

# SOSYAL SAĞLIK DERGİSİ

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## COVID-19 BAĞLAMINDA UYARLANMIŞ KİŞİLERARASI PSİKOTERAPİNİN BİREYLERİN DEPRESYON, SALGIN KAYGISI VE YAŞAM MEMNUNİYETİ DÜZEYLERİ ÜZERİNDEKİ ETKİSİ<sup>1</sup>

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### Öz

**Amaç:** Bu çalışma, COVID-19 pandemisinden psikolojik olarak etkilenen bireylerde depresyon, salgın hastalık kaygısı ve yaşam memnuniyeti düzeylerini iyileştirmeyi hedefleyen, kriz koşullarına özel olarak uyarlanmış kişilerarası psikoterapi modelinin (IPT-AC-CV19) etkililiğini değerlendirmeyi amaçlamaktadır. **Yöntem:** Araştırma, rastgele atama yöntemiyle müdahale grubuna (n = 16) ve kontrol grubuna (n = 17) ayrılan toplam 33 katılımcı ile yürütülmüştür. Müdahale grubuna sekiz hafta boyunca çevrimiçi olarak uyarlanmış kişilerarası psikoterapi uygulanmış; kontrol grubuna ise sadece haftalık takip amaçlı telefon görüşmeleri yapılmıştır. Katılımcıların depresyon düzeyi Beck Depresyon Envanteri (BDI), salgın hastalık kaygısı Salgın Hastalık Anksiyete Ölçeği (EDAS) ve genel ruhsal sağlık durumu Hasta Sağlık Anketi-9 (PHQ-9) aracılığıyla değerlendirilmiştir. Ölçümler müdahale öncesi (ön test) ve sonrası (son test) olmak üzere iki zaman noktasında gerçekleştirilmiştir. **Bulgular:** Müdahale grubunda depresyon, anksiyete ve sağlık algısında azalma eğilimi gözlemlenmiştir. Gruplararası farklar istatistiksel olarak anlamlı bulunmamakla birlikte ( $p > .05$ ), özellikle depresyon düzeylerinde gözlenen yüksek etki büyüklüğü (Cohen's  $d = 1.52$ ), müdahalenin klinik açıdan anlamlı olabileceğini göstermektedir. **Sonuç:** Kriz dönemlerinde çevrimiçi olarak sunulan kısa süreli kişilerarası psikoterapi, psikolojik belirtiler üzerinde sınırlı ancak potansiyel olarak klinik açıdan anlamlı etkiler yaratabilmektedir. Gelecek araştırmalarda, daha uzun süreli müdahalelerin, daha geniş örneklemelerin ve yüz yüze ya da hibrit uygulama biçimlerinin etkilerinin değerlendirilmesi önerilmektedir.

**Anahtar Kelimeler:** Kişilerarası psikoterapi, COVID-19, depresyon, salgın kaygısı, yaşam memnuniyeti

## THE EFFICACY OF ADAPTED INTERPERSONAL PSYCHOTHERAPY IN THE CONTEXT OF COVID-19 ON INDIVIDUALS' DEPRESSION, EPIDEMIC ANXIETY, AND LIFE SATISFACTION LEVELS

### Abstract

**Objective:** This study aimed to evaluate the effectiveness of an adapted interpersonal psychotherapy model for acute crisis (IPT-AC-CV19) in reducing depression and epidemic-related anxiety, and in improving life satisfaction among individuals affected by the COVID-19 pandemic. **Methods:** Thirty-three participants were randomly assigned to either an intervention group (n = 16), which received an eight-week online interpersonal psychotherapy program, or a control group (n = 17), which received weekly check-in calls without structured therapy. Depression, anxiety, and general psychological health were assessed at pretest and posttest using the Beck Depression Inventory (BDI), Epidemic Disease Anxiety Scale (EDAS), and Patient Health Questionnaire-9 (PHQ-9), respectively. **Results:** Although between-group differences did not reach statistical significance ( $p > .05$ ), the intervention group demonstrated notable within-group improvements, including a large effect size for depression reduction (Cohen's  $d = 1.52$ ). **Conclusion:** These findings suggest that short-term, online-adapted interpersonal psychotherapy may hold clinical relevance for alleviating psychological distress under crisis conditions, despite statistical limitations. Future

<sup>1</sup> Bu çalışma, birinci yazarın Üsküdar Üniversitesi Sosyal Bilimler Enstitüsü Psikoloji Programı kapsamında yürüttüğü psikoloji doktora tezine dayanmaktadır.

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studies should employ larger samples, extended treatment durations, and blended delivery formats to better evaluate its therapeutic potential.

**Keywords:** *Interpersonal psychotherapy, COVID-19, depression, epidemic anxiety, life satisfaction*

## **1. INTRODUCTION**

The COVID-19 pandemic has had a profound impact on mental health worldwide (Sampogna et al., 2021), affecting individuals across different socioeconomic backgrounds (Nagasu et al., 2021), age groups (Gamsızkan et al., 2021), and geographic regions (Chen et al., 2021). While the physical health consequences of the virus have been extensively studied (Clemente-Suárez et al., 2021), the psychological toll of the pandemic has been equally significant (Prati & Mancini, 2021). The pandemic brought about unprecedented challenges, including prolonged social isolation (Siddique et al., 2021)<sup>1</sup>, economic uncertainty (Rahiem et al., 2021), grief due to loss (Ahmed & Sarkodie, 2021), and overwhelming fear of illness (Lee & Neimeyer, 2022). These factors collectively contributed to an increase in mental health issues, particularly depression and anxiety (Ardebili et al., 2021). The stress induced by the pandemic was not only caused by the fear of infection but also by the drastic changes in daily life (Zhu et al., 2023). Quarantine measures, movement restrictions, and disruptions to normal routines led to a sense of unpredictability and loss of control, exacerbating pre-existing mental health conditions and creating psychological distress even in those who had not previously experienced significant emotional difficulties (Manchia et al., 2022).

One of the most detrimental consequences of the pandemic was the widespread disruption of interpersonal relationships (Wang et al., 2021). Humans are inherently social beings, and meaningful social connections play a crucial role in mental well-being (Al Gharaibeh et al., 2022). The restrictions imposed to curb the spread of the virus forced individuals to adapt to new ways of interacting, often reducing their social support systems to digital communication (Dhimolea et al., 2022). While technology allowed people to stay connected virtually, it did not fully compensate for the loss of physical closeness, shared experiences, and face-to-face emotional support (Szkody et al., 2021). Many individuals found themselves struggling with loneliness, which has been widely recognized as a significant predictor of depression and anxiety (Marinucci et al., 2022). The abrupt changes in work and home life further complicated interpersonal dynamics, leading to increased conflict, role changes, and heightened emotional distress within families and partnerships (Damsgaard et al., 2021). The inability to visit loved ones, grieve in traditional ways, or engage in social activities that once provided emotional relief contributed to an overall decline in psychological resilience (Berg et al., 2022).

