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Differential Response during Humanistic Experiential Psychological Therapy for Depression

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Declaration

I, the author, confirm that this Thesis is my own work which has not been submitted for any other degree or to any other institution.

Word Count

Scoping Review

Excluding references and tables: 7,756

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Empirical Study

Excluding references and tables: 7,998

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Total

Excluding references and tables: 15,756

Including references and tables: 26,119

Lay Summary

A range of psychological therapies are available that can effectively improve symptoms of depression, although some people respond more favourably than others. However, researchers and clinicians may define a 'treatment response' differently, influencing whether someone appears to have benefitted from treatment. In addition, many factors may impact how likely someone is to benefit from treatment; for example, characteristics related to the client (e.g., their symptoms or lifestyle factors), and characteristics of the therapy (e.g., the treatment approach). This report investigated differential treatment responses to humanistic-experiential psychological (HEP) therapy. HEP treatment is a broad term that includes different types of therapies that all focus on a person's individuality, their personal experiences and needs, and the relationship between the client and therapist.

The first section of this report is a scoping review that aimed to 'scope out' the available evidence on factors associated with treatment response in HEP treatment for depression. Additionally, the review aimed to clarify how 'treatment response' has been defined in the literature. Twenty-four studies were included. Two studies were observations from clinical practice (observational studies), and the rest used data from research trials that randomly assigned clients to treatment (randomised trials). The scoping review highlighted that the factors measured when considering 'treatment response' influence whether a person appears to have responded to therapy. However, most research in the area re-used data from two small-scale randomised trials. Therefore, the evidence was limited but emphasised the importance of hearing the patient's perspective on what a 'good outcome' would look like for them. More research is required to better understand the factors that impact differential treatment responses, and to gain more knowledge of what treatments work well for whom.

The second section of this report was a study that used an existing data set from a randomised trial comparing two psychological treatments: person-centred experiential therapy (PCET; a type of HEP), and cognitive-behavioural therapy (CBT). The study investigated how depression scores, during an early and later time point in therapy, were associated with 'clinically significant' improvement and recovery at the end of therapy. The study also investigated factors associated with an early response to therapy. The data were analysed using regressions, a statistical technique that investigated how client characteristics/symptoms (at different points during therapy), and the treatment approach (PCET or CBT), were related to treatment response. The results indicated that lower depression scores, early and later in therapy, were associated with improvement and 'recovery' at the end of therapy. However, there were differences between the treatment approaches; mainly, people with mild depression symptoms at session four appeared to do better in PCET, whereas people who still had moderate-severe depression symptoms at session four appeared to do better in CBT. In addition, females were more likely to have an early response during therapy; however, this finding should be treated with caution as the analysis was not sufficiently robust.

Overall, the findings suggest that differential treatment responses are related to client-specific and treatment-specific factors. However, more research using larger patient samples is needed before conclusions can be drawn.

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Contents

Section One: Literature Review

Factors Associated with Response during Humanistic Experiential Psychological Therapy for Depression: A Scoping Review

Abstract

Objective: This quantitative scoping review sought to collate, summarise, and clarify the evidence on factors that impact treatment response in Humanistic Experiential Psychological (HEP) therapy for depression. Further, by exploring how treatment response has been defined and shaped by the literature, it aimed to summarise the potential implications of the available evidence base to identify limitations and gaps within the subject area.

Methods: Systematic searches were conducted on four databases (Scopus, PsychINFO, Web of Science, ProQuest) in December 2022. Supplementary hand searchers were carried out on Google Scholar. Search syntax was kept broad and included terms related to factors associated with response to HEP treatment for depression. Study characteristics were tabulated, and key findings were narratively synthesised.

Results: Twenty-four studies were included; two were observational studies, and the remaining were randomised trials. The majority of included studies were secondary analyses of two underpowered randomised control trials. In the other trials, HEP was mainly the comparator-control treatment; these data likely influenced what and how variables were measured. Results highlighted that influences on outcomes depend on how a concept is measured, how the outcome is defined, and what other variables are considered.

Conclusion: Evidence on factors influencing response in HEP treatment for depression is sparse and requires attention. Data from two HEP-specific trials has been overused. Other randomised trials in this area are driven by cognitive-behavioural approaches, where HEPs are the comparator-control treatment. Observational data are underutilised and may prove fruitful in further exploring differential treatment responses in HEP.

Practitioner Points:

- Symptom-focused outcome measures do not align with the underpinnings of the HEP approach; patient-reported outcome measures may provide rich information in clinical and research practice.
- Baseline and within-session factors that impact treatment response require attention in clinical and research practice.
- Comorbidities and sub-optimal treatment expectations may not necessarily negatively influence psychotherapeutic outcomes in HEP, though future research is required before conclusions are drawn.

Keywords: humanistic and experiential therapy; psychotherapy; depression; treatment response; predictors

Humanistic and experiential psychological therapies, as defined by Elliott et al. (2021), encompass major sub-approaches including, but not limited to, person-centred therapy (e.g., Rogers, 1961), gestalt (e.g., Perls et al., 1951), and emotion-focused therapy (e.g., Greenberg et al., 1993). Whilst these approaches present diversity in their development and (to a degree) technique, at their core, they share distinctive theoretical assumptions (Pascual-Leone et al., 2016). Pertinently, humanistic experiential psychological therapies (HEP) value the importance of an empathetic, facilitative therapeutic relationship that offers the client a new, corrective, and validating emotional experience (Greenberg & Elliott, 2012). This relationship serves as a vehicle for therapeutic change, stimulating and promoting a client's emotional experiences (Watson et al., 2011). Whilst HEP sub-approaches do differ in the degree to which they are process-guiding (Elliott et al., 2021; Sachse, 1992), all, by nature, are person-centred in that they aim to develop one's self-awareness and sense-making (Bohart & Watson, 2011).

While HEP research has expanded over the last few decades, these approaches often form part of a non-specific relationship control under generic labels such as supportive or non-directive therapy (Elliott et al., 2021). These control groups typically concern 'less process guiding' treatments, where the therapist is less active and non-directive. When HEP is seen as a generic control, it only compounds and perpetuates misconceptions around the approach as inferior to other (dominating) psychotherapeutic therapies, mainly cognitive behavioural therapy (CBT). Yet, a recent systematic review and meta-analysis of the effectiveness of HEP found no significant difference in depression outcomes post-treatment when compared with other active controls and significantly better outcomes post-treatment when compared with treatment-as-usual (Duffy et al., 2023). Though the effectiveness of HEP appears similar to other popular approaches, they continue to be viewed as a second-tier therapy option (Elliott et al., 2021).

Factors associated with treatment response are of growing interest in psychotherapeutic research (Cuijpers et al., 2019). Although a clear understanding of what factors impact differential responses within HEP is lacking, early primary research found economic activity, continuous/recurrent depression, and being male to be predictors of poorer outcomes in brief client-centred therapy (Saxon et al., 2008). While these (underpowered) findings should be considered cautiously, predictors were similar to those reported in systematic reviews from other psychotherapeutic approaches (e.g., Amati et al., 2018; Johnsen & Friborg, 2015; Van et al., 2008).

A further area of interest, in addition to client characteristics, which are well documented to impact therapeutic outcomes, concerns therapists' qualities that likely influence differential outcomes (Heinonen & Nissen-Lie, 2020; Wampold et al., 2017). A considerable difference in the effectiveness between therapists is reported in the literature, though what constitutes these differential effects are less understood (Firth et al., 2019; Saxon & Barkham, 2012). Still, evidence on the impact of client and therapist characteristics, specific to outcomes in HEP, is lacking.

To aid the identification of variables that predict differential treatment responses, personalised methods have been applied to the psychological therapies field (Fonagy, 2010). Exploring different psychotherapeutic outcomes means developments have been made in an attempt to understand what works for whom (Rubel et al., 2020). Unsurprisingly, though, this literature mostly compares CBT with comparator therapies such as interpersonal therapy (Huibers et al., 2015), psychodynamic therapy (Cohen et al., 2020), and psychotropic medication (DeRubeis et al., 2014). Moreover, when person-centred analytical methods have been used to compare CBT to counselling, the theoretical underpinning of the counselling approach is not always specified (e.g., Saunders et al., 2020), with the result that this only exacerbates the status quo that HEPs are viewed as less favoured therapies.

A recent systematic meta-review of patient-level predictors synthesised findings of 74 predictors of psychological therapy outcomes in major depressive disorders (Tanguay-Sela et al., 2022). Whilst predictors frequently (re)appear within the available evidence base, again, CBT was overwhelmingly represented in these findings. As such, various demographic and symptom-based predictors are reported, and less attention is given to process-orientated predictors. Further, given the nature of a meta-review, bias is of concern as primary research from other therapeutic modalities becomes diluted or, worse, missed. Case in point – not a single HEP approach was accounted for within this meta-review; one of, if not the largest, predictor-outcome reviews to date. So, although the literature concerning factors that impact treatment response is extensive, covering a multitude of presenting problems (e.g., Grilo et al., 2012; Hamilton & Dobson, 2002; Olatunji et al., 2013; Porter & Chambless, 2015) and treatment-delivery modes (e.g., Kambeitz-Ilankovic et al., 2022), unsurprisingly, most of this research focuses on (variants of) CBT. By contrast, little attention has been paid to factors that impact treatment response in HEP (Elliott et al., 2021).

