

# Effectiveness of Cognitive Hypnotherapy in Mental Disorders: A Systematic Review (2018–2023)

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Hypnotherapy is a growing field within psychology. However, its effectiveness in treating mental health disorders was last reviewed by the Australian Psychological Society (APS) in 2018. This systematic review aimed to evaluate the evidence from 2018 to 2023 and determine the effectiveness of cognitive hypnotherapy. The methodology followed the PRISMA guidelines and the relevant Joanna Briggs Institute critical appraisal tools. A total of six papers were identified as meeting the criteria. Significant symptom reduction was observed in five studies, and cognitive hypnotherapy was reported to be as effective as Cognitive Behavioral Therapy in treating depression. The review suggests that hypnotherapy is a viable treatment option. Despite contrasting results from Rousseaux et al. (2022), the review highlights that tailored, interactive approaches may enhance the benefits of cognitive hypnotherapy. Future research should examine the effectiveness of different hypnotherapy techniques to determine whether certain hypnotherapeutic techniques are associated with different therapeutic outcomes.

*Keywords:* hypnotherapy; mental health disorders; depression; systematic review, PRISMA

Cognitive hypnotherapy (hereafter referred to as hypnotherapy), an evidence-based technique that uses the state of hypnosis for therapeutic purposes, has gained prominence as an adjunct treatment within psychotherapeutic options for mental health disorders (Alladin & Alibhai, 2010; Schlarb et al., 2017). Hypnosis is a naturally occurring state of concentration accompanied by physical and mental relaxation, similar to a daydream that can be induced by a trained professional when necessary (Vagnoli et al., 2019). Within this definition, and for the purpose of this review, *hypnotherapy* refers to a structured therapeutic intervention that integrates hypnotic techniques. This review does not treat the phenomenological experience of hypnosis as direct evidence of clinical efficacy; rather, hypnosis is conceptualized as a potential mechanism mediating treatment response. In 2018, the Australian Psychological Society (APS) published a systematic review examining the effectiveness of evidence-based psychological interventions for mental health disorders in Australia. Prior to this review, few studies had investigated the effectiveness of hypnotherapy for mental health disorders, and the available evidence demonstrated mixed findings. Some studies also focused on the psychological aspects of specific physical illnesses, such as bowel syndromes and sleep disorders (Gonsalkorale et al., 2004; Schlarb et al., 2017).

## **Australian Psychological Society (2018) Review**

In 2018, a systematic review was released by the APS synthesizing evidence regarding the use of hypnotherapy across different mental health disorders (Australian Psychological Society, 2018). Hypnotherapy was mentioned twice with Level II evidence but with limited and insufficient evidence including

findings for Posttraumatic Stress Disorder (PTSD), while stronger evidence was identified for functional abdominal pain and Irritable Bowel Syndrome (IBS) in children (Australian Psychological Society, 2018). Level II evidence refers to “a study of test accuracy with an independent, blinded comparison with a valid reference standard, among consecutive persons with a defined clinical presentation” (Australian Psychological Society, 2018, p. 11). However, the review also highlighted a limitation in its scope, stating that since only evidence subjected to “rigorous” investigation was included, the absence of evidence did not necessarily indicate that an intervention was ineffective (Australian Psychological Society, 2018).

Prior to 2018, evidence supporting hypnotherapy in mental health disorders remained limited. Although the APS (2018) review concluded that evidence was insufficient to establish the effectiveness of hypnotherapy for most mental disorders, this conclusion may reflect both the scarcity of experimental studies and the exclusion of several relevant domains where hypnotherapeutic interventions demonstrated promise. For example, controlled and systematic evidence published prior to 2018 reported beneficial effects of hypnotherapy for functional gastrointestinal disorders and sleep-related conditions, accompanied by improvements in associated psychological symptoms such as anxiety and depressive features. Collectively, these findings suggest that gaps identified in the APS review were driven by evidentiary limitations rather than consistent null effects, thereby providing a rationale for reexamining post-2018 experimental research focused specifically on mental health outcomes.

Given the heterogeneity of study designs, pop-

ulations, and hypnotherapeutic approaches, this review did not test a single confirmatory hypothesis but instead sought to synthesize and evaluate the current empirical evidence regarding clinical effectiveness. As such, the aim of this systematic review is to collate the evidence from 2018 to 2023 and determine the effectiveness of hypnotherapy in mental disorders as defined by the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM-5 (American Psychiatric Association, 2013).

### Method

This systematic review was conducted in accordance with the PRISMA 2020 guidelines, the gold standard for systematic reviews within the field of psychology (Page et al., 2021). The review protocol was registered with the Open Science Framework (<https://doi.org/10.17605/OSF.IO/CKBP8>). Ethical approval was obtained in February 2024 through the University of Technology Sydney (UTS).

### Research Design

Figure 1 serves to illustrate the breakdown of the review process and subsequent screening (Page et al., 2020). This systematic review is an extension of the previous APS (2018) paper, which also utilised the PRISMA framework (Page et al., 2021). The APS (2018) paper focused on studies between the years 2010-2017, while this review focused on the years 2018-2023. Another difference was that this review focused on hypnotherapy specifically rather than on all psychological therapies. This is because hypnotherapy demonstrated insufficient evidence for its effectiveness in treating mental disorders in the APS (2018) review. To address this, the present review included new search parameters and excluded systematic reviews and meta-analyses as sources of evidence (Australian Psychological Society, 2018) to enable direct comparison between each study.

