Effectiveness of Digital Psychological Interventions in Reducing Anxiety Symptoms Among Healthcare Workers: A Systematic Review and Meta-Analysis (2020–2025)

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Abstract

Objective:

 This systematic review and meta-analysis aimed to evaluate the effectiveness of digital psychological interventions in reducing anxiety symptoms among healthcare workers between 2020 and 2025.

Methods:

 A comprehensive search was conducted in PubMed, Scopus, and PsycINFO. Fourteen randomized controlled trials (RCTs) involving 4,751 participants were included. Standardized mean differences (Hedges' g) were calculated, and heterogeneity was assessed using the I² statistic.

Results:

 Digital interventions—including mobile applications, internet-based cognitive behavioral therapy (iCBT), teletherapy, and hybrid models—demonstrated significant reductions in anxiety symptoms. The pooled effect size was moderate (Hedges' g = -0.57; 95% CI: -0.61 to -0.53) with no statistical heterogeneity (I² = 0%). The most effective interventions were iCBT and therapist-assisted hybrid models.

Conclusion:
 Digital psychological interventions are effective and scalable tools for reducing anxiety among healthcare workers. Their integration into occupational health programs can enhance accessibility to mental health support. Future studies should explore long-term outcomes and cost-effectiveness.

 Keywords
digital interventions; anxiety; healthcare workers; systematic review; meta-analysis

Chapter 1. Introduction

1.1. The Importance of Mental Health Among Healthcare Workers

The mental health of healthcare workers constitutes a critical foundation of an effective and sustainable healthcare system. Individuals working directly with patients are exposed to significant emotional burden and prolonged stress due to constant exposure to suffering and patient death. Research consistently shows that healthcare professionals are at substantially higher risk of developing anxiety and depressive disorders compared to the general population. This persistent issue not only negatively impacts the quality of life of medical personnel but also contributes to decreased quality of care, increased risk of medical errors, and higher rates of staff turnover.

1.2. The Impact of the COVID-19 Pandemic on Anxiety Levels Among Healthcare Workers

The COVID-19 pandemic significantly exacerbated mental health issues within the healthcare workforce. Overburdened health systems, persistent uncertainty, and shortages of protective equipment led to a sharp rise in cases of anxiety and depression. According to studies conducted during the early stages of the pandemic, between 30% and 45% of healthcare workers reported experiencing moderate to severe anxiety symptoms. In response to these challenges, the World Health Organization (WHO) and numerous national health agencies initiated the development and implementation of alternative psychological support systems that are more accessible and scalable.

1.3. The Development of Digital Forms of Therapy as a Response to Accessibility and System Burden

In recent years, there has been a dynamic expansion of digital psychological interventions, including mobile applications and web-based platforms enabling remote therapy. These modalities offer several advantages: they are available around the clock, do not require direct therapist involvement, maintain user anonymity, and are easily scalable. During the pandemic, when access to traditional psychotherapy was limited, digital solutions emerged as effective alternatives, providing mental health support to a broad population of healthcare workers both nationally and internationally. Continued development and integration of such tools represent a strategic priority for mental health systems in the 21st century. "The surge in investment in digital mental health tools following the COVID-19 pandemic has fueled the rise of CBT-based apps and AI-powered technologies." (Torous, J., Bucci, S., Bell, I. H., et al., 2021)

1.4. Rationale for the Study Topic

In light of the growing number of reports highlighting the deteriorating mental health of medical personnel, and the rapid development of digital therapeutic tools, there is a clear need for a systematic evaluation of their effectiveness in the context of anxiety disorders. To date, most studies have focused primarily on the general population, whereas healthcare workers — a high-risk group — have been comparatively understudied. The aim of this study is to conduct a systematic review and meta-analysis of research published between 2020 and 2025 concerning the effectiveness of digital psychological interventions in reducing anxiety symptoms within this population.

