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RESEARCH ARTICLE

# Efficacy of systemic therapy on adults with depressive disorders: A meta-analysis

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## Abstract

**Objective** This meta-analysis evaluates the efficacy of systemic therapy approaches on adult clients with depressive disorders.

**Methods** The illness-specific systematic review updates a previous meta-analysis on the efficacy of systemic therapy on psychiatric disorders in adulthood. It integrates the results of 30 randomized controlled trials (RCTs) comparing systemic psychotherapy for depression with an untreated control group or alternative treatments. Studies were identified through systematic searches in relevant electronic databases and cross-referencing. A random-effects model calculated weighted mean effect sizes for each type of comparison (alternative treatments, control group with no alternative treatment/waiting list) on two outcomes (depressive symptoms change, drop-out rates).

**Results** On average, systemic interventions show larger improvements in depressive symptoms compared to no-treatment controls at post-test ( $g = 1.09$ ) and follow-up ( $g = 1.23$ ). Changes do not significantly differ when comparing systemic interventions with alternative treatments (post-test  $g = 0.25$ ; follow-up  $g = 0.09$ ). Results also vary, in part, by participant age, publication year, and active control condition.

**Conclusion** This meta-analysis indicates the potential benefits of systemic interventions for adult patients with depression. Future randomized clinical trials in this area should enhance study quality and include relational and other relevant outcome measures.

**Keywords:** systemic psychotherapy; family therapy; depressive disorders; meta-analysis; outcomes

**Clinical or methodological significance of this article:** The result of the meta-analysis enhances the evidence base on systemic therapy for depression. It provides valuable implications for both therapists working with clients who are experiencing depressive symptoms and for researchers' continued examination of systemically oriented psychotherapy approaches for depression. With an international dataset, the conclusions hold global implications for mental health service providers and individuals with depression.

## Introduction

Depression is a common mental disorder which is often seen and understood as an individual problem caused by either biological (e.g., Dean & Keshavan, 2017) and/or cognitive processes (e.g., Beck,

2008). Consequently, the standard treatment for depressive disorders is a form of short-term individual psychotherapy; often cognitive-behavioural

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therapy (CBT) as in the context of the Improving Access to Psychological Therapies Services (IAPTS) in the UK (Shepherd & Butler, 2021). Research on the effects of psychotherapies for depression is also mainly focussed on treatment approaches for individuals, with CBT being the most examined psychotherapy approach for depression (Cuijpers, Quero, et al., 2021). However, there is a large body of research evidence showing that interpersonal factors have a significant impact on the onset and maintenance of depression (Barbato et al., 2018). In a bidirectional and circular manner, relationship distress is seen as contributing to the development of depression, which in return can have a profound negative impact on interpersonal relationships and on couple/family functioning (Trusty et al., 2021; Whisman et al., 2012). The knowledge of the interpersonal aspects and impact of depression has led to relational forms of psychotherapy being developed and used as an intervention for depression.

Systemic therapy is one of these relational therapies employed in the treatment of mental health problems in many countries in Europe and North America, but also increasingly in Non-Western countries, such as Iran or China (Sim & Sim, 2020). While several definitions have been proposed in the literature, this paper follows von Sydow et al. (2010) who define systemic therapy as “a form of psychotherapy that conceives behaviour and especially mental symptoms within the context of the social systems people live in, focusing on interpersonal relations and interactions, social constructions of realities, and the recursive causality between symptoms and interactions” (p. 459). Systemic therapists work with individuals, couples and families in a resource-oriented and solution-focused way and use system-oriented and relational questions and interventions to alter context conditions seen as linked to individual distress (Pinquart et al., 2016). In line with von Sydow et al. (2010), we distinguish systemic therapy from other relational approaches for couple or family interventions that are not based on a theoretical systemic orientation, such as cognitive-behavioural couple therapy for example (Baucom et al., 2010).

Systemic therapy is not a singular coherent approach but includes several therapy models with an overlapping set of shared concepts and assumptions, including structural-strategic approaches (Haley, 1963; Minuchin, 1974), narrative therapy (White & Epston, 1990) and solution-focused therapy (de Shazer, 2005). In systemic practice, therapists often utilize and integrate ideas and concepts from different systemic models in an eclectic manner, tailored to the context and specific needs

of each client case. Systemic interventions might also be combined with psychoeducation or other treatment elements (Dallos & Draper, 2005; Pinquart et al., 2016). Specific systemic programmes and treatment manuals were developed for depression, including systemic couple therapy for couples with a depressed partner (Jones & Asen, 2000) and emotion focussed couple therapy based on integration of systemic and experiential approaches (Dessaulles et al., 2003). However, while systemic approaches are an established part of the mental health provision in many countries, they are often not specifically included and recommended in the clinical guidance for the treatment of depression (e.g., not recommended by the guidelines of the National Institute for Health and Care Excellence, NICE, in the UK).

While systemic approaches are established in practice for more than sixty years, research on its efficacy has only gained substantial traction in the last three decades, starting with Shadish et al.’s (1993) meta-analysis of family and marital psychotherapies (that also included 14 studies of systemic therapy). Since then, the number of controlled studies on systemic therapy increased substantially, which led to various narrative and systematic reviews on the efficacy/effectiveness and evidence-base of systemic therapy in working with adults (e.g., Carr, 2000, 2009, 2019; von Sydow et al., 2010: review of 38 RCT). However, these reviews have not been subject to further quantitative statistical analysis that would test authors’ conclusions or analyse possible moderating effects of study characteristics.

More recently, two broad meta-analyses have investigated the efficacy of systemic therapy on adults with mental disorders. Pinquart et al.’s (2016) meta-analysis included initially 37 RCTs across different systemic approaches, which Carr et al. (2020) later extended with five more recent studies. The authors found that, compared to non-active control conditions, clients receiving systemic therapy showed stronger improvements of their mental health symptoms after treatment ( $d = 0.68$ ) and at follow-up ( $d = 0.52$ ), as well as stronger improvements of their symptoms compared to alternative treatment conditions at the end of treatment ( $d = 0.22$ ) but not at follow up ( $d = 0.14$ ). Based on their systematic review, the authors concluded that “more research is needed before conclusions on disorder-specific comparisons of systemic therapy and alternative treatments can be drawn” (Pinquart et al., 2016, p. 250). The other comprehensive meta-analysis including 33 RCTs across different systemic approaches was conducted by the German Institute for Quality and Efficiency in Healthcare (“Institut für Qualität und

Wirtschaftlichkeit im Gesundheitswesen”, IQWiG, 2017) on behalf of the German Federal Joint Committee (G-BA) (von Sydow & Retzlaff, 2021). The analysis found benefits of systemic therapy (compared to other therapeutic approaches) in the treatment of depression, eating disorders and mixed disorders, although the number of studies per analysis tended to be very small. Meta-analytic evidence is also available for the efficacy of five specific systemic therapy models. Overall, these specific analyses show that multisystemic therapy (MST; Van der Stouwe et al., 2014), multidimensional family therapy (MDFT; Filges et al., 2018; Van der Pol et al., 2017) and solution-focused brief therapy (SBFT; Schmit et al., 2016; Zhang et al., 2018) seem slightly more efficacious than brief strategic family therapy (BSFT; Baldwin et al., 2012; Lindstrøm et al., 2013) and functional family therapy (FFT; Sexton, 2011, 2015).

Focussing more specifically on depressive disorders, Huang et al. (2024) recently conducted a meta-analysis on the efficacy of systemic therapy in the treatment of children and adolescents with depression (including 9 RCTs). They found, in regard to symptom relief, that systemic therapy was superior to a no-active control group (standardized mean difference, *SMD*,  $-1.75$ ) and dynamic psychotherapy ( $-0.66$ ) and similar to supportive psychotherapy ( $-0.04$ ) and treatment as usual conditions ( $-0.45$ ). Moreover, some evidence is available on the efficacy of systemic therapy specifically on adults with depression. The two meta-analyses mentioned above included illness-specific examinations. Carr et al. (2020; 12 RCTs) reported that clients with depression who received systemic therapy showed stronger improvements of their symptoms at post-test ( $d = 0.47$ ) and follow up ( $d = 0.44$ ), compared to non-active treatment conditions. However, when compared with an alternative active treatment there were no significant differences at both time points. Based on their illness-specific analysis of six studies focused on depression, IQWiG (2017) concluded that systemic therapy is at least equally efficacious for adults with depression than other treatment options and medication (von Sydow & Retzlaff, 2021). Finally, a Cochrane review of couple therapy for depression (Barbato et al., 2018) found no significant difference in the effects of couple therapy versus individual therapy, with couple therapy being significantly more effective than no or minimal treatment. However, of the 14 included studies only three focussed on systemic therapy (Leff et al., 2000; Lemmens et al., 2009; Seikkula et al., 2013), and the findings of the review were generally weakened by the low quality of the data included (e.g., small sample sizes, high drop-out rates at follow-up).

However, the number of RCTs on systemic therapy for adults with depression included in the illness-specific examinations (Carr et al., 2020; IQWiG, 2017) and the Cochrane review (Barbato et al., 2018) is small and suggests that not all relevant studies were included.

