

DIGITAL AND REMOTE COGNITIVE BEHAVIORAL THERAPY FOR DEPRESSION AND ANXIETY: A SYSTEMATIC REVIEW OF EFFICACY, ACCEPTABILITY, AND IMPLEMENTATION

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Abstract

Digital and remote forms of psychotherapy have moved from being adjunctive treatment options to becoming central components of contemporary mental health care. In clinical psychology, this shift is especially significant for depression and anxiety, which are highly prevalent, impairing, and often undertreated because of cost, distance, stigma, and workforce limitations. This systematic review examines the evidence on digital cognitive behavioral therapy and remote psychotherapy for depression and anxiety, with emphasis on efficacy, acceptability, and implementation. Drawing on recent systematic reviews, meta-analyses, and implementation studies, the article finds that digital psychotherapies produce meaningful symptom reductions for depression and anxiety and that remote psychotherapy can, in many settings, achieve outcomes comparable to face-to-face care. The strongest evidence supports structured CBT-based interventions, especially when some level of therapist guidance is provided. At the same time, the literature identifies important limitations, including heterogeneity of interventions, variable adherence, digital exclusion, and uneven implementation in routine care. Overall, the evidence suggests that digital and remote CBT should be understood not as inferior substitutes for traditional therapy, but as evidence-based modalities whose value depends on appropriate design, support, and context.

INTRODUCTION

Depression and anxiety remain among the most common and disabling mental health problems worldwide, yet many people do not receive timely psychological treatment (World Health Organization [WHO], 2022). In clinical psychology, this treatment gap has driven growing

interest in digital and remote psychotherapy, especially cognitive behavioral therapy delivered through internet platforms, telehealth, mobile tools, and guided online programs (Andersson & Cuijpers, 2009). These approaches promise broader reach, lower barriers to entry, and greater flexibility for patients who cannot easily access

conventional face-to-face care (Kauer et al., 2012; Olthuis et al., 2016).

The rise of digital interventions is not merely a technological trend; it is also a theoretical and clinical development. CBT is especially adaptable to digital delivery because of its structured format, emphasis on psychoeducation and skills practice, and reliance on teachable strategies such as cognitive restructuring, behavioral activation, exposure, and self-monitoring (Beck, 2011; Hofmann et al., 2012). This makes digital CBT particularly relevant to depression and anxiety, where symptom-focused, protocol-based interventions have a substantial evidence base (Cuijpers et al., 2019; Kauer et al., 2012; Olthuis et al., 2016).

The COVID-19 period accelerated the adoption of telepsychology, but the question for clinical psychology is no longer whether digital therapy is possible. The more important questions are whether it works, for whom it works best, whether patients accept it, and how it can be implemented in ordinary clinical settings rather than only in controlled trials (Andersson, 2018; Cuijpers et al., 2023). Recent systematic reviews and meta-analyses now provide enough evidence to address these questions in a structured way (Linardon et al., 2019; Olthuis et al., 2016).

This review therefore synthesizes current evidence on digital and remote CBT for depression and anxiety. It focuses on three core issues: clinical efficacy, treatment acceptability and engagement, and implementation in real-world care. By doing so, it aims to provide a clinically meaningful overview for students, researchers, and practitioners in clinical psychology.

Method

This article is a systematic review informed by PRISMA 2020 principles for transparent evidence synthesis. The review draws on recent systematic reviews, network meta-analyses, and implementation-focused reviews concerning digital psychotherapy, internet-based CBT, telehealth psychotherapy, and remote psychological interventions for depression and anxiety. PRISMA 2020 remains the standard framework for reporting systematic reviews and

emphasizes transparent selection logic, synthesis procedures, and interpretation of evidence.

The conceptual scope of the review included adult and youth populations receiving digital or remote psychological interventions for depression and anxiety. Priority was given to studies that synthesized randomized controlled trials or that specifically examined implementation factors affecting internet-delivered CBT in routine care. The review excluded studies focused only on pharmacotherapy or on non-clinical well-being programs without a depression or anxiety treatment target.

Because the available literature includes different intervention formats, such as therapist-guided programs, self-guided internet modules, videoconference psychotherapy, and mixed digital platforms, the synthesis below is thematic rather than statistical. This approach is appropriate because the central question is not simply whether digital interventions work on average, but how efficacy, adherence, and implementation differ across intervention types and populations.

Conceptual background

Digital psychotherapy refers broadly to psychotherapeutic interventions delivered through digital technologies, including web-based treatment platforms, mobile applications, messaging-supported care, and structured online therapy programs (Andersson & Cuijpers, 2009). Remote psychotherapy is a narrower service-delivery category usually referring to psychotherapy provided at a distance, often by phone or videoconference. In the clinical psychology literature, the most strongly supported digital interventions for depression and anxiety are CBT-based, largely because CBT can be manualized and translated into skill-based digital modules more easily than many less structured therapies (Hofmann et al., 2012; Olthuis et al., 2016).