Study quality was assessed using the Joanna Briggs Institute (JBI) critical appraisal tools. Two independent reviewers conducted the appraisal, and discrepancies were resolved through discussion (Table 2).

### Systematic Review Duration

The systematic review was undertaken from 20/11/2023 to 07/06/2024.

### Databases

Databases were selected for their relevance to psychological research and coverage of peer-reviewed literature. Databases searched included PsycINFO,

*Frontiers in Psychology*, ProQuest, Taylor & Francis, Springer, SAGE Journals, PubMed Central, and ScienceDirect. The continued relevance of these databases was affirmed through consultations with researchers experienced in systematic review methodology and psychological research, both from within and outside the UTS system. The selection of these databases was deliberate, based on their recognised status as primary sources for psychological publications. The APS (2018) review also utilised comprehensive electronic databases: Cochrane Library, PsycINFO, MEDLINE, Psychology and Behavioural Sciences Collection, SocINDEX and the National Library of Medicine (US). Differences between the databases used in this review and those employed in the APS (2018) review reflect the present review's specific focus on hypnotherapy rather than on evidence-based psychological interventions broadly. Collectively, the inclusion of these databases ensured a comprehensive exploration of the academic field, optimising access to a broad spectrum of academic resources and reinforcing the academic groundwork upon which the research findings are based.

### Inclusion Criteria (IC)

The inclusion criteria were partially informed by those used in the APS (2018) systematic review. For example, IC1 and IC3 stemmed from the APS (2018) study. This was to ensure consistency in the quality and types of publications included in this literature review and to facilitate direct comparison of the literature in the APS (2018) review and the current literature. Criteria included within the APS (2018) study but excluded in this review included the use of systematic reviews and meta-analyses as evidence. This literature review excluded these criteria to allow for a direct comparison of the evidence specific to mental health disorders. Before conducting the literature search, the following inclusion criteria were formulated:

IC1. Each paper was required to be peer-reviewed. This was to ensure that the work was rigorous and coherent. Similarly, the APS (2018) review also included peer-reviewed publications.

IC2. The time frame of the literature search was limited to papers published between and \2018-2023, inclusive. This criterion was included because the APS (2018) review included papers that appeared in the literature prior to 2018, and this review serves as an update of modern evidence regarding the effectiveness of hypnotherapy.

IC3. The papers were required to be published in scientific journals, which are publications that contain original articles written by research professionals and evaluated by experts within the same field of study. This is consistent with the APS (2018) review, which only included studies that were published in scientific journals.

### Exclusion Criteria (EC)

There were three criteria for exclusion identified, as listed below:

EC1. Publications that were not written in the English language were excluded.

EC2. Publications were excluded if the methodology did not follow an experimental design. Excluded formats included systematic reviews, case studies, meta-analyses, newspaper articles, literature reviews, blog posts, magazine articles, dissertations, committee reports, and narrative reviews. These experimental designs were included in the APS (2018) review methodology.

EC3. Publications that were not relevant to the subject matter of the systematic review were excluded. This means that the papers were required to examine the effectiveness of hypnotherapy in relation to mental health disorders as described in the DSM-5 (American Psychiatric Association, 2013). This was to ensure that the included publications did not expand to every area of hypnotherapy and instead focused specifically on mental health. This excluded articles broadly relating to mental disorders such as pain, IBS, insomnia, fatigue, addictions, positive thinking, and stress.

The IC and EC were applied during the initial screening phase. If there was uncertainty or ambiguity regarding whether an article met the criteria, it was included for further assessment during the full-text screening stage. In cases where an abstract was unavailable, the introduction section was reviewed instead.

### Search Words (SW)

The following search words (SWs) were systematically applied across the selected databases:

- SW1: hypnotherapy
- SW2: cognitive hypnotherapy
- SW3: hypnotherapy AND mental disorders
- SW4: hypnosis AND mental disorders
- SW5: cognitive hypnotherapy AND (depression AND/OR anxiety AND/OR PTSD AND/OR phobia)
  - SW5.1: cognitive hypnotherapy AND depression
  - SW5.2: cognitive hypnotherapy AND

- anxiety
- SW5.3: cognitive hypnotherapy AND PTSD
- SW5.4: cognitive hypnotherapy AND phobia

### SW1. hypnotherapy

The keyword “hypnotherapy” was utilised, along with filters adhering to the inclusion criteria specifying that selected papers must be peer-reviewed and published between 2018 and 2023. This approach aimed to establish a foundational framework for identifying the relevant literature. This approach resulted in a substantial volume of studies that were not related to the core focus of the review and did not capture key studies specific to mental health.

### SW2. cognitive hypnotherapy

This search included the keyword “cognitive hypnotherapy”, which in the literature is sometimes used to refer to hypnotherapy from a cognitive perspective (Alladin & Alibhai, 2010). This search did reduce the search to hypnotherapy that was associated with clinical settings.

### SW3. hypnotherapy AND mental disorders

The AND in this search referred to the subject headings and titles of the articles containing both the words “hypnotherapy” and “mental disorders.”

### SW4. hypnosis AND mental disorders

Another commonly used terminology for hypnotherapy is “hypnosis”, which is a common technique utilised uniquely in hypnotherapy (Rousseaux et al., 2022).

### SW5. cognitive hypnotherapy AND (depression AND/OR Anxiety AND/OR PTSD AND/OR Phobia)

The utilised SWs identified the principal disorders commonly linked with hypnotherapy. Although all studies featuring one or more of these disorders were included, each association is addressed separately below (SW5.1-5.4).