The aim of the present meta-analysis was therefore to conduct an illness-specific meta-analysis of the efficacy of systemic therapy on adults with depressive disorders that includes all RCTs that have been conducted in this area in the last four decades. From an epidemiological perspective, it is vital to provide further illness-specific evidence on the efficacy of systemic therapy for depression which is seen as one of the most relevant public health problems in the twenty-first century (WHO, 2017). Depressive disorders have a widespread prevalence (affecting more than 300 million people worldwide; Gabriel et al., 2023) that further increased during the recent Covid-19 pandemic (Zhu et al., 2023). Adopting a disorder-specific approach in investigating the efficacy of systemic therapy will facilitate clearer and more nuanced insights into its impact on adults with this mental health problem.

In order to increase test power, the presented meta-analysis both incorporated the ten studies focussed on the treatment of depressive disorders included in Pinquart et al.’s (2016) meta-analysis (studies published or presented by May 2014) as well as new RCTs published in the last decade (period from May 2014 to March 2024). As first meta-analysis focussed only on studies on the treatment of adult depression, we were piloting an illness-specific approach, testing its feasibility in investigating the efficacy of systemic therapy for adults in a more focussed and nuanced manner. We were also interested to see if this illness-specific meta-analytical approach could help to reduce clinical and statistical heterogeneity (Kriston, 2013). By testing against alternative treatments, the goal of the analysis was to compare systemic therapy with other available and tested treatments to see if its effects go beyond those of traditionally individualized treatment approaches for depressive disorders.

## Research Questions

To allow for comparisons with other meta-analyses on the efficacy of psychotherapy, the focus was on change of depressive symptoms in RCTs which provide the most scientifically rigorous method of testing intervention effects (Rychetnik et al., 2004). Conducting moderator analysis of study characteristics is crucial for understanding sources of heterogeneity and identifying biases which helps to

improve the interpretation of findings of a meta-analysis (Cooper et al., 2019). We therefore also aimed to test and replicate moderating effects reported in the literature, including treatment length (Shadish et al., 1993: higher dose of marital/family therapy associated with greater efficacy), age of the participants and year of publication (Carr et al., 2020: larger effect sizes in younger samples and in more recent studies at post-test), and type of alternative treatment (Cuijpers et al., 2020: effects of comparisons with other active treatments may depend on the kind of the alternative treatment). Given the increasing number of studies on systemic therapy published in non-Western countries, we were also interested in a comparison of the treatment effects in Western and non-Western countries.

The review addressed the following three research questions:

1. Do depressed adults who receive systemic therapy show stronger improvements of their depressive symptoms than those who received either alternative treatments or no treatment (e.g., waiting list)?
2. Are dropout rates lower in the systemic therapy group than in an alternative treatment or in the no-treatment control group?
3. Do age of the participants, year of publication, treatment length, type of alternative treatment and country in which the study was conducted (Western and non-Western countries, such as China and Iran) act as potential moderating factors?

In the light of the effect sizes reported by the previous illness-specific examinations (Carr et al., 2020; IQWiG, 2017) and meta-analytical findings on the efficacy of systemic therapy, we hypothesized that depressed patients would show stronger symptom improvements when treated systemically than patients in non-active control conditions, and similar improvements than patients treated with alternative approaches. Given the relational focus of systemic approaches we were also expecting that the systemic treatment effects would to a certain degree show sustainability at follow-up measurement points.

## Method

### Search Strategy

The review was prospectively registered with the international prospective register of systematic reviews (PROSPERO 2022 CRD42022303943). Studies were included in the review if they were

published in English language, or when a translation was available, and fulfilled the following criteria:

- (a) The study reported results of an RCT that compared systemic therapy (including a combination of systemic therapy with medication/psychoeducation about the disorder) to a control group (e.g., waiting list) and/or alternative treatment.
- (b) The authors had to characterize their intervention as systemic, thereby referring either to techniques designed by pioneers of systemic therapy (e.g., Minuchin, Satir), or to therapeutic approaches generally accepted as systemic (von Sydow et al., 2010—see definition provided above), or state explicitly that the treatment was based on systems theory. It was also required that the therapists worked on familiar relationships and/or interaction patterns, such as working on family boundaries.
- (c) The clients had a diagnosis of depression disorder according to the International Classification of Diseases (ICD) or the Diagnostic and Statistical Manual of Mental Disorders (DSM) or scored above the cut-off of an established screening for depressive disorders (including comorbid cases).
- (d) The participants were 18 years or older.
- (e) The study provided sufficient information on change in depressive symptoms for calculating effect sizes (changes in depressive symptoms was the primary outcome of the review).
- (f) The studies had been included in the previous meta-analysis (Pinquart et al., 2016), or published between May 2014 (deadline of previous meta-analysis) and March 2024.

We first checked which of the studies of the previous meta-analysis (Pinquart et al., 2016) fulfilled the inclusion criteria. Next, we conducted new comprehensive searches in well-established psychological and medical electronic databases (China Academic Journals Full Text Data Base, Cochrane Central Register of Controlled Trials (CENTRAL), Google Scholar, ISI Web of Knowledge, PsycINFO, PSYINDEX, PubMed and Academic Search Complete) to identify new studies. In addition, the reference sections of the identified papers were checked for additional studies.

The search strategy used in the previous systematic review (Pinquart et al., 2016) was adopted, with the combination of search terms used as in the previous meta-analysis, plus search terms for depressive disorders:

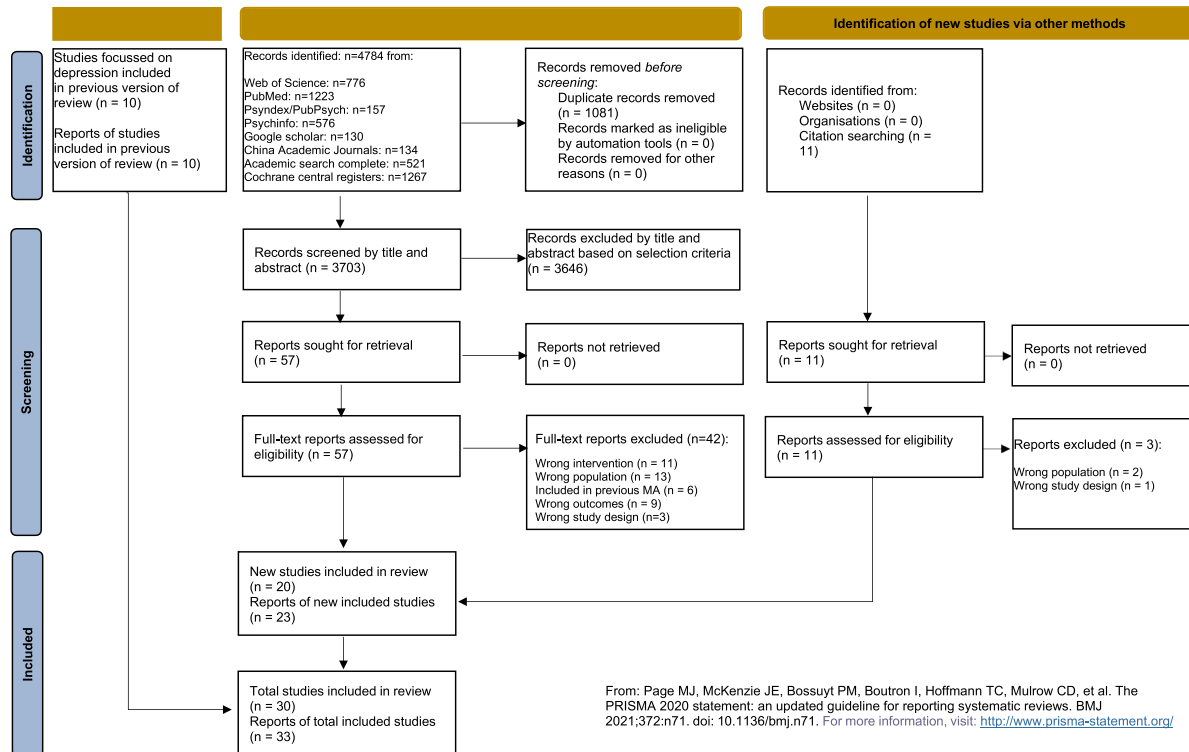


Figure 1. Prisma 2020 diagram for updated systematic review.

(systemic OR structural OR strategic OR “solution focused” OR narrative OR “Maudsley approach” OR triadic OR resource OR “couple therapy” OR Milan OR “de Shazer” OR Haley OR Minuchin OR Satir OR Palazzoli OR Stierlin OR “Boszormeny-Nagy” OR Watzlawick) AND random\* AND psychotherapy AND depress\*.

Ten studies from the previous meta-analysis fulfilled the inclusion criteria. In addition, the new electronic search and cross-referencing resulted in  $n = 4885$  hits. After checking the abstracts and the full texts, an additional 23 papers were included (4862 papers had to be excluded). One included study (Xi, 2011) had been published before the deadline of the previous meta-analysis but was first identified in the references list of a recent paper of the updated literature search. Screening was conducted by two researchers (AV, LF) using Covidence software. The PRISMA flow diagram is provided in Figure 1. Thus, the final sample consisted of 33 papers describing the results of  $k = 30$  independent RCTs (see Electronic Supplement ESM1).

### Coding Procedure and Effect Size Calculation

The studies were coded by two reviewers (AV, MP). We coded the authors, year of publication/presentation, numbers of participants in the systemic

condition and in the control condition(s), mean age of the participants, treatment length (number of sessions and number of weeks), type of alternative treatment (1 = untreated control group, 2 = active treatment), country in which the study was conducted, study quality (see below), change of depressive symptoms at post-test and follow-up (on average 8 month after treatment end; based on the primary outcome measure for depression if more than one was used in a study), and dropout rates in the systemic and control condition. Intercoder reliability was calculated as Pearson’s product-moment correlation, and good inter-rater agreements were established ( $r = .94-1.00$ ).