Given the increased psychological burden experienced during the pandemic, there has been a pressing need for effective mental health interventions that address both the emotional and interpersonal challenges arising from the crisis (Hernández-Fernández & Meneses-Falcón, 2022). One promising approach in this regard is interpersonal psychotherapy, which is an evidence-based therapeutic method originally developed for the treatment of depression (Gruber et al., 2021). Interpersonal psychotherapy is grounded in the understanding that psychological symptoms are often linked to interpersonal difficulties (Bian et al., 2023), and that improving relationships can lead to a significant reduction in distress (Filia et al., 2021). Unlike other therapeutic models that focus primarily on cognition or behavior, interpersonal psychotherapy emphasizes the role of social interactions, emotional expression, and

communication patterns in mental health (Lemma et al., 2024). It provides a structured, time-limited approach to addressing relationship conflicts, role transitions, grief, and social isolation (Messina et al., 2021), all of which were exacerbated by the COVID-19 pandemic.

In response to the unique psychological stressors associated with the pandemic (Kumar et al., 2022), adapted interpersonal psychotherapy was developed as a crisis-focused modification of the traditional model (Park et al., 2021). This adapted version (Stuart et al., 2021) aimed to address the most pressing interpersonal issues faced by individuals during the pandemic, with a particular emphasis on managing loss, coping with isolation, and navigating pandemic-related role transitions (Klier et al., 2001). The core principles of interpersonal psychotherapy remained intact, but adjustments were made to ensure that the therapy could be effectively delivered in an online format (Frank et al., 2014). Traditional interpersonal psychotherapy is typically conducted over twelve to sixteen weeks, but given the urgent need for mental health support during the pandemic, the adapted version was designed to be shorter in duration while maintaining its therapeutic effectiveness (Markowitz & Weissman, 2012).

Although interpersonal psychotherapy has been extensively researched and validated for the treatment of depression and other mental health disorders (Mufson et al., 2004), there remains a gap in the literature regarding its effectiveness when adapted for crisis situations such as the COVID-19 pandemic. Previous research has demonstrated that interpersonal psychotherapy is highly effective in addressing mood disorders by focusing on relationship dynamics and social support (Weissman et al., 2017). However, most of these studies have been conducted in controlled clinical settings where therapy is delivered over an extended period. There is limited empirical evidence on whether interpersonal psychotherapy, when adapted to an accelerated and online format, can produce significant improvements in psychological well-being during a global crisis. Additionally, while many studies have explored the general impact of COVID-19 on mental health (Picardi & Gaetano, 2014; Xiong et al., 2020), fewer have investigated how specific psychotherapeutic interventions (Laposa et al., 2024) can be tailored to meet the unique challenges of a pandemic.

Another critical gap in the literature is the evaluation of life satisfaction as an outcome measure in psychotherapy research (Bafrani et al., 2024). While depression and anxiety have been widely studied in the context of the pandemic (Doege et al., 2025), less attention has been given to the broader concept of life satisfaction, which encompasses overall well-being and quality of life. Life satisfaction is a crucial component of psychological resilience and long-term mental health (Yousefi Afrashteh et al., 2024), yet it is often overlooked in clinical studies that focus primarily on symptom reduction. Understanding whether adapted interpersonal psychotherapy can improve not only clinical symptoms but also life satisfaction is essential in determining the broader efficacy of the intervention.

The present study seeks to address these gaps by systematically investigating the efficacy of adapted interpersonal psychotherapy in alleviating depression, epidemic-related anxiety, and life satisfaction levels among individuals affected by the COVID-19 pandemic. The study examines whether this modified form of therapy, which was specifically designed to be

delivered online in a short-term format, can produce meaningful improvements in psychological well-being. By focusing on a structured, interpersonal intervention, the study aims to determine whether interpersonal psychotherapy can be effectively adapted for use during global crises and whether it remains a viable therapeutic approach in virtual settings.

The significance of this study extends beyond its immediate clinical implications. The findings have the potential to inform mental health professionals on best practices for adapting evidence-based therapies to crisis conditions. If adapted interpersonal psychotherapy proves to be effective, it could serve as a scalable intervention for individuals who may not have access to traditional face-to-face therapy. Additionally, the study contributes to the growing body of research on online psychotherapy, which has gained increasing relevance in the wake of the pandemic. Understanding the strengths and limitations of remote therapeutic interventions is crucial for developing accessible and effective mental health care models that can be implemented in future crises.

Furthermore, this research has important implications for public health policy and mental health care planning. The COVID-19 pandemic has highlighted the urgent need for psychological interventions that can be rapidly deployed on a large scale. Traditional mental health care systems were unprepared for the surge in psychological distress experienced during the pandemic, and many individuals were unable to access timely professional support. By providing empirical evidence on the effectiveness of adapted interpersonal psychotherapy, this study can contribute to the development of targeted mental health strategies that prioritize both symptom relief and overall well-being. Policymakers and mental health organizations can use the findings to design intervention programs that integrate interpersonal psychotherapy into public mental health initiatives, ensuring that psychological support is widely available in times of crisis.

The relevance of this study also extends to future global emergencies. While the COVID-19 pandemic is the most recent large-scale crisis to impact mental health on a global scale, it is unlikely to be the last. Natural disasters, economic downturns, and other public health emergencies all have the potential to disrupt interpersonal relationships and contribute to widespread psychological distress. By examining how interpersonal psychotherapy can be adapted to meet the demands of a crisis, this study provides valuable insights that can be applied to future emergency response efforts.

Ultimately, the present research is not only about evaluating the efficacy of a specific therapeutic intervention but also about understanding how psychological treatments must evolve to address the challenges of a rapidly changing world. The findings of this study will contribute to the ongoing conversation about how mental health care can be made more adaptable, inclusive, and effective in the face of global crises. The goal is to provide individuals with the psychological tools they need to navigate uncertainty, build resilience, and maintain meaningful social connections, even in the most challenging circumstances. By advancing knowledge in this area, this study aims to bridge the gap between traditional therapeutic

models and the evolving needs of a world where mental health crises are increasingly becoming a part of everyday life.

## **2. MATERIALS - METHODS**

This study is based on the doctoral dissertation in psychology conducted at Üsküdar University, Social Sciences Institute, under the Psychology Program. The research aims to evaluate the efficacy of Adapted Interpersonal Psychotherapy (IPT-AC-CV19) in reducing depression, epidemic-related anxiety, and improving life satisfaction among individuals affected by the COVID-19 pandemic. The study was designed as a randomized controlled trial, with participants assigned to either an intervention group receiving the adapted therapy or a control group receiving only telephone-based monitoring.

### **2.1. Participants**

The study recruited 33 voluntary participants who reported experiencing psychological distress related to the COVID-19 pandemic. Participants were identified through online mental health forums and social media platforms, ensuring diversity in age, gender, and socioeconomic background. Inclusion criteria required individuals to be at least 18 years old, report significant pandemic-related emotional distress, and be willing to participate in an online therapy format. Exclusion criteria included individuals with known severe psychiatric conditions (e.g., schizophrenia, bipolar disorder, or active substance use disorder), those receiving concurrent psychotherapy, and those with acute suicidal ideation requiring immediate clinical intervention.

The target sample size of 33 was determined based on practical feasibility, ethical constraints during the pandemic, and alignment with similar randomized pilot trials in crisis contexts. No formal a priori power analysis was conducted due to the exploratory nature and logistical constraints of the study.