#### SW5.1. cognitive hypnotherapy AND depression

Previous searches were based on broad mental health disorders and hypnotherapy. These searches displayed various types of mental disorders, of which depression was a prominent one (Ersan, 2020). Hence, this keyword combination identified articles that were relevant to only depression to filter the results.

#### SW5.2. cognitive hypnotherapy AND anxiety

Like the depression search, this search produced a

limited number of articles that were relevant to anxiety and hypnotherapy. Anxiety treated by hypnotherapy was also common in the literature (Golden, 2012).

### **SW5.3. cognitive hypnotherapy AND PTSD**

PTSD was also prevalent within the hypnotherapy databases (Abramowitz et al., 2008). For example, Abramowitz et al. (2008) found decreases in intrusion and avoidance reactions, as well as improvement in all assessed sleep variables, in the hypnotherapy group. This SW was used to identify specific articles relating to PTSD and hypnotherapy. The acronym PTSD was searched instead of the full term as the disorder was commonly referred to by its acronym in the literature.

### **SW5.4. cognitive hypnotherapy AND phobia**

Phobias were another mental disorder that were included due to their prevalence in the literature, such as the study by Lupu et al. (2019), which conducted a case study on treating flight phobia with virtual reality and hypnotherapy techniques. Hence, this SW was utilised to identify publications relating to phobia and hypnotherapy.

#### **Search String Used**

To identify relevant studies, the following search string was constructed from the above SW and applied across multiple academic databases:

("hypnotherapy" OR "cognitive hypnotherapy" OR "hypnosis") AND ("mental disorders" OR "depression" OR "anxiety" OR "PTSD" OR "phobia")

#### **Identification and Selection of Relevant Research (Exclusion Criteria)**

After reviewing the full text of the 17 articles, 11 were removed based on the exclusion criteria. A summary of the exclusion justifications is illustrated in Table 1. Only the primary reason for exclusion was specified in the following summaries; however, it is important to highlight that some articles could have been excluded based on multiple criteria.

Considering that hypnotherapy is still a growing field, it is understandable that there are only six articles that fit the inclusion and exclusion criteria. This was an increase from the three articles in the APS (2018) review. However, due to the small number and the diverse outcomes, a meta-analysis of the results was not appropriate, instead a narrative review of the methodology and findings of each paper, alongside a thematic analysis was conducted. This followed the procedure utilised by Rutten et al. (2013) in their

literature review where the studies were not statistically combined due to diverse outcome measures.

### **Results**

Six studies met the criteria established for this review. Their findings are summarised below and within Table 3. Due to heterogeneity in study designs, outcome measures, and interventions, findings were synthesised narratively and thematically.

#### **Fuhr et al. (2023): Hypnotherapy for Agoraphobia**

Fuhr et al. (2023) compared hypnotherapy (HT) with control waitlist (WL) conditions within a 2 x 2 mixed design study. Assessments were conducted using the Panic and Agoraphobia Scale (PAS) at baseline and post-treatment (Fuhr et al., 2023). Thirty-six patients (mean age = 42 yrs; majority female) were randomly assigned to receive 8-12 HT sessions or WL allocation. Both groups demonstrated symptom reduction, with greater reductions observed in the hypnotherapy group (Fuhr et al., 2023). The non-significant outcome was identified in the pre-protocol analysis, where WL did not differ from HT (Fuhr et al., 2023). Secondary analyses confirmed significant symptom decreases in the HT group compared to WL (Fuhr et al., 2023).

#### **Khazraee et al. (2023): Effectiveness of Hypnotherapy on Depression in Women**

Khazraee et al. (2023) implemented a single-blind, randomised controlled trial, comprising of 31 participants (16 in the hypnotherapy intervention group, 15 in control group) to examine mindful hypnotherapy for treating major depressive disorder in female adults in Iran (Khazraee et al., 2023). The intervention consisted of eight weekly sessions of mindful hypnotherapy, focusing on components such as present-moment awareness, self-compassion, and mindfulness (Khazraee et al., 2023). Both groups demonstrated symptom reduction, with greater reductions observed in the hypnotherapy group (Khazraee et al., 2023).

Results demonstrated a significant reduction in depression in the intervention group post-intervention and at the two-month follow-up (Khazraee et al., 2023). Self-compassion scores, including positive subscales (self-kindness, common humanity, and mindfulness), improved significantly in the intervention group post-intervention and at follow-up (Khazraee et al., 2023). Negative subscales (self-judgment, isolation, and overidentification) decreased significantly post-in-

tervention and at follow-up (Khazraee et al., 2023). Psychological inflexibility also significantly decreased in the intervention group post-intervention and at the two-month follow-up (Khazraee et al., 2023).

#### **Haupt et al. (2022): Hypnotherapy vs Cognitive Behaviour Therapy in Depression**

Haupt et al. (2022) compared CBT and HT to treat mild to moderate depressive episodes (Haupt et al., 2022). Seventy-five participants (56 females and 19 males, aged 18–69 years) completed pre- and post-therapy Near-Infrared Spectroscopy (NIRS) measurements and an emotional gait paradigm. Participants judged the emotion portrayed by walking avatars while NIRS data, reaction time, and errors were recorded (Haupt et al., 2022). Functional Connectivity between the Superior Temporal Sulcus and Extrastriate Body Area regions was calculated (Haupt et al., 2022). Changes in functional connectivity and behavioural outcomes were analysed using regression models (Haupt et al., 2022). Results showed significant changes in brain activation and emotional processing in both groups, with HT demonstrating comparable efficacy to CBT. Rumination and treatment group were associated with changes in functional connectivity.