The calculation of the weighted mean effect size was performed using a random effects model (Borenstein et al., 2021). First, standardized change in depressive symptoms ( $d$ ) was computed as the difference between change in participants of systemic treatment and participants in the control condition, divided by the pooled standard deviation at pretest. To analyse dropout rates, we computed rate ratios (RRs). The RR was defined as the relative dropout rate in systemic therapy as compared to the dropout rate in the control condition. Second, outliers defined as scores that deviate more than two standard deviation units ( $SD$ ) from the group mean were set to the value at two  $SD$ ’s. Third, the  $d$ -scores were adjusted for bias due to small sample

sizes and transformed to Hedges's  $g$ . Fourth, weighted mean effect sizes, 95% confidence intervals (CI), and prediction intervals (PI) were calculated. While the CI defines the range of the effect sizes of 95% of the included studies, PI indicate the range of true values for a single new study. For interpreting the practical significance of the results, we used Cohen's (1992) criteria which define an effect sizes of  $g = .2$  as small, of  $g = .5$  as medium, and of  $g = .8$  as large. Fifth, we tested homogeneity of the effect sizes by the use of the  $Q$  statistic. Sixth, an "Analog to the ANOVA" was used for testing effects of categorical moderator variables while meta-regression was used for analysing effects of continuous moderator variables. With several planned subgroup comparisons, there was a high risk of reduced or very low test-power of each individual moderator analyses (Cuijpers, Griffin, et al., 2021). We therefore used power-analysis to estimate the test-power (see Electronic Supplement ESM5). Finally, two approaches were used for checking the risk for a possible publication bias (a tendency for non-significant results to remain unpublished). Egger's test (Egger et al., 1997) was applied for testing whether studies with smaller samples tend to report larger effect sizes. Trim-and-fill analysis (Duvall & Tweedie, 2000) analysed funnel plot asymmetry (which may be caused by lacking effect sizes from missing studies) and tested whether imputing possibly missing effect sizes would change our results. All computations were conducted with the Comprehensive Meta-Analysis software (Borenstein et al., 2014).

### Study Quality Assessment

To assess the quality of RCTs various criteria and checklist have been suggested. In line with the previous meta-analysis (Pinquart et al., 2016), we coded eight criteria of study quality, based on Cuijpers et al. (2010) and Spielmans et al. (2010), with dummy variables (0 = fail, 1 = pass): use of diagnostic criteria of depressive disorders from the ICD/DSM, existence of a treatment manual, therapist training, check of treatment integrity/supervision, use of intent-to-treat-analysis, sample size  $\geq 50$ , randomization by an independent party, blind outcome assessment, and for comparisons with an active alternative treatment comparability between treatment intensity of the systemic therapy and alternative treatment.

### Results

The studies have been conducted in 12 countries, including Iran (10 studies), China (6 studies), and

the US (4 studies). In total, 1172 patients were randomized to systemic therapy, 410 to alternative active treatments, and 772 to the control group that received no alternative treatment (see Table I). The recipients of systemic therapy had a weighted mean age of 34.28 years ( $SD = 8.57$ ), and 76.1% of them were women ( $SD = 17.84$ ). Patients received, on average, 9.3 sessions of systemic therapy ( $SD = 3.8$ , range 4–20) that were offered over a mean interval of 4.3 ( $SD = 2.5$ ) months.

The studies fulfilled, on average, 3.4 of the 8 criteria of study quality ( $SD = 1.7$ ) when excluding the equal-dose criterion that can only be applied in studies with active control condition. Use of intent-to-treat analysis was most often fulfilled (58% each) and randomization by an independent party was least reported (18%).

### Outcome Measures

Most included studies reported not only depression scores but at least one or more secondary outcomes measure (4 reported depression scores only). However, the diverse secondary measures across studies covered different aspects such as anxiety, quality of life, quality of marital relationship, stress, and hope. None of these aspects were evaluated in more than four studies in one comparison category (with/without active control condition; see Table I), thus leading to insufficient test power per outcome (Valentine et al., 2010). Due to the varied measures and limited effect sizes per secondary outcome in the comparison categories, it was not feasible to analyse or combine them into a single variable with theoretical meaning (Deeks et al., 2019, p. 260). Consequently, the results presented here focus on the predetermined primary outcome measures as set out in the review registration: depression scores and drop-out rates.

### Overall Effect Sizes

When comparing systemic therapy to other active treatments at post-test, there was no significant difference between the effect sizes of other active treatment modalities and systemic therapy ( $k = 15$  effect sizes,  $g = .25$ ;  $CI = -.06-.56$ ,  $PI = -.93-1.43$ ,  $z = 1.55$ ,  $p < .12$ ,  $Q = 67.71$ ,  $p < .001$ ), which suggests that they are equally efficient. Individuals who had received systemic therapy showed significantly stronger improvements of their depressive symptoms than participants in the control group who received no alternative treatment ( $k = 20$ ,  $g = 1.09$ ;  $CI = .78-1.40$ ,  $PI = -.42-2.60$ ,  $z = 6.90$ ,  $p < .001$ ). According to Cohen (1992), this effect size

Table I. Selected characteristics of the 30 included studies\*.

Authors	<i>N</i> <sub>system</sub>	<i>N</i> <sub>contr</sub>	Age	Systemic Intervention	Control Condition	Secondary Outcome Measures	# Sessions	# Months	Quality Sum
Abassi et al. (2017)	15	15		brief solution-focused therapy	TAU	Enrich Marital Satisfaction Questionnaire	6	.	2
Aminnasab et al. (2018)	15	15	32.70	solution-focused therapy	TAU	Cohen's Perceived Stress Scale (PSS)	8	2	2
Ayar and Sabancıoğulları (2022)	31	30	38.68	solution-oriented therapy	TAU	Perceived Social Support Inventory (PSSI)	.6–10	.65	1
Azizi and Ghasemi (2017, comparison with ACT)	12	12	33.00	solution-focused therapy	Acceptance and Commitment Therapy	Quality of Life Questionnaire (WHOQOL-BREF)	9	2	2
Azizi and Ghasemi (2017, comparison with CBT)	12	12	33.00	solution-focused therapy	CBT	Quality of Life Questionnaire (WHOQOL-BREF)	9	2	2
Azizi and Ghasemi (2017)	12	12	33.00	solution-focused therapy	TAU	Quality of Life Questionnaire (WHOQOL-BREF)	9	2	2
Chen et al. (2021)	53	52	21.33	systematic family therapy	TAU	Chinese perceived stress scale (CPSS) Social Adaptive Functioning Evaluation (SAFE)	.	3	2
Cooper et al. (2024)	36	33	38.00	solution-focused therapy	TAU	General anxiety disorder-7 (GAD-7) Flourishing index	3	.75	3
Dashtizadeh et al. (2015)	10	10	.	solution-focused therapy	TAU	None	6	.	3
Ebrahimi et al. (2023)	15	15	71.46	solution-focused therapy	WLC	Bell adjustment inventory	8	1	2
Fabbri et al. (2007)	10	10	47.50	problem-centered systemic therapy	dose increase and clinical management (support/ advice)	Psychiatric Rating Scale	12	3	4
Friedman (1975)	84	82	36.64	marital therapy	TAU	Not enough information to compute and analyse effect sizes	9	3	2
Habibi et al. (2016)	15	15	.	solution-focused brief therapy	TAU	None	8	.	1
Huang et al. (2022)	59	57	.	solution-focused therapy	TAU	Hamilton Anxiety Rating Scale Pittsburgh Sleep Quality Index	9	4.5	2
Knekt et al. (2008, posttest, comp. with long-term psychodynamic therapy)	97	128	33.60	solution-focused therapy	psychodynamic therapy	Symptom Check List (SCL-90 ANX & GSI); Hamilton Anxiety Rating Scale (HARS); Work Ability Index (WAI); Social Adjustment Scale (SAS-Work); Perceived Psychological Functioning Scale (PPF)	10	8	5

(Continued)



**Table I. Continued.**

Authors	$N_{\text{system}}$	$N_{\text{contr}}$	Age	Systemic Intervention	Control Condition	Secondary Outcome Measures	# Sessions	# Months	Quality Sum
Knekt et al. (2008, posttest, comp. with short-term psychodynamic therapy)	97	101	33.60	solution-focused therapy	psychodynamic therapy	Symptom Check List (SCL-90 ANX & GSI); Hamilton Anxiety Rating Scale (HARS); Work Ability Index (WAI); Social Adjustment Scale (SAS-Work); Perceived Psychological Functioning Scale (PPF)	10	8	5
Knekt et al. (2013, 2016, follow-ups, comparison with long-term psychodynamic therapy)	97	128	33.60	solution-focused therapy	psychodynamic therapy	Symptom Check List (SCL-90 ANX & GSI); Hamilton Anxiety Rating Scale (HARS); Work Ability Index (WAI); Social Adjustment Scale (SAS-Work); Perceived Psychological Functioning Scale (PPF)	10	8	5
Knekt et al. (2013, 2016, follow-ups, comp. with short-term psychodyn. therapy)	97	101	33.60	solution-focused therapy	psychodynamic therapy	Symptom Check List (SCL-90 ANX & GSI); Hamilton Anxiety Rating Scale (HARS); Work Ability Index (WAI); Social Adjustment Scale (SAS-Work); Perceived Psychological Functioning Scale (PPF)	10	8	5
Kramer et al. (2014)	131	132	19.40	web-based solution-focused chat	WLC	None	5	.	2
Lee and Ofori Dei (2022)	62	34	46.00	congruence couple therapy	TAU	Various recovery outcome variables, including Dyadic adjustment scale (DAS); PHQ-9, Post-traumatic stress disorder checklist (PCL-551); Difficulties in emotion regulation scale (DERS52); Social readjustment rating scale (SRRS53)	13	.	2
Leff et al. (2000)	40	37	39.70	systemic couple therapy	medication	Camberwell Family Interview (CFI); Dyadic Adjustment Scale (DAS49)	16	.	6

*(Continued)*

Table I. Continued.