Another issue with dominant psychotherapeutic approaches governing the process-outcome literature relates to the measurements used. Whilst routine outcome monitoring may aid therapeutic work, knowing what measures to use and how best to interpret the information they provide is challenging in clinical practice (Aafjes-van Doorn & de Jong, 2022). Most research on the effects of psychological therapies focuses on symptom reduction. While these measures may complement cognitive and behavioural treatments, they do not align with the ethos of HEP, where self-actualisation is considered a core component of therapy (Cuijpers, 2019). Controversially, it has been argued that deterioration on symptom-focused outcome measures could be indicative of a positive outcome (Hill et al., 2016), whereby patients move towards experiencing difficult emotions, which, in turn, promotes a (re)consideration of needs (Yalom, 2020).

Regardless of one's stance, other measures should be considered, especially in approaches where symptoms are deemed secondary, as is the case in HEP. Multidimensional measures of impact and quality of life may offer a breadth that symptom-focused measures lack (Barkham, 2021; Kolovos et al., 2016), although these may still fail to capture what is considered important from a patient's perspective (see Sales et al., 2022; Timulak & Keoghs, 2017).

More recent work has shifted focus to 'when' and 'how' treatment response is measured. Sessional outcome monitoring has enabled the effects of early response and within-session sudden gains to come to light; both have been found to significantly predict improvement in therapeutic outcomes (respectively, Beard & Delgadillo, 2019; Shalom & Aderka, 2020). In addition, using within-session progress feedback has been found to improve outcomes and reduce dropouts, though pertinently, these effects were moderated by the feedback instrument used (Barkham et al., 2023; de Jong et al., 2021). Overall, it appears that findings related to predictor-outcome associates depend on what and how aspects are measured. This requires attention.

Objectives

Systematic reviews aim to represent the gold standard of evidence (Moore et al., 2022). Whilst they were brought about to reduce bias and random errors (Cook et al., 1997), the (more recent) mass production and distribution can lead to redundant, misleading, and conflicting information, at times, from those with vested interests (Page & Moher, 2016). While scoping reviews have limitations, they are generally broader, thus, more inclusive (Gottlieb et al., 2021). They provide an overview of the existing literature, clarify key concepts, and identify knowledge gaps (Munn et al., 2018); thus, they are particularly fruitful when evidence is emerging (Peterson et al., 2017).

Given that little attention has been paid to the variables that influence treatment outcomes in HEPs (Elliott et al., 2021), a focus on how and when treatment response is measured – and what factors impact treatment response – was of interest within the present review. However, these data are relatively limited and, to the author's knowledge, yet to be collated and summarised in a systematic way. Therefore, a scoping review was considered fitting given the heterogenous literature on factors associated with treatment response in HEPs.

The review aimed to collate, summarise, and clarify the evidence on factors that impact treatment response in HEP, specifically for the treatment of depression. Further, it aimed to understand how 'treatment response' as a concept has been defined and shaped in this literature by defining the approaches and techniques used to identify outcomes. By providing a comprehensive picture of what factors impact treatment response in HEP, the review aimed to reference how these factors relate to findings from comparator non-HEP psychotherapies. Broadly capturing themes and key concepts was considered important to understand what is currently driving the research. Clinical and research implications, limitations, and gaps were then summarised.

Review Questions

(1) What factors associated with treatment response have been identified in the HEP literature?

(2) Where factors have been researched, what approaches, techniques, or indicators are used to identify a treatment response in HEP?

(3) What are the potential implications of the evidence base related to factors that impact treatment response in HEP?

(4) What are the research limitations and gaps within this subject area?

Method

A well-established scoping review framework (Arksey & O'Malley, 2005) informed methodological decision-making; reporting followed Preferred Reporting Items for Systematic Reviews and Meta-Analyses Scoping Review guidelines (PRISMA-ScR; Tricco et al., 2018).

Protocol Registration

A scoping review protocol was preregistered on the Open Science Framework and is available at https://osf.io/j79ar.

Search Strategy

An initial hand search on Google Scholar ensured review feasibility and informed a pilot test on multiple databases, which enabled the identification of keywords. Based on the eligibility criteria (see Table 1) and informed by initial searches, the author then developed the search syntax; this was checked for suitability by two research experts within the field (the author's supervisors) and a Science Librarian, all based at The University of Sheffield, England. Any revisions were mutually agreed upon; search terms remained broad to increase inclusivity.

Four electronic databases – Scopus, Medline, PsycInfo, and ProQuest – were searched from inception to December 31st, 2022. ProQuest enabled additional searching of grey literature in the form of dissertations and theses. Screening 100 grey literature documents has been deemed adequate (Stevinson & Lawlor, 2004); an a-priori decision was made to double this, to screen the first 200 hits as sorted by relevance, as details surrounding HEP when acting as the control therapy are often omitted from the abstract. As promoted within scoping review guidance (Arksey & O'Malley, 2005), hand-searching took place on Google Scholar in February 2023. Compared with reference-list reviewing, hand searching reduces

(reporting-related) bias (Vassar et al., 2016). All syntax is presented in Table 2. Terms were mapped to subject heading where possible, and all searches were based on title, abstract, and keywords.

Eligibility Criteria

Table 1 outlines the full eligibility criteria. In sum, quantitative data from studies of varying designs and methodologies were included, in cases where a humanistic-experiential therapy had been provided in a community setting, to an adult participant/patient (referred to as clients hereon forward). Included studies had to outline at least one variable associated with therapeutic response, and this treatment response could be measured on any measure, at any time point, when defined by the study as the 'outcome' of therapy. Comparative studies were included when variables related to treatment response were reported separately for the HEP group. Articles where treatment groups and findings were combined (i.e., HEP with a non-HEP treatment), or which concerned multi-component interventions (e.g., HEP and medication initiation), were excluded.

Study Selection

All retrieved articles were exported into Rayyan (Ouzzani et al., 2016), a web-based software aid for academic reviews. After removing duplicates, the author (KA) independently screened each article, by title and abstract, against the eligibility criteria. To reduce the likelihood of inappropriate exclusion, articles that referred to a treatment of depression, where the treatment approach was unclear, were included in the full-text review.

Table 1

Inclusion and Exclusion Criteria for Included Studies

	Inclusion Criteria	Exclusion Criteria
Population	Adult clients (18 and above years) accessing a form of humanistic-experiential therapy for depression	Clients who are under 18
	Clients must meet criteria for depression on any recognised diagnostic procedure, or be screened as likely having depression based on a pre-specified threshold	Primary presenting problem or focus of treatment is not depression
Intervention	Any humanistic experiential therapy, as defined by Elliott et al. (2021)	Studies that do not concern HEP for the treatment of depression, or where HEP treatment for depression is combined with a non-HEP treatment
	Individual or (non-familial) group modalities where individual measures were collected	Family or couple-based treatments
Comparator[†]	Included studies must report at least one variable associated with treatment response	
	Studies that compare predictors, moderators or mediators of treatment response in HEP and non-HEP therapies will be included, only if they provide factors that relate to treatment response in HEP	Studies that compare HEP and non-HEP therapies but not provide factors associated with response to HEP specifically and separately (e.g., combined with a non-HEP treatment group)
Outcomes	Any measure of a treatment outcome, self-report or clinician/observer-rated, at any time point after commencing treatment (i.e., within-session response, end-of-treatment outcome, follow-up outcome).	Studies where a treatment response or outcome is not measured
Setting	Any out-patient setting where a HEP intervention was delivered to clients	In-patient settings
Study design	Quantitative research, including observational, experimental and clinician case studies	Qualitative (only) studies
	Published literature and grey literature in the form of dissertations and theses, in cases where the data source and findings have not been published	Dissertations and theses where the data source and findings have been published
	Studies published in the English language	Studies published in non-English language