#### **Brooker (2018): Music Performance Anxiety in Cognitive Hypnotherapy vs. EMDR**

Brooker (2018) compared the efficacy of Cognitive Hypnotherapy and Eye Movement Desensitisation and Reprocessing (EMDR) in treating 46 pianists exhibiting music performance anxiety (Brooker, 2018). The research utilised a multi-modal repeated-measure design, combining quantitative data from standardised assessments with qualitative information on subjective cognitive anxiety (Brooker, 2018). Cognitive anxiety was assessed using the State-Trait Anxiety Inventory, while performance quality was measured pre- and post-intervention (Brooker, 2018). Additionally, a self-report questionnaire allowed for the assessment of anxiety through idiographic reports of each performance experience (Brooker, 2018). Cognitive hypnotherapy and EMDR significantly reduced anxiety, compared to the control group, with EMDR showing greater effectiveness in reducing self-perceived anxiety. Performance quality also improved across both treatment groups.

#### **Rousseaux et al. (2022): Hypnosis and Virtual Reality for Anxiety**

Rousseaux et al. (2022) examined the impact of

hypnosis, virtual reality, and Virtual Reality Hypnosis (VRH) on self-assessed anxiety, pain, fatigue, and relaxation states in cardiac surgery patients (Rousseaux et al., 2022). Forty-eight participants were allocated to either intervention groups or standard care. Interventions included standard care plus a 20-minute pre-recorded hypnosis session, a virtual reality session using a head-mounted display with goggles, or a combination of both (Rousseaux et al., 2022). Assessments were conducted before and after each session (Rousseaux et al., 2022). No significant differences were observed between groups (Rousseaux et al., 2022). Anxiety levels decreased over time in all groups, with patients in the hypnosis group reporting more anxiety than those in the VRH group (Rousseaux et al., 2022).

#### **Fuhr et al. (2021): Hypnotherapy vs CBT in Major Depression**

Fuhr et al. (2021) employed a rater-blind randomised controlled trial (RCT) to compare hypnotherapy and cognitive behavioural therapy (CBT) for mild to moderate depression in 153 patients. Montgomery-Åsberg Depression Rating Scale (MADRS) outcomes were measured pre-treatment, post-treatment, and at six- and twelve-months post-treatment (Fuhr et al., 2021).

Hypnotherapy was found to be non-inferior to CBT in reducing depressive symptoms at post-treatment and follow-up (Fuhr et al., 2021). In the secondary outcomes, both treatments showed comparable efficacy in terms of symptom reduction, response rate, and remission rate (Fuhr et al., 2021). A slightly higher proportion of patients achieved a 50% reduction in MADRS scores in the hypnotherapy group compared to the CBT group (Fuhr et al., 2021). Remission rates were slightly higher in the hypnotherapy group, although the differences were not significant (Fuhr et al., 2021).

### **Discussion**

The findings of this systematic review largely support the effectiveness of hypnotherapy for mental health disorders, with five of the six included studies reporting significant improvements in clinical outcomes. Rousseaux et al. (2022) presented contrasting results, with no significant differences observed among the four groups (recorded hypnosis, VR, VRH, and control) for any measured variables, including anxiety, pain, fatigue, and relaxation.

Most studies employ randomised controlled trial designs to ensure the validity and reliability of their findings. A variety of psychological assessment tools were used across the studies to measure outcomes. Commonly used tools include the Panic and Agoraphobia Scale (PAS), Beck Depression Inventory-II, Montgomery-Åsberg Depression Rating Scale (MADRS), and State-Trait Anxiety Inventory. Follow-up assessments were a common feature, with evaluations conducted several months post-treatment to determine the longevity of therapeutic effects. For instance, Fuhr et al. (2023) and Khazraee et al. (2023) included follow-up assessments to track symptom changes over time. The studies often involved diverse participant demographics, but there was a notable emphasis on adult populations with specific conditions. Khazraee et al. (2023) focused on women with major depressive disorder, and Brooker (2018) included advanced pianists with performance anxiety. Many studies compared HT with other therapeutic approaches or control conditions. Fuhr et al. (2021) and Haight et al. (2022) compared hypnotherapy with CBT, while Brooker (2018) compared hypnotherapy with EMDR.

The contrasting findings of Rousseaux et al. (2022) can be interpreted through several key considerations. The study noted that anxiety and pain levels were initially low to moderate, suggesting that the standard medical treatment provided to all patients might have been sufficient to manage these symptoms. In contrast, other studies reviewed often involved patients with higher baseline levels of distress or pain, where the additional intervention of hypnotherapy may have had a more pronounced effect. The methodological differences between the studies might account for the varied outcomes. Rousseaux et al. (2022) employed a design that did not allow for clinician interactions with the patients, which may have limited the degree of therapeutic engagement compared with clinician-guided hypnotherapeutic interventions. Other studies, such as those by Fuhr et al. (2023) and Khazraee et al. (2023), utilised interactive and engaging therapeutic protocols, which might have contributed to their positive findings. Haight et al. (2022) included active therapist involvement in the intervention, creating hypnotherapy sessions which were more personalised and interactive. Furthermore, the timing and context of the intervention in Rousseaux et al. (2022) study involved a high-stress, immediate

postoperative ICU setting, where factors such as extreme fatigue and deep sedation may have limited the patient's ability to engage with or benefit from hypnotherapy and VR interventions. In contrast, other studies were conducted in less acute settings, allowing patients to be more responsive to the interventions.