Authors	$N_{\text{system}}$	$N_{\text{contr}}$	Age	Systemic Intervention	Control Condition	Secondary Outcome Measures	# Sessions	# Months	Quality Sum
Lemmens et al. (2009)	35	23	43.90	multifamily group therapy	TAU	Dyadic Adjustment Scale (DAS); Rating of the subjective emotional health (SEH)	7	6	5
Lemmens et al. (2009)	25	23	40.20	systemic couple therapy	TAU	Dyadic Adjustment Scale (DAS); Rating of the subjective emotional health (SEH)	7	6	5
Li et al. (2018)	25	28	32.16	solution-focused brief therapy	TAU	Herth Hope Index (HHI)	4	.	4
Lopes, Goncalves, Fassnacht, et al. (2014)	34	29	37.18	narrative therapy for depression	CBT	Outcome Questionnaire (OQ-45.2)	20	6	6
Lopes, Goncalves, Machado, et al. (2014)	34	29	37.18	narrative therapy for depression	CBT	Outcome Questionnaire (OQ-45.2)	20	6	6
Miller et al. (2005)	40	36	37.70	problem-centered systems therapy	TAU	Modified Scale for Suicidal Ideation	5	6	3
Moghadam et al. (2023)	15	15	24.43	solution-focused therapy	TAU	Hamilton Anxiety Rating Scale	8	2	0
Pizadi et al. (2023)	28	28	38.32	solution-focused therapy	TAU	WHO Quality of Life-Brief (WHOQOL-BREF) questionnaire.	6	1.5	1
Poole et al. (2018)	33	31	.	Best Mood programme	supportive parenting programme	Depression Anxiety Stress Scales-21 (DASS-21)—anxiety & stress subscales	8	.	3
Saadati et al. (2022)	15	15	43.92	solution-focused brief therapy	Compassioned-focussed therapy	Ruminative thoughts	6	3	4
Saadati et al. (2022)	15	15	43.92	solution-focused brief therapy	WLC	Ruminative thoughts	6	3	4
Seikkula et al. (2013)	35	31	41.20	couple therapy	TAU	Symptom check list (SCL-90); Global assessment of functioning rating (GAF); Dyadic Adjustment Scale (DAS);	11	.	4
Shakeri et al. (2020)	13	13	.	group narrative therapy	TAU	Quality of Life questionnaire (SF-36); Beck anxiety inventory (BAI);	10	3	2
Wang et al. (2011)	38	38	26.80	systemic family therapy	TAU (medication)	Gross Rating Scale (GAS), Treatment Emergent Symptom Scale (TESS)	6	3	3
Wu and Slesnick (2019)	123	60	33.90	ecologically based family therapy	Women's Health Education	Frequency of substance use	12	.	6
Xi (2011)	6	6	.	solution-focused group counselling	TAU	None	6	1	2

(Continued)

Table I. Continued.

Authors	$N_{\text{system}}$	$N_{\text{contr}}$	Age	Systemic Intervention	Control Condition	Secondary Outcome Measures	# Sessions	# Months	Quality Sum
Zhang et al. (2018)	22	22	31.57	solution-focused brief therapy	counseling from CBT or client-centered perspective	Brief Symptom Inventory (BSI-18, Chinese version, subscores anxiety and somatization); Herth Hope Index—Chinese version:	4	1	1

Note:  $N_{\text{system}}/N_{\text{contr}}$ : number of patients in systemic/control condition; CBT: cognitive-behavioral therapy; TAU: treatment as usual; WLC: wait list control condition.

\* each line shows one included comparison (some studies have multiple comparisons/more than one control group and/or were reported in more than one publication).

can be interpreted as large. The effect size was, however, heterogeneous ( $Q = 168.78$ ,  $p < .001$ ), indicating the need to explore/test for moderator variables.

Similar to the post-test, comparisons with an active control condition revealed no statistically significant different change for systemic treatment versus other interventions at follow-up ( $k = 13$ ,  $g = .09$ ;  $CI = -.15-.33$ ,  $PI = -.80-.98$ ,  $z = .74$ ,  $p < .46$ ,  $Q = 36.05$ ,  $p < .001$ ). Stronger improvements of depressive symptoms compared to a no-treatment control condition persisted at follow-up ( $k = 9$ ,  $g = 1.23$ ;  $CI = .80-1.68$ ,  $PI = -.15-2.61$ ,  $z = 5.53$ ,  $p < .001$ ). When assuming moderate effect sizes in comparison with a no-treatment control condition ( $g = .5$ ), test power was adequate at post-test (98.0%) but below the 80% standard convention at follow-up (69.7%). When assuming small effect sizes of  $g = .3$  in comparisons with an alternative active control condition, test power was somewhat restricted at post-test (67.8%) and follow-up (74.7%). About 16.1% of the participants of systemic therapy had not completed the intervention, which was similar to participants of alternative active treatments (15.5%). The dropout rate was somewhat higher in the no-treatment control condition (19.2%), but the difference to systemic therapy was not statistically significant ( $RR = .94$ ,  $Z = -.35$ ,  $p < .86$ ).

Egger's regression test found that the effect sizes of studies without active control condition varied by the standard errors that are approximately proportional to sample size of the studies (post-test:  $t(18) = 4.26$ ,  $p < .001$ ; follow-up:  $t(7) = 2.21$ ,  $p < .05$ ). Trim-and-analysis added one possibly missing effect size of a study without active control condition at posttest and follow-up. Including this effect size led to a decline of the weighted mean effect size from  $g = 1.09$  to  $g = 1.02$  ( $CI .71-1.32$ ,  $z = 6.53$ ,  $p < .001$ ) at posttest and from  $g = 1.23$  to  $g = 1.14$  ( $CI .71-1.57$ ,  $z = 5.14$ ,  $p < .001$ ) at follow-up. Both results indicate a possible publication bias, although the

corrected mean effect sizes remained statistically significant. Trim-and-fill analysis also added a possibly missing effect size in comparisons with an active control condition at follow-up, and there was still no significant difference between the effects of systemic therapy and other active interventions ( $g = .03$ ,  $CI = -.23-.28$ ,  $z = .24$ ,  $p < .97$ ).

### Moderator Analyses

We start with reporting the analysis of continuous moderating variables (see ESM3), followed by categorical moderators (ESM4). Change in depressive symptoms did not vary by the number of sessions of systemic treatment. We found a moderating effect of the mean age of the participants with studies with an active control group showing larger effects at follow-up in older samples. Treatment effects of studies with a no-treatment control condition at posttest varied by year of publication. More recent studies found stronger effects at posttest.

In studies without an active control group (ESM3), the overall quality score did not moderate the efficacy of systemic interventions. However, when an active control condition was present, higher-quality studies showed weaker effects. We further explored which individual criteria of study quality led to the moderating effect of the quality sum score. In comparison with alternative active treatments, studies without intent-to-treat analysis reported larger effects of systemic therapy compared to others (post-test:  $Q(1) = 8.91$ ,  $p < .003$ ,  $g = .63$ ,  $z = 3.50$ ,  $p < .001$  vs.  $g = -.09$ ,  $z = -.58$ ,  $p < .57$ ; follow-up:  $Q(1) = 23.26$ ,  $p < .001$ ,  $g = .85$ ,  $z = 4.91$ ,  $p < .001$  vs.  $g = -.08$ ,  $z = -.59$ ,  $p < .35$ ). At follow-up, studies with over 50 participants reported lower effects than smaller samples ( $Q(1) = 10.82$ ,  $p < .001$ ,  $g = -.02$ ,  $z = -.21$ ,  $p < .84$  vs.  $g = .76$ ,  $z = 3.57$ ,  $p < .001$ ).

Studies from Western and Non-Western countries (China and Iran) did not significantly differ in their results (ESM4). Examining the type of active control condition, systemic therapy had smaller improvements than CBT at post-test (based on two RCTs). However, systemic therapy had significantly stronger improvements than other therapies (11 RCTs) and marginally stronger than psychodynamic treatments (2 RCTs). These significant differences between systemic therapy and treatments other than CBT and psychodynamic treatments persisted at follow-up, maintaining the advantage of systemic therapy over other treatments. In these sub-analyses, test power was adequate for identifying large effect sizes in Western countries and when comparing systemic therapy with treatments other than CBT and psychodynamic therapies at post-test but below 80% in most of the other analyses (ESM5).