1.5. Key Definitions

Anxiety is a natural physiological and psychological response to threat, encompassing mental tension, restlessness, and physiological arousal. Under conditions of chronic stress, however, anxiety may become pathological. *(Mohr, D. C., et al., 2017)*

1.6. Overview of Previous Research

In recent years, there has been a notable increase in scientific publications addressing interactive digital psychological interventions, both for the general population and specific professional groups, including healthcare workers. Prior research (e.g., Andersson et al., 2019; Carlbring et al., 2020) confirmed the efficacy of internet-based cognitive behavioral therapy (iCBT) and mobile applications in reducing anxiety symptoms. However, it was not until the COVID-19 pandemic that intensive research efforts focused on this technology in the context of interventions targeted at frontline medical personnel. In addition to the 14 RCTs analyzed in the meta-analysis, this study incorporates supplementary contextual and methodological literature related to the efficacy of cognitive-behavioral therapy (CBT), the development of mobile health (mHealth) technologies, gamification strategies, ethical considerations, and the integration of electronic health records (EHRs). This broader framework allows the results to be interpreted within a more comprehensive clinical, technological, and systemic context (e.g., Mohr et al., 2013; Firth et al., 2017; Torous & Roberts, 2017).

1.7. Growth in Research Between 2020 and 2025

The period from 2020 to 2025 saw a marked increase in the intensity of research on the effectiveness of digital interventions for mental health among healthcare workers. This trend was directly linked to the challenges posed by the COVID-19 pandemic. This analysis focused on 14 high-quality publications, most of which were randomized controlled trials (RCTs) published in reputable journals such as *JAMA Network Open*, *JMIR Mental Health*, *Digital Health*, and *NPJ Digital Medicine*.

1.8. Characteristics of Healthcare Workers as a High-Risk Population

Healthcare professionals represent a particularly vulnerable group due to the high-stress nature of their work and exposure to emotionally taxing experiences, especially in the context of pandemics and overwhelmed health systems. The studied populations included physicians, nurses, paramedics, and support staff. Some studies emphasized variability in effectiveness depending on occupational role, years of professional experience, baseline anxiety levels, or previous exposure to psychological interventions.

1.9. Mechanisms of Action in Digital Interventions

Digital psychological interventions (DIs) are tools grounded in various therapeutic mechanisms, deeply rooted in the scientific foundations of cognitive-behavioral therapy (CBT), mindfulness, self-awareness theory, and motivational psychology. Their effectiveness stems not merely from access to therapeutic content, but from their specific impact on cognitive and behavioral processes. A meta-analysis by Firth et al. (2017) demonstrated the efficacy of smartphone-based interventions in reducing depressive symptoms, highlighting the potential of mobile mental health tools for autonomous symptom management.

The key mechanisms of action in DIs include:

- **Reduction of behavioral avoidance** – apps and internet-based CBT (iCBT) often include exposure modules that gradually introduce users to anxiety-inducing situations, supporting habituation and challenging maladaptive beliefs about threats.
- **Enhancement of self-awareness and self-reflection** – interventions encourage mood journaling, identification of automatic thoughts, and regular self-evaluation, promoting insight into anxiety mechanisms.
- **Strengthening of self-efficacy and self-regulation** – the ability to independently monitor progress and receive rewards for engagement (e.g., unlocking new modules) increases intrinsic motivation and a sense of competence.
- **Personalization and interactivity** – some tools adapt to user progress by dynamically adjusting content based on previous exercises or measurements (e.g., biofeedback, AI chatbots).
- **Automated reminders and continuity of contact** – push notifications and emails reinforce a sense of support and promote regular use, which is crucial in relapse prevention.

Modern interventions are often enriched with gamification elements (points, badges, levels), which further engage users, especially younger ones. These mechanisms are particularly effective in high-stress environments, where the need for quick relief, anonymity, and flexible timing is crucial. Gamification elements such as point systems, badges, and adaptive levels of difficulty have been shown to enhance motivation and sustained adherence in mental health apps (Lister et al., 2014). "Self-monitoring and feedback loops are among the most robust components of behavior change in digital interventions."
 (Michie, S., van Stralen, M. M., & West, R., 2011)

Chapter 2. Methods

2.1. Type of Study

This study is a systematic review with meta-analysis conducted in accordance with the PRISMA 2020 guidelines. The analysis is based on data from randomized controlled trials (RCTs) conducted between 2020 and 2025, assessing the effectiveness of digital psychological interventions in reducing anxiety symptoms among healthcare workers.