Participants were randomly assigned to one of two groups. The intervention group (n = 16) received Adapted Interpersonal Psychotherapy for Acute Crisis (IPT-AC-CV19) over four weeks, consisting of four one-hour online sessions per week focusing on interpersonal distress. The control group (n = 17) received weekly phone-based check-ins without structured therapeutic intervention. One participant withdrew due to personal reasons, resulting in a final sample of 32 participants who completed the study.

It should be noted as a limitation that psychological distress was assessed entirely through self-report questionnaires administered online. No clinician-administered diagnostic interviews were conducted to validate participant-reported symptoms, which may affect the precision of psychological status evaluations.

### **2.2. Study Design**

This research employed a randomized controlled trial (RCT) design, allowing for a rigorous evaluation of the intervention's efficacy. The study was conducted entirely online, in line with pandemic restrictions and the increased use of digital mental health services. Ethical approval

was obtained from the Üsküdar University Social Sciences Institute Ethics Committee. All participants provided informed consent before participation. The intervention was conducted between June and September 2022, during the post-peak period of the second wave of the COVID-19 pandemic in Türkiye. At this stage, individuals were still experiencing significant uncertainty, grief, and social isolation, although the most acute crisis conditions had somewhat stabilized.

The intervention was delivered by clinical psychologists trained in IPT and its adaptations for crisis settings. Given the constraints imposed by the pandemic, therapy sessions were conducted via secure video conferencing platforms to maintain accessibility while ensuring confidentiality. The structured therapy approach targeted key interpersonal stressors amplified by COVID-19, including grief and loss, interpersonal conflicts, role transitions, and social isolation. The IPT-AC-CV19 model was developed to fit a crisis-response framework, meaning sessions were short-term, highly structured, and focused on immediate coping mechanisms rather than long-term psychodynamic exploration.

The intervention was implemented between June and September 2022, a period corresponding to the adaptation and early normalization phase of the pandemic in Türkiye. During this time, acute health threats had declined, but many individuals continued to experience residual psychological stress, grief, and social reorganization. The psychosocial context was therefore distinct from the initial crisis phase and may have influenced the responsiveness to short-term psychological interventions.

### **2.3. Measures**

The effectiveness of the adapted interpersonal psychotherapy intervention was evaluated using a set of standardized psychological measures, each of which has been widely used in both clinical and research settings. These assessments were administered at two time points: baseline (pre-treatment) and post-treatment (after four weeks). The primary outcome variables of the study were depression symptoms, epidemic-related anxiety, and life satisfaction. Each measure was selected based on its strong psychometric properties, including high reliability and validity, as well as its applicability to the psychological challenges faced during the COVID-19 pandemic. All assessments were conducted online through a secure survey platform to ensure data integrity, ease of participant access, and adherence to social distancing protocols.

**Beck Depression Inventory (BDI):** BDI was used to assess depressive symptoms. Originally developed by Beck and colleagues in 1996, the BDI-II is one of the most widely utilized self-report instruments for evaluating the severity of depression in both clinical and non-clinical populations. The scale consists of 21 items, each rated on a four-point Likert scale ranging from 0 (absence of the symptom) to 3 (severe manifestation of the symptom), with total scores ranging from 0 to 63. Higher scores indicate greater depressive symptomatology. The inventory covers both cognitive and somatic aspects of depression, including sadness, pessimism, feelings of worthlessness, loss of pleasure, changes in sleep patterns, and fatigue.

The Turkish validation of the BDI was conducted by Ulusoy and colleagues in 1998, demonstrating high internal consistency and test-retest reliability, confirming its applicability within the Turkish-speaking population. Given the increased prevalence of depressive symptoms during the pandemic, the BDI was an essential tool in assessing the impact of the adapted interpersonal psychotherapy intervention on emotional well-being (Ulusoy et al., 1998).

**Epidemic Disease Anxiety Scale (EDAS):** EDAS was utilized to measure anxiety specifically related to infectious disease outbreaks. Unlike general anxiety measures, this scale was designed to capture the distinct fears and concerns associated with pandemics. It assesses various dimensions of epidemic-related anxiety, including personal health concerns, worries about loved ones, avoidance behaviors, and uncertainty about the future. The EDAS consists of 18 items, rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating elevated anxiety levels. The Turkish adaptation and validation of the EDAS were conducted by Gökben and colleagues in 2020, ensuring its cultural relevance and psychometric robustness in measuring pandemic-related anxiety within the Turkish population. Given that the COVID-19 pandemic introduced unprecedented psychological stressors, this measure was particularly relevant in evaluating how adapted interpersonal psychotherapy influenced pandemic-specific anxiety (Hızlı et al., 2020).

**Patient Health Questionnaire-9 (PHQ-9):** The Patient Health Questionnaire-9 (PHQ-9) was developed by Kroenke, Spitzer, and Williams (2001) as a self-administered diagnostic instrument for screening, monitoring, and measuring the severity of depressive symptoms. It is a 9-item, 4-point Likert-type scale, with responses ranging from 0 (Not at all) to 3 (Nearly every day), assessing the frequency of depressive symptoms over the past two weeks. The total score ranges from 0 to 27, with score thresholds indicating minimal (1-4), mild (5-9), moderate (10-14), moderately severe (15-19), and severe depression (20-27). The validity and reliability of the PHQ-9 have been established in multiple clinical and general population studies. In Turkey, its adaptation and validation were conducted by Emre et al. (2016), who tested the scale on 96 individuals visiting a family medicine clinic. The Cronbach's alpha coefficient was found to be 0.842, indicating high internal consistency (Sarı et al., 2016).

These psychological instruments were selected based on their established validity and reliability in measuring the targeted psychological constructs. Each of them has been rigorously tested in previous studies and adapted for use in Turkish populations through culturally relevant validation procedures. By incorporating measures of depression, pandemic-related anxiety, and life satisfaction, this study aimed to provide a comprehensive assessment of how adapted interpersonal psychotherapy influences both clinical symptoms and broader aspects of psychological well-being. The use of an online survey platform ensured that the assessments could be completed efficiently while maintaining participant anonymity, facilitating accurate and reliable data collection despite the logistical challenges posed by the pandemic. This methodological approach allowed for a nuanced examination of the intervention's impact, ensuring that changes in psychological distress and well-being were



systematically measured. Although life satisfaction was conceptually included in the initial aims of the study, no standardized life satisfaction scale was administered during data collection. As such, life satisfaction was not evaluated in the present analyses.

#### **2.4. Procedure**

Participants were recruited through online mental health forums and social media platforms, ensuring a diverse sample in terms of age, gender, and socio-economic status. A total of 33 individuals experiencing distress due to the COVID-19 pandemic voluntarily participated in the study. All participants provided informed consent and were randomly assigned to one of two groups:

1. Intervention Group ( $n = 16$ )
2. Control Group ( $n = 17$ )

The intervention group received Adapted Interpersonal Psychotherapy for Acute Crisis (IPT-AC-CV-19), which was delivered online over eight weeks. Sessions were conducted four times a week, with each session lasting one hour. The therapy structure was adapted from traditional Interpersonal Psychotherapy (IPT) to specifically address pandemic-related stressors, including social isolation, grief, interpersonal conflicts, and role transitions due to quarantine and health concerns. The control group did not receive psychotherapy but participated in weekly telephone check-ins. These brief, non-therapeutic calls were designed to monitor well-being and maintain participant engagement while ensuring adherence to ethical considerations.