Previous studies have highlighted hypnotherapy's role in enhancing cognitive-behavioural interventions, managing pain, and reducing symptoms of anxiety and depression. Most studies in this review supported these claims, demonstrating hypnotherapy's potential across different populations and settings. The integration of hypnotherapy with other therapeutic techniques underscores the prospective flexibility and potential broad applicability of hypnotherapy in clinical practice.

However, in contrast to other previous studies, the APS review found insufficient evidence to support the efficacy of hypnotherapy for PTSD, a conclusion supported by the Australian Centre for Posttraumatic Mental Health (2013), which reported inadequate evidence of hypnotherapy's effectiveness over waitlist control for treating PTSD in adults. Conversely, Rotaru and Rusu (2016) presented a meta-analysis indicating a positive impact of hypnotherapy on reducing PTSD symptoms, especially with specific hypnotherapeutic approaches such as ego state therapy. This mixed evidence highlights the complexity of hypnotherapy's role in treating PTSD, requiring further research to substantiate its effectiveness. Fuhr et al. (2023), Khazraee et al. (2023), and Haight et al. (2022) provided evidence supporting hypnotherapy's efficacy for agoraphobia, depression, and functional connectivity improvements in depressive patients. Fuhr et al. (2021) found hypnotherapy to be non-inferior to CBT for major depression, with both treatments showing comparable efficacy in symptom reduction and remission rates. These findings suggest that hypnotherapy can be a viable treatment alternative for depression-related disorders, contrasting with the limited evidence for PTSD.

The APS review supported hypnotherapy for functional abdominal pain and IBS in children, with Rutten et al. (2013) reporting significant reductions in pain and treatment success rates post-treatment and at follow-up. These studies collectively highlight hypnotherapy's potential in treating both psychological and somatic symptoms, demonstrating its versatility across various conditions. The studies by Fuhr et al. (2023), Khazraee et al. (2023), and Haight et al.

(2022) provide more recent evidence supporting hypnotherapy's efficacy for mental health disorders, indicating a progression in research outcomes over time.

### **Methodological Limitations and Improvements**

While the five reviewed studies provide evidence that hypnotherapy is effective for treating mental health disorders, several methodological limitations must be acknowledged. Many studies had small sample sizes, limiting the generalisability of the findings. Including larger and more diverse populations could enhance external validity. The duration of follow-up varied across studies, with some only assessing short-term outcomes. Longitudinal studies are needed to assess the sustained effects of hypnotherapy. The control conditions also varied, with some studies using waitlists or alternative therapies such as CBT and EMDR. Standardising comparison groups would facilitate more consistent assessments of hypnotherapy efficacy. Furthermore, due to the heterogeneity of study designs and control conditions, the review could not weight studies by methodological rigour. As such, the convergence observed across findings reflects qualitative consistency rather than quantitative equivalence. In addition, because the studies varied widely in methodology and theoretical grounding, a unified mechanistic mapping was not feasible within the scope of this review. Future reviews should include greater emphasis on the mapping of findings onto underlying psychological and cognitive mechanisms to clarify how and for whom hypnotherapy is most effective.

In Rousseaux et al.'s (2022) study, high dropout rates due to the inability to participate post-surgery because of fatigue and sedation limited the study's power and generalisability. The study's standardised approach did not allow adaptation to individual patient needs, which is an important aspect of effective therapy (Rousseaux et al., 2022). The use of passive VR without user interaction might have reduced the potential benefits of VR, as active engagement is known to enhance immersion and therapeutic outcomes (Rousseaux et al., 2022). As noted by the authors, this study could be improved by incorporating more interactive VR environments with a therapist and considering individual patient needs (Rousseaux et al., 2022).

### **Future Directions and Clinical Significance**

Previous studies, such as Rotaru & Rusu (2016), found differences in the level of effectiveness of different types of hypnotherapies. Differences in out-

comes across studies may partly reflect variation in hypnotherapeutic techniques, including the use of clinician-guided cognitive hypnotherapy, mindful hypnotherapy, and prerecorded or technology-mediated hypnosis. This could explain the varied results regarding effectiveness identified in the original APS (2018) study. Future research could examine comparative effectiveness within hypnotherapy to identify whether significant variation exists and why such variation occurs. Furthermore, previous studies focused on hypnotherapy combined with EMDR or CBT. Examining the combined effects of hypnotherapy with other therapeutic modalities might reveal other benefits, thereby enhancing overall treatment outcomes. For instance, combining hypnotherapy with dialectical behaviour therapy or psychodynamic therapy could provide comprehensive treatment approaches.

The applied significance of this research lies in its potential to diversify treatment options for mental health practitioners (Lupu et al., 2019). Integrating hypnotherapy into standard practice could offer patients additional pathways to recovery, particularly for those who do not respond well to conventional treatments.

### **Conclusions**

The evidence collected from these studies suggests that hypnotherapy may be a viable treatment option for certain mental health disorders, including anxiety, depression, PTSD, and phobias. Hypnotherapy showed comparable efficacy to established treatments such as CBT and EMDR, particularly in reducing symptoms of anxiety and depression. These findings underscore the potential of hypnotherapy to be integrated into therapeutic practices for mental health care. However, its efficacy may be influenced by factors such as the patients' baseline symptom levels, the type of hypnotherapy technique, and the therapeutic context. The contrasting findings of Rousseaux et al. (2022) highlight the need for tailored, interactive approaches and consideration of patient-specific factors to optimise the benefits of hypnotherapy. It should be noted, however, that the findings remain limited by methodological variability and inconsistency of treatment protocols. Greater standardisation of hypnotherapeutic procedures is essential for establishing replicable and clinically applicable outcomes. This review supports the continued exploration and utilisation of hypnotherapy in mental health care, advocating for its

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inclusion as a complementary therapeutic approach.

