Bilişsel Davranışçı Psikoterapi ve Araştırmalar Dergisi
Journal of Cognitive-Behavioral Psychotherapy and Research
DOI: 10.14744/JCBPR.2026.52414
J Cogn Behav Psychother Res 2026;15(3):127–142

Evaluating the Feasibility of an Acceptance and Commitment Therapy Protocol for Burnout in Health Care Professionals: A Single-Case Study

Edanur Gürbüz Taşyıldız,[1] Ahmet Nalbant,[2] Havvanur Uysal Akdemir,[1] Kaasım Fatih Yavuz[2]

[1]Private Practice, Clinical Psychologist, İstanbul, Türkiye
[2]Private Practice, Psychiatrist, İstanbul, Türkiye

ABSTRACT

Burnout, characterized by emotional exhaustion, depersonalization, and reduced accomplishment, is prevalent among healthcare workers, who face challenges in seeking treatment due to psychological and practical barriers. Acceptance and Commitment Therapy (ACT) has shown promise in addressing burnout by promoting psychological flexibility and value-driven behaviors. The aim of this study was to evaluate the feasibility, acceptability, and preliminary outcomes of an ACT-based intervention adapted from a self-help program for healthcare workers experiencing burnout, delivered through therapist-guided face-to-face sessions using a single-case experimental design. The study consisted of two separate stages with two participants. An 8-session ACT-based intervention protocol was applied, incorporating the Burnout Assessment Tool (BAT), Acceptance and Action Questionnaire II, Valuing Questionnaire, and personalized daily questions. Following the completion of Stage 1, the study proceeded to Stage 2 with some modifications. Results were evaluated using visual analysis, Tau-U, and the Reliable Change Index (RCI). Results from the Stage 1 indicated a significant decrease only in the BAT score, reflecting reduced burnout. Regarding daily measures, significant increases were observed in contact with values and experiential avoidance scores. In Stage 2, RCI analysis revealed a significant decrease only in the BAT score. However, Tau-U analysis of the daily questions indicated significant decreases in being present, experiential avoidance, and rumination-worry scores, and a significant increase in the valued living 1 score. The findings indicate that the self-help protocol may be feasible and acceptable, but further research is needed to confirm these findings.

Keywords: Acceptance and commitment therapy, burnout, feasibility, healthcare workers, protocol, single-case experimental design.

ÖZ

Sağlık Çalışanlarında Tükenmişliğe Yönelik Kabul ve Kararlılık Terapisi Protokolünün Uygulanabilirliğinin Değerlendirilmesi: Bir Tek Olgulu Deneysel Çalışma

Tükenmişlik; duygusal yorgunluk, depersonalizasyon ve kişisel başarı hissinde azalma ile karakterize olup özellikle tedavi arayışında psikolojik ve pratik engellerle karşılaşan sağlık çalışanları arasında yaygındır. Kabul ve kararlılık terapisi (ACT), psikolojik esnekliği ve değerler doğrultusunda davranmayı destekleyerek tükenmişliği azaltmada umut verici bir yaklaşım olarak öne çıkmaktadır. Bu çalışmanın amacı, tükenmişlik yaşayan sağlık çalışanları için kendine yardım programından uyarlanan ACT temelli bir müdahalenin uygulanabilirliğini, kabul edilebilirliğini ve ön sonuçlarını değerlendirmektir. Müdahale, tek olgulu deneysel çalışma (TODÇ) deseni kullanılarak terapist eşliğinde yüz yüze seanslar yoluyla gerçekleştirildi.

Cite this article as:
Gürbüz Taşyıldız E, Nalbant A, Uysal Akdemir H, Yavuz KF. Evaluating the Feasibility of an Acceptance and Commitment Therapy Protocol for Burnout in Health Care Professionals: A Single-Case Study. J Cogn Behav Psychother Res 2026;15(3):127–142.

Address for correspondence:
Edanur Gürbüz Taşyıldız.
Özel Muayenehane, Klinik Psikolog, İstanbul, Türkiye
Phone: +90 534 634 46 60
E-mail:
psk.edanurgurbuz@gmail.com

Submitted: 25.03.2026
Revised: 06.07.2026
Accepted: 15.07.2026
Available Online: 19.08.2026

JCBPR, Available online at http://www.jcbpr.org/

Sekiz seanslık ACT temelli müdahale protokolü uygulanan değerlendirmelerde tükenmişlik ölçme aracı (BAT-TR), kabul ve eylem formu-II (KEF II), değer verme ölçeği (DVÖ) ve kişiselleştirilmiş günlük ölçümler uygulandı. Aşama 1'in tamamlanmasının ardından, bazı değişiklikler yapılarak yeni katılımcıyla Aşama 2'ye geçildi. Müdahale sonuçları görsel analizler, Tau-U ve güvenilir değişim endeksi (GDE) kullanılarak incelendi. Birinci aşamanın GDE analizine göre yalnızca BAT-TR puanında anlamlı bir azalma saptandı ve bu durum tükenmişlik düzeyinde düşüşe işaret etti. Günlük ölçümlerde ise değerlerle temas ve yaşantısal kaçınma puanlarında anlamlı artışlar gözlendi. İkinci aşamada da GDE analizine göre yalnızca BAT-TR puanında anlamlı bir azalma bulundu. Bununla birlikte, günlük ölçümlerin Tau-U analizinde anda olma, yaşantısal kaçınma ve ruminasyon-endişe puanlarında anlamlı azalmalar; değer doğrultusunda yaşama 1 puanında ise anlamlı bir artış belirlendi. Bulgular, kendine yardım protokolünün sağlık çalışanlarında tükenmişlik müdahalesi için uygulanabilir ve kabul edilebilir olabileceğine işaret etmektedir; ancak bu bulguların doğrulanması için daha fazla araştırmaya ihtiyaç vardır.

Anahtar Kelimeler: Kabul ve kararlılık terapisi, protokol, sağlık çalışanları, tek olgulu deneysel çalışma, tükenmişlik, uygulanabilirlik.

INTRODUCTION

The concept of burnout, originally identified among volunteer health workers, refers to a condition in which the work environment and interpersonal relationships are negatively affected by emotional exhaustion, depersonalization, and a reduced sense of accomplishment. (Freudenberger, 1975). It is often accompanied by symptoms such as fatigue, hopelessness, and helplessness, particularly among individuals who work directly with people and face intense demands (Freudenberger, 1975; Maslach et al., 2001).

Healthcare workers stand out as one of the groups most at-risk for burnout (Parker et al, 2022). They often underestimate their symptoms and may not seek help, believing that their distress is not severe enough to warrant treatment (Hopcraft, 2023; Wei et al., 2021). Additionally, shame and fear of disclosure associated with seeking mental health treatment may act as psychological barriers (Favre et al., 2023; Medeiros, 2018). Practical barriers, such as lack of time and limited access to mental health services, also contribute to low treatment-seeking rates (Clough et al., 2018; Harris, 2024). Therefore, addressing burnout among healthcare workers is considered highly crucial.

The limited evidence on burnout in the mental health field highlights the need for further research on effective interventions. Existing evidence suggests that third-wave cognitive-behavioral approaches, including meditation and mindfulness practices, may be especially promising in this area (Morse et al., 2012). Acceptance and Commitment Therapy (ACT) is one of these third-wave cognitive-behavioral therapies with growing empirical support (A-Tjak et al., 2015; Gloster et al, 2020). ACT is based on the concept of psychological flexibility, which includes six core processes: contact with the present moment, acceptance, cognitive defusion, self-as-context, values, and committed action (Hayes et al., 2006).

While research on ACT for burnout is still emerging, evidence supports its efficacy in reducing burnout (Flaxman et al., 2013; McConachie et al., 2014; Moran, 2015; Towey-Swift et al., 2023). A review of the literature suggests that ACT-based self-help interventions are gradually expanding and appear promising as potentially effective approaches for burnout (Eklund & Kiritsis, 2019; Hofer et al., 2018; Eklund et al., 2023; van de Leur et al., 2025). Considering the difficulties healthcare workers face in seeking mental health support, self-help interventions might be helpful.

Although some studies have examined ACT-related processes, such as psychological flexibility and values, in relation to burnout and occupational outcomes (Çelik et al., 2024; Toprak et al., 2020), no study has directly evaluated ACT-based interventions for burnout among healthcare workers in Türkiye. The present study aimed to evaluate the acceptability and preliminary efficacy of an ACT-based burnout protocol developed for healthcare workers in Türkiye. We hypothesized that the protocol would demonstrate acceptable feasibility and preliminary efficacy.

METHODS

Design

This study is used an AB single-case Design. To gather more information and assess individual changes during the intervention, a single-case experimental design (SCED) with daily measurements was used. An eight-session ACT-based online self-help program (MyLife) was developed to address work-related stress and burnout among healthcare workers. As part of the program development process, a face-to-face

therapy protocol was derived from the self-help materials and used in a preliminary feasibility and content-testing phase to evaluate the applicability and clinical utility of the intervention prior to finalizing the online version. This phase was conducted with two healthcare workers presenting with burnout symptoms through therapist-guided sessions. Feedback and clinical observations obtained from this phase were used to refine and finalize the content of the online self-help program. The present study reports this initial feasibility phase and presents the implementation process, acceptability, and observed outcomes of the face-to-face adaptation of the protocol.

Process

The study was conducted with two different participants at separate time points (Stage 1 and Stage 2), and some modifications were made between the stages (details are provided in the relevant sections). Ethics approval was obtained from the Medipol University Ethics Committee (Approval Date: July 10, 2023; Decision No: 92). The study was conducted in accordance with the Declaration of Helsinki, and informed consent was obtained from all participants prior to participation. Participants were recruited through social media. Inclusion criteria were being employed as healthcare worker and having workplace-related burnout symptoms. Exclusion criteria were psychotropic medication use, ongoing psychotherapy, and suicidal ideation or self-harm thoughts.

Before the sessions, an assessment interview was conducted (by E.G.T) to evaluate the client's complaints and burnout symptoms based on the World Health Organization (2019) criteria. Eligible participants completed the pre-test measures following the interview.