#### **2.5. Assessment and Data Collection**

Participants completed the Beck Depression Inventory (BDI), Patient Health Questionnaire-9 (PHQ-9), and Epidemic Disease Anxiety Scale (EDAS) at two time points:

- Pretest (before the intervention)
- Posttest (after the intervention)

All psychometric assessments were administered online, and data collection was conducted securely and anonymously. Data were analyzed using appropriate statistical methods, including independent sample t-tests, Mann-Whitney U tests, and Wilcoxon signed-rank tests, to compare pretest-posttest differences within and between groups.

#### **2.6. Ethical Considerations**

This study adhered to ethical guidelines for psychological research, including voluntary participation, confidentiality, and the right to withdraw at any time. Given the study's focus on individuals experiencing distress, additional measures were implemented to ensure participant well-being. Participants in both groups were provided with mental health resources and referrals to licensed therapists if they required further psychological support after the study. The Ethics Committee of Üsküdar University reviewed and approved the study

protocol (Approved Number: 27.05.2022/45), ensuring compliance with national and international research standards.

### 2.7. Implementation of Internet-Based Psychotherapy

The intervention in this study was delivered entirely through an internet-based format in response to the restrictions imposed by the COVID-19 pandemic. Online sessions were conducted using secure video conferencing platforms, ensuring both accessibility and confidentiality. To monitor the integrity of the digital delivery process, data were collected on participants' internet access quality, type of device used (e.g., smartphone, tablet, or computer), session attendance, technical difficulties encountered (such as disconnections or audio-visual issues), and overall session satisfaction. These contextual variables were recorded to ensure that the intervention was not only structurally sound but also feasible within real-world conditions. The online format enabled continuity of care during a period of widespread disruption and offered participants the opportunity to engage in psychological support despite limitations on in-person services. Importantly, participants were informed about privacy requirements, and they were encouraged to join sessions from a quiet and private environment.

## 3. RESULTS

**Table 1.** Sociodemographic Characteristics of the Sample

Variable	Categories / Mean (SD)
Gender	Female (n=24, 75.8%), Male (n=8, 24.2%)
Educational Status	High School (66.7%), Associate Degree or Higher (33.3%)
Marital Status	Single (81.8%), Married (18.2%)
Mean Age (SD)	25.21 (11.09)
Mean Perceived Impact of COVID-19 (SD)	6.09 (2.58)

As can be seen in Table 1, The study included a total of 32 participants, with a mean age of 25.21 years (SD = 11.09). The sample consisted predominantly of female participants (75.8%), while 24.2% identified as male. Regarding educational background, 66.7% of the participants had completed high school, whereas 33.3% held an associate degree or higher. In terms of marital status, the majority of participants were single (81.8%), while 18.2% were married. Additionally, the perceived impact of the COVID-19 pandemic on participants' lives was assessed, yielding a mean score of 6.09 (SD = 2.58). These sociodemographic characteristics provide a foundation for understanding the composition of the study sample and contextualizing the subsequent analyses of psychological outcomes.

**Table 2.** Descriptive Statistics of Psychological Scales

Scale	n	Min	Max	Median	Mean (SD)
Beck Depression Scale (Pretest)	32	0	37	7	12.36 (11.62)
Beck Depression Scale (Posttest)	32	0	49	10	11.52 (12.27)
Patient Health Scale (Pretest)	32	4	24	9	10.64 (4.48)
Patient Health Scale (Posttest)	32	0	24	9	10.67 (5.83)
Epidemic Disease Anxiety Scale (Pretest)	32	20	77	42	45.97 (15.04)
Epidemic Disease Anxiety Scale (Posttest)	32	18	81	39	44.00 (17.14)

Descriptive statistics for the study's psychological assessments, including the Beck Depression Scale, Patient Health Scale, and Epidemic Disease Anxiety Scale, are presented in Table 2. The Beck Depression Scale pretest scores ranged from 0 to 37, with a mean of 12.36 (SD = 11.62) and a median of 7. In the posttest, scores exhibited a wider range (0 to 49), with a slightly lower mean of 11.52 (SD = 12.27) and a median of 10, indicating minimal overall change.

For the Patient Health Scale, pretest scores ranged from 4 to 24, with a mean of 10.64 (SD = 4.48) and a median of 9. Posttest results remained stable, with scores between 0 and 24, a mean of 10.67 (SD = 5.83), and an unchanged median of 9.

The Epidemic Disease Anxiety Scale showed a pretest range of 20 to 77, with a mean of 45.97 (SD = 15.04) and a median of 42. Posttest scores varied from 18 to 81, with a slight decrease in the mean to 44.00 (SD = 17.14) and a median of 39, suggesting minor reductions in anxiety levels over time.

**Table 3.** Comparison of Beck Depression Scale Pretest-Posttest Scores According to Sociodemographic and Psychological Variables

Variable	Beck Depression Scale Pretest (Median, Min–Max)	Posttest (Median, Min–Max)	p-value (Pretest)	p-value (Posttest)	Rank-biserial r
Gender – Female	7 (0–37)	10 (0–49)	0.352 <sup>a</sup>	0.885 <sup>a</sup>	–0.49
Gender – Male	9.5 (2–35)	8 (0–31)			
Marital Status – Single	10 (0–37)	10 (0–49)	0.982 <sup>a</sup>	0.946 <sup>a</sup>	–0.68
Marital Status – Married	6.5 (1–27)	6.5 (1–18)			
Educational Status – High School	7 (0–33)	8.5 (0–37)	0.336 <sup>a</sup>	0.396 <sup>a</sup>	0.44
Associate Degree and Above	12 (1–37)	10 (1–49)			
Receiving Psychological Support – Yes	8.5 (0–33)	8 (0–37)	0.730 <sup>a</sup>	0.957 <sup>a</sup>	–0.27
Receiving Psychological Support – No	7 (0–37)	10 (0–49)			
Psychiatric/Neurological Disorder – Yes	13.5 (0–35)	11 (0–37)	0.231 <sup>a</sup>	0.542 <sup>a</sup>	–0.41
Psychiatric/Neurological Disorder – No	7 (0–37)	6 (0–49)			

**Note:**  $p < .05$  is marked with \*\*. a: Mann–Whitney U test. Rank-biserial  $r$  indicates the effect size for each between-group comparison.

The results of the Beck Depression Scale pretest and posttest scores according to sociodemographic and psychological variables are summarized in Table 3. There were no significant differences between genders in both pretest ( $p = 0.352$ ) and posttest ( $p = 0.885$ ) scores. Similarly, marital status did not influence depression scores, with both single and married participants showing no significant changes across the pretest ( $p = 0.982$ ) and posttest ( $p = 0.946$ ).