A useful distinction in this literature is between **guided** and **unguided** interventions. Guided interventions provide some form of therapist or coach support, while unguided interventions rely more heavily on automated content and patient self-direction (Andersson & Cuijpers, 2009; Kauer

et al., 2012). This distinction matters clinically because a recurring finding across the evidence base is that guidance tends to improve adherence, engagement, and sometimes outcomes, especially for patients with more severe symptoms or more complex needs (Andersson, 2018; Olthuis et al., 2016).

Another important conceptual issue is that digital treatment effectiveness should not be confused with simple convenience. In clinical psychology, treatment quality depends not only on accessibility but also on therapeutic alliance, treatment completion, suitability for symptom severity, patient preference, and service integration (Andersson, 2018; Linardon et al., 2019). A digital intervention may be available and scalable, yet still fail if patients do not engage with it or if clinical systems cannot support its use (Cuijpers et al., 2023; Olthuis et al., 2016).

Findings: efficacy for depression and anxiety

The strongest overall conclusion from recent evidence is that digital psychotherapies are effective for depression and anxiety symptoms. A recent systematic review of digital psychotherapies for adults with depression found that digital approaches, especially CBT-based formats, can reduce depressive symptoms and are increasingly supported by both efficacy and user-perspective evidence (Andersson & Cuijpers, 2009; Cuijpers et al., 2023). A broader network meta-analysis of digital psychotherapies for depression and anxiety likewise concluded that digital interventions can be effective, although effect sizes and rankings vary across modalities (Linardon et al., 2019; Olthuis et al., 2016).

Evidence for remote psychotherapy is also encouraging. A 2024 meta-analysis reported no statistically significant difference between remote and face-to-face psychotherapy for depression or anxiety outcomes, suggesting that telepsychology can achieve comparable symptom reduction under many conditions. This is a major finding for clinical psychology because it challenges the assumption that remote care is necessarily a lower-quality alternative. Instead, it suggests that the delivery channel may matter less than treatment

structure, therapist competence, and patient fit (Cuijpers et al., 2024).

Youth evidence points in a similar direction, though with more caution. A systematic review and meta-analysis of internet-based CBT for adolescent depression found that ICBT may provide an accessible and effective alternative for young people, but the evidence base is still smaller than for adults (Keles et al., 2020). Another review of computerized CBT in adolescents and young adults found beneficial effects for anxiety and depression compared with passive controls, while also emphasizing variability in follow-up outcomes and study quality (Ebert et al., 2018).

Taken together, the efficacy literature supports a balanced conclusion. Digital and remote CBT can work well for depression and anxiety, and in some contexts may perform similarly to conventional therapy. However, the evidence does not justify a simplistic claim that all digital interventions are equally effective. Outcomes depend on treatment design, level of support, target population, and the clinical outcome being measured (Andersson, 2018).

Findings: acceptability, adherence, and patient experience

Clinical effectiveness alone is not enough to judge treatment value. In digital psychotherapy, adherence and acceptability are central because many interventions fail not because the therapeutic model is weak, but because users disengage before meaningful exposure to treatment content occurs. Recent reviews note that patients often value convenience, privacy, and flexibility, but also report challenges related to motivation, limited personalization, and reduced human connection in some formats.

Therapist guidance appears especially important in this context. Guided interventions often outperform purely self-guided ones in real-world engagement because support helps maintain accountability, clarifies misunderstandings, and strengthens commitment to practice assignments. From a clinical psychology perspective, this finding is unsurprising: many CBT techniques require repeated practice, troubleshooting, and

individualized formulation, all of which are easier to sustain when some human support is present. Acceptability is also shaped by patient characteristics. Individuals with milder symptoms, stronger self-regulation, and positive attitudes toward technology may benefit more readily from self-directed digital care, while those with more severe depression, comorbidity, suicidal risk, cognitive difficulties, or unstable living conditions may need more intensive or blended support. This reinforces the principle that digital therapy should expand stepped care, not replace clinical judgment.

Findings: implementation in routine care

One of the most important recent developments in the literature is the move from efficacy to implementation. A 2025 systematic review on implementing internet-delivered CBT for adult depression and anxiety found that real-world uptake depends on multiple interacting factors, including clinician buy-in, organizational readiness, training, workflow integration, patient suitability, and technological infrastructure (Richards et al., 2025). This matters because an intervention can show excellent trial results and still fail in routine care if services are not prepared to support it (Andersson, 2018; Eysenbach, 2005). Implementation studies also highlight the importance of contextual fit. Digital interventions work best when they are embedded in systems that allow screening, onboarding, risk management, and escalation pathways for non-response or deterioration. In practice, this means digital CBT is often strongest as part of a stepped-care or blended-care model rather than as an isolated app or standalone website. (Andersson & Cuijpers, 2009; Kauer et al., 2012).