Measures

Standardized Measures

The standardized measures were administered to participants via Google Forms after the assessment interview, and the same measures were re-administered after the intervention.

- Burnout Assessment Tool (BAT): The scale was developed by Schaufeli, Desart, and De Witte (2020) and adapted into Turkish by Koçak, Gençay, and Schaufeli (2022). It consists of six factors and 33 items rated on a 5-point Likert scale (1=Never, 5=Always), with higher scores indicating higher burnout levels. The Cronbach's alpha coefficient of the Turkish version was 0.95 (Koçak et al., 2022).

- Acceptance and Action Questionnaire II (AAQ-II): The scale, developed by Bond et al. (2011) to measure experiential avoidance is a 7-item, 7-point Likert-type scale (1=Never true, 7=Always true). The Cronbach's alpha value of the scale, as determined by a Turkish validity and reliability study, was found to be 0.84 (Yavuz et al., 2016).

- Valuing Questionnaire (VQ): The scale, developed by Smout, Davies, Burns, and Christie (2014), consists of 10 items in two dimensions and uses a 7-point Likert-type scale (0=Not at all true, 6=Completely true). Aydın and Aydın (2017) conducted validity and reliability studies in Turkish, and the Cronbach's alpha value of the scale was found to be 0.78.

Idiographic Measures

In line with the SCED, idiographic daily measures were used based on a behavioral analysis conducted during the assessment interviews with participants. These measures were tailored to assess psychological inflexibility (the core concept of ACT) and burnout-related symptoms, ensuring that the daily questions reflected the individual patterns of functioning and clinically relevant difficulties experienced by the participants.

A 10-point Likert scale was used, with the participants being instructed to rate items from 1 (least appropriate) to 10 (very appropriate). Since environmental factors may also contribute to burnout, open-ended questions were also included to assess external factors. The daily questions were sent to the participant via Google Forms every day at 7:00 PM. If they were not completed, a reminder message was sent at 9:00 PM.

Details regarding the daily questions are provided within the Stage 1 and Stage 2 sections of this study.

Intervention

An ACT-based eight-session protocol titled "MyLife" was applied to the participants. Sessions lasted approximately 45 minutes. The sessions were conducted by a psychotherapist who is pursuing a master's degree in clinical psychology, has received training in ACT, and has completed supervision sessions (by E.G.T). The details of the intervention are provided in Table 1.

Statistical Analysis

The data analyses were conducted using three different approaches. First, the Reliable Change Index (RCI; Jacobson & Truax, 1991) was used to analyze reliable changes between the pre-intervention and post-intervention time points on standardized scales. Second, visual analyses were used to evaluate the data collected with the daily questions (Bulté & Onghena, 2011). Third, in addition to visual analysis, Tau-U analysis was used to interpret the statistical significance of the changes (Vannest et al., 2011).

Table 1. Intervention sessions

Sessions	Intervention
1. Introduction	Detailed problem assessment, psychoeducation, and general recommendations
	Experiential Exercise 1: Meaningfulness Over Obligations
2. For what?	Clarify and contact with values related to work
	Experiential Exercise 2: For What?
	Experiential Exercise 3: Retirement Party
3. My life	Clarification of and contact with values outside related to work
	Experiential Exercise 4: 80th Birthday
4. Me and my experiences	Contact with the present moment
	Experiential Exercise 5: Me and My Experiences
	Experiential Exercise 6: Slowing Down
5. Away and toward	Behavioral excesses and deficits, creative hopelessness, and acceptance
	Experiential Exercise 7: Awareness of Avoidance
	Experiential Exercise 8: Acceptance
6. Me and my body	Attending to emotions and the body, noticing the critical mind and the compassionate mind, and acceptance
	Experiential Exercise 9: Listening to My Body
	Experiential Exercise 10: Noticing the Critical Mind
	Experiential Exercise 11: Hearing the Compassionate Mind
7. Me and my mentor	Noticing the inner mentor and thoughts, and defusion
	Experiential Exercise 12: Noticing the Inner Mentor
8. Integration	Contextual self, and integration of the sessions
	Experiential Exercise 13: The Circle of My Life

Stage 1

Participant

Participant 1 was a 29-year-old female healthcare worker who had worked in the field for six years. She reported burnout symptoms related to excessive workload and difficult working conditions, including emotional exhaustion, tension, fatigue, sleep problems, and anger regulation difficulties.

Idiographic Measures

Table 2 presents the daily questions for Participant 1.

Table 2. Daily questions of participant 1

• Today, I felt tired and exhausted at work. ***(Burnout)***
• While working at my workplace today, I experienced challenging emotions (e.g., anger, intolerance, unhappiness, etc.). ***(Negative affect)***
• During my work today, I recognized the significance of this job to me. ***(Contact with values)***
• While working today, I was influenced by certain thoughts (e.g "i am inadequate or incompetent") and/or challenging emotions (e.g anger, worthlessness, inadequacy, anxiety, sadness, helplessness, etc.), or I made an effort not to experience them. ***(Experiential avoidance)***
• Today, at work, I exhibited a stance closer to the person I aspire to be in my profession. ***(Valued living 1)***
• Today, I took small steps in significant areas of my life outside of work. ***(Valued living 2)***
o Did you experience any positive situations or events at your workplace today? If yes, please describe them briefly.
o Did you experience any negative situations or events at your workplace today? If yes, please describe them briefly.
Daily measurements were collected during the baseline phase (4 days before the intervention), throughout the intervention phase, and during the follow-up phase (7 days after the intervention).

Intervention

Intervention sessions with Participant 1 were conducted twice a week.

Results of Stage1

The results of the RCI analysis of Participant 1's pre-test and post-test scores (Table 3), the Tau-U analysis of the daily questions (Table 4), and the visual analysis of the statistical analyses for each variable collected daily from Participant 1 are presented below.

According to Table 3, the RCI results indicate both reliable and non-reliable changes across the scales. The participant's BAT score decreased relative to baseline, with an RCI of 49.69 indicating reliable improvement ($|RCI|>1.96$). The participant's AAQ-II score also decreased after the intervention, reflecting increased psychological flexibility; however, the RCI of 1.82 did not exceed the ±1.96 threshold. The decline in value-consistent behaviors on the VQ-Progress score was not reliable (RCI=0.43, $|RCI|<1.96$). Although the VQ-Obstruction score decreased, indicating fewer perceived barriers to value-based behaviors, the RCI of 0.73 also fell below the ±1.96 threshold.

Table 3. RCI results of participant 1

Scale	Pre-test	Post-test	Scale SD	Cronbach's alpha	RCI-value
BAT	121	110	0.70	0.95	49.69
AAQ-II	33	25	7.76	0.84	1.82
VQ-progress	15	14	3.45	0.77	0.43
VQ-obstruction	20	18	3.45	0.76	0.73

BAT: Burnout assessment tool; AAQ-II: Acceptance and Action Questionnaire II; VQ: Valuing Questionnaire; RCI: Reliable Change Index; SD: Standard deviation.

Table 4. Tau-U results of participant 1

	Phase	Tau-U	p-value	Z-score
Burnout	A–B	-0.1481	0.6374	-0.4714
Negative affect	A–B	0.4815	0.1255	15.321
Contact with values	A–B	0.6759	0.0315	21.508
Experiential avoidance	A–B	0.7315	0.0199	23.276
Valued living 1	A–B	0.2407	0.4437	0.7660
Valued living 2	A–B	0.1574	0.6165	0.5009

Phase A: Baseline; Phase B: Intervention.

According to visual analysis, changes were observed between the baseline and intervention phases. However, the Tau-U analysis revealed that only the scores for contact with values and experiential avoidance were statistically significant (Table 4). As expected, the contact with values score showed a significant increase (Fig. 1), and the experiential avoidance score, contrary to expectations, significantly increased (Fig. 2). As shown by the Tau-U results, no significant changes were observed in the scores for burnout (Fig. 3), negative affect (Fig. 4), valued living 1 (Fig. 5), and valued living 2 (Fig. 6).

Discussion of Stage1

The RCIs indicated that Participant 1 showed reduced burnout levels, whereas changes in psychological flexibility and value-consistent behaviors were non-significant. The RCI values may have been influenced by the standard deviations of the scales. The BAT showed a high RCI value, likely due to its low standard deviation, requiring cautious interpretation. The non-significant AAQ-II and VQ results were consistent with the Tau-U findings.

Evidence from daily measures indicated changes in the participant's scores; however, according to the Tau-U results, there were no significant changes in the burnout, negative affect, valued living 1, or valued living 2 scores. Contrary to expectations, the experiential avoidance score significantly increased. Only the contact with values score showed a significant increase as anticipated.

Throughout the intervention sessions, the participant reported escalating difficulties at her workplace, including conflicts with her supervisors and being blamed for a financial issue. The lack of significant change in her burnout and negative affect scores can be understood in this context.

Although the participant's contact with values scores increased, no significant changes were observed in the Valued Living 1 and Valued Living 2 scores. This may be related to the sessions being scheduled every three days, along with the participant's heavy workload and long commute. These factors may have limited homework completion and engagement in value-consistent actions.

The increase in the participant's experiential avoidance score, contrary to expectations, is thought to be due to a misunderstanding or misinterpretation of the question related to experiential avoidance. Feedback on this matter was received from the participant during a follow-up assessment (see Section 3.6).

Regarding environmental factors, the participant experienced more negative than positive events daily, which may have contributed to the lack of significant changes. Additionally, the baseline phase was relatively short, which may have affected both the significant and non-significant results.

Follow-up Assesment

At the conclusion of the sessions with Participant 1, a follow-up interview was conducted by a different researcher (A.N.) to ensure impartiality. The participant reported that two sessions per week were overwhelming, that work demands made scheduling difficult, and that she struggled to complete home exercises. She also reported that she had interpreted the experiential avoidance question in the opposite way and had responded accordingly. Based on this feedback, a second phase of the study was conducted with another participant to refine and further evaluate the feasibility of the intervention protocol. In this phase, sessions were held weekly, idiographic daily questions were refined through a more detailed behavioral analysis, and the baseline and follow-up periods were extended (see Stage 2).