### Discussion

The present study is the first illness-specific meta-analysis on the efficacy of systemic therapy for adult patients that includes the relevant clinical trials in the area and allows conclusions to be drawn about the depression-specific efficacy of systemic therapy. The fact that two thirds of the included clinical trials in this meta-analysis were new studies (published after May 2014) indicates that the evidence base for systemic therapy for adults with depressive disorders has grown in the last decade. With these additional new studies, it has become feasible to investigate the efficacy of systemic therapy for adult patients with depression in a more focussed and nuanced manner. We found that after receiving therapeutic interventions with systemic theoretical focus, patients showed stronger improvements of their symptoms than those in non-active control groups, both directly after the intervention and at follow-up. While the drop-out rate was slightly higher in the no-treatment control conditions, the difference was not statistically significant. Moderator analysis showed that in more recent studies stronger effects were reported at post-test (compared to non-active control groups). The number of sessions of systemic treatment was not found to have an impact on the change in depressive symptoms.

The comparison with active-treatment control groups, after the intervention and at follow-up, showed that the efficacy of systemic approaches was not lower than that of the sum of alternative treatments, which suggests equally efficacy at both time points. There was also no difference in the drop-out rates between systemic interventions and alternative treatment control-groups. Moderator analysis

showed that systemic therapy produced smaller improvements than CBT, but stronger improvements than psychodynamic and other treatments after the intervention (no difference at follow up). This result pattern mirrors the findings from a recent meta-analysis on the efficacy and acceptability of systemic therapy in the treatment of children and adolescents with depression. Huang et al. (2024) also found that systemic therapy for children and adolescents with depression was superior to psychodynamic psychotherapy and inferior to cognitive behaviour therapy (CBT), however, their meta-analysis is based on a very small number of studies (only 9 RCTs) and does not offer a clear conclusion to explain the heterogeneity of effect sizes in the sample. Our findings also suggested stronger moderating effects for older samples at post-test, while studies from Western and Non-Western countries did not differ in their results.

### Efficacy of Systemic Therapy on Adults with Depressive Disorders

With the present updated meta-analysis, we were able to identifying a large effect size of systemic interventions for depression ( $g = 1.09$  post-test;  $g = 1.23$  follow-up), compared to a no-treatment control condition. These illness-specific effects sizes are slightly above the weighted mean effect size of  $g = 0.72$  (95% CI: 0.67 ~ 0.78) reported by Cuijpers et al. (2020) in their meta-analysis for the main evidence-based psychotherapies for adult depression (which did not include systemic therapy). They are also stronger than the depression-specific effect sizes for systemic therapy identified by Carr et al. (2020;  $g = .47$ ) and the overall effect size of systemic therapy on adults with mental disorders reported by Pinquart et al. (2016;  $g = .51$ ).

However, an efficacious psychotherapy intervention should not only lead to stronger symptom improvement than experienced by patients in no-treatment/waiting list groups, but also produce effect sizes that are stronger or at least equal to those provided by other therapeutic modalities (von Sydow et al., 2010). Our findings suggest that systemic therapy meets this criterion in the treatment of adults with depressive disorders as it is similarly efficacious compared to alternative treatments. This replicates the findings reported by the IQWiG (2017) that identified systemic therapy as at least equally efficacious for adults with depression than other treatment options and medication (von Sydow & Retzlaff, 2021). The findings are also in line with the large body of psychotherapy research showing that different therapy modalities generally tend to be equally effective

(Budd & Hughes, 2009), and the results of a recent network analysis by Cuijpers, Quero, et al. (2021; including 331 randomized trials with 34,285 patients). Focussing on the efficacy, acceptability and long-term outcomes of different types of psychotherapies for depression (systemic interventions were not included), Cuijpers, Quero, et al. (2021) concluded that there are only few significant differences between the main types of psychotherapy for depression regarding their efficacy and acceptability. Our meta-analytical findings suggest that the efficacy of systemic approaches is, on average, not lower than that of the main therapy modalities for depression as investigated by Cuijpers et al. (2020)—although the few direct comparisons of systemic therapy with CBT indicated that the latter led to stronger improvement. While systemic therapy seems to be, on average, equally effective as other therapies, Crane and Christenson (2014) conclude (based on their review of a series of studies conducted over 20 years) that systemic interventions are more cost-effective than individual therapy, leading to medical cost reductions. This can be explained by the traditionally short time frame of systemic approaches in therapeutic practice, with fewer sessions than most individual interventions (von Sydow et al., 2010).

### Effects of Moderator Variables

We found a moderating effect for the year of publication of the studies, with larger effect sizes in more recent clinical trials (which tend to employ structured and manualized interventions). A possible explanation for this moderator effect could be the fact that many of the more recent clinical trials were conducted in Iran and China and employed a structured and manualized form of solution-focused brief therapy (SFBT) in a controlled setting. Compared to other systemic approaches, it is likely that the SFBT interventions are easier to learn and apply in clinical trials, given that much of the delivery of the intervention is specified in the manual (Pinquart et al., 2016). However, we did not find a general difference in the efficacy of studies from Non-Western countries such as Iran and China, where SFBT interventions are increasingly employed and researched, and clinical trials conducted in Western countries. This finding indicates that systemic interventions can be effective in reducing depressive symptoms in different cultural contexts. It has been suggested that systemic therapy's emphasis on family system and relationships could align well with more collectivist cultures, where interconnectedness is valued, compared to the traditional focus on individual problems in Western countries

(Epstein et al., 2012). However, for systemic therapy to work effectively across cultures, interventions need to adapt to local sociocultural contexts to ensure cultural sensitivity and appropriateness (Sim & Sim, 2020). Further research is needed to investigate which adapted systemic concepts and approaches are best equipped for which cultural and societal circumstances. In contrast to Carr et al. (2020), who reported larger effect sizes for younger adults, we observed stronger effects for older samples at follow-up in studies with an active control group. This suggests that older patients might benefit more from the long-term effects of systemic therapy on depressive symptoms than younger patients, which could be linked to the increased risk for experiencing severe depression in older age (due to factors like social isolation, bereavement, poor/declining health; Kok & Reynolds, 2017). The moderating effects of study quality indicate that the analysis of completers tends to overestimate treatment effects as individuals who do not benefit from the treatment are less likely to complete the study. The moderating effect of sample size may be based on a file-drawer problem as studies with small samples and small, non-significant effects often remain unpublished and unidentified in meta-analyses (Rosenthal, 1979).

Finally, the moderator analyses of the type of active control condition (alternative treatments) suggested that, in the short-term, systemic therapy might be slightly less efficacious than CBT and more efficacious than psychodynamic interventions and treatment for depression as usual (no significant difference at follow up). While this particular finding can be seen as resonating with some of the research literature (e.g., CBT interventions leading to a larger short-term decrease of depressive symptoms than treatment-as-usual; López-López et al., 2019), it should be interpreted with caution as the moderator analysis to compare systemic therapy with CBT and psychodynamic were based on two clinical trials only (see Table I).

### Limitations

There are several limitations that need to be taken into consideration when drawing conclusions from our results. While the review included all relevant published and available clinical trials, the number of included studies was still comparatively low which had a generally limiting impact on the test-power for both the overall effect size and the moderator analysis, as illustrated by the power analysis (see ESM5). With the reduced test-power of the moderator analyses in particular (e.g., on the kind of active

control condition and on Western vs. non-Western studies), the results need to be interpreted with caution. Due to the low study number, it was also not feasible to conduct analysis based on the secondary outcomes assessed in the studies or to analyse moderating effects of the specific country in which the study has been conducted.

Secondly, it is essential to interpret the findings cautiously due to the heterogeneous effect sizes in the sample, as indicated by prediction intervals which can offer crucial information for clinical decision-making (Kriston, 2013). Despite adopting an illness-specific approach, which was anticipated to reduce heterogeneity, a significant range of effect sizes persists. Notably, recent studies conducted in non-Western countries show some large effects. While our moderator analyses suggested potential sources of heterogeneity (e.g., larger effect sizes in more recent clinical trials which might be related to better study quality), definitive conclusions about the reasons for the variation in effect sizes are challenging to draw until more studies are included in future meta-analyses. The prediction intervals are likely to decrease when more studies become available in future. Given the observed stronger effects of systemic therapy in more recent studies, the prediction interval of the comparison of systemic therapy with no-treatment control conditions may no longer include zero if these additional new studies become available.

A third limitation is related to the fact that systemic therapy is not a singular coherent therapy modality. Rather, a broad range of different approaches can be found under the “systemic umbrella” (Vossler, 2010). While these different approaches have key systemic ideas and assumptions in common, they also differ from each other, for example in how structured they are, and to what degree they are focussed on the relationship system around the client. Due to the low number of clinical trials on the different systemic approaches, and because in some cases the approach could not be categorized except defining it as eclectic, it was not possible to test if there are differences in the treatment efficacy of different systemic modalities. More clinical trials with specific systemic models are needed before the question of possible approach-specific efficacy in the treatment of adult depression can be answered in the future. Nonetheless, our analyses did not find significant heterogeneity of the effect sizes within subgroups (ESM2), thus indicating a considerable amount of similarity of treatment effects across individual studies.