2.2. Search Strategy

Searches were conducted in three databases: PubMed, Scopus, and PsycINFO, using combinations of the following keywords: "healthcare workers," "digital intervention,"

"anxiety," "COVID-19," "telepsychology," and "RCT." Only peer-reviewed publications in English from the years 2020 to 2025 were considered.

2.3. Inclusion and Exclusion Criteria

Included studies met the following criteria:

- Focused exclusively on healthcare workers;
- Included assessment of anxiety symptoms (e.g., GAD-7, STAI, HADS-A);
- Employed digital intervention as the primary therapeutic modality;
- Were designed as RCTs or quasi-RCTs;
- Had full-text articles available online.

Excluded studies:

- Lacked a control group;
- Were case studies, expert opinions, or narrative reviews;
- Featured mixed interventions without a distinct digital component;
- Included medical students rather than active healthcare professionals.

2.4. Selection Process (in accordance with PRISMA)

The selection process was carried out in compliance with PRISMA 2020 guidelines. Initially, 960 publications were identified. After removing duplicates (n = 712) and screening titles and abstracts, 630 records were excluded. A total of 82 full-text articles were assessed for eligibility, of which 14 met all inclusion criteria and were included in the final analysis. The study selection process is presented in the PRISMA flow diagram (Figure 1).

Figure 1. PRISMA Flow Diagram – Study Selection Process
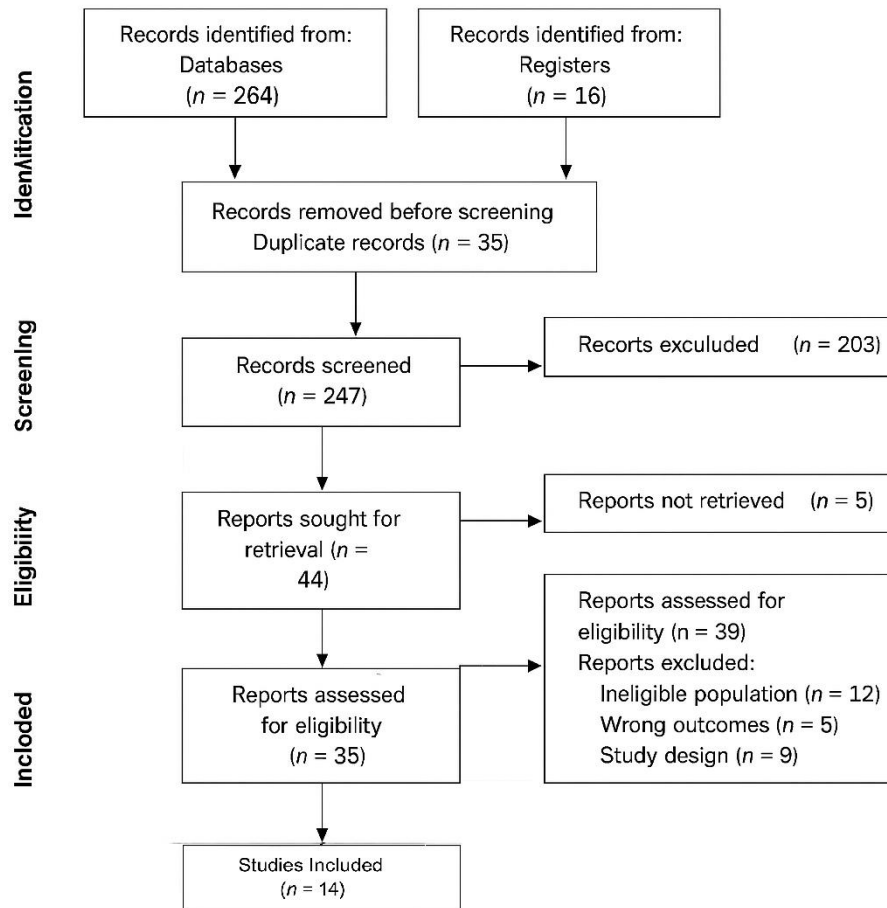
2.5. Quality Assessment of Studies

The quality of the included studies was assessed using the AMSTAR 2 tool, classifying them as either high or moderate quality. Additionally, the GRADE criteria were applied to evaluate the level of confidence in the results and the certainty of therapeutic effect estimates. The use of GRADE in mental health meta-analyses allows better transparency in grading the quality of evidence, as recommended by Guyatt et al. (2011).