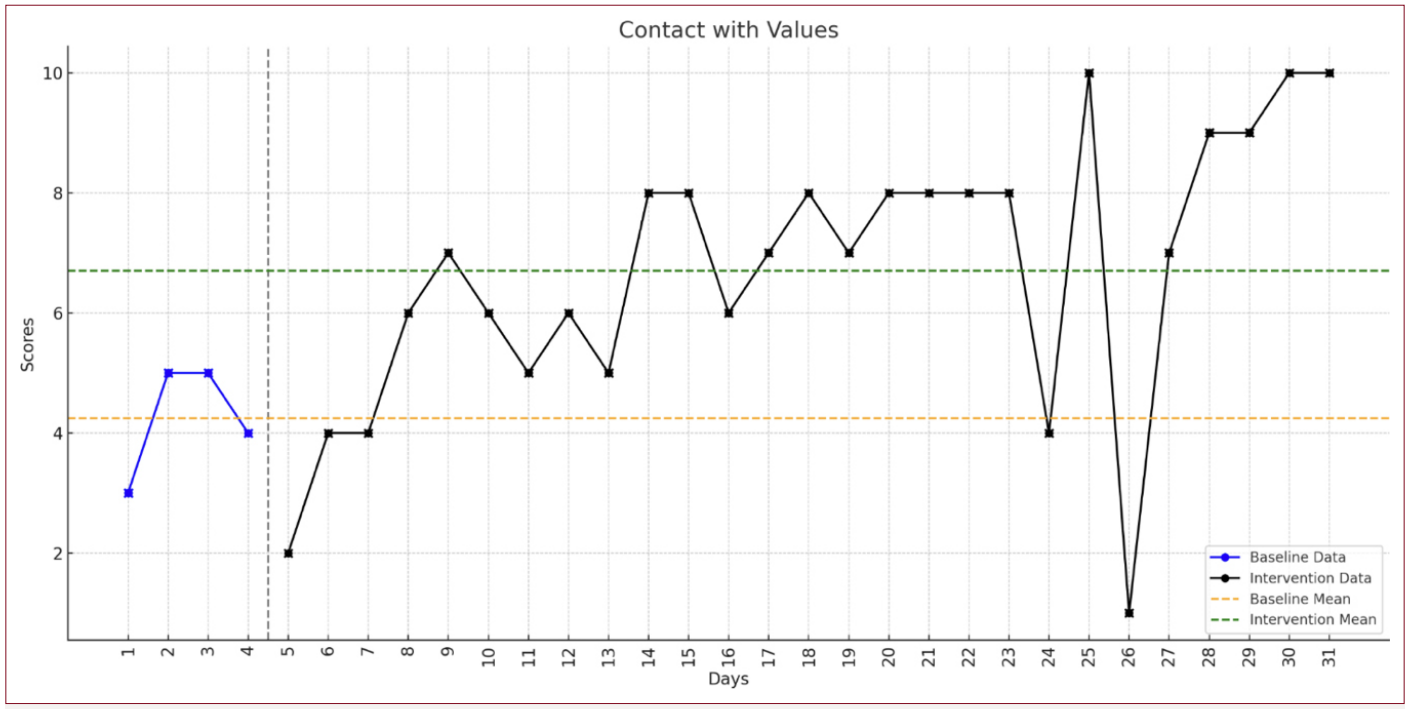

Figure 1. Contact with values.

Stage 2

Participant

Participant 2 was a 24-year-old female emergency healthcare worker with two months of work experience. She reported burnout symptoms related to challenging working conditions, including mental fatigue, hopelessness, sleep difficulties, work-related preoccupation, and concerns about making mistakes at work.

Idiographic Measures

Table 5 presents the daily questions for Participant 2.

Intervention

Intervention sessions with Participant 2 were conducted once a week.

Table 5. Daily questions of participant 2

• Today, I struggled to concentrate on what I did. ***(Being present)***
• I experienced challenging emotions today (e.g., feeling stuck, helplessness, hopelessness, or feeling overwhelmed etc). ***(Negative affect)***
• Today, I recognized the significance of this job to me. ***(Contact with values)***
• When I experienced challenging emotions today (such as anger, hopelessness, helplessness, worthlessness, impatience, etc.), I acted like someone I didn't want to be. ***(Experiental avoidance)***
• Today, I kept thinking about the events I experienced or was likely to experience related to my work. ***(Rumination-worry)***
• Today, at work, I exhibited a stance closer to the person I aspire to be in my profession. ***(Valued living 1)***
• Today, I took small steps in significant areas of my life outside of work. ***(Valued living 2)***
o Did any negative event that you experienced today or in recent days affect your day?
o Did any positive event that you experienced today or in recent days affect your day?
o Did you go to work today?

Daily measurements were conducted across the baseline (8 days before the intervention), intervention, and follow-up (7 days after the intervention) phases.

Results of Stage 2

Table 6 presents the RCI analysis results for the pre-test and post-test scores, and Table 7 contains the results of the Tau-U analysis for Participant 2.

According to Table 6, the RCI results showed both reliable and non-reliable changes across the scales. The participant's BAT score decreased, with an RCI of 81.32 indicating reliable improvement (|RCI|>1.96). Although the AAQ-II score decreased, reflecting increased psychological flexibility, the

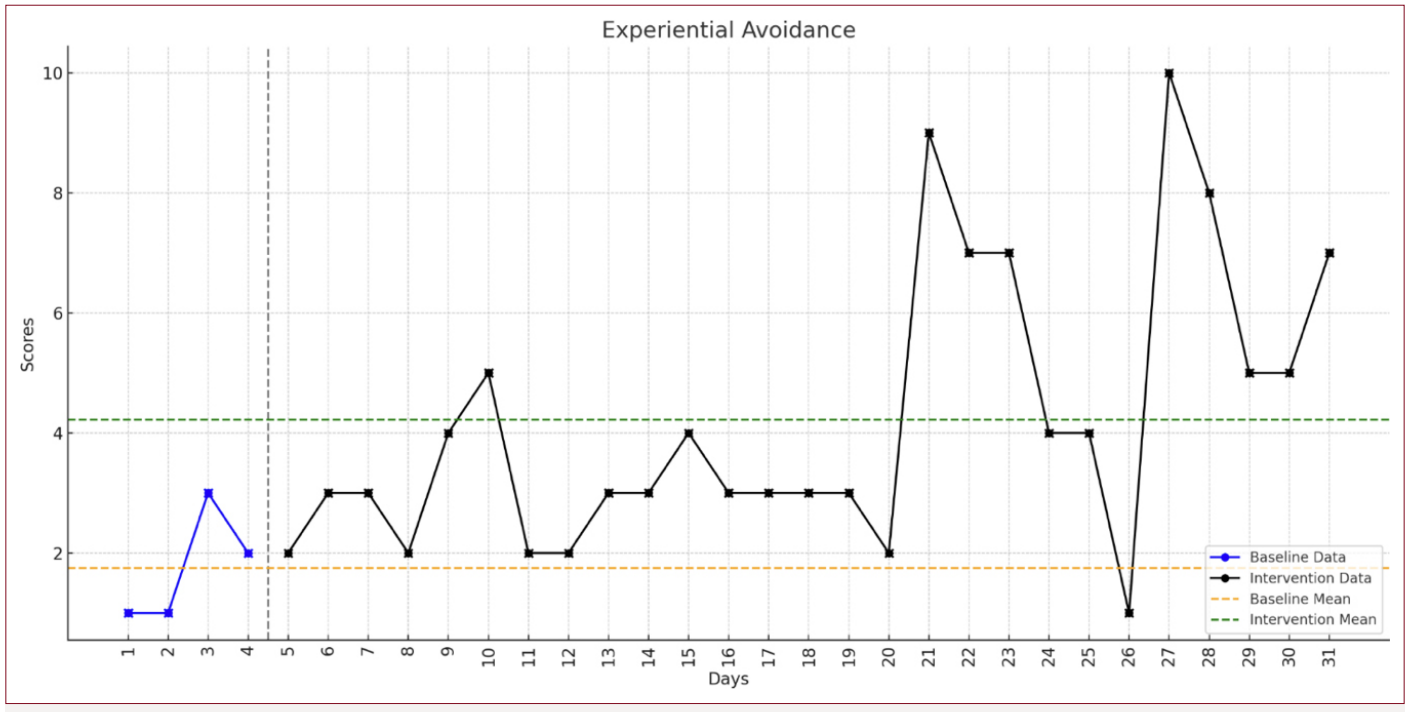

Figure 2. Experiential avoidance.