[†]Comparator therapy studies included though not essential

Table 2

Search Strategy Used to Identify Relevant Records from Key Databases

Database	Search Strategy
Scopus, ProQuest	(TITLE-ABS-KEY (humanistic OR experiential OR person-cent* OR "person cent*" OR client-cent* OR "client cent*" OR supportive OR non-directive OR "non directive" OR emotion-focused OR "emotion focused" OR emotionally-focused OR "emotionally focused" OR "eft" OR "process experiential" OR process-experiential OR attachment-based OR " attachment based" OR "motivational interview*" OR "motivational enhancement" OR gestalt OR psychodrama OR "psycho-drama" OR "psycho drama" OR expressive OR body-oriented OR "body oriented" OR humanistic-existential OR existential OR focusing-oriented OR "focusing oriented" OR empty-chair OR "empty chair" OR counselling OR counseling OR rogerian) AND TITLE-ABS-KEY (outcome* OR respon*) AND TITLE-ABS-KEY (predict* OR moderat* OR mediat* OR covariat* OR confound* OR regress* OR multi-level OR "multi level" OR multilevel OR mlm OR "hierarchical linear" OR hlm) AND TITLE-ABS-KEY (depress* OR "mdd" OR "mood disorder" OR mood-disorder))
PsycInfo	1. exp Humanistic Psychotherapy/ or exp Humanistic Psychology/ or exp Experiential Psychotherapy/ or humanistic.mp. or experiential.mp. or process-experiential.mp. or "process experiential".mp. 2. exp Client Centered Therapy/ person-cent*.mp. or "person cent*".mp. or client-cent*.mp. or "client cent*".mp. 3. exp Supportive Psychotherapy/ or supportive.mp. or non-directive.mp. or "non directive".mp. 4. exp Emotion Focused Therapy/ or emotion-focused.mp. or "emotion focused".mp. or emotionally-focused.mp. or "emotionally focused".mp. or "eft".mp. 5. exp Gestalt Therapy/ or exp Gestalt Psychology/ or gestalt.mp. 6. exp Motivational Interviewing/ or "motivational interview*".mp. or "motivational enhancement".mp. 7. attachment-based.mp. or "attachment based".mp. 8. psychodrama.mp. or exp Psychodrama/ or psycho-drama.mp. or "psycho drama".mp. 9. exp Expressive Psychotherapy/ or expressive.mp. 10. body-oriented.mp. or "body oriented".mp. 11. exp Existential Therapy/ or existential.mp. or humanistic-existential.mp. 12. focusing-oriented.mp. or "focusing oriented".mp. 13. exp Empty Chair Technique/ or empty-chair.mp. or "empty chair".mp. 14. exp Counseling/ or counseling.mp. or exp Counseling Psychology/ or exp Counseling Psychologists/ or exp Psychotherapeutic Counseling/ or counselling.mp. 15. exp "Rogers (Carl)"/ or exp Empathy/ or rogerian.mp. 16. exp "Treatment Process and Outcome Measures"/ or exp Patient Reported Outcome Measures/ or outcome*.mp. 17. exp Emotional Responses/ or respon*.mp. 18. exp Prediction/ or predict*.mp. or moderat*.mp. or mediat*.mp. or covariat*.mp. or confound*.mp. 19. regression.mp. or exp Logistic Regression/ or exp Linear Regression/ or exp Nonlinear Regression/ or exp Multiple Regression/ or exp Statistical Regression/ or regress*.mp. or multi-level.mp. or "multi level".mp. or "MLM".mp. or "hierarchical linear".mp. or "HLM".mp. 17. exp Major Depression/ or exp "Depression (Emotion)"/ or exp Affective Disorders/ or depress*.mp. or "MDD".mp. or mood-disorder.mp. or "mood disorder".mp.

	18. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 19. 16 or 17 20. 18 or 19 21. 17 and 18 and 19 and 20
Medline	1. humanistic.mp. or experiential.mp. or process-experiential.mp. or "process experiential".mp. 2. Person-Centered Psychotherapy/ or person-cent*.mp or "person cent*".mp. or client-cent*.mp. or "client cent*".mp. 3. supportive.mp. or non-directive.mp. or "non directive".mp. 4. Emotion-Focused Therapy/ or emotion-focused.mp. or "emotion focused".mp. or emotionally-focused.mp. or "emotionally focused".mp. or "eft".mp. 5. Gestalt Therapy/ or Gestalt Theory/ or gestalt.mp. 6. Motivational Interviewing/ or "motivational interview*".mp. or "motivational enhancement".mp. 7. attachment-based.mp. or "attachment based".mp. 8. Psychodrama/ or psychodrama.mp. or "psycho drama".mp. or "psycho-drama".mp. 9. expressive.mp. 10. body-oriented.mp. or "body oriented".mp. 11. Existentialism/ or existential.mp. or humanistic-existential.mp. 12. focusing-oriented.mp. or "focusing oriented".mp. 13. empty-chair.mp. or "empty chair".mp. 14. Counseling/ counselling.mp. or counselling.mp. 15. Empathy/ or rogerian.mp. 16. Patient Reported Outcome Measures/ or Treatment Outcome/ or outcome*.mp. 17. respon*.mp. 18. predict*.mp. or moderat*.mp. or mediat*.mp. or covariat*.mp. or confound*.mp. 19. Regression Analysis/ or regress*.mp. or multi-level.mp. or "multi level".mp. or multilevel.mp. or Multilevel Analysis/ or "MLM".mp. or "hierarchical linear".mp. or HLM.mp. 20. Depressive Disorder/ or Depressive Disorder, Major/ or MDD.mp. or depress*.mp. or Depression/ or "mood disorder".mp. or Mood Disorders/ mood-disorder.mp. 18. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 19. 16 or 17 20. 18 or 19 21. 17 and 18 and 19 and 20
Google Scholar †	"[Intervention]"AND "Depression"

†Supplementary hand searches for all (previously listed) HEP interventions were conducted, individually by intervention approach, on Google Scholar. The first page of each search result was screened.

Full-text review followed a two-stage process. Firstly, KA independently reviewed articles, again against the eligibility criteria, and all articles that clearly and definitively met the exclusion criteria were excluded. The remaining articles were then reviewed by KA and independently reviewed by a final-year PhD student (PM) with expertise in quantitative systemic reviews. PM was blind to the KA's inclusion/exclusion decisions; any disagreements were later discussed, resolved, and mutually agreed upon with KA's academic supervisor (MB).

Data Charting

Descriptive information from the included studies was charted in Excel by KA and reviewed by PM and MB. This included data on article characteristics (e.g., country, study design), participants' characteristics (e.g., therapist and client characteristics), HEP intervention type and length, measures collected, analytical methods, and a summary of the findings. A second data charting form was then developed to transport and group key information based on the review's aims. This included information on the operationalisation of treatment response, identified variables associated with treatment response, reported strengths and weaknesses, and reported clinical implications.

Critical Appraisal

Scoping reviews do not aim to critically appraise findings concerning a specific question; instead, they aim to provide an overview of the available evidence (Munn et al., 2018). Thus, in line with best practice guidelines, a critical appraisal of individual sources was not conducted (Munn et al., 2018; Peters et al., 2015).

Synthesis

Following guidance (Arksey & O'Malley, 2005; Tricco et al., 2018), studies were clustered and summarised based on common themes. Study characteristics were tabulated, and key findings were narratively synthesised.

Results

In total, searches yielded 10,046 articles. Duplicates (N = 4210) were removed before the title and abstract of the remaining 5836 articles were screened. Of these, 5547 were excluded leaving 289 articles. During the two-stage full-text review process, 197 articles were excluded, and the remaining 92 were independently reviewed. In total, 24 met the eligibility criteria and were included in this review; see Figure 1 for the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Moher et al., 2009) flow diagram.

All included studies were published in peer-reviewed journals. Eight grey literature articles met all but one eligibility criterion; these articles were excluded as the data source and findings were later published and thus accounted for within the included peer-reviewed publications. All articles excluded at full-text review are reported in Appendix A.

Narrative Synthesis

An overview of the key findings, summarising study methodologies and relevant data related to review objectives and questions are narratively synthesised below.

Data Source and Design

Of the 24 included studies, 15 (62.5%) were secondary analyses of data collected within the York University Psychotherapy Depression Project, Canada (for the primary studies, see Greenberg & Watson, 1998; Goldman et al., 2006; Watson & Greenberg, 1996).

In an attempt to reduce reporting bias, these studies have been reported separately. Study characteristics of (secondary analyses of) the York Depression Studies (SA-YDS) are reported in Table 3, and all other studies are reported in Table 4.

York Depression Studies. Concerning SA-YDS, seven articles used data from the 'York I' depression study only (Greenberg & Watson, 1998), six articles combined data from the 'York I' and 'York II' (Goldman et al., 2006) depression studies, one article used data from the York II depression study only, and one article combined data from the York I depression study and data from an earlier study (Watson & Greenberg, 1996) from the YDS project. All original YDS were primary randomised clinical trials. The York I depression study (n =34) compared process-experiential and client-centred therapy, and the York II depression study (n =38) compared emotion-focused and client-centred therapy. The earliest SA-YDS, which was accounted for once within this review (Goldman et al., 2005), appears to be the original sample that later came to be known as the York I depression study, plus 2 extra clients (meaning a total of 36 clients, 34 of whom appear to be the same sample within the most referenced paper termed the 'York I' depression study). The methodology related to secondary data usage of the York I study is unclear. From here forward, the (primary) YDS will be referred to as the York I and York II depression studies, echoing the reference within the included literature.