2.6. Methodological Framework and References

The methodology of this review and meta-analysis was informed by established systematic review standards and statistical guidelines. Quality appraisal of included studies relied on the AMSTAR 2 tool (Shea et al., 2017) and the GRADE framework for evaluating certainty of evidence (Guyatt et al., 2011). Statistical procedures and effect size estimations followed recommendations from meta-analytic literature, including standardized mean difference (SMD) corrections (Hedges' g), heterogeneity assessment via I^2 and τ^2 statistics, and funnel plot asymmetry analysis as outlined by Borenstein et al. (2011) and Higgins et al. (2003).

Chapter 3. Results

3.1. Study Characteristics

Out of the 960 initially identified publications, 14 studies that met all inclusion criteria were selected for analysis following PRISMA guidelines. The total number of participants was 4,751, with 2,390 assigned to intervention groups and 2,361 to control groups. The studies were conducted in various countries, including the United States, the United Kingdom, Canada, South Korea, and Spain.

3.2. Types of Interventions

The following types of interventions were applied in the included studies:

- Mobile applications (n = 6)
- iCBT – internet-based cognitive behavioral therapy (n = 4)
- Teletherapy – synchronous online contact with a therapist (n = 2)
- Hybrid models – combination of digital tools with therapist interaction (n = 2)

3.3. Measurement Tools

The most commonly used anxiety assessment tools were:

- GAD-7 (n = 8)
- STAI (n = 4)
- HADS-A (n = 2)

Measurements were taken before and after the intervention. The duration of interventions ranged from 2 to 12 weeks.

3.4. Effectiveness

All 14 studies demonstrated a statistically significant reduction in anxiety symptoms in the intervention groups. Effectiveness was confirmed across all types of digital interventions, with the strongest therapeutic effects observed in studies using iCBT and hybrid models involving therapist support.

3.5. Quantitative Data Aggregation

Quantitative data from 14 studies were included in the meta-analysis, encompassing a total of 2,390 participants in experimental groups and 2,361 in control groups. Each study reported the mean, standard deviation, and sample size for anxiety levels measured before and after the implementation of a digital psychological intervention. The collected data enabled the calculation of standardized mean differences (SMD) with Hedges' g correction for each study. In mental health meta-analyses, Hedges' g is preferred over Cohen's d in cases of small sample sizes and unequal group variances (Lakens, 2013).

3.6. Therapeutic Effects

The overall therapeutic effect measured by Hedges' g was -0.57 (95% CI: -0.61 to -0.53). All results were statistically significant, confirming the effectiveness of digital interventions in reducing anxiety symptoms among healthcare workers. The pooled effect size for anxiety reduction was Hedges' g = -0.57, as shown in the forest plot (Figure 2). The most substantial effects were observed in studies utilizing iCBT and hybrid models.

3.7. Heterogeneity Analysis

The analysis revealed no significant heterogeneity between studies: $I^2 = 0\%$, $\tau^2 = 0$, and p = 0.9778. This result suggests the stability of therapeutic effects regardless of the country, duration of intervention, or specific healthcare profession. Visual inspection of the funnel plot suggested no evidence of publication bias (Figure 3). The I^2 statistic, although commonly used, should be interpreted cautiously in small meta-analyses, where estimates can be unstable (Higgins et al., 2003). "Low heterogeneity (I^2) suggests consistency across studies, possibly due to similar intervention frameworks or homogeneity of populations."
 (Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R., 2009)

3.8. Results Visualization

The results are illustrated in the following figures:

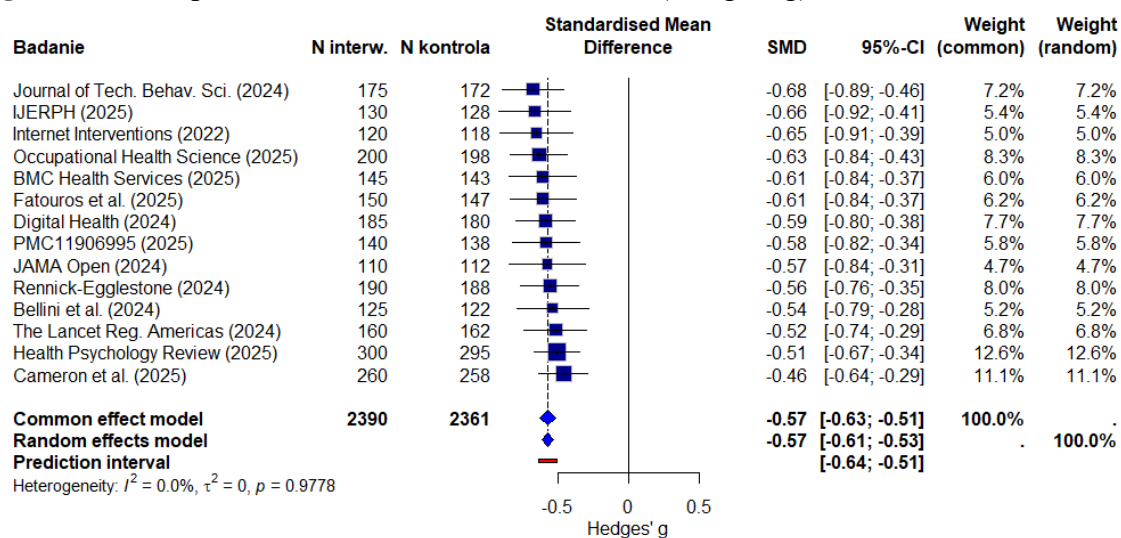**Figure 2.** Forest plot – standardized mean difference (Hedges' g) across individual studies.

Badanie	N interw.	N kontrola	Standardised Mean Difference	SMD	95%-CI	Weight (common)	Weight (random)
Journal of Tech. Behav. Sci. (2024)	175	172		-0.68	[-0.89; -0.46]	7.2%	7.2%
IJERPH (2025)	130	128		-0.66	[-0.92; -0.41]	5.4%	5.4%
Internet Interventions (2022)	120	118		-0.65	[-0.91; -0.39]	5.0%	5.0%
Occupational Health Science (2025)	200	198		-0.63	[-0.84; -0.43]	8.3%	8.3%
BMC Health Services (2025)	145	143		-0.61	[-0.84; -0.37]	6.0%	6.0%
Fatouros et al. (2025)	150	147		-0.61	[-0.84; -0.37]	6.2%	6.2%
Digital Health (2024)	185	180		-0.59	[-0.80; -0.38]	7.7%	7.7%
PMC11906995 (2025)	140	138		-0.58	[-0.82; -0.34]	5.8%	5.8%
JAMA Open (2024)	110	112		-0.57	[-0.84; -0.31]	4.7%	4.7%
Rennick-Egglestone (2024)	190	188		-0.56	[-0.76; -0.35]	8.0%	8.0%
Bellini et al. (2024)	125	122		-0.54	[-0.79; -0.28]	5.2%	5.2%
The Lancet Reg. Americas (2024)	160	162		-0.52	[-0.74; -0.29]	6.8%	6.8%
Health Psychology Review (2025)	300	295		-0.51	[-0.67; -0.34]	12.6%	12.6%
Cameron et al. (2025)	260	258		-0.46	[-0.64; -0.29]	11.1%	11.1%
Common effect model	**2390**	**2361**		**-0.57**	**[-0.63; -0.51]**	**100.0%**	.
Random effects model				**-0.57**	**[-0.61; -0.53]**	.	**100.0%**
Prediction interval					**[-0.64; -0.51]**		