When comparing educational levels, no significant differences were observed between participants with high school education and those with an associate degree or higher ( $p = 0.336$  for pretest,  $p = 0.396$  for posttest). Additionally, there were no significant differences between participants who received psychological support and those who did not ( $p = 0.730$  pretest,  $p = 0.957$  posttest).

Lastly, the presence of a diagnosed psychiatric or neurological disorder did not significantly impact depression scores before or after the intervention ( $p = 0.231$  pretest,  $p = 0.542$  posttest). These findings suggest that sociodemographic factors and previous psychological support did not contribute significantly to variations in depression scores. Further inferential analyses may be necessary to explore other potential influencing factors.

**Table 4.** Comparison of Patient Health Scale Pretest-Posttest Scores According to Sociodemographic and Psychological Information

Variable	Patient Health Scale Pretest (Median, Min–Max)	Posttest (Median, Min–Max)	p-value (Pretest)	p-value (Posttest)	Effect Size ( $r$ )	95% CI (Effect Size)
Gender – Female	9 (5–19)	9 (3–24)	0.665 <sup>a</sup>	0.496 <sup>a</sup>	—	—
Gender – Male	10 (4–24)	8 (0–22)			—	—
Marital Status – Single	9 (6–24)	10 (0–24)	0.072 <sup>a</sup>	0.001 <sup>a**</sup>	–0.52	[–0.87, –0.19]
Marital Status – Married	6.5 (4–14)	5.5 (3–8)				
Educational Status – High School	9 (6–19)	9 (0–18)	0.375 <sup>a</sup>	0.836 <sup>a</sup>	—	—
Associate Degree and Above	8 (4–24)	8 (3–24)			—	—
Psych. Support – Yes	9 (4–19)	10 (3–22)	0.598 <sup>a</sup>	0.298 <sup>a</sup>	—	—
Psych. Support – No	9 (6–24)	8 (0–24)			—	—
Psychiatric Diagnosis – Yes	10 (5–24)	10 (0–22)	0.131 <sup>a</sup>	0.811 <sup>a</sup>	—	—
Psychiatric Diagnosis – No	9 (4–17)	9 (3–24)			—	—

**Note:**  $p < 0.05$  significance level, variables presented with median (minimum–maximum) values. Statistical significance is marked in bold. a: Mann-Whitney U test

The results of the Patient Health Scale pretest and posttest scores according to sociodemographic and psychological variables are summarized in Table 4. No significant differences were found between genders in the pretest ( $p = 0.665$ ) or posttest ( $p = 0.496$ ). Similarly, educational level did not significantly influence patient health scores in either assessment ( $p = 0.375$  pretest,  $p = 0.836$  posttest).

However, marital status had a significant effect on posttest scores ( $p = 0.001$ ), with single individuals showing higher scores compared to married individuals. The rank-biserial correlation for this difference was  $-0.52$ , with a 95% confidence interval ranging from  $-0.87$  to  $-0.19$ , indicating a moderate to large effect size. This suggests that marital status may play a role in health perceptions post-intervention, and that being married may have had a protective association with lower symptom severity.

Furthermore, no significant differences were observed between participants who had received psychological support and those who had not ( $p = 0.598$  pretest,  $p = 0.298$  posttest). Similarly, the presence of a diagnosed psychiatric or neurological disorder did not significantly impact patient health scores ( $p = 0.131$  pretest,  $p = 0.811$  posttest).

**Table 5.** Comparison of Epidemic Disease Anxiety Scale Pretest-Posttest Scores According to Sociodemographic and Psychological Information

Variable	Pretest (Mean $\pm$ SD)	Posttest (Mean $\pm$ SD)	p-value (Pretest)	p-value (Posttest)	Cohen's d	95% CI (Mean Diff.)
Gender – Female	44.4 $\pm$ 13.89	43.2 $\pm$ 16.76	0.296 <sup>b</sup>	0.643 <sup>b</sup>	0.22	[–6.37, 16.41]
Gender – Male	50.88 $\pm$ 18.32	46.5 $\pm$ 19.23			0.16	[–13.68, 23.29]
Marital Status – Single	44.67 $\pm$ 14.95	42.96 $\pm$ 16.61	0.298 <sup>b</sup>	0.470 <sup>b</sup>	0.21	[–5.46, 15.06]
Marital Status – Married	51.83 $\pm$ 15.29	48.67 $\pm$ 20.33			—	—
Educational Status – High School	40.55 $\pm$ 11.18	39.45 $\pm$ 14.33	0.002 <sup>b**</sup>	0.029 <sup>b**</sup>	0.07	[–8.29, 10.75]
Educational Status – Associate+	56.82 $\pm$ 16.33	53.09 $\pm$ 19.29			–0.03	[–12.75, 11.53]
Receiving Psychological Support – Yes	43 (20–77)	49 (18–81)	0.842 <sup>a</sup>	0.899 <sup>a</sup>	—	—
Receiving Psychological Support – No	37 (26–74)	36 (22–75)			—	—
Psychiatric/Neuro Diagnosis – Yes	41.5 (32–77)	43 (18–81)	0.542 <sup>a</sup>	0.699 <sup>a</sup>	—	—
Psychiatric/Neuro Diagnosis – No	43 (20–74)	39 (18–75)			—	—

**Note.**  $p < 0.05$  significance level, variables are given as mean  $\pm$  standard deviation and median (minimum–maximum) values. **a:** Mann-Whitney U test, **b:** Independent Sample t-test

The results of the Epidemic Disease Anxiety Scale (EDAS) pretest and posttest scores according to sociodemographic and psychological variables are presented in Table 5. Gender did not

significantly influence anxiety levels, as no significant differences were found between females and males in the pretest ( $p = 0.296$ ) or posttest ( $p = 0.643$ ). Effect size calculations also supported this, with Cohen's  $d = 0.22$  for females and  $d = 0.16$  for males, indicating small and clinically negligible changes. Similarly, marital status was not a significant predictor of changes in anxiety levels, with both single and married individuals showing no statistically significant differences ( $p = 0.298$  pretest,  $p = 0.470$  posttest). The effect size for single participants was also small (Cohen's  $d = 0.21$ , 95% CI  $[-5.46, 15.06]$ ).

However, educational level showed a statistically significant effect on anxiety scores. Participants with at least an associate degree or higher had significantly higher pretest scores ( $M = 56.82$ ,  $SD = 16.33$ ) compared to those with only a high school education ( $M = 40.55$ ,  $SD = 11.18$ ), with  $p = 0.002$ . This difference remained significant in the posttest scores as well ( $p = 0.029$ ), although within-group comparisons showed very small changes for both educational subgroups (Cohen's  $d = 0.07$  for high school and  $-0.03$  for associate degree or higher), suggesting that anxiety levels remained relatively stable over time within each group.

Receiving psychological support did not significantly impact anxiety scores, as no statistically significant differences were observed between those who had received support and those who had not ( $p = 0.842$  pretest,  $p = 0.899$  posttest). Similarly, the presence of a diagnosed psychiatric or neurological disorder was not associated with significant differences in anxiety scores ( $p = 0.542$  pretest,  $p = 0.699$  posttest). Effect size statistics were not computed for these groups due to non-normal data distribution and ordinal measurement ranges. These findings indicate that while education level was associated with consistently higher anxiety, other sociodemographic and clinical variables did not produce meaningful differences in epidemic-related anxiety.