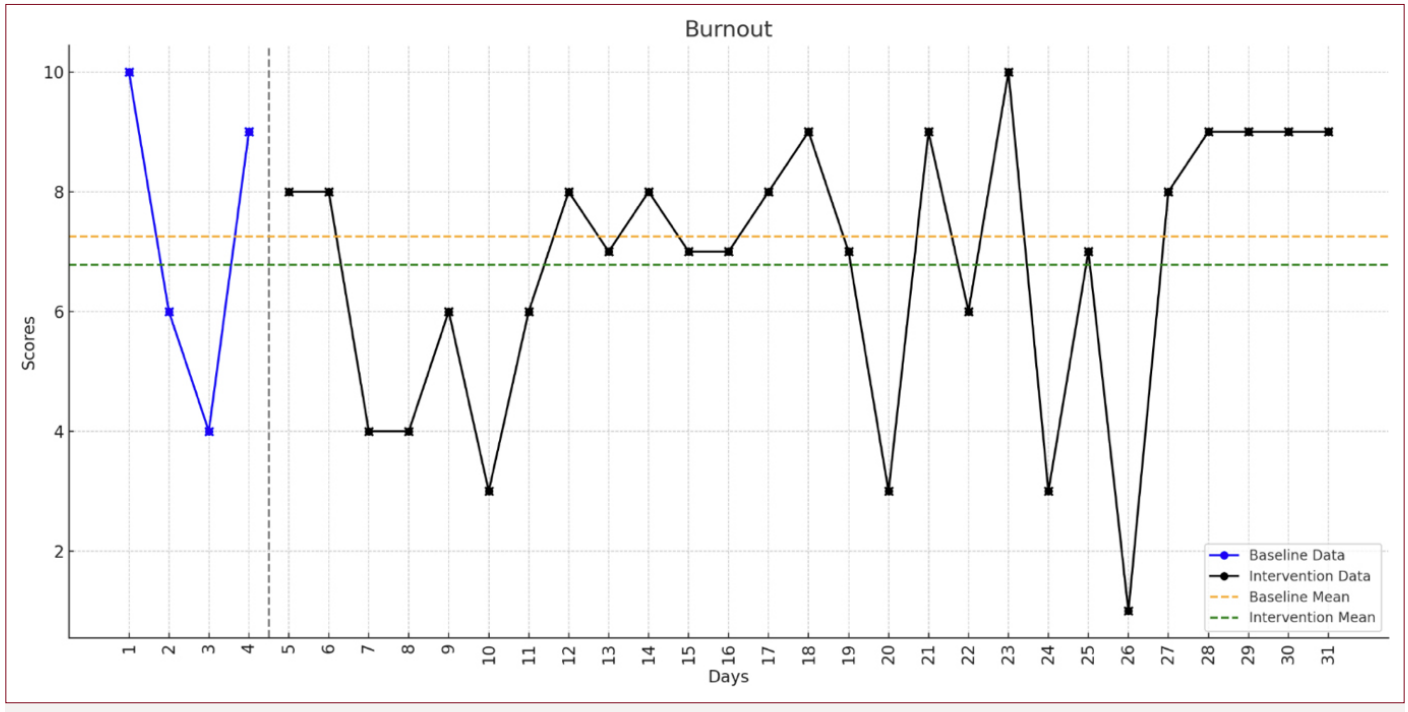

Figure 3. Burnout.

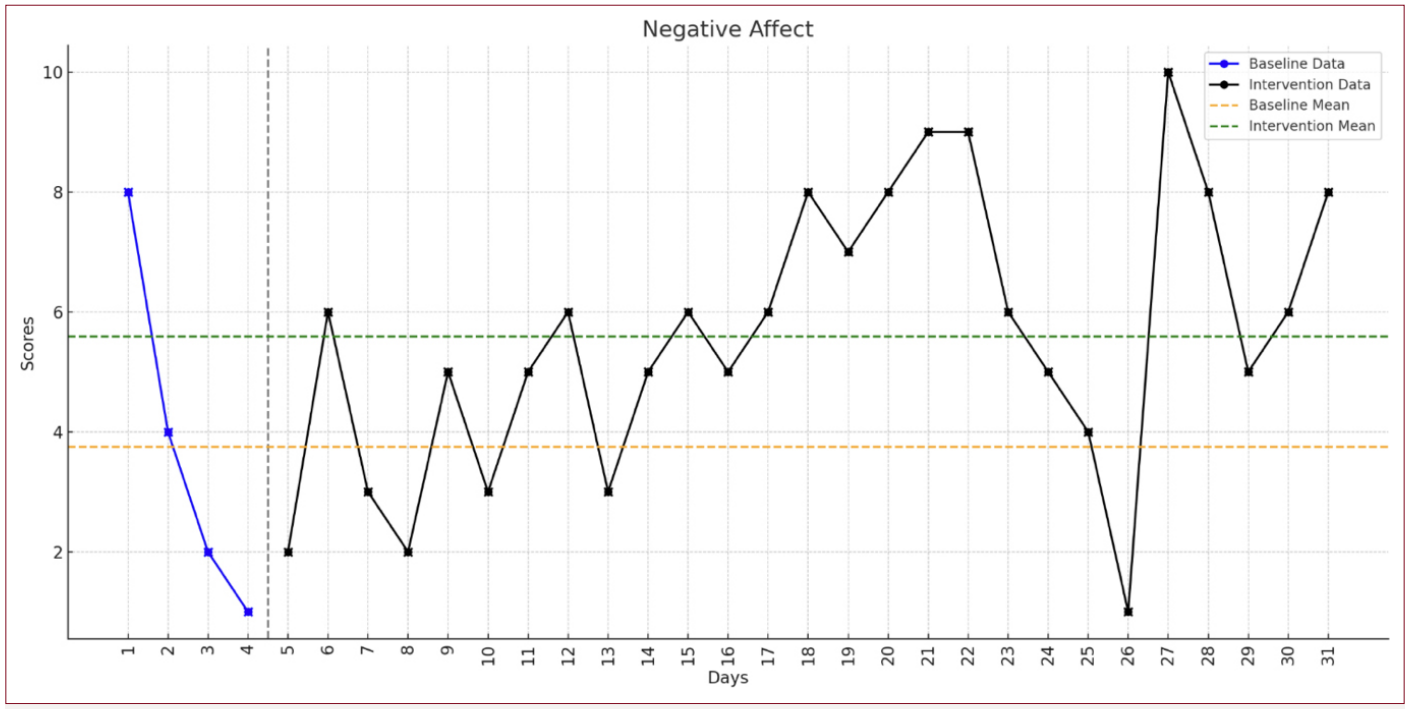

Figure 4. Negative affect.

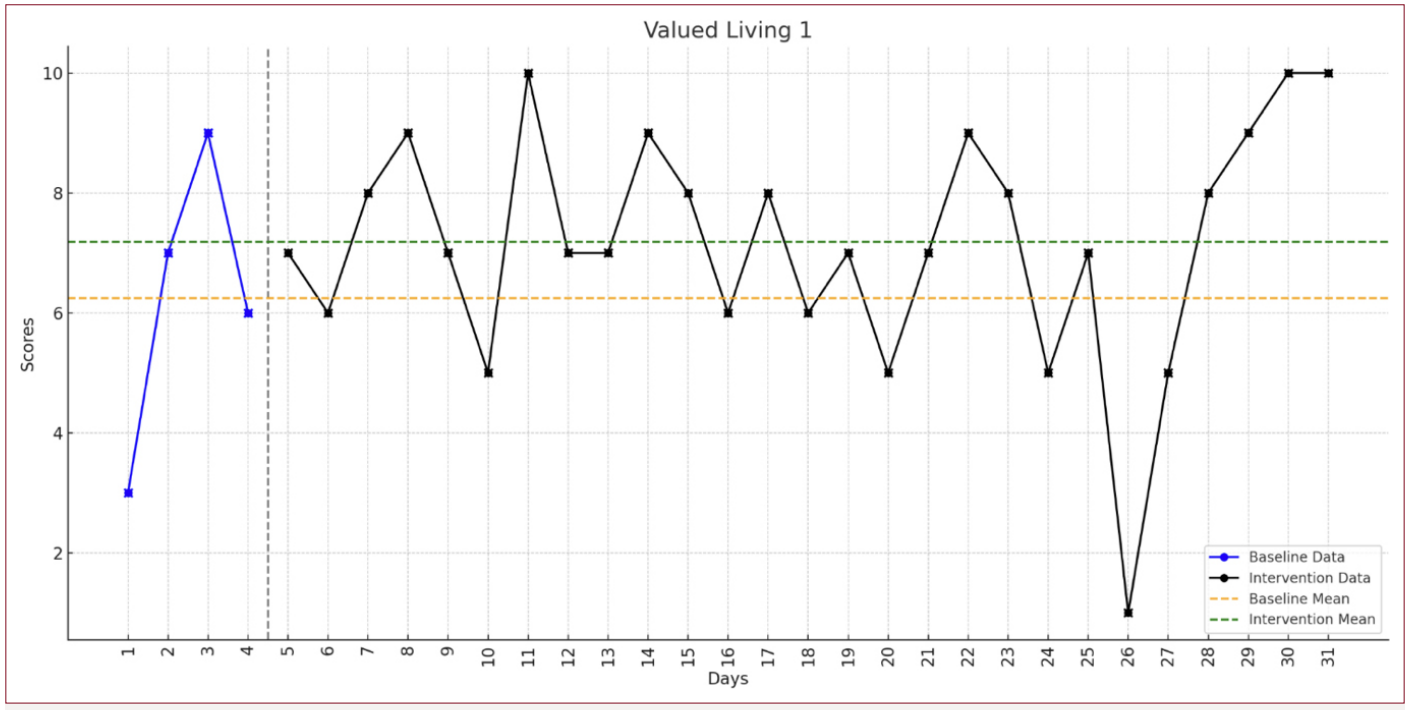

Figure 5. Valued living 1.