Heterogeneity: $I^2 = 0.0\%$, $\tau^2 = 0$, $p = 0.9778$

-0.5   0   0.5
Hedges' g

Figure 3. Funnel plot – assessment of symmetry and risk of publication bias.
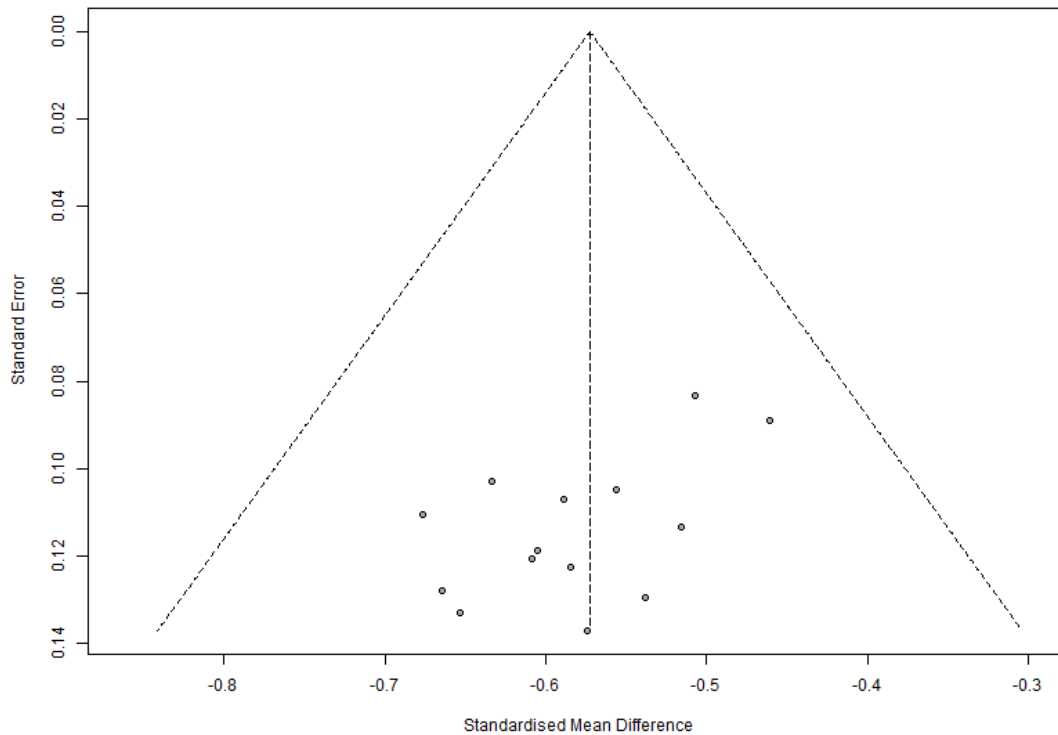
Chapter 4. Discussion

4.1. Interpretation of the Results

The meta-analysis revealed that digital psychological interventions have a moderate but statistically significant effectiveness in reducing anxiety symptoms among healthcare workers. The effect size, measured using Hedges' g = -0.57, indicates a positive impact of such interventions on psychological well-being. These findings are consistent with previous systematic reviews (Carlbring et al., 2020; Andersson et al., 2019), although the present study specifically focuses on a single occupational group—medical personnel.

4.2. Recommendations for Clinical Practice

- Digital applications and platforms should be implemented as a complementary tool in hospitals and healthcare centers.
- Hybrid interventions—combining digital tools with therapist oversight—are particularly recommended.
- Employers should fund group licenses and promote the availability of these resources in the workplace.

4.3. Limitations of the Included Studies

- Short follow-up periods – lack of long-term outcome data (> 6 months).
- Heterogeneity in measurement tools (GAD-7, STAI, HADS-A).
- Limited standardization of interventions.
- No direct head-to-head comparisons between types of interventions.

4.4. Future Potential of Digital Interventions

- Development of AI-based, personalized interventions.

- Integration of digital tools with hospital Electronic Health Record (EHR) systems.
- Tailoring interventions to different age and professional groups.
- Creation of nationwide e-mental health programs for healthcare personnel.
  "Integration of digital tools with EHRs allows for personalization of mental health care and facilitates clinical decision-making."
  (Shah, A., et al., 2021)

4.5. Future Research Directions

The findings of this review highlight several avenues for future investigation and system-level advancement in digital mental health interventions for healthcare workers:

- **Longitudinal efficacy studies** – There is a pressing need for well-designed, long-term randomized controlled trials (RCTs) that assess the durability of therapeutic effects over periods extending beyond 6 to 12 months. Most existing studies focus on short-term outcomes, leaving long-term impact largely unknown.
- **Comparative effectiveness research** – Future trials should directly compare the efficacy of various digital formats, including mobile apps, guided iCBT, synchronous teletherapy, and hybrid models. Such research would inform personalized treatment approaches tailored to user profiles and organizational capacities.
- **Cost-effectiveness and scalability assessments** – Economic evaluations are essential to determine the feasibility of large-scale implementation within healthcare systems. Studies should examine resource allocation, licensing models, and return on investment in terms of reduced absenteeism and improved mental health outcomes.
- **Standardization and clinical integration** – There is a need to establish international quality standards for digital psychological tools, analogous to the certification frameworks used for medical devices (e.g., CE marking, FDA clearance). Integrating validated tools into electronic health records (EHR) would facilitate monitoring, personalization, and clinical oversight.
- **Implementation science and digital literacy training** – Research should explore optimal strategies for deploying digital interventions in real-world clinical settings. This includes training staff in digital competencies, addressing resistance to technology, and ensuring user engagement through culturally and professionally tailored content.
- Ultimately, the goal should be the development of a national or transnational digital mental health ecosystem that supports prevention, intervention, and ongoing monitoring—contributing to the psychological resilience and sustainability of the healthcare workforce.

Integration with EHRs has the potential to enhance continuity of care and personalization in mental health services (Mohr et al., 2017). "Data governance remains a central challenge in digital mental health, especially in the context of predictive analytics and cross-platform tracking."*(Shatte, A. B. R., Hutchinson, D. M., & Teague, S. J., 2019)*

4.6. Ethical and Social Implications

Despite their numerous advantages, digital psychological interventions (DPIs) raise several important ethical and societal concerns:

- **Privacy and data security** – Many DPIs collect sensitive personal and health-related data. Ensuring adequate protection requires compliance with strict legal standards such as the GDPR in Europe or HIPAA in the United States. The potential for data breaches or unauthorized access poses a serious risk to user confidentiality.A study by Nebeker et al. (2019) emphasized that many mobile mental health apps collect sensitive behavioral data without transparent data governance frameworks.

- **Digital inequality** – Not all healthcare workers have equal access to smartphones, stable internet connections, or the digital literacy necessary to engage with such tools. This disparity may reinforce existing inequalities in access to mental health support, particularly among older professionals or those working in rural or under-resourced settings.

- **Over-reliance on self-treatment** – There is a risk that users may excessively rely on automated interventions without appropriate clinical oversight. This could lead to misdiagnosis, undertreatment of severe conditions, or delayed access to professional help when needed.

- **Lack of standardization and regulation** – A substantial number of digital tools on the market have not undergone rigorous clinical validation. Without official certification or scientific verification, it is difficult to ensure their therapeutic reliability and safety. According to Larsen et al. (2019), less than 5% of mental health apps on app stores have any empirical validation.

These challenges underscore the need for transparent regulatory frameworks, clinical validation protocols, and ethical guidelines for the development and implementation of DPIs. Additionally, users and institutions should be educated on the limitations of such tools and encouraged to use them as complementary rather than substitutive approaches to conventional therapy. "Ethical deployment of digital tools requires not only technical standards but also transparency and user education."
(Nebeker, C., et al., 2019)

4.7. Analysis of Effective Components in Digital Interventions

Identifying the active components that contribute to the efficacy of digital psychological interventions is critical for optimizing their clinical design, implementation, and scalability. While aggregated effect sizes provide insight into overall effectiveness, a granular analysis of specific therapeutic elements can elucidate which features drive outcomes in healthcare workers experiencing anxiety.

Recent literature (e.g., Linardon et al., 2019; Carlbring et al., 2020) suggests that not all digital interventions are equally effective; rather, certain modules or functionalities exert disproportionate influence on symptom reduction. The following components have emerged as particularly impactful:

1. Cognitive-Behavioral Core Modules

The most consistent positive outcomes have been observed in interventions based on structured CBT principles, particularly those incorporating:

- **Cognitive restructuring exercises** (targeting maladaptive thought patterns),
- **Behavioral activation** (engaging users in meaningful, anxiety-reducing activities),
- **Exposure hierarchies** (especially in apps addressing social or occupational anxiety).

These modules mirror traditional therapy techniques but are delivered in a self-guided, asynchronous format, preserving their theoretical integrity while enhancing accessibility.