Figure 1

PRISMA Flow Diagram

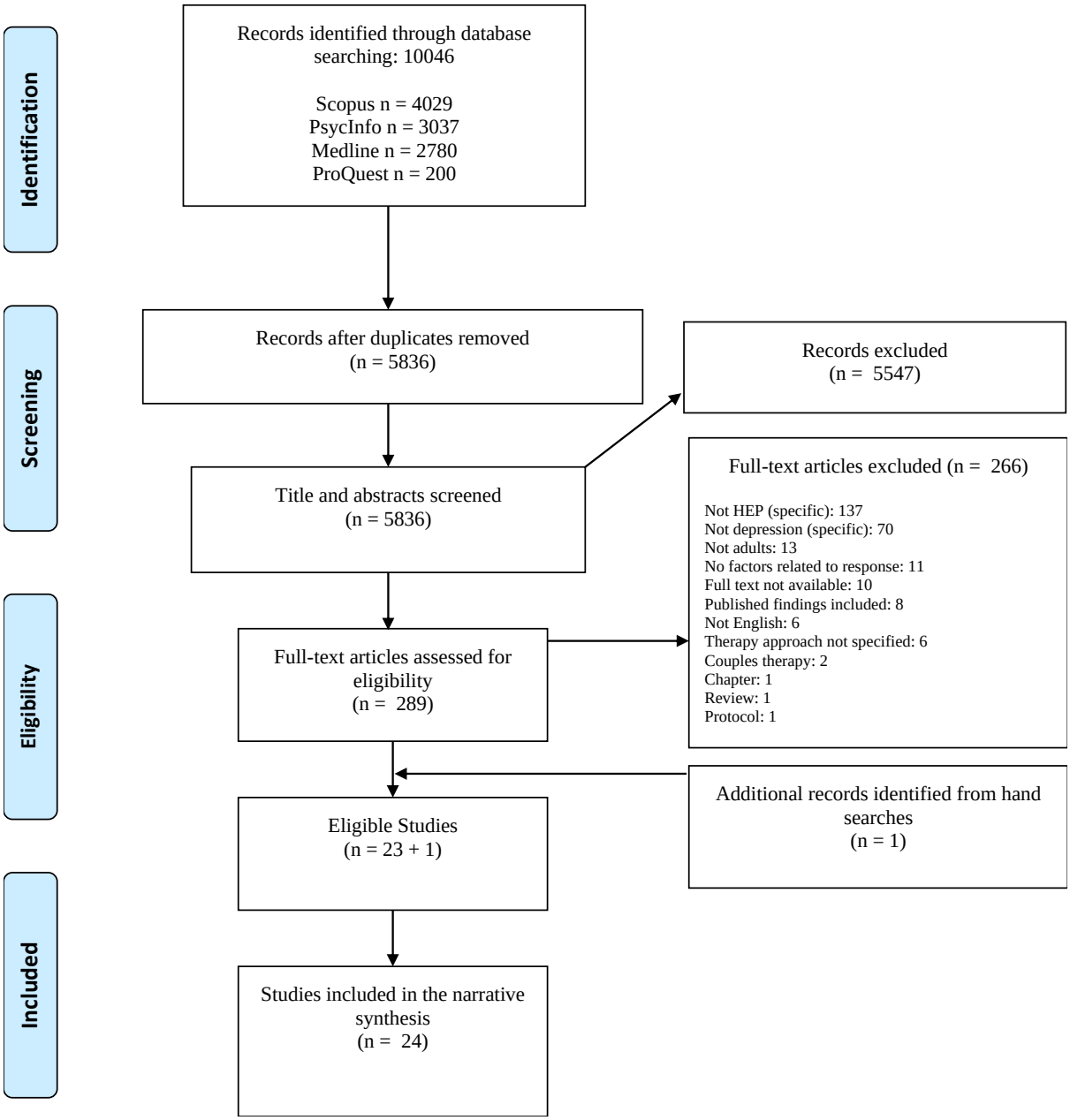

Table 3

Study Characteristics for the Secondary Analyses of the York Depression Studies

Secondary Analyses of York Depression Studies (SA-YDS)								
First Author (Year)	**Data Source**	**Study Focus**	**HEP Population (Patient, therapist)**	**Demographics (Mean age, gender)**	**Factors Impacting Outcome Measured**	**Defined Treatment Response**	**Outcome Measure/s**[†]	**Analyses**
Auszra (2013)	York I & II	Client processes during beginning and working phase of treatment	P = 74 T = 22	Age 39.9, 66% female	*Within-session* alliance, emotional productivity, emotional arousal	Residual gains (baseline – end of treatment)	BDI GSI	Hierarchical Regressions
Boritz (2008)	York I	Autobiographical memory ratings from early, middle and late stages of therapy	P = 34 T= 11	Age 39.7, 73% female	*Within-session* ABM specificity	Recovered versus unchanged at end of treatment	BDI	Hierarchical Linear Modelling
Boritz (2011)	York I	Narrative and emotional ratings from early, middle and late stages of therapy	P = 34 T = 11	Age 39.6, 74% female	*Within-session* emotional arousal, autobiographical memory subtypes	Depressed versus non-depressed at termination	BDI	Hierarchical Linear Modelling
Boritz (2013)	York I	Comparing 'recovered' versus 'unchanged' cases; three (early, middle, late) sessions from each client randomly selected	P = 8	Age 39.2, 63% female	*Within-session* narrative and emotional processing	Recovered versus unchanged at the end of treatment using clinical cut-off and reliable change index	BDI	Hierarchical Linear Modelling
Carryer (2010)	York II	Three sessions with the highest therapist-rated post-session reports of client levels of arousal and processing during the last 2/3^{rds} of therapy.	P = 38 T = 14	Age 39.5, 63% female	*Within-session* clients expressed emotional arousal, working alliance	Residual gains (baseline – end of treatment)	BDI GSI RSE IIP	Hierarchical Regression

Secondary Analyses of York Depression Studies (SA-YDS)								
First Author (Year)	**Data Source**	**Study Focus**	**HEP Population (Patient, therapist)**	**Demographics (Mean age, gender)**	**Factors Impacting Outcome Measured**	**Defined Treatment Response**	**Outcome Measure/s**[†]	**Analyses**
Goldman (2005)	York I & Watson and Greenberg (1996)	Early versus later emotional processing and alliance	P = 35 T = 11	Age 40.8, 71% female	*Within-session* emotional experience, working alliance	Residual gains (baseline – end of treatment)	BDI/GSI RSE *IIP*	Hierarchical Regression
Herrmann (2016)	York I & II	Clients' emotions during chair work during working phases of therapy	P = 30 T = 22	Age 41.7, 66% female	*Within-session* emotion (sub)types, working alliance	Residual gains (baseline – end of treatment)	BDI	Regressions
Malin (2015)	York I & II	Clients with the lowest (LA) and highest (HA) post-session one alliance ratings	P = 30 T = 16	*HA group;* age 38.9, 75% female *LA group;* age 48.9, 72% female	*Within-session* therapist empathy, client working alliance, client experiencing	Residual gains (baseline – end of treatment)	BDI	Regressions and Path Analysis
Missirlian (2005)	York I	Emotional arousal, emotional processing and alliance across early, middle and late stages of therapy	P = 32 T = 11	Age 37, 66% female	*Within-session* emotional arousal, perceptual processing, working alliance	End of treatment score	BDI RSE IIP GSI	Hierarchical Regressions
Piccirilli (2020)	York I & II	Clients' emotions during working phases of therapy	P = 55 T = 22	Not stated	*Within-session* emotional processing	Good (<10) versus Poor (≥10) outcomes 18 months post-therapy	BDI	THEME™ time-sequential analysis, Logistic Regressions

Secondary Analyses of York Depression Studies (SA-YDS)

First Author (Year)	Data Source	Study Focus	HEP Population (Patient, therapist)	Demographics (Mean age, gender)	Factors Impacting Outcome Measured	Defined Treatment Response	Outcome Measure/s[†]	Analyses
Pos (2003)	York I	Early versus late emotional processing and alliance	P = 34 T = 11	74% female	*Within-session* emotional processing, alliance	Residual gains (baseline – end of treatment)	BDI/GSI	Hierarchical Regressions
Pos (2009)	York I & II	Emotional processing and alliance across beginning, working, and termination phase of therapy	P = 74 T = 22	Age 39.9, 66% female	*Within-session* emotional processing, working alliance	Residual gains (baseline – end of treatment)	BDI GSI RSE IIP	Path Analyses
Pos (2017)	York I	Early, middle and late emotional arousal and experiencing	P = 32	Age 37, 66% female	*Within-session* emotional arousal, emotional processing	Residual gains (baseline – end of treatment)	BDI	Path analyses and regressions
Singh (2021)	York I and II	Change processes related to sudden gains	P = 23	Age 39.9, 79% female	*Prepregain, pregain, aftergain* emotional processing, affective-meaning subtypes, therapists' focus	Sudden gain Criteria	BDI	Repeated measures ANOVA, Wilcoxon
Weereasekera (2001)	York I	Working alliance across therapy	P = 34	74% female	*Within-session* working alliance	Residual gains (baseline – end of treatment)	BDI GSI EMM RSE IIP	Part correlation analyses

Abbreviations: BDI = Beck Depression Inventory (Beck, 1978); BDI/GSI = BDI and GSI composite score; EMM = Epstein's Mood Measure (Epstein, 1979); GSI = Global Severity Index (taken from SCL-90-R; Derogatis et al., 1976); IIP = Inventory of Interpersonal Problems (Horowitz, 1988); RSE = Rosenburg Self-Esteem Inventory (Rosenburg, 1979); SCL-90-R = Symptom Checklist-90-revised

[†]Italics denote non-significant findings

Table 4

Study Characteristics for Included Studies, Except the York Depression Studies

All other (non-YDS) studies									
First Author (Year), Country	**Setting; Data Source**	**Design** **Secondary Analysis (SA)**	**Population (n)** **HEP Patients (P)** **Therapists (T)**	**Patient Demographics**	**HEP Intervention** **Sessions (S)**	**Factors Impacting Outcome Measured**	**Defined Treatment Response**	**Outcome Measure/s**[†]	**Analyses**
Barbosa (2019), Portugal	Community sample; Salgado (2014)	Randomised Clinical Trial; SA	P = 6 T = 5 pretrained PhD and MSc therapists	Age 35.5, 83% female	EFT S = 16	*Within-session* Immersed and Distanced Speech	Good versus poor outcomes at the end of treatment	BDI-II	Friedman's Test
Beutler (1991), US	Research facility; primary data	3-arm randomised trial	P = 42 T= pretrained PhD psychologists and graduate students	Age 46.8, 63% female	FEP (*n* =22) S-SD (*n* =20) S = up to 20	*Baseline* coping styles	Baseline – end of treatment change scores	GSI, HRSD, *BDI, BLRI, WAI*	ANCOVAs
Cooper (2018), Scotland	Primary care; Freire (2015)	Pilot 2-Arm RCT; SA	P = 13 T = accredited counsellors	Age 43.3, 90% female	PCC S = up to 8, average 5.4	*Baseline* treatment preference	Change score from baseline to 3- and 6-month follow-up.	GRID-HAMD, *PHQ-9*, WSAS, EQ-5D-5L, SF-12v2 MH, *CSQ-8*	Linear Regressions
Delgadillo (2020), England	Primary care; IAPT, North England	Retrospective observational; routine practice data	P = 331 T = accredited counsellors	Age 41.2, 68.3% female	PCET S = up to 20, average 8.31	*Baseline* patient demographics and clinical information, plus Model-indicated treatment (MLA)	End of treatment RCSI	PHQ-9	Supervised Machine Learning Methods