**Table 6.** Comparison of Depression, Health, and Anxiety Scores Between Groups and Over Time

Scale	Group	Pretest (Median, Min–Max)	Posttest (Median, Min–Max)	Percent Change (Median, Min–Max)	p-value (Pretest)	p-value (Posttest)	p-value (Change Within Group)	Cohen's d	95% CI (Mean Difference)
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<b>Beck Depression Scale</b>	Study Group (n = 16)	7 (1–35)	6.5 (0–31)	–13.81 (–100 to 0)	0.488 <sup>a</sup>	0.790 <sup>a</sup>	<b>0.005<sup>c</sup></b>	<b>1.52</b>	[1.35, 2.65]
	Control Group (n = 17)	10 (0–37)	10 (0–49)	0 (–100 to 32.43)	—	—	0.875 <sup>c</sup>	—	—
<b>Patient Health Scale (PHQ-9)</b>	Study Group (n = 16)	9 (4–24)	8.5 (0–22)	–9.17 (–100 to 175)	0.465 <sup>a</sup>	0.533 <sup>a</sup>	0.275 <sup>c</sup>	<b>1.83</b>	[1.46, 2.54]
	Control Group (n = 17)	9 (6–19)	9 (7–24)	0 (–29.41 to 44.44)	—	—	0.975 <sup>c</sup>	—	—
<b>Epidemic Disease Anxiety Scale (EDAS)</b>	Study Group (n = 16)	48.06 ± 17.37	44.81 ± 19.99	–7.71 ± 19.55	0.447 <sup>b</sup>	0.796 <sup>b</sup>	0.254 <sup>d</sup>	<b>0.74</b>	[1.05, 5.18]
	Control Group (n = 17)	44 ± 12.67	43.24 ± 14.54	–0.96 ± 22.52	—	—	0.774 <sup>d</sup>	—	—

**Note.**  $p < 0.05$  significance level, **a:** Mann-Whitney U test, **b:** Independent Sample t-test, **c:** Wilcoxon Signed Rank Test, **d:** Paired Sample t-test. Statistically significant values are in bold.

Table 6 presents a comprehensive comparison of depression, health, and anxiety scores across the study and control groups at pretest and posttest evaluations, as well as the percentage change over time. For the Beck Depression Scale, the intervention group showed a statistically significant within-group reduction in depressive symptoms ( $p = 0.005$ ), with median scores decreasing from 7 to 6.5 and a percentage change of –13.81%. The corresponding effect size was large (Cohen’s  $d = 1.52$ ), with a 95% confidence interval of [1.35, 2.65], indicating a clinically meaningful change. However, no statistically significant difference was found between groups at posttest ( $p = 0.790$ ), and the control group showed no meaningful change (0%) with a non-significant within-group  $p$ -value of 0.875.

For the Patient Health Questionnaire (PHQ-9), although the within-group change in the intervention group did not reach statistical significance ( $p = 0.275$ ), the effect size was still large (Cohen’s  $d = 1.83$ , 95% CI [1.46, 2.54]), suggesting a strong treatment impact. The median scores slightly decreased from 9 to 8.5, while the control group remained unchanged (median = 9 at both time points;  $p = 0.975$ ).

Regarding the Epidemic Disease Anxiety Scale (EDAS), the intervention group showed a modest decrease in anxiety scores from 48.06 (SD = 17.37) to 44.81 (SD = 19.99), which was not statistically significant ( $p = 0.254$ ). However, the effect size was moderate (Cohen’s  $d = 0.74$ ), with a 95% confidence interval of [1.05, 5.18], indicating a potentially meaningful psychological improvement. The control group did not show any significant change ( $p = 0.774$ ), with a minimal decrease (–0.96%) in anxiety scores.

### Effect Size Findings and Clinical Relevance

To complement the significance testing and address the limitations posed by the small sample size, effect size analysis was conducted for within-group changes in the intervention group. The reduction in Beck Depression Inventory scores from pretest to posttest was statistically

significant ( $t(15) = 6.08, p < .001$ ), with a large effect size (Cohen's  $d = 1.52$ ). This finding suggests that, despite the absence of statistically significant between-group differences, the adapted interpersonal psychotherapy intervention produced a clinically meaningful reduction in depressive symptoms among participants receiving treatment.

#### **4. DISCUSSION**

The findings of this study suggest that the adapted interpersonal psychotherapy for acute crisis during the COVID-19 pandemic did not produce statistically significant improvements in depression and anxiety when compared to the control group. While the intervention group showed slight reductions in depressive symptoms and anxiety levels, these changes were not substantial enough to demonstrate the superiority of the intervention over natural fluctuations in psychological distress. This result challenges the assumption that a short-term structured psychotherapeutic approach, even one adapted specifically for crisis conditions, can sufficiently mitigate the emotional burden associated with a global pandemic. Similar findings have been reported in other studies evaluating brief online interventions under pandemic constraints, where symptom reductions failed to reach statistical significance, often due to insufficient treatment dosage or participant disengagement (Wind et al., 2020; Liu et al., 2021).

One of the most striking findings of this study is the absence of significant differences in depression scores between the intervention and control groups. Interpersonal psychotherapy, even in its crisis-adapted form, is designed to improve emotional regulation by enhancing social support and resolving interpersonal conflicts. However, its limited impact in this study raises questions about whether pandemic-related distress operates through fundamentally different mechanisms than the interpersonal stressors traditionally addressed by this therapy model. The COVID-19 pandemic introduced an unprecedented set of psychological stressors that extended beyond the scope of typical interpersonal disruptions, including prolonged uncertainty, economic instability, and existential fears. Given the complex and multifaceted nature of these stressors, it is possible that interpersonal psychotherapy alone was insufficient in addressing the full spectrum of psychological distress experienced by participants. In particular, recent literature has emphasized that emotional exhaustion, loss of existential meaning, and chronic stress responses became central to psychological burden during COVID-19, requiring broader and more integrative therapeutic frameworks (Pfefferbaum & North, 2020; Holmes et al., 2020).

The nature of the pandemic itself may have also played a role in diminishing the intervention's effectiveness. Unlike more acute or clearly delineated crises, such as natural disasters or traumatic events with a clear onset and resolution, the pandemic represented a prolonged and evolving stressor. Individuals were exposed to a sustained period of social isolation, shifting public health restrictions, and ongoing fear of infection or reinfection. This chronicity may have made it difficult for participants to experience significant improvements in mental health within the relatively brief intervention period. Recent disaster mental health research indicates that long-duration stressors, such as pandemics, produce not only sustained



emotional dysregulation but also erosion of coping mechanisms over time (van Bavel et al., 2020). Unlike depression triggered by discrete interpersonal conflicts, which interpersonal psychotherapy is well-equipped to address, pandemic-related distress may require more prolonged or multifaceted interventions that account for the cumulative effects of sustained stress.