Another limitation concerns the chosen outcome measures. It was the prospectively registered intention with this review to focus on the change of depressive symptoms and drop-out rates as primary

outcomes. An analysis at secondary outcome level was not deemed viable due to the diverse measures utilized by the included studies. However, the exclusion of secondary outcomes limits the review’s generalisability which may prevent a comprehensive evaluation of reported outcomes within and between studies and potentially lead to an overestimation of treatment difference (Flückiger et al., 2018). The focus on depressive symptoms as primary outcome particularly fails to consider treatment effects extending beyond symptom change (e.g., functioning and quality of life). The depression scales used in the included clinical trials lack the capacity to measure treatment effects beyond the individual level of this core psychological symptom, such as improvements in relationships and contextual variables. As systemic therapies intentionally target changes in social relationships and the client’s relational systems, the overall efficacy of systemic psychotherapies may be underreported compared to individual-focused interventions. Future meta-analyses on systemic therapy should address this limitation by incorporating secondary outcomes and analysing multiple outcomes per study, using e.g. three-level meta-analytic models (Assink & Wibbelink, 2016). Clinical trials on systemic therapy should consider including more relational outcome measures, such as the “Systemic Clinical Outcome and Routine Evaluation scale” (SCORE-15; Carr & Stratton, 2017; Stratton et al., 2010).

Finally, the quality of many included studies was limited, with nearly half of the RCTs not conducting intent-to-treat analysis and relying on small sample sizes (less than 50 participants). The limited study quality should be considered when interpreting the findings of this meta-analysis, indicating the need to improve study quality when planning and conducting clinical trials of systemic therapy.

Despite the above limitations, the findings of the present study have considerable implications for mental health service provision. Being the first illness-specific meta-analysis on the efficacy of systemic therapy for adults, it highlights that systemic approaches can be at least as efficacious as most other therapeutic modalities in reducing depressive symptoms. It would therefore be beneficial to provide more adult patients with depression with access to systemic therapy, especially in cases where relational factors play a key role in the onset of depression, and where modalities focussed on the individual are not able to address the impact of system members sustaining or perturbing recovery. Such a move away from the dominance of “one size fit all” individual treatment approaches for depression could increase patient’s choice and can help with a more precise matching between patients

and treatment options (based on more detailed patient information; Cuijpers, Quero, et al., 2021). Hence, investing in systemic therapy options in the treatment of depression would have the potential to improve mental health service provision—especially in those countries where relational therapy approaches are underused and currently not recommended by treatment guidelines for depression, like for example in the UK (Shepherd & Butler, 2021).

### Disclosure Statement

No potential conflict of interest was reported by the author(s).

### Supplemental Data

Supplemental data for this article can be accessed at <https://doi.org/10.1080/10503307.2024.2352741>.

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### References

- Abassi, A., Mohammadi, M., Zaharakar, K., Davarniya, R., & Babaeigarmkhani, M. (2017). Effectiveness of Solution-Focused Brief Therapy (SFBT) on reducing depression and increasing marital satisfaction in married women. *Iran Journal of Nursing, 30*(105), 34–46.
- Aminnasab, A., Mohammadi, S., Zareinezhad, M., Chatrouz, T., Mirghafari, S. B., & Rahmani, S. (2018). Effectiveness of Solution-Focused Brief Therapy (SFBT) on depression and perceived stress in patients with breast cancer. *Tanaffos, 17*(4), 272–279.
- Assink, M., & Wibbelink, C. J. M. (2016). Fitting three-level meta-analytic models in R: A step-by-step tutorial. *The Quantitative Methods for Psychology, 12*(3), 154–174. <https://doi.org/10.20982/tqmp.12.3.p154>
- Ayar, D., & Sabanciogullari, S. (2022). The effect of a solution-oriented therapy on the depression levels and the perceived social support of depressive patients. *Archives of Psychiatric Nursing, 36*, 62–69. <https://doi.org/10.1016/j.apnu.2021.11.004>
- Azizi, A., & Ghasemi, S. (2017). Comparison the effectiveness of solution-focused therapy, cognitive-behavior therapy and acceptance and commitment therapy on depression and quality of life in divorced women. *Counseling Culture and Psychotherapy, 8*, 207–236.
- Baldwin, S. A., Christian, S., Berkeljon, A., Shadish, W. R., & Bean, R. (2012). The effects of family therapies for adolescent delinquency and substance abuse: A meta-analysis. *Journal of Marital and Family Therapy, 38*(1), 281–304. <https://doi.org/10.1111/j.1752-0606.2011.00248.x>
- Barbato, A., D'Avanzo, B., & Parabiaghi, A. (2018). Couple therapy for depression. *Cochrane Database of Systematic Reviews, 6*(6), CD004188. <https://doi.org/10.1002/14651858.CD004188.pub3>
- Baucom, D. H., Epstein, N. B., Kirby, J. S., & LaTaillade, J. J. (2010). Cognitive-behavioral couple therapy. In K. S. Dobson (Ed.), *Handbook of cognitive-behavioral therapy* (3rd ed., pp. 411–444). Guilford Press.
- Beck, A. T. (2008). The evolution of the cognitive model of depression and its neurobiological correlates. *American Journal of Psychiatry, 165*(8), 969–977. <https://doi.org/10.1176/appi.ajp.2008.08050721>
- Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2014). *Comprehensive meta-analysis (CMA) software* (Version 3.0). Biostat.
- Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2021). *Introduction to meta-analysis*. John Wiley & Sons.
- Budd, R., & Hughes, I. (2009). The Dodo Bird verdict—controversial, inevitable and important: A commentary on 30 years of meta-analyses'. *Clinical Psychology & Psychotherapy, 16*(6), 510–522. <https://doi.org/10.1002/cpp.648>
- Carr, A. (2000). Research update: Evidence-based practice in family therapy and systemic consultation. II. Adult focused problems. *Journal of Family Therapy, 22*(3), 273–295. <https://doi.org/10.1111/1467-6427.00152>
- Carr, A. (2009). The effectiveness of family therapy and systemic interventions for adult-focused problems. *Journal of Family Therapy, 31*(1), 46–74. <https://doi.org/10.1111/j.1467-6427.2008.00452.x>
- Carr, A. (2019). Couple therapy, family therapy and systemic interventions for adult-focused problems: The current evidence base. *Journal of Family Therapy, 41*(4), 492–536. <https://doi.org/10.1111/1467-6427.12225>
- Carr, A., Pinquart, M., & Haun, M. W. (2020). Research-informed practice of systemic therapy. In M. Ochs, M. Borcsa, & J. Schweitzer (Eds.), *Systemic research in individual, couple, and family therapy and counselling* (pp. 319–347). Springer International.
- Carr, A., & Stratton, P. (2017). The score family assessment questionnaire: A decade of progress. *Family Process, 56*(2), 285–301. <https://doi.org/10.1111/famp.12280>
- Chen, Q., Zhao, W., Li, Q., & Sagi, H. (2021). The influence of family therapy on psychological stress and social adaptability of depressed patients. *Work, 69*(2), 613–624. <https://doi.org/10.3233/WOR-213503>
- Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155–159. <https://doi.org/10.1037/0033-2909.112.1.155>
- Cooper, H. M., Hedges, L. V., & Valentine, J. C. (Eds.). (2019). *The handbook of research synthesis and meta-analysis* (3rd ed.). Russell Sage Foundation.
- Cooper, Z., Mowbray, O., Ali, M., & Johnson, L. (2024, under review). Addressing depression and comorbid health conditions with a solution-focused brief intervention in an integrated care setting: A randomized clinical trial. <http://doi.org/10.2139/ssrn.4671847>
- Crane, R., & Christenson, J. (2014). A summary report of cost-effectiveness: Recognizing the value of family therapy in health care. In J. Hodgson, A. Lamson, T. Mendenhall, & R. Crane (Eds.), *Medical family therapy: Advanced applications* (pp. 419–436). Springer.
- Cuijpers, P., Griffin, J. W., & Furukawa, T. A. (2021). The lack of statistical power of subgroup analyses in meta-analyses: A

