducing parental burnout. In particular, Acceptance and Commitment Therapy-based approaches aimed at enhancing psychological flexibility and regulating emotional reactivity could serve a protective function for parents of children with ASD. Accordingly, these findings provide guidance for both clinical practice and future research. The findings highlight the importance of interventions that strengthen psychological flexibility and emotion regulation to support parents' mental health and overall family functioning. Addressing these needs is crucial for sustainable caregiving and positive long-term outcomes for both parents and children.

Keywords: Psychological flexibility, emotional reactivity, parental burnout, autism spectrum disorder, parents

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SB14 - The Effect of an Acceptance and Commitment Therapy–Based Intervention on Posttraumatic Growth in Widowed Women: A Single-Case Experimental Study

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Introduction: Posttraumatic Growth (PTG) refers to positive psychological changes that may emerge following individuals' struggles with highly challenging life events (Tedeschi & Calhoun, 1996). The loss of a spouse is widely recognized as a potentially traumatic experience that may result in prolonged grief, depressive symptoms, anxiety, and functional impairments (You et al., 2022). Despite these difficulties, some individuals are able to reconstruct meaning in life and experience positive changes in self-perception, interpersonal relationships, and life philosophy following such losses (Linley & Joseph, 2004).

Acceptance and Commitment Therapy (ACT) is a third-wave behavioral therapy that aims to enhance psychological flexibility by fostering acceptance of unavoidable internal experiences and promoting value-consistent action (Hayes et al., 1999). ACT has been suggested as a particularly suitable intervention for complex grief processes, as it supports individuals in approaching painful emotions, reducing experiential avoidance, and adapting to new life roles after loss (Hayes et al., 1999). However, empirical evidence examining the effects of ACT on PTG, particularly among widowed women, remains limited. The present study aimed to evaluate the effects of a six-week ACT-based intervention on posttraumatic growth and psychological flexibility in women who had experienced spousal loss.

Method: This study employed a single-case experimental design using an ABCD model to examine the effects of a six week ACT-based intervention on posttraumatic growth and psychological flexibility. The design consisted of four phases: baseline (A), intervention (B), post-intervention (C), and follow-up (D). Outcome measures were administered systematically across all phases.

Participants were selected using criterion sampling (Büyüköztürk et al., 2020). Inclusion criteria were being female, aged 18 years or older, and having experienced the loss of a spouse within the past three years. Four widowed women participated in the study ($M=33.25$, $SD=4.57$). None of the participants reported a history of psychiatric diagnosis.

Posttraumatic growth was assessed using the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996), adapted into Turkish by Dürü and Işıklı (2006). Psychological flexibility was measured using the Psychological Flexibility Scale developed by Francis et al. (2016) and adapted into Turkish by Karakuş and Akbay (2020).

The intervention was based on the “6 Session ACT Toolkit” (Jenkins & Ahles, 2023) and culturally adapted for the Turkish context. Sessions were delivered individually in an online format. Measurements were repeated following each session.

Data analysis was conducted using methods specific to single-case experimental designs, including Tau-U statistics (Parker et al., 2011), Reliable Change Index (RCI; Jacobson & Truax, 1991), and Single-Case Visual Analysis (SCVA). Tau-U analyses compared baseline (A) and intervention (B) phases to assess immediate intervention effects, while intervention and follow-up phases (B–C–D) were combined and compared with baseline to evaluate overall effects over time.

Ethical approval was granted by the Scientific Research Ethics Committee at İstanbul Medipol University (Reference Number=2024/142, Date=11.11.2024).

Results: Tau-U and RCI analyses indicated meaningful improvements in posttraumatic growth for three of the four participants when overall intervention effects (B–C–D vs. A) were examined ($p < .05$). During the comparison of baseline and intervention phases, two participants demonstrated statistically significant and reliable increases in PTG. In the comparison between intervention and follow-up phases, one participant maintained a significant and reliable increase. Visual analyses supported these findings by indicating upward trends and level changes in PTG across phases.

Regarding psychological flexibility, Tau-U analyses revealed significant overall increases for two participants ($p < 0.05$), while one participant demonstrated a statistically significant negative change. Visual analyses suggested increasing trends in psychological flexibility for most participants, although some discrepancies between statistical and visual findings were

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observed. These inconsistencies appeared to be associated with baseline variability, outliers during the intervention phase, and potential ceiling effects in participants with initially high flexibility scores.

Discussion: The findings partially supported the study hypotheses. The hypothesis that ACT would increase posttraumatic growth was supported for most participants, consistent with previous experimental studies demonstrating the effectiveness of ACT in facilitating growth following adversity (Omidbeygi et al., 2020). The hypothesis regarding increases in psychological flexibility was supported for two participants, while results varied across cases. Prior research suggests that psychological flexibility may require longer intervention periods to demonstrate stable change (Arch et al., 2016), which may explain the mixed findings observed in this short-term intervention.

Social support appeared to play a critical role in treatment outcomes, as participants with stronger support systems demonstrated more consistent gains in both PTG and psychological flexibility. Additionally, discrepancies between observed behavioral changes during sessions and quantitative outcomes highlight the importance of integrating qualitative and process-based measures in single-case research.

Overall, despite variability across cases, the present study provides preliminary evidence that a brief ACT-based intervention may facilitate posttraumatic growth and psychological flexibility in widowed women. These findings contribute to the limited experimental literature in this area and underscore the need for future studies with larger samples, longer follow-up periods, and multimethod assessment strategies.

Keywords: Acceptance and commitment therapy, posttraumatic growth, psychological flexibility, spousal loss, single-case experimental design

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