### References

- Alladin, A., & Alibhai, A. (2007). Cognitive hypnotherapy for depression: An empirical investigation. *International Journal of Clinical and Experimental Hypnosis*, 55(2), 147–166. doi.org/10.1080/00207140601177897
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). doi.org/10.1176/appi.books.9780890425596
- Australian Centre for Posttraumatic Mental Health. (2013). *Australian guidelines for the treatment of acute stress disorder*. ACMPH, Melbourne, Victoria. [https://aci.health.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0004/212971/Australian-guidelines-treatment-acute-stress-posttraumatic-disorder.pdf](https://aci.health.nsw.gov.au/__data/assets/pdf_file/0004/212971/Australian-guidelines-treatment-acute-stress-posttraumatic-disorder.pdf)
- Australian Psychological Society. (2018). *Evidence-based psychological interventions* (4th ed.). <https://psychology.org.au/getmedia/23c6a11b-2600-4e19-9a1d-6ff9c2f26fae/evidence-based-psych-interventions.pdf>
- Brooker, E. (2018). Music performance anxiety: A clinical outcome study into the effects of cognitive hypnotherapy and eye movement desensitisation and reprocessing in advanced pianists. *Psychology of Music*, 46(1), 107–124. doi.org/10.1177/0305735617703473
- Ersan, E. (2020). The effect of hypnotherapy on depression and anxiety levels in obesity patients. *Journal of Clinical Psychiatry*, 23(3), 343–351. <https://doi.org/10.5505/kpd.2020.41196>
- Fuhr, K., Bender, A., Wiegand, A., Janouch, P., Drujan, M., Cyrny, B., Schweizer, C., Kreifelts, B., Nieratschker, V., & Batra, A. (2023). Hypnotherapy for agoraphobia—Feasibility and efficacy investigated in a pilot study. *Frontiers in Psychology*, 14, 1–13. doi.org/10.3389/fpsyg.2023.1213792
- Fuhr, K., Meisner, C., Broch, A., Cyrny, B., Hinkel, J., Jaberg, J., Petrasch, M., Schweizer, C., Stiegler, A., Zeep, C., & Batra, A. (2021). Efficacy of hypnotherapy compared to cognitive behavioral therapy for mild to moderate depression - Results of a randomized controlled rater-blind clinical trial. *Journal of Affective Disorders*, 286, 166–173. doi.org/10.1016/j.jad.2021.02.069
- Golden, W. L. (2012). Cognitive hypnotherapy for anxiety disorders. *American Journal of Clinical Hypnosis*, 54(4), 263–274. doi.org/10.1080/00029157.2011.650333
- Golden, W. L. (2007). Cognitive-behavioral hypnotherapy in the treatment of irritable -bowel -syndrome-induced agoraphobia. *International Journal of Clinical and Experimental Hypnosis*, 55(2), 131–146. doi.org/10.1080/00207140601177889
- Gonsalkorale, W. M., Toner, B. B., & Whorwell, P. J. (2004). Cognitive change in patients undergoing hypnotherapy for irritable bowel syndrome. *Journal of Psychosomatic Research*, 56(3), 271–278. doi.org/10.1016/s0022-3999(03)00076-x
- Haupt, A., Rosenbaum, D., Fuhr, K., Giese, M., Batra, A., & Ehlis, A.-C. (2022). The effects of hypnotherapy compared to cognitive behavioral therapy in depression: A NIRS - study using an emotional gait paradigm. *European Archives of Psychiatry and Clinical Neuroscience*, 272, 729–739. doi.org/10.1007/s00406-021-01348-7
- Khazraee, H., Bakhtiari, M., Kianimoghadam, A. S., & Ghorbanikhah, E. (2023). The effectiveness of mindful hypnotherapy on depression, self-compassion, and psychological inflexibility in females with major depressive disorder: A single-blind, randomized clinical trial. *International Journal of Clinical and Experimental Hypnosis*, 71(1), 63–78. doi.org/10.1080/00207144.2022.2160257
- Lupu, V., Matu, S., & Lupu, I. R. (2019). Cognitive-behavioral hypnotherapy augmented with virtual reality exposure in flight phobia: A case study. *Journal of Evidence - Based Psychotherapies*, 19(1), 49–57.
- Page, M. J., McKenzie, J. E., Bossuyt, P.M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., & Chou, R. (2020). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. doi: 10.1136/bmj.n71
- Page, M.J., Moher, D., Bossuyt, P.M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E.W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., Stewart, L.A., Thomas, J., Tricco, A. C., Welch, V.A., Whiting, P., & McKenzie, J. E. (2021). PRISMA 2020 explanation and elaboration: Updated guidance and