- cautionary note. *Epidemiology and Psychiatric Sciences*, 30, e78. <https://doi.org/10.1017/S2045796021000664>
- Cuijpers, P., Karyotaki, E., de Wit, L., & Ebert, D. D. (2020). The effects of fifteen evidence-supported therapies for adult depression: A meta-analytic review. *Psychotherapy Research*, 30(3), 279–293. <https://doi.org/10.1080/10503307.2019.1649732>
- Cuijpers, P., Quero, S., Noma, H., Ciharova, M., Miguel, C., Karyotaki, E., Cipriani, A., Cristea, I. A., & Furukawa, T. A. (2021). Psychotherapies for depression: A network meta-analysis covering efficacy, acceptability and long-term outcomes of all main treatment types. *World Psychiatry*, 20(2), 283–293. <https://doi.org/10.1002/wps.20860>
- Cuijpers, P., van Straten, A., Bohlmeijer, E., Hollon, S. D., & Andersson, G. (2010). The effects of psychotherapy for adult depression are overestimated: A meta-analysis of study quality and effect size. *Psychological Medicine*, 40(2), 211–223. <https://doi.org/10.1017/S0033291709006114>
- Dallos, R., & Draper, R. (2005). *An introduction to family therapy. Systemic theory and practice* (2nd ed.). Open University Press.
- Dashtizadeh, N., Sajedi, H., Nazari, A., Davarniya, R., & Shakarami, M. (2015). Effectiveness of solution-focused brief therapy (SFBT) on reducing symptoms of depression in women. *Journal of Clinical Nursing and Midwifery*, 4(3), 67–78.
- Dean, J., & Keshavan, M. (2017). The neurobiology of depression: An integrated view. *Asian Journal of Psychiatry*, 27, 101–111. <https://doi.org/10.1016/j.ajp.2017.01.025>
- Deeks, J. J., Higgins, J. P., Altman, D. G., & Cochrane Statistical Methods Group. (2019). Analysing data and undertaking meta-analyses. In J. P. T. Higgins & S. Green (Eds.), *Cochrane handbook for systematic reviews of interventions* (2nd ed., pp. 241–284). Wiley-Blackwell.
- de Shazer, S. (2005). *More than miracles: The state of the art of solution-focused therapy*. Haworth Press.
- Dessaules, A., Johnson, S. M., & Denton, W. H. (2003). Emotion-focused therapy for couples in the treatment of depression: A pilot study. *The American Journal of Family Therapy*, 31(5), 345–353. <https://doi.org/10.1080/01926180390232266>
- Duval, S., & Tweedie, R. (2000). Trim and fill: A simple funnel-plot-based method of testing and adjusting for publication bias in meta-analysis. *Biometrics*, 56(2), 455–463. <https://doi.org/10.1111/j.0006-341X.2000.00455.x>
- Ebrahimi, P., Soleimani, M., & Abdi, M. (2023). The effectiveness of solution-focused approach on increasing social adjustment and reducing clinical depression in elderly women of Kermanshah. *Aging Psychology*, 9(2), 151–165.
- Egger, M., Smith, G. D., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple, graphical test. *British Medical Journal*, 315(7109), 629. <https://doi.org/10.1136/bmj.315.7109.629>
- Epstein, N. B., Berger, A. T., Fang, J. J., Messina, L. A., Smith, J. R., Lloyd, T. D., Fang, X., & Liu, Q. X. (2012). Applying western-developed family therapy models in China. *Journal of Family Psychotherapy*, 23(3), 217–237. <https://doi.org/10.1080/08975353.2012.705661>
- Fabbri, S., Fava, G. A., Rafanelli, C., & Tomba, E. (2007). Family intervention approach to loss of clinical effect during long-term antidepressant treatment: A pilot study. *Journal of Clinical Psychiatry*, 68, 1348–1351. <https://doi.org/10.4088/JCP.v68n0904>
- Filges, T., Andersen, D., & Jørgensen, A.-M. K. (2018). Effects of multidimensional family therapy (MDFT) on nonopioid drug abuse: A systematic review and meta-analysis. *Research on Social Work Practice*, 28(1), 68–83. <https://doi.org/10.1177/1049731515608241>
- Flückiger, C., Del Re, A. C., Barth, J., Hoyt, W. T., Levitt, H., Munder, T., Spielmanns, G. I., Swift, J. K., Vislã, A., & Wampold, B. E. (2018). Considerations of how to conduct meta-analyses in psychological interventions. *Psychotherapy Research*, 28(3), 329–332. <https://doi.org/10.1080/10503307.2018.1430390>
- Friedman, A. S. (1975). Interaction of drug therapy with marital therapy in depressive patients. *Archives of General Psychiatry*, 32, 619–637. <https://doi.org/10.1001/archpsyc.1975.01760230085007>
- Gabriel, F. C., Stein, A. T., Melo, D. d., Fontes-Mota, G. C. H., dos Santos, I. B., Rodrigues, C. d., Dourado, A., Rodrigues, M. C., Fráguas, R., Florez, I. D., Correia, D. T., & Ribeiro, E. (2023). Guidelines' recommendations for the treatment-resistant depression: A systematic review of their quality. *PLoS One*, 18(2), e0281501. <https://doi.org/10.1371/journal.pone.0281501>
- Habibi, M., Ghaderi, K., Abedini, S., & Jamshidnejad, N. (2016). The effectiveness of solution-focused brief therapy on reducing depression in women. *International Journal of Educational and Psychological Researches*, 2(4), 244–249.
- Haley, J. (1963). *Strategies of psychotherapy*. Grune and Stratton.
- Huang, C., Han, W., & Hu, S. (2022). The effects of the solution-focused model on anxiety and postpartum depression in nulliparous pregnant women. *Frontiers in Psychology*, 13, 814892. <https://doi.org/10.3389/fpsyg.2022.814892>
- Huang, Y., Li, Y., Haun, M. W., Xie, R., Yang, L., Retzlaff, R., & Qian, Y. (2024). Systemic therapy for children and adolescents with depression: A systematic review and meta-analysis. *Current Psychology*, 43(4), 3355–3367. <https://doi.org/10.1007/s12144-023-04558-5>
- Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen (IQWiG). (2017). *Abschlussbericht Systemische Therapie als Psychotherapieverfahren bei Erwachsenen*. Auftrag N14-2. Version 1.0 Stand: 24.05.2017. N14-02 - Abschlussbericht - Systemische Therapie bei Erwachsenen - Version 1.0 (iqwig.de). Retrieved April 4, 2023.
- Jones, E., & Asen, E. (2000). *Systemic couple therapy and depression*. Karnac.
- Knekt, P., Lindfors, O., Härkänen, T., Välikoski, M., Virtala, E., Laaksonen, M. A., Marttunen, M., Kaipainen, M., & Renlund, C. (2008). Randomized trial on the effectiveness of long- and short-term psychodynamic psychotherapy and solution-focused therapy on psychiatric symptoms during a 3-year follow-up. *Psychological Medicine*, 38(5), 689–703. <http://doi.org/10.1017/S003329170700164X>
- Knekt, P., Lindfors, O., Sares-Jäske, L., Virtala, E., & Härkänen, T. (2013). Randomized trial on the effectiveness of long- and short-term psychotherapy on psychiatric symptoms and working ability during a 5-year follow-up. *Nordic Journal of Psychiatry*, 67(1), 59–68. <http://doi.org/10.3109/08039488.2012.680910>
- Knekt, P., Virtala, E., Härkänen, T., Vaarama, M., Lehtonen, J., & Lindfors, O. (2016). The outcome of short- and long-term psychotherapy 10 years after start of treatment. *Psychological Medicine*, 46(6), 1175–1188. <http://doi.org/10.1017/S0033291715002718>
- Kok, R. M., & Reynolds, C. F., 3rd (2017). Management of depression in older adults: A review. *JAMA Psychiatry*, 317(20), 2114–2122. <https://doi.org/10.1001/jama.2017.5706>
- Kramer, J., Conijn, B., Oijevaar, P., & Riper, H. (2014). Effectiveness of a web-based solution-focused brief chat treatment for depressed adolescents and young adults: Randomized controlled trial. *Journal of Medical Internet Research*, 16(5), e141. <https://doi.org/10.2196/jmir.3261>
- Kriston, L. (2013). Dealing with clinical heterogeneity in meta-analysis. Assumptions, methods, interpretation. *International Journal of Methods in Psychiatric Research*, 22(1), 1–15. <https://doi.org/10.1002/mpr.1377>
- Lee, B. K., & Ofori Dei, S. M. (2022). Changes in work status, couple adjustment, and recovery capital: Secondary analysis