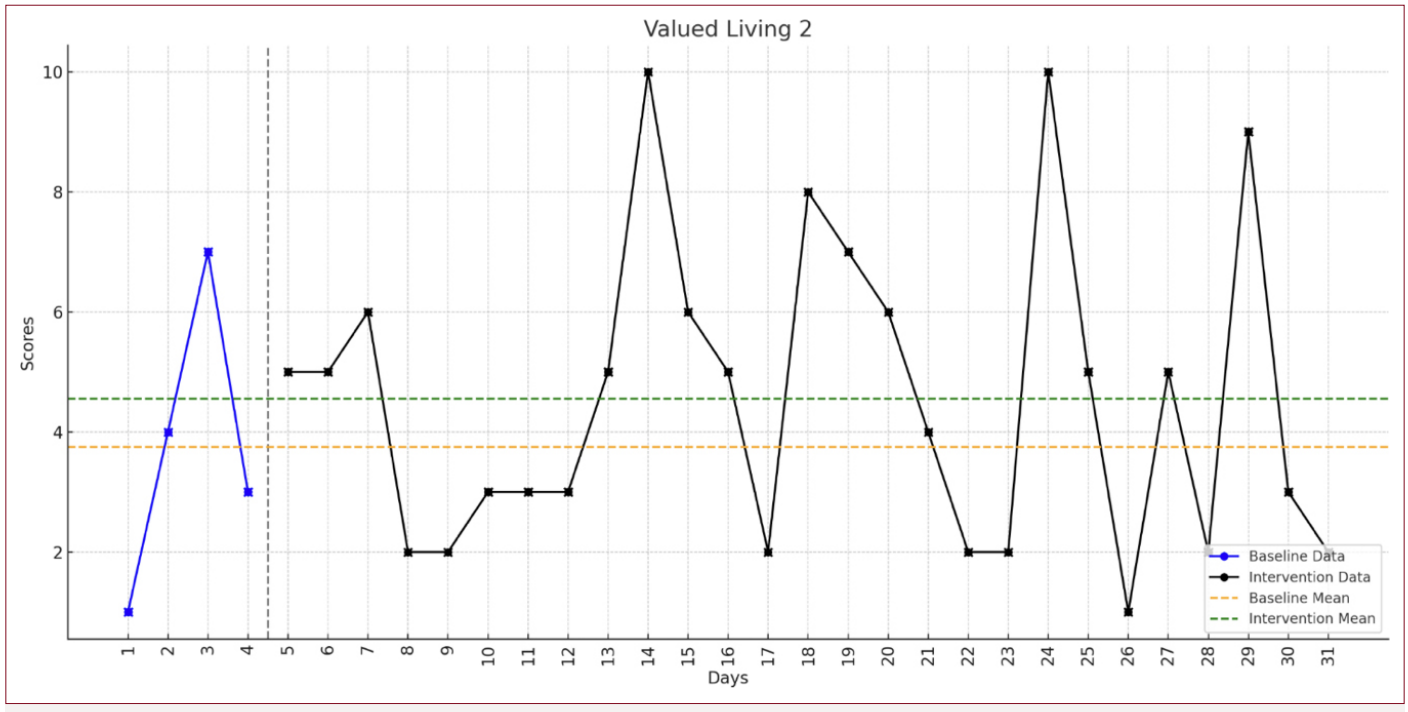

Figure 6. Valued living 2.

Table 6. RCI results of participant 2

Scale	Pre-test	Post-test	Scale SD	Cronbach's alpha	RCI value
BAT	88	70	0.70	0.95	81.32
AAQ-II	24	20	7.76	0.84	0.91
VQ-Progress	21	21	3.45	0.77	0.00
VQ-Obstruction	13	11	3.45	0.76	0.73

BAT: Burnout assessment tool; AAQ-II: Acceptance and Action Questionnaire II; VQ: Valuing Questionnaire; RCI: Reliable Change Index; SD: Standard deviation.

Table 7. Tau-U results of participant 2

	Phase	Tau-U	p-value	Z-score
Being present	A–B	-0.4677	0.0330	-2.1317
Negative affect	A–B	-0.4030	0.0662	-1.8370
Contact with values	A–B	0.4698	0.0322	2.1415
Experiential avoidance	A–B	-0.5049	0.0301	-2.1691
Rumination- worry	A–B	-0.6789	0.0020	-3.0944
Valued living 1	A–B	0.8815	0.0001	4.0178
Valued living 2	A–B	0.3448	0.1385	1.4813

Phase A: Baseline; Phase B: Intervention.

RCI of 0.91 was not reliable (|RCI|<1.96). The VQ-Progress score remained unchanged between the pre- and post-tests (RCI=0.00). Although the VQ-Obstruction score decreased, the RCI of 0.73 did not exceed the ±1.96 threshold (|RCI|<1.96).

The visual and Tau-U analyses revealed several notable findings. The participant's being present scores (Fig. 7) showed a decreasing trend, with a significant reduction observed in the post-intervention phase ($p<0.05$). Although negative affect scores (Fig. 8) visually appeared to decrease, the Tau-U analysis did not reveal a statistically significant change ($p>0.05$). In contrast, contact with values scores (Fig. 9) exhibited an increasing trend, which was statistically significant according to the Tau-U analysis ($p<0.05$). Similarly, experiential avoidance (Fig. 10) and rumination-worry scores (Fig. 11) both showed significant decreases from baseline to the intervention phase ($p<0.05$). Furthermore, the valued living 1 scores (Fig. 12) increased significantly after the intervention ($p<0.05$), while valued living 2 (Fig. 13) scores exhibited an increase in the

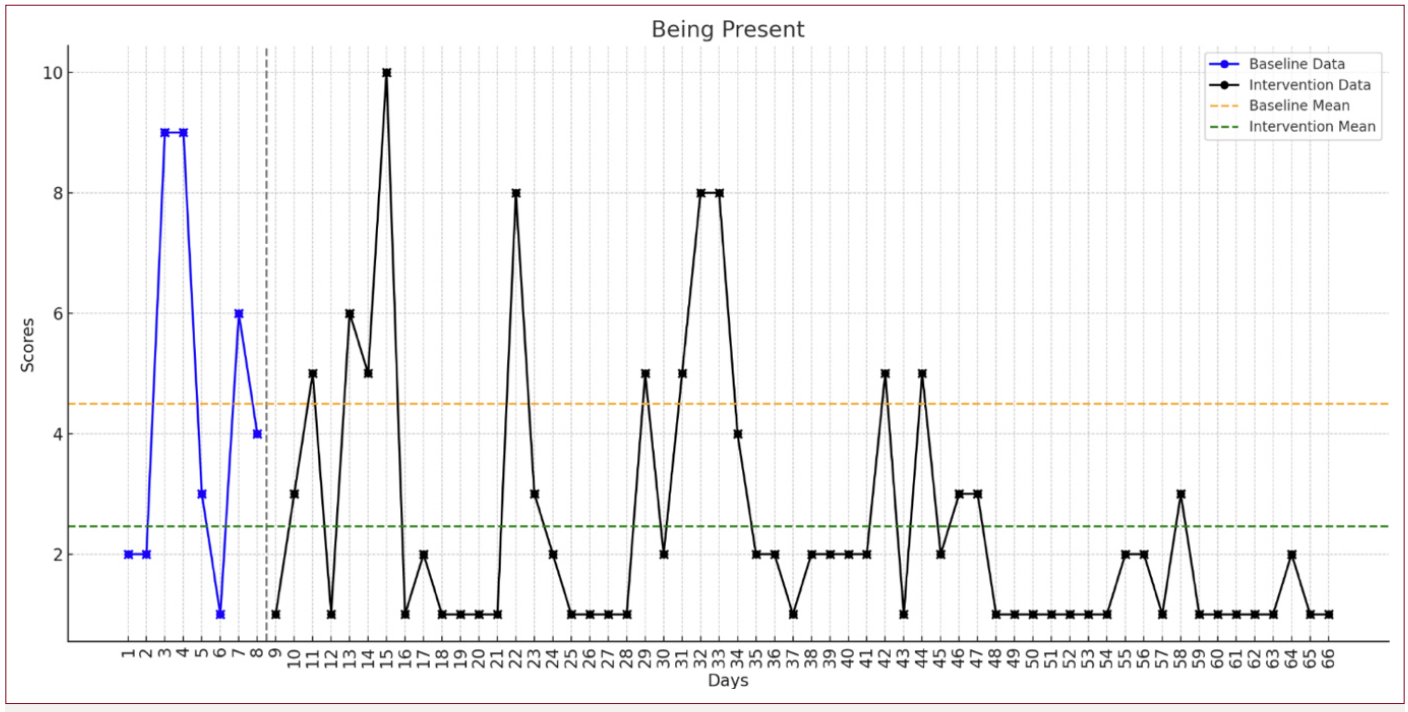

Figure 7. Being present.

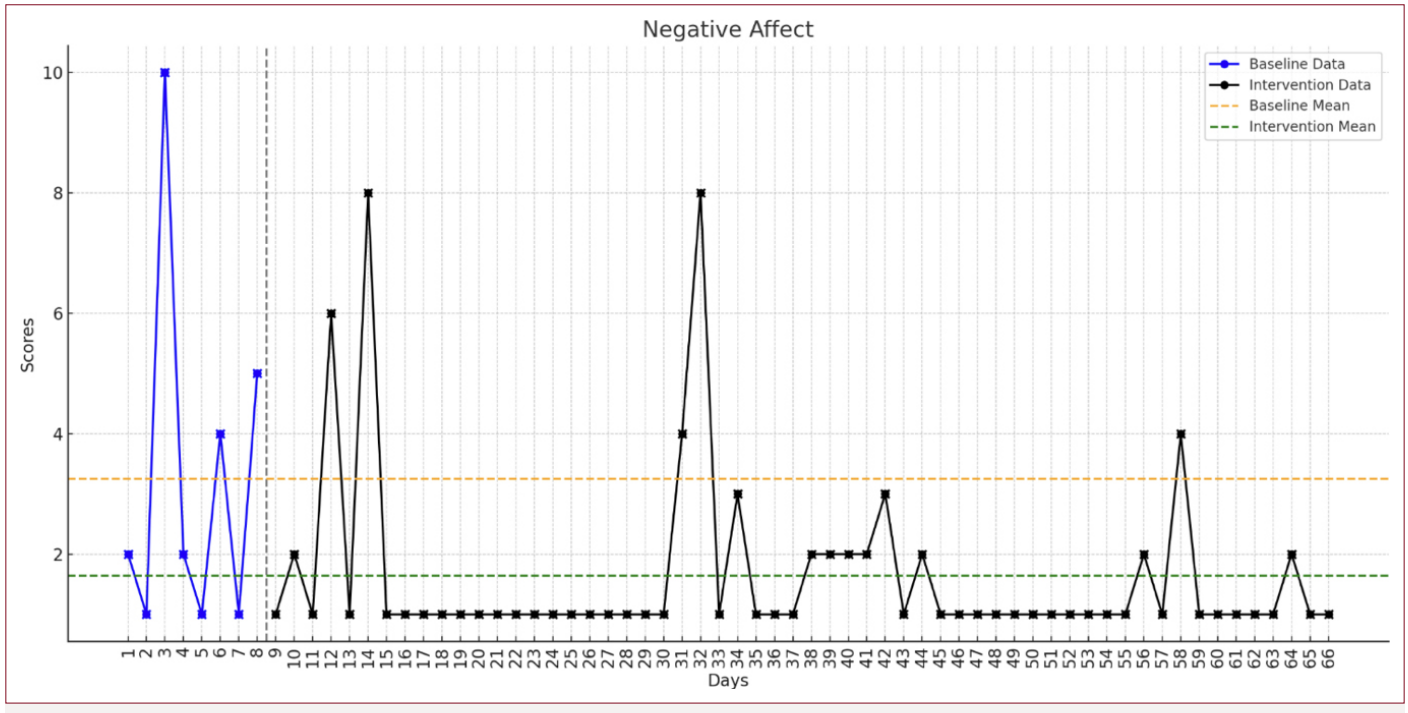

Figure 8. Negative affect.