- exemplars for reporting systematic reviews. *BMJ*, 372, n160. doi: 10.1136/bmj.n160.
- Rotaru, T.-Ş., & Rusu, A. (2016). A meta-analysis for the efficacy of hypnotherapy in alleviating PTSD symptoms. *International Journal of Clinical and Experimental Hypnosis*, 64(1), 116–136. doi.org/10.1080/00207144.2015.1099406
- Rousseaux, F., Dardenne, N., Massion, P. B., Ledoux, D., Bicego, A., Donneau, A.-F., Faymonville, M.-E., Nyssen, A.-S., & Vanhaudenhuyse, A. (2022). Virtual reality and hypnosis for anxiety and pain management in intensive care units. *European Journal of Anaesthesiology*, 39(1), 58–66. doi.org/10.1097/eja.0000000000001633
- Rutten, J. M. T. M., Reitsma, J. B., Vlieger, A. M., & Benninga, M. A. (2013). Gut-directed hypnotherapy for functional abdominal pain or irritable bowel syndrome in children: A systematic review. *Archives of Disease in Childhood*, 98(4), 252–257. doi.org/10.1136/archdischild-2012-302906
- Schlarb, A., Friedrich, A., & Claben, M. (2017). Sleep problems in university students – An intervention. *Neuropsychiatric Disease and Treatment*, 13, 1989–2001. doi.org/10.2147/ndt.s142067
- Vagnoli, L., Bettini, A., Amore, E., De Masi, S., & Messeri, A. (2019). Relaxation-guided imagery reduces perioperative anxiety and pain in children: A randomized study. *European Journal of Pediatrics*, 178(6), 913–921. doi.org/10.1007/s00431-disorders (5th ed.). doi.org/10.1176/appi.books.9780890425596

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**Table 1.**

*Summary of Excluded Studies*

<b>Exclusion Criteria (EC)</b>	<b>No. of Excluded Articles</b>	<b>Reason for Exclusion</b>
Non-English Language	2	One paper was in German and one paper was in Turkish.
Non-Experimental Design	4	Two meta-analyses, one review article, and one case study.
Irrelevant Subject Matter	5	Focused on topics not relevant to hypnotherapy and mental health disorders, including pain, irritable bowel syndrome, insomnia and sleep disorders, fatigue, addictions, positive thinking, and stress.

Table 2.

*Summary of JBI Quality Analyses*

<b>Study Author and Consensus</b>	<b>Internal Validity</b>	<b>Assessment Bias</b>	<b>Bias Related to Participant Retention</b>	<b>Statistical Validity</b>	<b>Statistical Analyses Used</b>	<b>Trial Design</b>
Rousseaux et al. (2022)	Randomisation in blocks of five patients, but details were not specified.	Assessors were aware of treatment assignments.	Follow-up details were not adequately described. 30 participants had dropped out.	Participants were analysed in groups as randomised.	Repeated measures ANOVA.	Single-blind, randomised controlled trial.
Consensus	Yes	No	No	Yes	Yes	Yes
Brooker (2018)	Participants were randomised into three groups.	Participants were likely aware of the assignment due to self-reports.	Follow-up was not detailed; dropout rates were unclear	Groups were analysed as randomised.	ANCOVA, paired sample <i>t</i> -tests, and pairwise comparisons.	Multimodal repeated measure design and randomised sample.
Consensus	Yes	No	No	Yes	Yes	Yes
Fuhr et al. (2021)	Randomisation to hypnotherapy or CBT using nQuery 7.0.	Participants were blind until therapy started.	Follow-up was incomplete, and differences in retention were not analysed.	Analysed as randomised.	Linear regression.	Single-factor design with repeated measures and randomised participants.
Consensus	Yes	Yes	No	Yes	Yes	Yes

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**Table 2 cont.**

*Summary of JBI Quality Analyses*

Haip et al. (2022)	Participants were randomly assigned to CBT or hypnotherapy groups. Method was not specified.	Self-assessment-based, creating potential bias.	Dropout details were not fully described.	Participants were analysed in their assigned groups.	Linear regression and two-tailed <i>t</i> -tests.	Randomised controlled trial.
Fuhr et al. (2023)	Up to 50 patients were block-randomised using nQuery 7.0.	Outcome assessors were not blinded.	No dropout analysis.	Groups were analysed according to randomisation.	Non-parametric Mann-Whitney <i>U</i> tests, repeated measures ANOVA.	2 × 2 mixed-design study with the factor time and treatment condition.
Consensus	Yes	No	No	Yes	Yes	Yes
Khazraee et al. (2023)	Randomisation was conducted via an SPSS number generator and sealed envelopes.	Self-assessment-based; assessors were aware of treatment.	Follow-up details were vague, and there was no dropout analysis.	Analysed as randomised groups.	ANCOVA and repeated measures ANOVA.	Single-blind, randomised controlled trial.
Consensus	Yes	No	No	Yes	Yes	Yes

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*Note.* JBI = Joanna Briggs Institute; CBT = Cognitive Behavioral Therapy; HT = Hypnotherapy.

**Table 3.***Summary Table of Articles on Hypnotherapy*

<b>Study</b>	<b>Methodology</b>	<b>Sample</b>	<b>Intervention</b>	<b>Outcome Measures</b>	<b>Key Findings</b>
Fuhr et al. (2023)	2 × 2 mixed-designs with time (pre- and post-) and treatment condition (HT vs. WL); assessments conducted 3 months post-treatment	36 patients (mean age = 42.03 years; mostly female)	HT: 8-12 sessions over 3 months; WL: control waitlist	Panic and Agoraphobia Scale (PAS), symptom reduction percentage	Significant symptom reduction in HT compared to WL; non-significant pre-protocol analysis; substantial improvements for both groups
Khazraee et al. (2023)	Single-blind, randomised controlled trial with assessments at baseline, post-intervention, and 2-month follow-up	31 participants (16 HT, 15 control)	8 weekly sessions of mindful hypnotherapy	Beck Depression Inventory-II, Self-Compassion Scale-Short Form, Acceptance and Commitment Questionnaire-II	Significant reduction in depression post-intervention and follow-up in HT group; significant changes in self-compassion and psychological flexibility
Haupt et al. (2022)	Randomised trial with pre- and post-therapy NIRS measurements and emotional gait paradigm assessment	75 participants (56 female, 19 male)	Randomised to CBT or HT	Functional Connectivity (FC) between STS and EBA regions, reaction time, errors	Significant changes in FC and behavioural data; significant predictors of change in FC included pre-FC, rumination, and therapy group
Brooker (2018)	Multimodal repeated-measures design with quantitative and qualitative data collection	46 advanced pianists	CH and EMDR	State-Trait Anxiety Inventory, self-report questionnaire, performance assessment criteria	Significant decrease in anxiety for both CH and EMDR groups compared to the control; EMDR was more effective in reducing self-perceived anxiety
Rousseaux et al. (2022)	Randomised trial with standard care plus interventions (hypnosis, VR, or	48 cardiac surgery patients	20-minute prerecorded hypnosis session, VR	Self-assessed anxiety, pain, fatigue, relaxation states,	No significant differences between groups; anxiety levels decreased over