- of data from a congruence couple therapy randomized controlled trial. *Substance abuse: research and treatment*, 16, 11782218221088875. <https://doi.org/10.1177/11782218221088875>
- Leff, J., Vearnals, S., Brewin, C. R., Wolff, G., Alexander, B., Asen, E., Dayson, D., Jones, E., Chisholm, D., & Everitt, B. (2000). The London depression intervention trial. Randomised controlled trial of antidepressants v couple therapy in the treatment and maintenance of people with depression living with the partner: Clinical outcome and costs. *British Journal of Psychiatry*, 177(2), 95–100. <https://doi.org/10.1192/bjp.177.2.95>
- Lemmens, G. M. D., Eisler, I., Buysse, A., Heene, E., & Demyttenaere, K. (2009). The effects on mood of adjunctive single-family and multi-family group therapy in the treatment of hospitalized patients with major depression. *Psychotherapy and Psychosomatics*, 78(2), 98–105. <https://doi.org/10.1159/000201935>
- Li, Y., Solomon, P., Zhang, A., Franklin, C., Ji, Q., & Chen, Y. (2018). Efficacy of solution-focused brief therapy for distress among parents of children with congenital heart disease in China. *Health and Social Work*, 43(1), 30–40. <https://doi.org/10.1093/hsw/hlx045>
- Lindström, M., Saidj, M., Kowalski, K., Filges, T., Rasmussen, P. S., & Jørgensen, A.-M. K. (2013). Brief strategic family therapy (BSFT) for young people in treatment for non-opioid drug use: A systematic review. *Campbell Systematic Reviews*, 9(1), 1–95. <https://doi.org/10.4073/csr.2013.7>
- Lopes, R. T., Gonçalves, M. M., Fassnacht, D. B., Machado, P. P., & Sousa, I. (2014). Long-term effects of psychotherapy on moderate depression: a comparative study of narrative therapy and cognitive-behavioral therapy. *Journal of Affective Disorders*, 167, 64–73. <https://doi.org/10.1016/j.jad.2014.05.042>
- Lopes, R. T., Gonçalves, M. M., Machado, P. P., Sinai, D., Bento, T., & Salgado, J. (2014). Narrative therapy vs. cognitive-behavioral therapy for moderate depression: empirical evidence from a controlled clinical trial. *Psychotherapy Research*, 24(6), 662–674. <https://doi.org/10.1080/10503307.2013.874052>
- López-López, J. A., Davies, S. R., Caldwell, D. M., Churchill, R., Peters, T. J., Tallon, D., Dawson, S., Wu, Q., Li, J., Taylor, A., Lewis, G., Kessler, D. S., Wiles, N., & Welton, N. J. (2019). The process and delivery of CBT for depression in adults: A systematic review and network meta-analysis. *Psychological Medicine*, 49(12), 1937–1947. <https://doi.org/10.1017/S003329171900120X>
- Miller, I. W., Keitner, G. I., Ryan, C. E., Solomon, D. A., Cardemil, E. V., & Beevers, C. G. (2005). Treatment matching in the posthospital care of depressed patients. *American Journal of Psychiatry*, 162, 2131–2138. <https://doi.org/10.1176/appi.ajp.162.11.2131>
- Minuchin, S. (1974). *Families and family therapy*. Harvard University Press.
- Moghadam, Z. P., Ejtehadi, Z., Yazdan-Panah, Z., Heydari, S., & Karimi, N. (2023). The effects of the solution-focused therapy on postpartum depression and anxiety. *International Journal of Body, Mind and Culture*, 10(3), 240–249.
- Pinquart, M., Oslejsek, B., & Teubert, D. (2016). Efficacy of systemic therapy on adults with mental disorders: A meta-analysis. *Psychotherapy Research*, 26(2), 241–257. <https://doi.org/10.1080/10503307.2014.935830>
- Pizadi, L., Vakilian, K., Farzan Azar, F., & Norouzi, E. (2023). Effect of solution-focused counselling on depression and quality of life in women under mastectomy: A randomized clinical trial. *The Open Public Health Journal*, 16(1), e187494452308220. <https://doi.org/10.2174/0118749445259180230921113303>
- Poole, L. A., Knight, T., Toumbourou, J. W., Lubman, D. I., Bertino, M. D., & Lewis, A. J. (2018). A randomized controlled trial of the impact of a family-based adolescent depression intervention on both youth and parent mental health outcomes. *Journal of Abnormal Child Psychology*, 46(1), 169–181. <https://doi.org/10.1007/s10802-017-0292-7>
- Rosenthal, R. (1979). The file drawer problem and tolerance for null results. *Psychological Bulletin*, 86(3), 638–641. <https://doi.org/10.1037/0033-2909.86.3.638>
- Rychetnik, L., Hawe, P., Waters, E., Barratt, A., & Frommer, M. (2004). A glossary for evidence based public health. *Journal of Epidemiology & Community Health*, 58(7), 538–545. <https://doi.org/10.1136/jech.2003.011585>
- Saadati, L. G., Shohreh, G. S., & Khalatbari, J. (2022). Comparison of the effectiveness of “Solution-Focused Brief Therapy” and “Compassion-Focused Therapy” on ruminative responses of couples with depression. *Journal of Health Promotion Management (JHPM)*, 11(5), 16–28.
- Schmit, E. L., Schmit, M. K., & Lenz, S. (2016). Meta-analysis of solution-focused brief therapy for treating symptoms of internalizing disorders. *Counseling Outcome Research and Evaluation*, 7(1), 21–39. <https://doi.org/10.1177/2150137815623836>
- Seikkula, J., Aaltonen, J., Kalla, O., Saarinen, P., & Tolvanen, A. (2013). Couple therapy for depression in a naturalistic setting in Finland: A 2-year randomized trial. *Journal of Family Therapy*, 35(3), 281–230. <https://doi.org/10.1111/j.1467-6427.2012.00592.x>
- Sexton, T. (2011). *Functional family therapy in clinical practice*. Routledge. <https://doi.org/10.4324/9780203882665>
- Sexton, T. (2015). Functional family therapy. In T. Sexton, & J. Lebow (Eds.), *Handbook of family therapy* (4th ed., pp. 250–270). Routledge.
- Shadish, W. R., Montgomery, L. M., Wilson, P., Wilson, M. R., Bright, I., & Okwumabua, T. (1993). Effects of family and marital psychotherapies: A meta-analysis. *Journal of Consulting and Clinical Psychology*, 61, 992–1002. <https://doi.org/10.1037/0022-006X.61.6.992>
- Shakeri, J., Ahmadi, S. M., Maleki, F., Hesami, M. R., Parsa Moghadam, A., Ahmadzade, A., Shirzadi, M., & Elahi, A. (2020). Effectiveness of group narrative therapy on depression, quality of life, and anxiety in people with amphetamine addiction: A randomized clinical trial. *Iranian Journal of Medical Sciences*, 45(2), 91–99. <https://doi.org/10.30476/IJMS.2019.45829>
- Shepherd, M., & Butler, L. (2021). The underuse of couple therapy for depression in Improving Access to Psychological Therapies Services (IAPTS): A service evaluation exploring its effectiveness and discussion of systemic barriers to its implementation. *Journal of Family Therapy*, 43(4), 493–515. <https://doi.org/10.1111/1467-6427.12323>
- Sim, T., & Sim, C. (2020). Global contexts for the profession of systemic family therapy. In K. S. Wampler, R. B. Miller, & R. B. Seedall (Eds.), *The handbook of systemic family therapy: Volume 1* (1st ed., pp. 51–77). John Wiley & Sons.
- Spielmanns, G. I., Gatlin, E. T., & McFall, J. P. (2010). The efficacy of evidence-based psychotherapies versus usual care for youths: Controlling confounds in a meta-reanalysis. *Psychotherapy Research*, 20(2), 234–246. <https://doi.org/10.1080/10503300903311293>
- Stratton, P., Bland, J., Janes, E., & Lask, J. (2010). Developing an indicator of family function and a practicable outcome measure for systemic family and couple therapy: The SCORE. *Journal of Family Therapy*, 32(3), 232–258. <https://doi.org/10.1111/j.1467-6427.2010.00507.x>
- Trusty, W. T., Swift, J. K., & Rasmussen, E. B. (2021). A behavioral economic model of help-seeking for depression. *Perspectives on Behavior Science*, 44(11), 1–20.

- Valentine, J. C., Pigott, T. D., & Rothstein, H. R. (2010). How many studies do you need? A primer on statistical power for meta-analysis. *Journal of Educational and Behavioral Statistics*, 35(2), 215–247. <https://doi.org/10.3102/1076998609346961>
- Van der Pol, T., Hoeve, M., Noom, M. J., Jan, G., Stams, J. M., Doreleijers, T. A. H., van Domburgh, L., & Vermeiren, R. R. J. M. (2017). Research review: The effectiveness of multidimensional family therapy in treating adolescents with multiple behavior problems – a meta-analysis. *Journal of Child Psychology and Psychiatry*, 58(5), 532–545. <https://doi.org/10.1111/jcpp.12685>
- Van der Stouwe, T., Asscher, J. J., Stams, G. J., Deković, M., & van der Laan, P. H. (2014). The effectiveness of Multisystemic Therapy (MST): A meta-analysis. *Clinical Psychology Review*, 34(6), 468–481. Epub 2014 Jun 27. PMID: 25047448. <https://doi.org/10.1016/j.cpr.2014.06.006>
- von Sydow, K., Beher, S., Schweitzer, J., & Retzlaff, R. (2010). The efficacy of systemic therapy with adult patients: A meta-content analysis of 38 randomized controlled trials. *Family Process*, 49(4), 457–485. <https://doi.org/10.1111/j.1545-5300.2010.01334.x>
- von Sydow, K., & Retzlaff, R. (2021). Aktueller Stand der Systemischen Therapie. Wirksamkeitsforschung und Implementierung in das deutsche Gesundheitssystem [Current state of systemic therapy. Outcome research and implementation in the German healthcare system]. *Psychotherapeut*, 66, 469–477. <https://doi.org/10.1007/s00278-021-00547-w>
- Vossler, A. (2010). Systemic approaches. In M. Barker, A. Vossler, & D. Langdridge (Eds.), *Understanding counselling and psychotherapy* (pp. 191–210). Sage Publisher.
- Wang, Z.-H., Li, X., & Shi, Y. (2011). Systemic family therapy combined with sertraline treatment for depression (in Chinese). *Practical Clinical Medicine*, 12, 6.
- Whisman, M. A., Johnson, D. P., Be, D., & Li, A. (2012). Couple-based interventions for depression. *Couple and Family Psychology: Research and Practice*, 1(3), 185–198. <https://doi.org/10.1037/a0029960>
- White, M., & Epston, D. (1990). *Narrative means to therapeutic ends*. W.W. Norton.
- World Health Organization. (2017). *Depression and other common mental disorders: Global health estimates*. Retrieved December 21, 2023 WHO. Depression and Other Common Mental Disorders (who.int).
- Wu, Q., & Slesnick, N. (2019). Interruption of dysfunctional mother-child reciprocal influences associated with family therapy. *Journal of Family Psychology: JFP: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, 33(7), 753–763. <https://doi.org/10.1037/fam0000536>
- Xi, M. (2011). Treatment of college students' depression with solution-focused group counselling (in Chinese). *China Journal of Health Psychology*, 19, 223–225.
- Zhang, A., Franklin, C., Currin-McCulloch, J., Park, S., & Kim, J. (2018). The effectiveness of strength-based, solution-focused brief therapy in medical settings: A systematic review and meta-analysis of randomized controlled trials. *Journal of Behavioral Medicine*, 41(2), 139–151. <https://doi.org/10.1007/s10865-017-9888-1>
- Zhu, C., Zhang, T., Li, Q., Chen, X., & Wang, K. (2023). Depression and anxiety during the COVID-19 pandemic: Epidemiology, mechanism, and treatment. *Neuroscience Bulletin*, 39(4), 675–684. doi:10.1007/s12264-022-00970-2