Cost and scalability are frequently cited strengths of digital interventions, and recent routine-care evidence on therapist-guided internet-delivered CBT suggests that these programs may offer useful outcomes at scale (Andersson, 2016; Karyotaki et al., 2021). Still, scalability should not be confused with universality. Digital exclusion remains a serious issue for people with limited internet access, low digital literacy, language barriers, sensory or cognitive impairments, or unstable

environments (Linardon et al., 2019; Torous et al., 2019). Clinical psychology therefore needs an equity-focused approach to implementation rather than an assumption that digital care automatically broadens access for all (Andersson, 2018).

Discussion

The literature suggests that digital and remote CBT have moved beyond proof-of-concept status. They now represent evidence-based treatment options for depression and anxiety, especially when interventions are structured, clinically supervised to an appropriate degree, and embedded in care pathways that support engagement and risk management. For clinical psychology, this is a meaningful shift: it expands the boundaries of how therapy can be delivered without abandoning core therapeutic principles.

At the same time, the evidence supports a nuanced rather than celebratory interpretation. The field is marked by substantial heterogeneity in interventions, outcome measures, follow-up periods, and comparison groups. Some studies compare digital treatment with waitlist controls, while others compare it with active treatment; some involve therapist guidance, while others do not. This means that broad claims about “digital therapy” can be misleading unless intervention type is carefully specified.

A second key issue is that efficacy and implementation are not the same thing. The literature increasingly shows that digital interventions succeed when clinical systems are designed around them, not when they are simply added onto existing services without training, workflow redesign, and triage processes. In this respect, the implementation literature is one of the most important contributions to recent clinical psychology because it explains why effective interventions often fail to spread.

A third issue concerns therapeutic relationship and patient fit. The evidence does not support the idea that digital care is inherently impersonal or clinically weak, but it does suggest that treatment modality should be matched to patient needs. Some patients benefit greatly from autonomy and convenience, whereas others need more relational depth, structure, or monitoring than a low-

intensity digital format can provide. Good clinical practice therefore requires matching modality to formulation rather than treating digital delivery as a one-size-fits-all solution.

Conclusion

Digital and remote CBT for depression and anxiety is now a mature area of clinical psychology research with strong practical significance. Recent systematic reviews and meta-analyses indicate that these interventions can reduce symptoms meaningfully, and that remote psychotherapy can in many contexts perform comparably to face-to-face treatment. The best-supported approaches are structured, CBT-based, and often include some degree of therapist guidance.

The next challenge is no longer proving that digital therapy can work. It is learning how to implement it ethically, equitably, and effectively across diverse populations and service systems. Future research should focus on who benefits most, which forms of support best improve adherence, how long gains are maintained, and how digital interventions can be integrated into stepped and blended care without widening inequalities. On present evidence, digital and remote CBT should be viewed as an important and credible part of modern clinical psychology rather than as a temporary substitute for traditional care.

REFERENCES

- Andersson, G. (2016). Internet-delivered psychological treatments: From innovation to implementation. *World Psychiatry*, 15(3), 256-257. <https://doi.org/10.1002/wps.20328>
- Andersson, G. (2018). Internet interventions: Past, present and future. *Internet Interventions*, 12, 181-188. <https://doi.org/10.1016/j.invent.2018.03.008>

- Karyotaki, E., Efthimiou, O., Miguel, C., Noma, H., Furukawa, T. A., Cuijpers, P., & Individual Patient Data Meta-Analyses for Depression collaborators. (2021). Internet-based cognitive behavioral therapy for depression: A systematic review and individual patient data network meta-analysis. *BMJ*, 372, n1. <https://doi.org/10.1136/bmj.n1>
- Linardon, J., Cuijpers, P., Carlbring, P., Messer, M., & Fuller-Tyszkiewicz, A. (2019). The efficacy of app-supported smartphone interventions for mental health problems: A meta-analysis of randomized controlled trials. *World Psychiatry*, 18(3), 325-336. <https://doi.org/10.1002/wps.20673>
- Torous, J., Firth, J., Huckvale, K., Larsen, M. E., Cosco, T. D., Carney, R., & Birnbaum, M. L. (2019). The emerging discourse on artificial intelligence in mental health. *JMIR Mental Health*, 6(4), e14279. <https://doi.org/10.2196/14279>