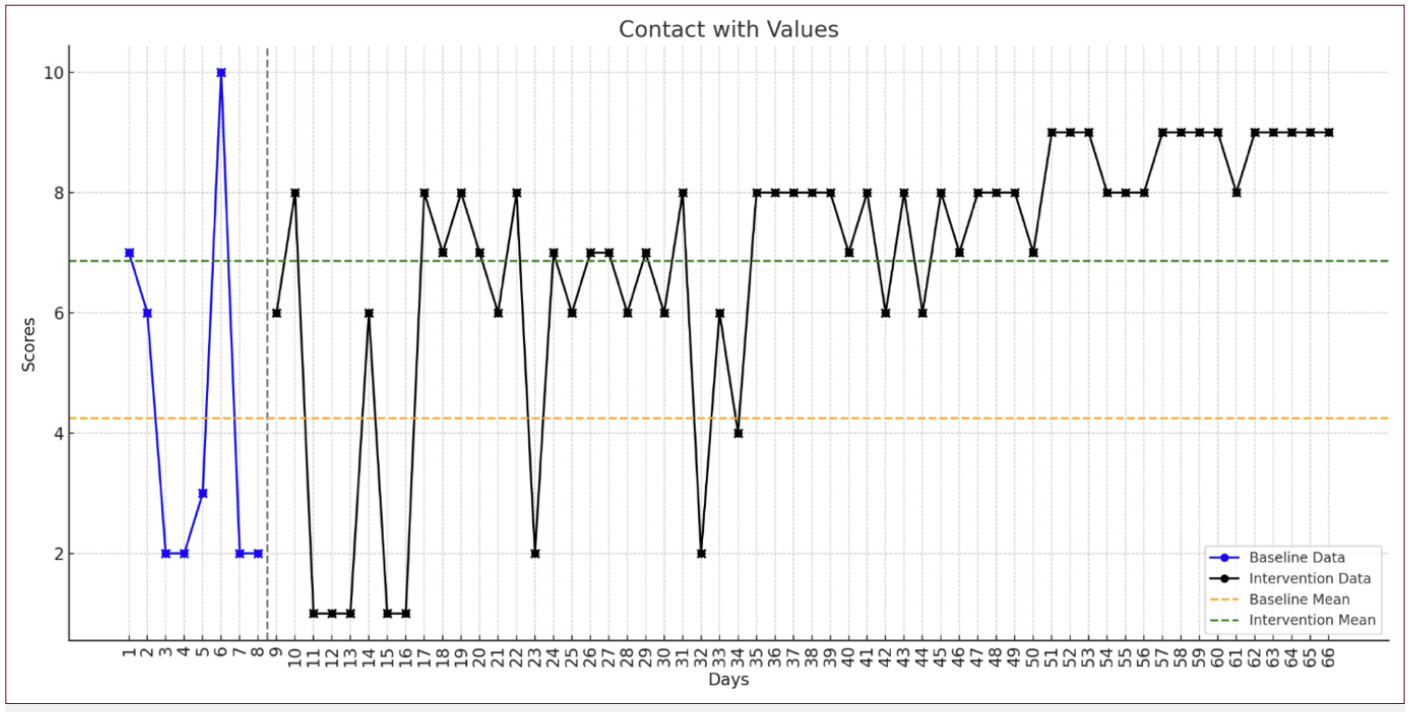

Figure 9. Contact with values.

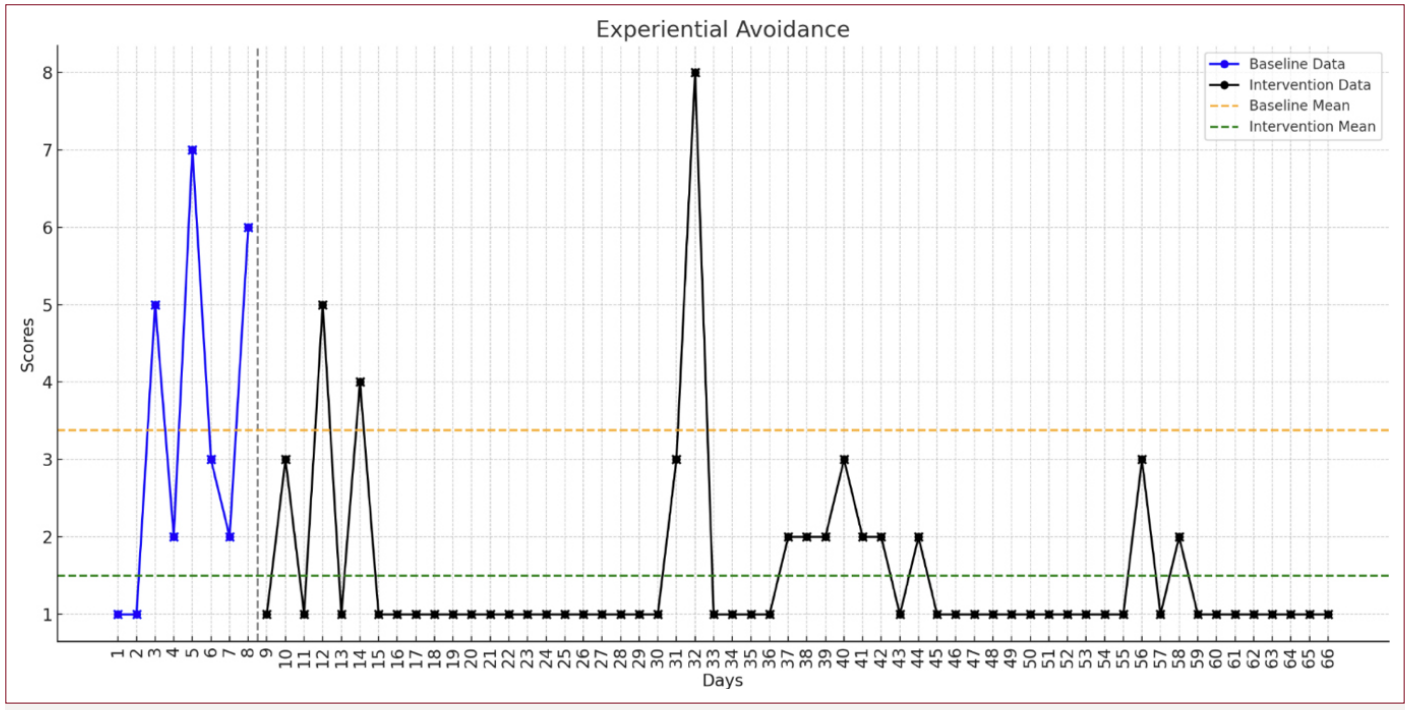

Figure 10. Experiential avoidance.

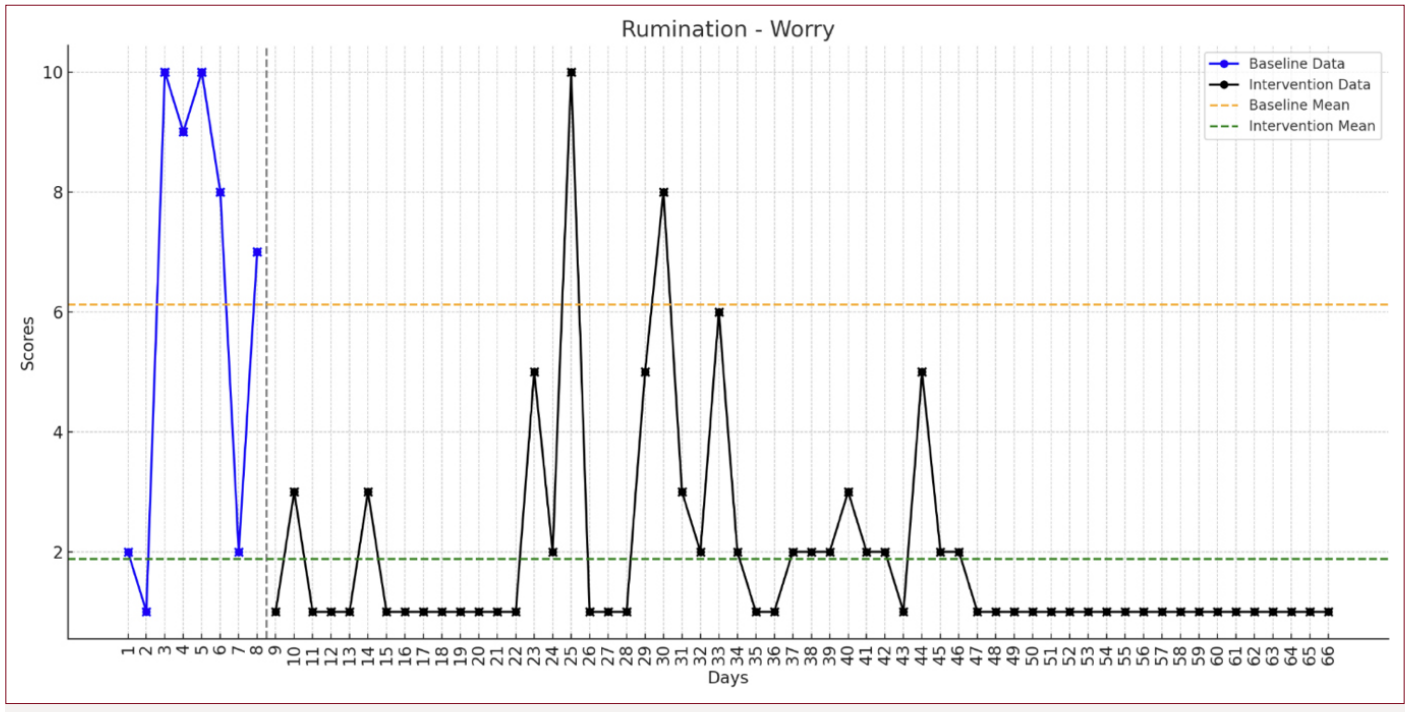

Figure 11. Rumination- worry.