All other (non-YDS) studies

First Author (Year), Country	Setting; Data Source	Design Secondary Analysis (SA)	Population (n) HEP Patients (P) Therapists (T)	Patient Demographics	HEP Intervention Sessions (S)	Factors Impacting Outcome Measured	Defined Treatment Response	Outcome Measure/s[†]	Analyses
Duffy (2022), England	Primary care; IAPT, North-West England	Retrospective observational; routine practice data	P = 3,321 T = accredited counsellors	Age 43.7, 70.2% female	PCET S = up to 20	*Baseline* patient demographics and clinical information *Within-session* early response, therapist effects	End of treatment RCSI Early versus later responders	PHQ-9	Logistic and Multi-level Regressions
Harrison (2019), England	Primary care; primary data	Pragmatic RCT	P = 43 T = accredited counsellors	Age 38.6, 55% female	PCET S = up to 20	*Baseline* expected engagement, credibility and expectancy of therapy	Baseline – end of treatment change scores	*PHQ-9*	Logistic Regression
Serbanescu (2020a), Germany	Multisite university centres; Schramm (2017)	RCT; SA of treatment completers	P = 96 T = 39 psychotherapy-trained psychotherapists and psychiatrists	Age 45.8, 60% female	SP S = 32	*Baseline* patient demographics, clinical information and characteristics	Lower continuous score at the end of treatment	HRSD	Linear Regressions
Serbanescu (2020b), Germany	Multisite university centres; Schramm (2017)	RCT; SA	P = 100-131 (unclear) T = psychotherapy-trained psychotherapists and psychiatrists	Age 45.8, 60% female	SP S = 32	*Baseline* patient demographics, clinical information and characteristics	Baseline – End of treatment change score	HRSD	Composite Moderator Approach

All other (non-YDS) studies

First Author (Year), Country	Setting; Data Source	Design Secondary Analysis (SA)	Population (n) HEP Patients (P) Therapists (T)	Patient Demographics	HEP Intervention Sessions (S)	Factors Impacting Outcome Measured	Defined Treatment Response	Outcome Measure/s[†]	Analyses
Zilcha-Mano (2022), Israel	Research facility; primary data	RCT	P = 50 T = 6 experienced therapists	Age 31.0, 58% female	ST S = up to 16	*Sessional* alliance	Sessional change scores	HRSD	Multilevel Models

Outcome Measures Abbreviations. BDI = Beck Depression Inventory (Beck, 1978); BDI-II = Beck Depression Inventory-II (Beck et al., 1996);); BLRI = Barrett-Lennard Relationship Inventory (Barrett-Lennard, 1962); CSQ-8 = Client Satisfaction Questionnaire (Attkisson & Zwick,1982); EQ-5D-5L = EuroQol Health-Related Quality of Life measure (Herdman et al., 2011); GRID-HAMD = GRID-Hamilton Depression Rating Scale (Williams et al., 2008); GSI = Global Severity Index (taken from Brief Symptom Inventory, BSI; Derogatis, 1977); HRSD = Hamilton Rating Scale for Depression (Hamilton, 1967); PHQ-9 = Patient Health Questionnaire (Kroenke et al., 2001); SF-12v2 MH = modified version of the Short Form Health Survey containing three additional mental health questions (Maruish & Turner-Bowker, 2009); WAI = Working Alliance Inventory (Horvath & Greenberg, 1986);. WSAS = Work and Social Adjustment Scale (Mundt et al., 2002).
Treatment Approach Abbreviations. EFT = Emotion-Focused Therapy (Elliott et al., 2004; Greenberg & Watson, 2006); FEP = Focused Expressive Psychotherapy (Daldrup et al., 1991); PCC = Person-Centred Counselling (Rodgers, 1957); PCET = Person-Centred Experiential Therapy (Sanders & Hill, 2014); SP = Supportive Psychotherapy (Markowitz, 2014); S-SD = Supportive Self-Directed Therapy (Scogin et al., 1987); ST = Supportive Therapy (Leibovich et al., 2018).
Remaining Abbreviations. IAPT, Improving Access to Psychological Therapies; MDD, major depressive disorder; MLA, Machine Learning Analysis; MSc, Master of Science; PBE, Practice Based Evidence; PhD, Doctor of Philosophy; RD, recurrent depression; RCSI, reliably and clinically significant improvement; RCT, Randomised Control Trial.
[†] Italics denote non-significant findings

Thus, in total, the YDS comprised a total of 74 participants. Sub-samples of these data, ranging in size (n = 8 – 74; M = 37.80; SD = 17.48), are analysed within the SA-YDS papers included within this review (k = 15). Therefore, findings from these studies should be understood in this context, as multiple secondary analyses using the same underpowered data likely exacerbates bias in this literature.

Other Included Studies. Of the remaining nine studies, seven used randomised trial data, and two were observational studies. Six of the seven randomised trials compared HEP to a cognitive or cognitive-behavioural therapy (Barbosa et al., 2019; Beutler et al., 1991; Cooper et al., 2018; Harrison et al., 2019; Serbanescu et al., 2020a; Serbanescu et al., 2020b) and one compared HEP with a psychodynamic therapy (Zilcha-Mano & Ben David-Sela, 2022). One of the observational studies included a HEP sample and a cognitive-behavioural therapy sample (Delgadillo & Gonzalez Salas Duhne, 2020); the other observational study included only clients who had received a HEP treatment (Duffy et al., 2022). Non-HEP treatment will be referred to as the comparator here on forward, as comparing therapies was not the aim of this review.

Of the randomised trials, one was a pilot randomised control trial (Cooper et al., 2018), and one used data from a pragmatic randomised control trial (Harrison et al., 2019). Two studies (Serbanescu et al., 2020a; 2020b) used the same randomised trial data source; the first analysed therapy completers and the latter analysed all participants with (relevant) complete data. All other (non-YDS) studies used unique (not repeated in this review) data.

Of these randomised trials, the number of clients receiving a HEP treatment ranged from six to [100-131] (approximate M = 52.2); the latter, largest trial (Serbanescu et al., 2020b) included clients who completed all measures, though the exact number of HEP clients was unclear as missing data was totalled across treatment arms. Two observational studies

used IAPT data which allowed for larger sample sizes – one used machine learning (n = 331) to compare optimal treatment in HEP and a comparator therapy (Delgadillo & Gonzalez Salas Duhne, 2020); the other observational study (Duffy et al., 2022) included a large HEP sample only (n = 3,321).

In sum, unique data accounts for less than half of the 24 included studies (k = 10; 41.7%), and the majority were analyses of randomised trials (k = 22; 91.7%). Only two studies were observational, although these were sufficiently better powered due to the large sample sizes.

HEP Treatment

Treatment Type. The language used to define the same treatment approach differed across studies. For example, secondary analyses of the York I trial used either emotion-focused or process-experiential therapy when referring to the same treatment. Similarly, the retrospective observational studies of IAPT data used different terms to reference the same treatment: Counselling for Depression (as referred to in Delgadillo & Gonzalez Salas Duhne, 2020) and Person-Centred Experiential Therapy (as referred to in Duffy et al., 2022). When current studies were synthesised, to avoid language confusion, treatment approaches were sub-grouped into ‘less process-guiding and ‘more process-guiding’ therapies, as defined by Elliott et al. (2021).

The original YDS compared a less process-guiding therapy with a more process-guiding therapy; however, therapy groups have mostly been combined within the secondary analyses. Concerning the other randomised trials, four studies used data from individuals who had received less process-guiding therapy (Cooper et al., 2018; Serbanescu et al., 2020a, 2020b; Zilcha-Mano & David-Sela., 2022), two studies used data from individuals who had received a more process-guiding therapy (Barbosa et al., 2019; Harrison et al., 2019) and one

study compared a less process-guiding with a more process-guiding therapy (Beutler et al., 1991).

Amongst the included studies – where factors that impacted on HEP treatment response in depression had been investigated – the treatment approach offered within randomised trials did not reflect the approach offered within observational studies; the two observational studies concerned data from individuals who received a more process-guiding approach (Delgadillo & Gonzalez Salas Duhne, 2020; Duffy et al., 2022).

Treatment Mode and Method. All but one study included clients who received individual therapy; within Beutler et al. (1991) study, modal treatment was group-based therapy. All included studies referenced specific treatment manuals. The YDS offered up to 20 hourly sessions based on manuals devised for the projects (see Greenberg et al., 1993, 1994). Concerning the other (non-YDS) randomised trials, the number of treatment sessions offered ranged from eight to 32, with all but one (Cooper et al., 2018) offering up to or over 16 sessions. Both IAPT observational studies offered up to 20 sessions of the same process-guiding therapy, informed by Sanders and Hill's (2014) treatment manual.