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**Table 3 cont.**

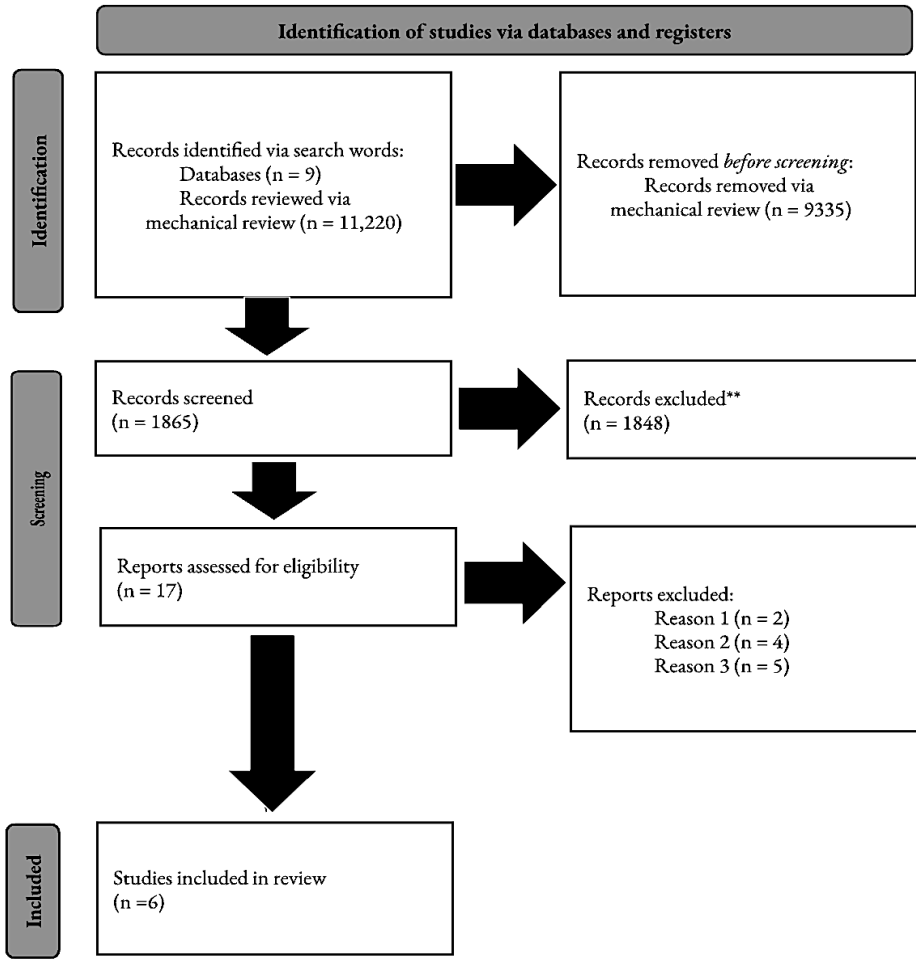
*Summary Table of Articles on Hypnotherapy*

<b>Category - Item</b>	<b>Statement</b>
Economic Issues - 1	The wealth inequality gap is widening
Economic Issues - 2	The wealthy should pay their fair share of taxes
Economic Issues - 3	Free health care is a right
Economic Issues - 4	Green energy will help the economy
Economic Issues - 5	Poor people should be given financial support from the government
Economic Issues - 6	The president is responsible for the economy
Election Security – 1	Voter fraud is an important issue
Election Security – 2	The most recent presidential election was rigged
Election Security – 3	A so-called "dark state" controls elections in the U.S.
Election Security – 4	Gerrymandering is not a problem
Election Security - 5	Both parties try to win elections at all costs
General Political - 1	All politicians are dishonest
General Political - 2	Politicians use fear to motivate people
General Political - 3	The media is biased
General Political - 4	I feel angry when I watch the news

*Note.* HT = Hypnotherapy; WL = Waitlist; CBT = Cognitive Behavioral Therapy; MDD = Major Depressive Disorder; CH = Cognitive Hypnotherapy; EMDR = Eye Movement Desensitisation and Reprocessing; VR = Virtual Reality; VRH = Virtual Reality Hypnosis; NIRS = Near-Infrared Spectroscopy; STS = Superior Temporal Sulcus; EBA = Extrastriate Body Area; FC = Functional Connectivity; MADRS = Montgomery-Åsberg Depression Rating Scale.

**Figure 1.**

*Modified PRISMA Model Flow Diagram (Page et al. 2020)*



*Note.* Adapted from Page et al. (2020).