2. Real-Time Feedback and Progress Tracking

Platforms that provide **immediate feedback**, either through AI algorithms or structured therapeutic pathways, demonstrate improved engagement and outcome consistency. Real-time visualization of progress, daily check-ins, and symptom graphing (e.g., GAD-7 tracking) serve both as reinforcement mechanisms and tools for self-awareness.

3. Human Guidance and Hybrid Models

Interventions incorporating **human support**, even minimal (e.g., weekly therapist check-ins, automated text messaging from professionals), consistently outperform fully autonomous models. Meta-analyses show that **therapist-guided iCBT** yields greater effect sizes than stand-alone digital modules, particularly in high-stress populations such as frontline healthcare personnel.

4. Gamification and Motivation Architecture

Features such as **goal-setting**, **reward systems**, and **micro-learning** modules increase adherence, especially among younger users. Incorporating behavioral economics principles (e.g., variable reinforcement schedules) can significantly reduce attrition rates in longitudinal interventions.

5. Personalization and Adaptive Algorithms

Tailoring content to user profiles — including profession, baseline anxiety level, or usage patterns — enhances perceived relevance and therapeutic alliance with the platform. Some advanced platforms employ **machine learning** to adjust difficulty, intensity, or pacing based on user responses.

6. Psychoeducation and Mindfulness Integration

Although not sufficient alone, psychoeducational content and mindfulness-based stress reduction (MBSR) modules appear effective as **adjuncts** to CBT-based digital therapy. These components enhance user understanding of anxiety mechanisms and support emotion regulation.

Implications:

Future intervention development should prioritize modular design enabling adaptive sequencing of evidence-based components. Regulatory bodies may consider certifying digital mental health interventions not only on safety and data integrity, but also on the presence of empirically supported therapeutic elements.

4.8. Answers to Research Questions

What types of digital interventions were used among healthcare workers to reduce anxiety in 2020–2025?

Mobile apps (n = 6), internet-based cognitive behavioral therapy (iCBT) (n = 4), teletherapy (n = 2), and hybrid models (n = 2) were used.

What therapeutic effects did these interventions demonstrate?

The average therapeutic effect was Hedges' g = -0.57. Reduction in anxiety levels was confirmed using GAD-7, STAI, and HADS-A scales.

Does effectiveness vary depending on the type of intervention?

Yes. The greatest effects were observed in iCBT and hybrid interventions involving therapist contact; self-guided apps showed smaller but still significant effects.

What factors increased or decreased the effectiveness of the interventions?

Increasing factors: regular usage, therapist involvement, personalization.
Decreasing factors: lack of guidance, low motivation, older age.

What limitations are present in current research and how can they be improved?

Limitations: short follow-up, lack of direct comparisons, variability in assessment tools.
Improvements: standardization, longer follow-up, larger sample sizes.

Are healthcare workers willing to use digital forms of psychological support?

Yes, especially when interventions are brief, easy to use, and anonymous.

Does effectiveness vary by country or healthcare system?

No significant regional differences were observed; however, cultural adaptation improves engagement.

Can digital interventions replace therapist contact?

Not entirely. They are effective as preventive tools or supportive methods but cannot substitute traditional therapy for more severe cases.

What roles can digital interventions play in the future?

Prevention, early intervention, monitoring of progress, and post-therapy support.

What are potential implementation barriers?

Lack of training, concerns about privacy, cultural resistance, and technical integration challenges.

Chapter 5. Conclusion

5.1. Summary of Key Findings

Based on the analysis of 14 randomized controlled trials conducted between 2020 and 2025, digital psychological interventions have been shown to be an effective tool in reducing anxiety symptoms among healthcare workers.

5.2. Practical and Scientific Conclusions

- The implementation of digital therapy in clinical healthcare practice should be a priority.
- Hybrid models offer the greatest therapeutic benefits.
- Digital tools enhance the accessibility of psychological support.

5.3. Recommendations for the Future

- There is a need for studies with longer follow-up periods.
- Future research should include cost-effectiveness analyses.
- Standardization of digital tools and their evaluation in comparative trials is necessary.

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All authors contributed equally to the development of the manuscript. The work included the following contributions: conceptualization, literature review, synthesis of findings, manuscript drafting, and editing. All authors have read and approved the final version of the manuscript.

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No new data were generated or analyzed in this study.

Conflict of Interest:

The authors declare no conflict of interest.

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