Client and Therapist Characteristics

Client Characteristics. Clients within the YDS (k = 15) met the criteria for major depressive disorder (MDD) based on a Diagnostic and Statistical Manual (DSM) III or IV criteria (American Psychiatric Association (APA), 1980, 1994). Across the SA-YDS, the average age was 39, and 69.6% were female; however, demographics varied slightly across the sub-group secondary analyses. Notably, compared with the averages across the SA-YDS, a higher percentage of females (79% compared to 69%) were noted in Singh et al. (2021) study, which included only those who met sudden gain criteria. Furthermore, within Malin

and Pos' (2015) study, those categorised into a 'low (therapeutic) alliance' group were statistically significantly older than those categorised into a 'high alliance' group.

In the other (non-YDS) randomised trials (*k* =7), similarly to the SA-YDS, the majority of studies (*k* = 5; 71.4%) involved clients whose presenting problem met inclusion based on MDD criteria (Barbosa et al., 2019; Beutler et al., 1991; Serbanescu et al., 2020a, 2020b; Zilcha-Mano & Ben David-Sela, 2022). Within the pragmatic randomised control trial (Harrison et al., 2019), clients were moderately to severely depressed, whereas in the pilot randomised trial (Cooper et al., 2018), clients were mildly to moderately depressed. Across these trials, clients' mean ages ranged from 31 – 46, with an overall average of 41, similar to the SA-YDS. The percentage of female clients ranged from 55% - 90%, with an average of 67% females across the studies – again, similar to the SA-YDS.

The two observational studies concerned either (a) clients with a PHQ-9 score over 10 (Duffy et al., 2022) or (b) clients with MDD or recurrent depression (Delgadillo & Gonzalez Salas Duhne, 2020). Client demographics are similar to that reported within the SA-YDS and the other randomised trials; on average, clients were aged 42, and 69.3% were female.

Therapist Characteristics. All studies (*k* = 24) note that therapists were pre-trained. The SA-YDS (*k* =15) involved (up to) 22 therapists; 17 were female, and five were male. Of these, 12 were advanced clinical psychology doctoral students, nine had a clinical psychology PhD, and one was a psychiatrist. Of the other randomised trials (*k* =7), two trials used accredited counsellors (Cooper et al., 2018; Harrison et al., 2019), two trials included pre-trained PhD psychologists, graduate students or therapists (Barbosa et al., 2019; Beutler et al., 1991), one trial included six experienced therapists (Zilcha-Mano & Ben David-Sela, 2022), and the two studies using the same data source included 39 psychotherapy trained psychotherapists or psychiatrists (Serbanescu et al., 2020a; 2020b). Both observational

studies used accredited counsellors (Delgadillo & Gonzalez Salas Duhne, 2020; Duffy et al., 2022) though additional therapist-related information was unavailable due to the study design.

Treatment Outcome

Symptom-Focused Measures. When concerning variables that impact treatment response, all studies report on at least one depression-specific, symptom-focused standardised outcome measure. The BDI was used in all of the YDS; in the other randomised trials, the HRSD was most commonly used and was reported in four of the seven studies (Beutler et al., 1991; Serbanescu et al., 2020a; Serbanescu et al., 2020b; Zilcha-Mano & Ben David-Sela, 2022). The PHQ-9 was used in three studies – one that used pragmatic randomised trial data (Harrison et al., 2019) and both observational studies (Delgadillo & Gonzalez Salas Duhne, 2020; Duffy et al., 2022). One study used the HAMD (Cooper et al., 2018) and, similarly to the SA-YDS, the remaining trial used the BDI-II (Barbosa et al., 2019).

Other Outcome Measures. As well as the symptom-focused outcome measures reported in all studies, seven of the 15 SA-YDS reported additional outcome measures. Specific measures are referred to in Table 3 and Table 4.

A global distress measure was used in five studies (Ausra et al., 2013; Carryer et al., 2010; Missirlian et al., 2005; Pos et al., 2009; Weereasekera et al., 2001), and two studies combined the BDI and the GSI into a composite symptom measure (Goldman et al., 2005; Pos et al., 2003). In addition, five studies used a self-esteem measure and a measure of interpersonal relationships (Carryer, 2010; Goldman et al., 2005; Missirlian et al., 2005; Pos et al., 2009; Weereasekera et al., 2001). Lastly, one study (Weereasekera et al., 2001) used three items from a mood measure to assess within and between-session mood.

Two of the seven other randomised trials reported on additional (non-symptom focused) outcome measures, though both studies had small sample sizes. The pilot randomised trial (Cooper et al., 2018) used seven outcome measures, including functioning, global, and client satisfaction measures. The other randomised trial (Beutler et al., 1991) included global, relational and process measures. The two observational studies used one symptom-focused outcome measure: the PHQ-9.

Outcome Operationalisation. Over half of the SA-YDS (*k* = 9; 60%) used residual gain outcome scores by regressing baseline scores onto the end-of-treatment scores (Auszra et al., 2013; Carryer et al., 2010; Goldman et al., 2005; Herrmann et al., 2016; Malin et al., 2015; Pos et al., 2003; 2009; 2017; Weereasekera et al., 2001). Four (33.3%) SA-YDS used the end-of-treatment score; one (Missirlian et al., 2005) used the continuous scores whilst controlling for pre-treatment scores, and the other three dichotomously categorised clients into depressed/unchanged or non-depressed/recovered groups, either based on clinical cut-off and reliable change criteria (Boritz et al., 2008; 2013), or clinical cut off alone (Boritz et al., 2011).

The remaining two SA-YDS did not use (some variation of) end-of-treatment scores. Instead, one SA-YDS looked at outcomes 18 months post-therapy, dichotomously comparing good versus poor outcomes on the BDI (Piccirilli et., 2020). Finally, the most recently published SA-YDS used sudden gain criteria as the treatment (response) outcome (Singh et al., 2021).

Concerning the other (non-YDS) randomised trials, five operationalised outcomes using change scores. Of these, three trials used baseline to end-of-treatment change scores (Beutler et al., 1991; Harrison et al., 2019; Serbanescu et al., 2020b); one (pilot) trial used change scores from baseline to three- and six-month follow-up (Cooper et al., 2018); and one

trial used sessional change scores (Zilcha-Mano & Ben David-Sela, 2022). In addition, one trial dichotomously categorised good versus poor outcomes at the end of treatment based on clinical cut-off criteria (Barbosa et al., 2019), and the remaining trial used a continuous end-of-treatment score (Serbanescu et al., 2020a). Besides the underpowered pilot trial (Cooper et al., 2018), none examined post-treatment follow-up outcomes, and only one looked at response during treatment (Zilcha-Mano & Ben David-Sela, 2022).

Both observational studies primarily defined treatment response using an end-of-treatment reliable and clinically significant change criteria on the PHQ-9 (Delgadillo & Gonzalez Salas Duhne, 2020; Duffy et al., 2022). Supplementary analyses provided by Duffy et al. (2022) also dichotomously categorised clients into early versus later responders, the latter achieving over 80% of their gains after session four.

In sum, across all included studies, treatment response mainly concerned end-of-treatment outcomes using symptom-focused measures. Little attention has been paid to within-session differential responses or post-treatment (follow-up) outcomes.

Factors that Impact Treatment Response

The main findings from individual sources can be found in Appendix B. All SA-YDS reported on within-session variables that impact treatment response. Of the other randomised trials, five of the seven reported on baseline variables (Beutler et al., 1991; Cooper et al., 2018; Harrison et al., 2019; Serbanescu et al., 2020a; Serbanescu et al., 2020b) and two of the seven reported on within-session variables that relate to treatment response (Barbosa et al., 2019; Zilcha-Mano & Ben David-Sela, 2022). One observational study reported on baseline variables (Delgadillo & Gonzalez Salas Duhne, 2020); the other observational study (Duffy et al., 2022) was the only included study to report on both baseline *and* within-session

variables that impact treatment response. Findings are synthesised based on measurement characteristics and distinguished based on study design.

Baseline Client Characteristics. Five studies identified baseline client characteristics. In both observational studies (Delgadillo & Gonzalez Salas Duhne, 2020; Duffy et al., 2022), lower baseline depression predicted treatment outcomes. Using machine learning methods with observational data, Delgadillo and Gonzalez Salas Duhne (2020) found that clients who, at baseline, had higher anxiety scores, longer chronicity, and reported having a disability were more likely to achieve RCSI at the end of HEP treatment. In addition, they reported that clients living in poverty and with disabilities tended to have better outcomes in HEP relative to the comparator therapy. These findings related to chronicity and comorbidity raise questions, especially as (the largest included) trial data found that clients with recurrent major depression without complete remission had significantly lower post-treatment depression scores (Serbanescu et al., 2020a), and these clients – alongside those with an Axis II disorder – also responded favourably to HEP relative to the comparator therapy (Serbanescu et al., 2020b).

However, the same studies reported better outcomes in HEP if a client's baseline functioning was higher (Delgadillo & Gonzalez Salas Duhne, 2020; Serbanescu et al., 2020b), and in Serbanescu et al. (2020b) study, when quality of life was reportedly less affected by persistent depressive disorder. Baseline functioning was the most important predictor of HEP outcomes in Delgadillo & Gonzalez Salas Duhne's (2020) study and, alongside the predictors noted, higher age, being employed, and not taking anti-depressant medication were all significant baseline prognostic values of RCSI at the end of HEP treatment. When synthesising results across study designs, findings imply that those with chronic and comorbid presentations may have better outcomes in HEP, possibly where the wider impact of such presentations is less burdensome. In summary, it appeared that a

subgroup of clients responded favourably to HEP (Delgadillo & Gonzalez Salas Duhne, 2020; Serbanescu et al., 2020b), and clients who received their optimal treatment (versus suboptimal treatment) were more likely to achieve better outcomes (Delgadillo & Gonzalez Salas Duhne, 2020).