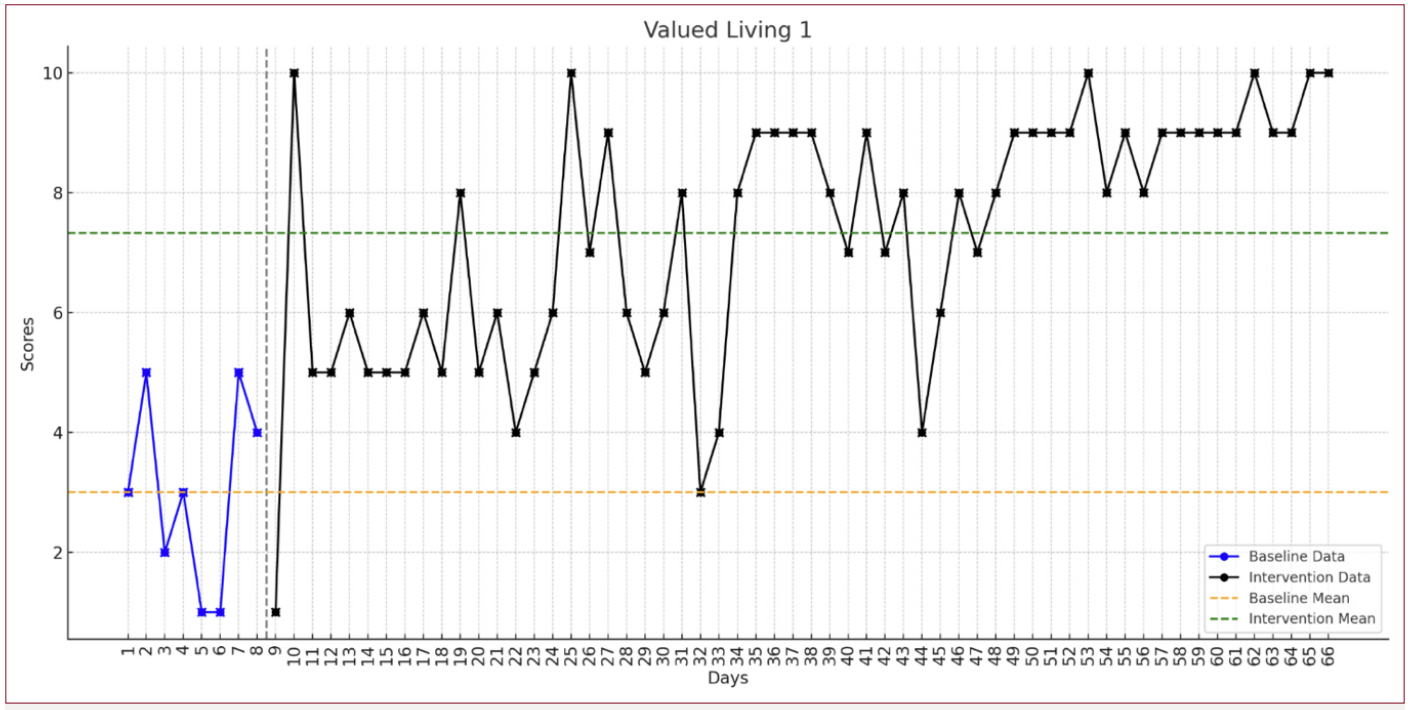

Figure 12. Valued living 1.

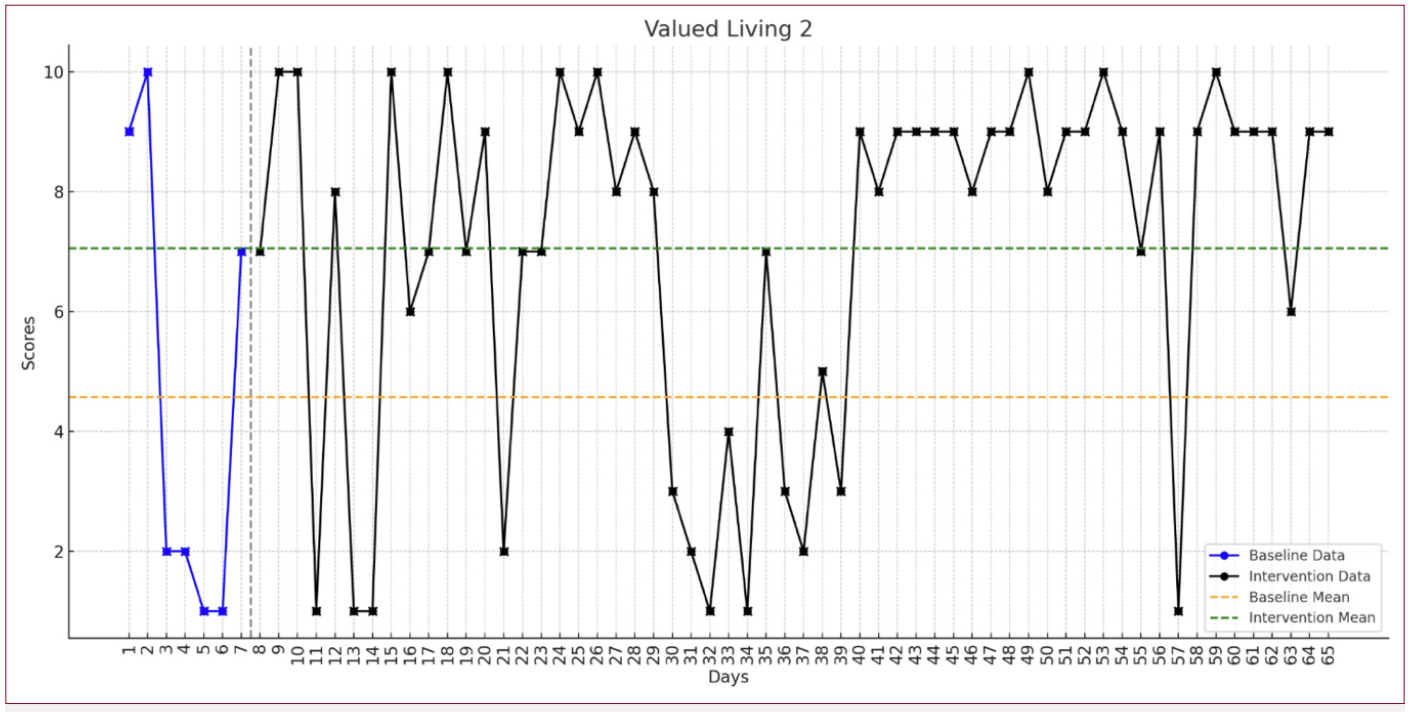

Figure 13. Valued living 2.

intervention phase, though this change was not statistically significant (p>0.05).

Discussion of Stage 2

RCI results, similar to those of Participant 1, revealed a significant reduction in burnout levels with a large RCI value for participant 2. However, changes in psychological flexibility, value-consistent behaviors, and perceived barriers to valued living did not reach statistical significance.

In this participant, the visual and Tau-U analyses of the daily questions indicated significant patterns, which appear somewhat inconsistent with the RCI findings. While RCI analyses rely on two time points—pre- and post-intervention—daily analyses capture more dynamic fluctuations. Considering the daily events experienced by the participant in the workplace, it is possible that the RCI results may have overlooked certain changes.

Evidence from daily measures indicated changes in the participant's scores, and the Tau-U results showed that there were significant changes in contact with values, experiential avoidance, rumination-worry, and valued living 1 scores. However, according to the Tau-U results there were no significant changes in negative affect and valued living 2 scores. Contrary to expectations, the being present score significantly decreased.

During the eight-week intervention, the participant continued to face a heavy workload and challenging patient profiles in the emergency department. Additionally, she was preparing for a highly rigorous specialty exam. Therefore, the absence of a significant reduction in negative affect can be understood within this context.

Similarly, the change in the participant's valued living 2 score, reflecting value-driven actions outside of work, was not significant. In line with the ACT model, developing psychological flexibility and engaging in values-driven behaviors is a gradual process. These changes may have been more evident in follow-up assessments; however, the absence of follow-up measurements likely contributed to the non-significant findings.

The participant's being present score showed a significant decrease, contrary to expectations. One possible explanation is that she did not fully understand the question. She also frequently reported distractibility during sessions. Since the question was related to concentration, it may not have measured the intended construct accurately. Furthermore, during the final weeks of the intervention, she received a new assignment at a busier hospital in the city center. Distressed by this news, she frequently expressed concerns during the final sessions. These factors may have contributed to the decrease in the being present score.

CONCLUSION

This report discusses a two-stage study examining the needs, feasibility, and acceptability of a self-help program for healthcare workers experiencing burnout. Stage 1 of the study yielded mostly non-significant results, prompting a follow-up meeting to explore underlying factors and gather participant insights. Based on this feedback, we modified the program and study design, leading to more distinct and significant outcomes in the second stage.

While RCI analyses of the standardized measures indicated significant reductions only in burnout symptoms, a different pattern emerged in the daily measures. Specifically, variables reflecting burnout-related experiences and negative affect did not show consistent change, whereas significant changes were observed in psychological flexibility-related processes, including contact with values, valued living, and experiential avoidance, especially in Stage 2. These findings are also consistent with the results reported by Reeve, Moghaddam, Tickle, and Young (2021). In their study, changes in variables such as emotional exhaustion and work engagement were observed in the standardized measures, whereas significant changes in psychological well-being and behavioral alignment were primarily detected through daily measures.