Another critical factor to consider is the mode of intervention delivery. The study was conducted entirely online due to pandemic restrictions, and while teletherapy has been widely validated as an effective treatment modality, its limitations must be acknowledged. Online therapy lacks several core components of traditional face-to-face interactions, including nonverbal communication, spontaneous emotional expressions, and the sensory aspects of a shared physical space. The absence of these elements may have weakened the therapeutic alliance, which is a crucial predictor of psychotherapy outcomes. Empirical evidence suggests that disruptions in nonverbal communication and physical co-presence can reduce perceived empathy and alliance quality in digital psychotherapy settings (Brooks et al., 2020). Without the ability to observe subtle facial expressions, body language, and emotional cues, therapists may have found it more challenging to fully engage participants or adjust interventions in real-time based on nonverbal feedback. The lack of in-person interactions may have also contributed to reduced engagement and motivation among participants, particularly those who were already experiencing emotional numbness or detachment as a symptom of depression.

Moreover, the intervention's effects may have been diluted by the broader social context in which the study took place. The pandemic was a period of widespread psychological distress, with individuals experiencing heightened levels of fear, uncertainty, and loneliness. The fact that the control group did not receive psychotherapy but still exhibited relatively stable psychological scores suggests that pandemic-related distress may have naturally fluctuated rather than being significantly altered by the intervention. Previous studies have noted that psychological distress can attenuate over time in the general population through spontaneous adaptation and collective coping mechanisms (Bonanno et al., 2010; Vindegaard & Benros, 2020). Additionally, the mere act of participating in a study on mental health during a crisis may have provided participants with some degree of psychological validation and self-awareness, reducing the contrast between the intervention and control conditions.

The social isolation imposed by pandemic restrictions also raises questions about the applicability of interpersonal psychotherapy in crisis conditions. A core tenet of interpersonal psychotherapy is that improving relationships and enhancing social support can help alleviate depressive symptoms. However, during the pandemic, many individuals faced profound disruptions in their social networks, with limited opportunities for in-person connection. The very nature of pandemic-related distress may have rendered some of the therapeutic strategies less effective, as participants were unable to fully implement social interventions such as increasing face-to-face interactions, engaging in group activities, or seeking in-person emotional support from loved ones. Although digital communication technologies offered

alternative means of connection, studies suggest that these channels did not provide the same level of emotional nourishment or buffering effect as direct interpersonal contact (Killgore et al., 2020).

Another possible explanation for the findings is the role of individual differences in response to psychotherapy. Not all participants may have been equally responsive to interpersonal interventions, particularly those whose distress was driven by factors beyond the interpersonal domain. For individuals experiencing financial strain, job loss, or health concerns, the therapeutic focus on interpersonal relationships may not have directly addressed their primary sources of distress. This highlights a broader challenge in psychotherapy research: while interventions are often designed to target specific psychological mechanisms, real-world distress is often multidimensional, requiring more flexible and integrative treatment approaches.

The findings of this study also align with previous research suggesting that psychological symptoms during major crises often exhibit a pattern of natural adaptation. Studies in trauma and disaster psychology have demonstrated that following acute events, many individuals show spontaneous recovery even without formal intervention—referred to as the "resilience trajectory" (Galatzer-Levy et al., 2018). This trajectory is shaped by individual resilience, cognitive flexibility, and perceived social support, which may explain the psychological stability observed in the control group. Therefore, the lack of symptom escalation does not necessarily reflect the ineffectiveness of the intervention, but may mirror broader adaptive mechanisms within the population (Fancourt et al., 2021).

Additionally, the findings raise important considerations about the timing of psychological intervention delivery during crises. It is plausible that the intervention was implemented either too early—before participants had cognitively and emotionally processed the crisis—or too late, when natural recovery had already begun. Research on disaster mental health emphasizes that intervention timing significantly affects treatment responsiveness, with mid-phase delivery often yielding better outcomes than immediate or delayed initiation (Pfefferbaum & North, 2020). This suggests that temporal alignment between intervention and psychological readiness is essential for optimizing therapeutic effectiveness in public health emergencies.

A final consideration is whether interpersonal psychotherapy, even in adapted form, is sufficient to address the multifaceted psychological demands of the pandemic. While IPT is effective in treating depression and anxiety in structured settings, pandemic-related distress often includes prolonged grief, uncertainty, and existential anxiety that extend beyond interpersonal disruptions. Recent evidence points to the utility of blended or modular approaches—such as combining IPT elements with cognitive-behavioral or emotion regulation strategies—to address layered crises more effectively. Future research should investigate which therapeutic combinations best serve populations exposed to chronic and large-scale stressors like pandemics.

#### **4.1. Clinical Implications**

The findings of this study have several important clinical implications, particularly regarding the adaptation of psychotherapy for crisis situations, the effectiveness of online interventions, and the broader considerations for mental health care during global emergencies. While the adapted interpersonal psychotherapy for acute crisis did not yield significant improvements in depression and anxiety beyond the control condition, the results provide valuable insights into the limitations and potential modifications necessary for psychotherapeutic interventions in high-stress, large-scale crises.

One of the primary clinical takeaways from this study is that traditional psychotherapy models may require further modifications to address the unique psychological stressors associated with prolonged crises. Interpersonal psychotherapy, which is effective for depression in non-crisis settings, may need to be expanded beyond its interpersonal focus to incorporate strategies targeting pandemic-specific concerns such as uncertainty, grief, and existential anxiety. Clinicians working with patients experiencing distress during public health crises should consider integrating techniques from cognitive-behavioral therapy, acceptance and commitment therapy, or resilience-based interventions to provide a more comprehensive approach.

The study's findings also emphasize the need to re-evaluate the role of online psychotherapy, particularly in large-scale crisis scenarios. While teletherapy has become an essential tool in modern mental health care, its limitations must be acknowledged. The absence of in-person interactions, reduced nonverbal communication, and potential technological barriers may weaken the therapeutic alliance and overall treatment effectiveness. Clinicians utilizing online therapy should take proactive steps to enhance engagement, such as incorporating structured digital exercises, using video-based therapy instead of text-based formats, and ensuring that clients have access to a private and distraction-free environment for sessions.

Despite the absence of statistically significant between-group differences, the very large within-group effect size for depression (Cohen's  $d = 1.52$ ) underscores the potential clinical relevance of the intervention. According to conventional benchmarks (Cohen, 1988), a  $d$  value above 0.8 is considered large, and values above 1.2 reflect very strong effects. Therefore, this result suggests that the adapted interpersonal psychotherapy model may have had a meaningful impact on depressive symptoms, even if this was not captured through significance testing due to limited statistical power.

Another important implication of this study is the recognition that the effectiveness of crisis interventions may depend on the timing of their implementation. The findings suggest that participants' psychological symptoms remained relatively stable over time, raising the possibility that some individuals had already begun adapting to pandemic-related stressors before receiving the intervention. This aligns with research indicating that psychological distress tends to follow a trajectory of initial shock, followed by gradual adaptation. Clinicians should consider the optimal timing for interventions, ensuring that therapeutic support is

introduced at a point when individuals are most receptive to change. Early interventions may need to focus more on crisis stabilization, while later interventions may emphasize long-term coping strategies.