Only one study explored the impact of a client's (baseline) coping styles on the outcome (Beutler et al., 1991). In this study, HEP was more effective than comparator therapy for internalising clients. Furthermore, highly defensive (resistant) clients did better in a less process-guiding HEP, whereas those with low resistance did better in a more process-guiding HEP therapy.

Baseline Treatment Preconceptions. Three studies reported on baseline treatment preconceptions. Findings from the pilot trial (Cooper et al., 2018) found individuals to have better outcomes if they had a stronger preference for HEP treatment, or a lack of preference for the comparator treatment. Clients who received HEP but preferred the comparator therapy had worse functional impairment and depression scores at the three-month follow-up. Conversely, if clients preferred and received HEP treatment, quality-of-life at the 6-month follow-up was higher.

Whilst preference and engagement may be thought of as likely related, expected engagement did not predict HEP end-of-treatment outcomes in the pragmatic trial, and this was regardless of credibility ratings (Harrison et al., 2019). Furthermore, findings from one of the large observational studies suggest that *lower* outcome expectancy predicted end-of-treatment reliable and clinically significant change (Delgadillo & Gonzalez Salas Duhne, 2020). Findings (tentatively) suggest that, whilst treatment preferences may play a role in therapeutic outcomes, 'sub-optimal' expected engagement and expected outcome may not

necessarily negatively affect depression outcomes – at least from the available (limited) evidence. Clearly, more studies are required in order to draw conclusions.

Within-Session Client Factors. All SA-YDS, two of the seven other trials, and one observational study reported on within-session factors related to treatment outcomes.

Alliance. The one non-YDS trial that explored alliance-outcome relations found that increases in within-patient alliance predicted significantly lower depression outcomes in HEP treatment but not in the comparator treatment (Zilcha-Mano & Ben David-Sela, 2022). Findings from the SA-YDS are mixed and depend on when the alliance was measured, how the outcome was defined, and what other variables are considered. Notably, working alliance was more consistently related to a change in depression scores rather than a change reported on the self-esteem or interpersonal relationship measures (Carryer et al., 2010; Goldman et al., 2005; Missirlian, 2005; Weereasekera et al., 2001). While early session alliance was associated with outcome (Carryer et al., 2010; Pos et al., 2009; Weereasekera et al., 2001), the indirect effect of working phase alliance on outcome was also found to be mediated by emotional processing (Pos et al., 2009).

Arousal and Emotional Processing. Findings from SA-YDS suggest that the impact of emotional arousal and processing on outcome depends on the phases of treatment and process/outcome measures involved (Goldman et al., 2005; Herrmann et al., 2016; Missirlian et al., 2005; Pos et al., 2003; 2009; 2017). Findings suggest an optimal level of emotional processing that independently predicts outcomes (Ausra et al., 2013), with too much or too little expressed emotional arousal predicting poorer outcomes (Carryer et al., 2010). In addition, emotional arousal indirectly predicted outcomes by positively impacting emotional experiencing (Pos et al., 2017); this “deepening” of emotional experiencing throughout sessions predicted changes in outcome (Goldman et al., 2005; Pos et al., 2017).

Narrative and Emotional Subtypes and Processing. SA-YDS suggested (better) outcomes are related to more primary adaptive emotions and less secondary maladaptive emotions (Herrmann et al., 2016; Piccirilli et al., 2020). Three SA-YDS, all by the same author, explored the impact of narrative (Boritz et al., 2008) or narrative-emotional processing on outcomes (Boritz et al., 2011; 2013). Reported findings vary between these studies, again dependent on the methods. Findings from a non-YDS trial, which measured immersed and distancing speech in sessions, found distancing to increase and immersion to decrease in good outcome cases (Barbosa et al., 2017).

Early Response. Findings from a well-powered observational study found that, after controlling for baseline depression and therapist effects, clients with an early response were six times more likely to attain end-of-treatment RCSI (Duffy et al., 2022). Duffy et al. (2022) also reported on predictors of eventual responders relative to early responders. Approximately 25% of clients were eventual responders; these clients were more likely to be taking medication, have higher impaired functioning, and have lower depression severity.

One SA-YDS used sudden gain as the outcome variable and found that the session preceding the sudden gain accounted for most of the symptom reduction (Singh et al., 2020). Within this session, clients were more likely to display primary adaptive emotions and a deepening of experiencing which, as mentioned, had been linked to (better) HEP outcomes within other SA-YDS.

Therapist Factors. Only two studies, both SA-YDS, explored specific therapist factors that may impact outcomes; both of these factors were reporter-rated. Malin et al. (2015) found therapist-expressed empathy to be indirectly related to symptom outcomes through the means of session one working alliance and working phase emotional processing. When exploring factors related to a sudden gain, Singh et al. (2021) found that therapists

were more likely to focus on a client's unmet needs within the critical pre-sudden gain session. Given that therapist effects were found to be a significant predictor of HEP outcomes (Duffy et al., 2022), understanding therapist factors that impact treatment response requires attention.

Discussion

Twenty-four articles were included in this current scoping review summarising the evidence for factors influencing treatment response in HEPs, though only 10 datasets were unique. Most studies utilised data from two original YDS (Greenberg & Watson, 1998; Goldman et al., 2006), comprising 72 clients. In other randomised trials, HEP was mostly the comparator-control treatment; besides the SA-YDS, these trials are driving the literature within this field and are likely influencing how treatment response is defined and what factors (that influence response) are considered. Differences in the HEP treatment approach adopted appeared to be associated with study design and country. When considering this yield, concerns are raised about the subsequent over-analysis of two studies that account for more than half of the associated body of literature. More so because both YDS are substantially underpowered but yielded the largest effect sizes in a meta-analysis of HEPs compared to control conditions (Duffy et al., 2023).

Most studies used symptom-focused outcome measures, which do not lend themselves, at least optimally, to non-symptom focused treatments such as HEPs. Further, most studies were concerned with the end-of-treatment outcomes; little attention has been paid to within-session responses or follow-up outcomes. Whilst only two observational studies were found to be relevant, these studies were substantially better powered. Both used IAPT data which, as mandated, incorporate standardised outcome measures designed with symptom focused therapies at the core.

All SA-YDS, but only two non-YDS, investigated within-session factors that impact treatment response. Conversely, both observational studies and five of the seven non-YDS randomised trials investigated baseline factors that impact treatment response. Interestingly, none of the SA-YDS explored baseline factors that impact treatment response. Thus, where HEP therapies were not being compared to non-HEP therapies, it appeared that (expected) process or relational measures were more of interest, measures that are arguably more in line with the ethos of the HEP approach. However, given the number of SA-YDS, it is surprising that these data did not utilise (collected) baseline measures alongside, or separate to, their multitude of analyses concerning within-session factors that impact treatment response. Similarly, given the availability of IAPT data, and the coding of presenting problem(s), the sparsity of predictor-outcome research, specific to HEP treatment for depression, was unexpected.

Due to the small number of unique studies, and the heterogeneity across studies, all findings should be interpreted cautiously. Most pertinently, this synthesis emphasised that the influences on outcome depend on how a concept is measured, how the outcome is defined, and what other variables are considered. Lower baseline depression severity and early response appear to be associated with better treatment outcomes in HEP, which mirrors reporting from other therapeutical modalities (e.g., Beard & Delgadillo, 2019; Tanguay-Sela et al., 2022). From the sparse available evidence, compared to non-HEP therapies, clients with chronic or comorbid presentations may respond favourably to HEP, particularly when depression impact or baseline functioning is less affected. Early findings also suggest that a client's treatment preferences may play a role in HEP outcomes, though depression outcomes may not be negatively affected by 'sub-optimal' expected engagement or expected outcome. Lastly, alliance appeared to be related to better outcomes, and data from within SA-YDS

further suggested that alliance-outcome relations may be mediated by emotional processing. Given that emotional processing is core to HEP, this warrants further investigation.

All studies focused on client characteristics. Literature concerning therapist effects and therapist factors that impact treatment response was sparse. Given the evidence of therapist effects, and the relational core underpinnings of the HEP approach, future research concerning therapist factors that impact treatment response is required. However, obtaining a therapist effect within a trial is likely to be more of a methodological rather than a substantial issue. Nevertheless, the consistent finding of therapist effects in routine practice requires attention.

Implications

Though it appears that subgroups of individuals respond favourably, both within HEP therapies and between different psychotherapeutic modalities, more research is required to validate early findings. Considering these initial findings, it is questionable how congruent the stepped-care approach 'fits' with a HEP treatment offer, given that chronicity and multiple commodities may not necessarily be associated with poorer outcomes. Conceptually, it seems plausible that disorder-specific treatments may work favourably for disorder-specific presentations, so transdiagnostic non-disorder-specific approaches, like HEP, may be favourable where comorbidities present. Practice-based data, where heterogeneity and comorbidities arise, are underutilised; these data offer a good opportunity to further investigate and validate initial findings. This is required before conclusions are drawn. Overall, this review supports the relevance of considering pre-treatment and within-treatment characteristics when considering or evaluating differential treatment responses.