This pattern may be explained in several ways. Daily measures may have been more closely aligned with the specific ACT processes targeted during the intervention, making them more sensitive to change. Additionally, in ACT, changes in psychological flexibility and value-consistent behavior are expected to emerge before broader reductions in symptoms, as the model focuses on engaging in valued actions rather than directly targeting internal experiences (Hayes et al., 1999). Taken together, these findings suggest that daily measures in SCED research may be better suited to detecting clinically meaningful changes in intervention targets.

Several limitations should be considered when interpreting the findings of the present study. The study included only two female participants, which limits the generalizability of the findings. Additionally, the relatively short baseline and follow-up periods may have limited the evaluation of change and maintenance over time, particularly given the nature of ACT processes.

Burnout remains a relatively underexplored area, particularly in relation to ACT-based interventions. In Türkiye, research in this area is limited, highlighting the need for structured intervention programs. Given the complex nature of burnout, more comprehensive interventions may be needed beyond brief approaches (Awa et al., 2010). Therefore, the present study aimed to address this gap by developing a comprehensive ACT-based intervention program targeting burnout and conducting a preliminary evaluation of its feasibility and potential effectiveness.

In conclusion, this study provides preliminary evidence supporting the acceptability and feasibility of the MyLife protocol for reducing burnout symptoms. As one of the first studies examining an ACT-based burnout intervention among healthcare workers in Türkiye, it contributes to the emerging literature in this area. However, further research is needed to confirm and extend these findings.

Ethics Committee Approval: This study was approved by the İstanbul Medipol University Ethics Committee (Decision No: 92; Date: 10.07.2023).

Informed Consent: Informed consent was obtained from all participants prior to their participation.

Conflict of Interest: The authors declare that there is no conflict of interest.

Financial Disclosure: No funding was received for the preparation, writing, or publication of this study.

Use of AI for Writing Assistance: The authors declare that no artificial intelligence tools were used in the writing of this manuscript.

Authorship Contributions: Concept – EGT, AN, HUA; Design – EGT, AN, HUA; Supervision – KFY, AN; Fundings – KFY; Materials – KFY; Data Collection and/or Processing – EGT; Analysis and/or Interpretation – AN, HUA; Literature Review – EGT, AN, HUA; Writing – EGT; Critical Review – AN.

Acknowledgments: The authors would like to thank Livanur Yılmaz for her assistance with sending the daily questionnaires to the participants.

Peer-review: Externally peer-reviewed.

REFERENCES

A-Tjak, J. G. L., Davis, M. L., Morina, N., Powers, M. B., Smits, J. A. J., & Emmelkamp, P. M. G. (2015). A meta-analysis of the efficacy of acceptance and commitment therapy for clinically relevant mental and physical health problems. *Psychotherapy and Psychosomatics, 84*(1), 30-36. [CrossRef]

Awa, W. L., Plaumann, M., & Walter, U. (2010). Burnout prevention: A review of intervention programs. *Patient Education and Counseling, 78*(2), 184-190. [CrossRef]

Aydın, Y., & Aydın, G. (2017). Değer Verme Ölçeğini (Valuing Questionnaire) Türk kültürüne uyarlama çalışması. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 17*(1), 64-77. [CrossRef]

Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., Waltz, T., & Zettle, R. D. (2011). Preliminary

psychometric properties of the Acceptance and Action Questionnaire-II: A revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy, 42*(4), 676-688. [CrossRef]

Bulté, I., & Onghena, P. (2011). When the truth hits you between the eyes. *Methodology, 8*(3), 104-114. [CrossRef]

Çelik, Z., Kılıç, O., & Ulusoy, S. (2024). Valued living, fulfilled at work: Investigating job satisfaction and associated psychological processes among physicians. *Psychiatry and Behavioral Sciences, 14*(3), 200-208. [CrossRef]

Clough, B., March, S., Leane, S., & Ireland, M. (2018). What prevents doctors from seeking help for stress and burnout? A mixed-methods investigation among metropolitan- and regional-based Australian doctors. *Journal of Clinical Psychology, 75*(3), 418-432. [CrossRef]

Eklund, M., & Kiritsis, C. (2019). *ACT-based self-help without therapist support: An online randomised controlled trial* (Master's thesis). Karolinska Institutet, Stockholm, Sweden.

Eklund, M., Kiritsis, C., Livheim, F., & Ghaderi, A. (2023). ACT-based self-help for perceived stress and its mental health implications without therapist support: A randomized controlled trial. *Journal of Contextual Behavioral Science, 27*, 98-106. [CrossRef]

Favre, S., Bajwa, N., Dao, M., Audétat, M., Nendaz, M., Perron, N., Perneger, T., & Richard-Lepouriel, H. (2023). Association between burnout and stigma in physicians. *PLOS ONE, 18*(4), e0283556. [CrossRef]

Flaxman, P. E., Bond, F. W., & Livheim, F. (2013). *The mindful and effective employee: An acceptance and commitment therapy training manual for improving well-being and performance*. Oakland, CA: New Harbinger Publications.

Freudenberger, H. J. (1975). The staff burn-out syndrome in alternative institutions. *Psychotherapy: Theory, Research & Practice, 12*, 73-82. [CrossRef]

Gloster, A. T., Walder, N., Levin, M. E., Twohig, M. P., & Karekla, M. (2020). The empirical status of acceptance and commitment therapy: A review of meta-analyses. *Journal of Contextual Behavioral Science, 18*, 181-192. [CrossRef]

Harris, A. (2024). Burnout in urological education: An in-depth study of residents and fellows in the 2021 AUA census. *The Journal of Urology, 212*(1), 205-212. [CrossRef]

Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes, and outcomes. *Behaviour Research and Therapy, 44*(1), 1-25. [CrossRef]

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

Hofer, P. D., Waadt, M., Aschwanden, R., Milidou, M., Acker, J., Meyer, A. H., Lieb, R., & Gloster, A. T. (2018). Self-help for stress and burnout without therapist contact: An online randomised controlled trial. *Work & Stress, 32*(2), 189-208. [CrossRef]

Hopcraft, M. (2023). Australian dental practitioners' experience of burnout. *Journal of Public Health Dentistry, 83*(4), 397-407. [CrossRef]

Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59*(1), 12-19. [CrossRef]

Koçak, Ö. E., Gençay, O., & Schaufeli, W. B. (2022). BAT-TR: Tükenmişlik Ölçme Aracının (BAT) Türkçeye uyarlanması. *Psikoloji Çalışmaları, 42*(3), 509-549. [CrossRef]

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397-422. [CrossRef]

McConachie, D. A. J., McKenzie, K., Morris, P. G., & Walley, R. M. (2014). Acceptance and mindfulness-based stress management for support staff caring for individuals with intellectual disabilities. *Research in Developmental Disabilities, 35*(6), 1216-1227. [CrossRef]

Medeiros, J. (2018). Burnout in medical students: The impact of lifestyle and health behaviours in development of burnout. *Mental Health & Human Resilience International Journal, 2*(1). [CrossRef]

Moran, D. (2015). Acceptance and commitment training in the workplace. *Current Opinion in Psychology, 2*, 26-31. [CrossRef]

Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its remediation. *Administration and Policy in Mental Health and Mental Health Services Research, 39*(5), 341-352. [CrossRef]

Parker, G., Tavella, G., & Eyers, K. (2022). *Burnout: A guide to identifying burnout and pathways to recovery* (1st ed.). Routledge. [CrossRef]

Reeve, A., Moghaddam, N., Tickle, A., & Young, D. (2021). A brief acceptance and commitment intervention for work-related stress and burnout amongst frontline homelessness staff: A single-case experimental design series. *Clinical Psychology & Psychotherapy, 28*(5), 1001-1019. [CrossRef]

Schaufeli, W. B., Desart, S., & De Witte, H. (2020). Burnout Assessment Tool (BAT)-Development, validity, and reliability. *International Journal of Environmental Research and Public Health, 17*, 1-14. [CrossRef]

Smout, M., Davies, M., Burns, N., & Christie, A. (2014). Development of the Valuing Questionnaire (VQ). *Journal of Contextual Behavioral Science, 3*(3), 164-172. [CrossRef]

Toprak, T. B., Arıcak, O. T., & Yavuz, K. F. (2020). Tıp fakültesi öğrencilerinde tükenmişlik derecesi, psikolojik esneklik ve değerler arasındaki ilişkinin incelenmesi. *Bilişsel Davranışçı Psikoterapi ve Araştırmalar Dergisi, 9*(1), 16-27. [CrossRef]

Towey-Swift, K. D., Lauvrud, C., & Whittington, R. (2023). Acceptance and commitment therapy (ACT) for professional staff burnout: A systematic review and narrative synthesis of controlled trials. *Journal of Mental Health, 32*(2), 452-464. [CrossRef]

van de Leur, J. C., Lundbäck, K., Forslund, S., Virtanen, N., & Buhrman, M. (2025). Feasibility, utility, and acceptability of an online ACT-based rehabilitation for clinical burnout. *Cognitive Behaviour Therapy*. Advance online publication. [CrossRef]

Vannest, K. J., Parker, R. I., & Gonen, O. (2011). *Single Case Research: Web-based calculators for SCR analysis* (Version 1.0). Available from: http://www.singlecaseresearch.org. Accessed Jan 16, 2025.

Wei, Z., Pu, J., Zhong, X., Yang, W., Teng, T., Fan, L., Wang, H., Tian, L., Liu, Y., & Xie, P. (2021). Overlap of burnout-depression symptoms among Chinese neurology graduate students in a national cross-sectional study. *BMC Medical Education, 21*(1). [CrossRef]

World Health Organization. (2019). *Burn-out an "occupational phenomenon": International Classification of Diseases*. Available from https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases. Accessed Jul 20, 2026.

Yavuz, F., Ulusoy, S., Işık, M., Esen, F., Burhan, H., Karadere, M., & Yavuz, N. (2016). Turkish version of Acceptance and Action Questionnaire-II (AAQ-II): A reliability and validity analysis in clinical and non-clinical samples. *Klinik Psikofarmakoloji Bülteni-Bulletin of Clinical Psychopharmacology, 26*(1), 1-10. [CrossRef]