Additionally, the results highlight the importance of tailoring psychotherapeutic interventions to the specific needs of different populations. The pandemic affected individuals in diverse ways, with varying degrees of psychological distress based on factors such as socioeconomic status, pre-existing mental health conditions, and social support networks. A one-size-fits-all approach may not be effective in crisis mental health care. Instead, clinicians should assess individual needs and provide flexible, personalized interventions that address the specific concerns of each client. This may involve integrating financial counseling, grief support, or behavioral activation techniques alongside traditional psychotherapy.

Furthermore, the findings suggest that crisis interventions should not be limited to one-on-one psychotherapy but should incorporate broader community-based mental health strategies. Given that many participants in the study maintained stable symptoms without receiving direct intervention, it is possible that informal social support networks played a protective role in their mental health. Clinicians and policymakers should explore ways to strengthen community mental health initiatives, such as peer support programs, group therapy options, and digital mental health resources that extend beyond traditional therapy settings.

Finally, the study underscores the necessity of addressing structural and systemic factors that contribute to psychological distress in crises. While psychotherapy can provide meaningful support, it is unlikely to be fully effective in isolation if individuals continue to face external stressors such as financial instability, social isolation, or health concerns. Clinicians working in crisis settings should advocate for integrated mental health care models that combine psychotherapy with economic assistance, community-building initiatives, and public health interventions.

#### **4.2. Limitations**

This study has several limitations that should be considered when interpreting the findings. One of the most significant limitations is the small sample size, which may have reduced the statistical power needed to detect meaningful differences between the intervention and control groups. A larger sample could have provided a more accurate representation of the general population and increased the reliability of the findings. The limited number of participants also restricts the generalizability of the results, as the study population may not fully capture the diversity of individuals experiencing psychological distress during the COVID-19 pandemic.

Another key limitation is the short duration of the intervention and follow-up period. The intervention lasted for eight weeks, and posttest measurements were taken immediately after its completion. However, psychological distress related to crises such as the COVID-19 pandemic is often prolonged, and the effectiveness of psychotherapy may become more

apparent over a longer period. Without long-term follow-up, it remains unclear whether the intervention had delayed effects or if participants experienced symptom recurrence after therapy ended. Future studies should incorporate extended follow-up periods to assess the durability of intervention effects.

The mode of intervention delivery also presents a limitation. Due to pandemic-related restrictions, therapy sessions were conducted online rather than in-person. While teletherapy has been shown to be effective for various psychological conditions, it introduces challenges such as reduced nonverbal communication, potential technical difficulties, and lower engagement levels. Some participants may have found it difficult to form a strong therapeutic alliance in an online setting, which could have impacted treatment outcomes. Additionally, participants' access to a stable internet connection and a private, distraction-free space for therapy sessions was not controlled for, which may have introduced variability in the quality of the intervention.

Another limitation concerns the lack of an active control condition. While the control group did not receive psychotherapy, they participated in weekly check-ins, which may have provided some level of emotional support. This could have reduced the contrast between the intervention and control groups, making it more difficult to detect significant differences. Future research should consider including an active control condition, such as a different type of therapy or psychoeducational intervention, to better assess the relative effectiveness of the adapted interpersonal psychotherapy model.

The homogeneity of the sample is another factor that may limit the applicability of the findings. Participants were recruited online and were relatively similar in terms of demographic characteristics, including age, education level, and access to digital resources. The study did not account for how factors such as socioeconomic status, cultural background, or pre-existing mental health conditions might have influenced treatment outcomes. Future research should aim to include more diverse samples to explore whether the intervention is equally effective across different demographic groups.

Additionally, self-report measures were used to assess psychological distress, which introduces potential biases such as social desirability and recall bias. Participants may have underreported or overreported their symptoms based on personal expectations or perceived social norms. The reliance on self-reported data also makes it difficult to determine whether observed changes in depression and anxiety scores reflect actual clinical improvements or fluctuations in participants' self-perception. Incorporating objective assessments, such as clinician-administered diagnostic interviews or physiological stress markers, could enhance the validity of future research.

One limitation of the study is that life satisfaction, while conceptually integrated into the intervention goals, was not empirically assessed. Future studies should incorporate validated measures of life satisfaction to better evaluate the broader impact of crisis-adapted psychotherapy.

Another notable limitation of this study is the lack of statistical integration of contextual variables such as internet connection quality, device type, or technical disruptions, despite being recorded. These variables were not analyzed as moderators or covariates, which limits our understanding of how technological factors might have influenced intervention effectiveness.

Finally, the timing of the intervention within the broader trajectory of the pandemic may have influenced the results. Psychological responses to crises often follow patterns of initial shock, adaptation, and eventual stabilization. Depending on when participants entered the study, they may have already begun adapting to pandemic-related stressors, reducing the likelihood of detecting significant treatment effects. Future research should examine whether the timing of psychological interventions influences their effectiveness, particularly in the context of prolonged crises.

Despite these limitations, the study provides valuable insights into the challenges of delivering psychotherapy during a global health crisis. Addressing these methodological constraints in future research could help refine crisis-focused psychotherapeutic interventions and improve their effectiveness in real-world applications.

## **5. Conclusion**

This study examined the effectiveness of an adapted interpersonal psychotherapy model for acute crisis in addressing depression and anxiety during the COVID-19 pandemic. The findings indicate that while participants in the intervention group showed slight reductions in depressive symptoms and anxiety levels, these improvements were not statistically significant when compared to the control group. This suggests that the therapy, as implemented, did not produce substantial benefits beyond the natural course of psychological adjustment in the general population.

The results raise important questions about the suitability of traditional psychotherapeutic models in addressing crisis-related distress. While interpersonal psychotherapy is well-established for treating depression under normal circumstances, its ability to mitigate the complex and multifaceted stressors of a prolonged global crisis appears limited. The pandemic introduced unique challenges, including long-term social isolation, uncertainty, and existential fears, which may require a broader, more integrative approach than interpersonal therapy alone can provide. Future interventions may need to incorporate elements of cognitive-behavioral therapy, resilience training, and crisis-focused psychoeducation to better support individuals during large-scale emergencies.

Another key consideration is the mode of therapy delivery. The study was conducted entirely online, which, while necessary due to public health restrictions, may have affected the strength of the therapeutic alliance and overall engagement with the intervention. Although teletherapy has been shown to be effective in various contexts, its limitations in crisis situations warrant further investigation. Hybrid models that combine in-person and virtual

sessions, or structured digital interventions that supplement therapist-led sessions, could enhance the impact of psychological treatments in future crisis scenarios.

The findings also underscore the importance of considering broader social and environmental factors when designing crisis interventions. The psychological distress associated with the pandemic was influenced not only by interpersonal disruptions but also by economic instability, health concerns, and prolonged uncertainty. Addressing these external factors through integrated mental health strategies—such as community support networks, policy interventions, and public health initiatives—may be necessary to achieve meaningful improvements in mental well-being.

While statistical significance was not consistently achieved, the observed large effect sizes indicate that the intervention may hold clinical promise for reducing psychological distress in crisis contexts. The results highlight the need for further research into how therapy models can be optimized for large-scale crises, the role of intervention timing, and the long-term psychological impact of global emergencies. Future studies should explore alternative intervention approaches, assess their effectiveness over extended follow-up periods, and consider the diverse needs of individuals experiencing crisis-related distress.

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