Treatment preferences should be considered in practice, though previous evidence suggests that clients' often feel uncertain about what to expect during therapy (Rushton et al.,

2020). Therefore, questions arise about what a client's preconceptions and preferences are based on. Given that HEP is often viewed as inferior to other approaches (Elliott et al., 2021), and a less-structured HEP approach likely means it is more difficult to know what to expect (Harrison et al., 2019), efforts should be made to inform clients on the availability and differences between therapeutic approaches, so that preferences and expectations are, at least somewhat, based on informed choices. Further, learning how a person would prefer to work could facilitate clinical decision-making.

The idea that an optimal level of emotional processing may benefit client outcomes appears fitting with more widespread literature. A person's window of tolerance, a concept coined by Siegel (1999), refers to an optimal state in which one can function and thrive in everyday contexts. Thus, through the notion of parallel processes, a client's window of tolerance may relate to their ability to remain optimally aroused in therapy. Considering arousal-processing relations in clinical practice, both within-session and in supervision, may support practitioners to be mindful of the potential impact on outcomes when a client presents as under or over-regulated. That said, how practitioners help (or hinder) one's ability to remain optimally aroused is less understood (Carryer & Greenberg, 2010). Questions now arise regarding how to optimise a person's ability to experience and process emotions. Future research may wish to investigate the complex interplay between baseline, process, and outcome relations in an attempt to disentangle main and moderating effects.

Given that the measures used impacted the outcomes found, researchers and clinicians should prioritise the user's perspective on the most useful type of measure. The most influential methods and measures used to define outcomes are underpinned by medical criteria and were developed primarily for medical (not psychotherapeutic) use (e.g., the Patient Health Questionnaire 9 [PHQ-9]; Kroenke et al., 2001). These measures may not align with the client's perspective on the 'outcome' that is most important to them, nor the

theoretical approach adopted. Measures developed specifically for a humanistic-experiential counselling approach (e.g., The Strathclyde Inventory; Stephen & Elliott, 2022) may prove fruitful in future practice. A simple adaptation would be for the WSAS to be viewed and utilised as key, not complimentary, in HEP-specific practices – especially considering this was the strongest predictor of HEP outcome in Delgadillo and Gonzalez Salas Duhne's (2020) study. When depressed patients have been asked about how remission should be defined, the three features considered most important for determining remission were (1) positive mental health such as optimism and confidence, (2) a return to one's 'normal' self, and (3) a return of the person's 'usual' levels of functioning (Zimmerman et al., 2006). Possibly, the most helpful consideration would be to include at least one idiographic patient-reported outcome measure (Sales et al., 2022). Researchers and clinicians may wish to prioritise this in practice. Agreement between nomothetic and idiographic measures can then be (better) explored. Particularly in HEPs, the clients' experiences and views are most important; this is not reflected within research practices.

Limitations

Whilst multiple analyses of the same data are a major limitation of the available evidence, and the decision to include these studies could be viewed as a limitation of this review, the synthesis emphasised that differences in findings depend on the measure used. Though attempts were made to reduce SA-YDS reporting biases, the evidence is still concentrated on reusing these data. Further, whilst an experienced independent reviewer was involved in eligibility decision-making, data extraction was completed solely by the first author.

Another limitation of this review relates to the inclusion criteria itself. Given that HEP do not place value on symptom-focused practices, including (only) depression-specific

studies may have limited the types of studies found, the subsequent measures utilised, and, therefore, the methodological and clinical findings. Scoping reviews are designed to be broad and inclusive; thus, including all studies where HEP was offered for the treatment of (any) common mental health difficulty may have been more appropriate. However, the decision to include the broad array of HEPs fits with the scoping approach; findings might have become redundant if all common health problems and all HEPs were included.

That said, the decision to include all HEPs raises more questions given (some) variation in the specificities of included approaches. Now might be the time for researchers and practitioners to better distinguish between 'more' or 'less' process-guiding HEP approaches. Better defining therapeutic orientations may complement the growing evidence base on HEPs and support a more optimistic outlook on the added value that these therapies can offer.

Conclusions

The sparsity of the available evidence calls for further research to investigate factors that impact treatment response in HEP treatment. Baseline and within-session predictors ought to be considered together in future research. Whilst attention has mainly been paid to factors that impact end-of-treatment outcomes, newer studies have shifted focus to factors that impact within-session responses. Given that early response has been found to predict treatment outcomes more generally in the psychotherapeutic literature, future research may wish to focus on factors that influence differential within-session responses.

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Appendix A

Articles Excluded at Full Text Review

First Author (Date)	DOI / Reference	Reason for exclusion
Abbott (2019)	https://dx.doi.org/10.1016/j.jaac.2018.12.013	Not HEP specific
Abbott (2021)	https://dx.doi.org/10.1037/ccp0000656	Adolescents
Adams (2006)	https://dx.doi.org/10.1111/j.1748-0361.2006.00056.x	Not HEP
Alang (2020)	https://dx.doi.org/10.1177/1178632920918288	Not HEP specific
Allart-van Dam (2007)	https://dx.doi.org/10.1016/j.jad.2006.06.020	Subsyndromal depression
Anderson (2019)	https://dx.doi.org/10.1080/10503307.2018.1506949	Not HEP Not depression specific
Arnow (2013)	https://dx.doi.org/10.1037/a0031530	Multicomponent intervention – plus pharmacotherapy
Arvidsdotter (2014)	https://dx.doi.org/10.1186/1472-6882-14-210	Not depression specific
Assmann (2018)†	https://dx.doi.org/10.1002/da.22839	No factors that impact HEP response
Attridge (2021)	https://dx.doi.org/10.1080/15555240.2021.1971537	Not depression specific
Bailey (2021)	https://dx.doi.org/10.1037/ser0000462	Not HEP Not depression specific

First Author (Date)	DOI / Reference	Reason for exclusion
Ban (1969)	https://doi.org/10.1007/BF03000089	Not HEP
Barbe (2004)	https://doi.org/10.1521/suli.34.1.44.27768	Adolescents
Barkham (2021)	https://dx.doi.org/10.1016/S2215-0366(21)00083-3	No factors that impact HEP response
Barowsky (2011)†	Barowsky, D. (2011). *Relationship Between Pretreatment Variables and Working Alliance in Psychotherapy: Parental Representations, Ego Functioning, and Psychopathology as Predictors* (Order No. 3467377). Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (884640722). https://www.proquest.com/dissertations-theses/relationship-between-pretreatment-variables/docview/884640722/se-2	Not depression specific
Barrett-Lennard (1962)	https://dx.doi.org/10.1037/h0093918	Not HEP Not depression specific
Basto (2018)†	https://dx.doi.org/10.1002/cpp.2130	Therapy groups combined; No factors that impact HEP response
Batty (2006)	Batty, Z. (2006). *Masculinity and depression : Men's subjective experience of depression, coping and preferences for therapy and gender role conflict.* [Doctoral dissertation, University of Western Sydney, Doctor of Philosophy]. Semantics Scholar. https://www.semanticscholar.org/paper/Masculinity-and-depression-%3A-men%27s-subjective-of-Batty/281eb4d36bc57f27affa24f5d93876102d8329eb	Not depression specific
Bausch (2020)†	https://dx.doi.org/10.1016/j.jad.2020.03.164	No factors that impact HEP response

First Author (Date)	DOI / Reference	Reason for exclusion
Beasley (2015)†	Beasley, B. N. (2015). *The relationships among client-counselor ethnic match, client characteristics, counselor characteristics, and counseling outcomes for African American university counseling center clients* (Order No. 10012759). Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (1766149242). https://www.proquest.com/dissertations-theses/relationships-among-client-counselor-ethnic-match/docview/1766149242/se-2	Can't access full text
Beaudreau (2015)	https://dx.doi.org/10.1016/j.jagp.2014.09.003	Pts w/ executive dysfunction
Bedard (2008)†	Bedard, D. L. (2008). *An investigation of clients' emotional processing in process-experiential and cognitive-behavioural therapies: Processing with head and heart* (Order No. NR39771). Available from ProQuest Dissertations & Theses A&I. (304368349). https://www.proquest.com/dissertations-theses/investigation-clients-emotional-processing/docview/304368349/se-2	Therapy groups combined
Bernholtz (2013)†	Bernholtz, B. E. (2013). *The client's and therapist's vocal qualities in CBT and PE-EFT for depression* (Order No. 3745282). Available from ProQuest Dissertations & Theses A&I. (1764221250). https://www.proquest.com/dissertations-theses/clients-therapists-vocal-qualities-cbt-pe-eft/docview/1764221250/se-2	Therapy groups combined
Bird (2018)	https://dx.doi.org/10.1017/S1352465817000820	Non-clinical sample
Blanco (2019)	https://dx.doi.org/10.1007/s10549-018-4994-5	Pts w/ breast cancer
Bohmer (2022)	https://dx.doi.org/10.1093/pm/pnab321	Pts with Chronic Pain
Bone (2021)	https://dx.doi.org/10.1016/S2589-7500(21)00018-2	Not depression specific Not HEP specific
Boritz (2007)†	Boritz, T. Z. (2007). *Autobiographical memory specificity and emotional arousal in brief psychotherapy for depression* (Order No. MR31980). Available from ProQuest Dissertations & Theses A&I. (304776819). https://www.proquest.com/dissertations-theses/autobiographical-memory-specificity-emotional/docview/304776819/se-2	Findings and data source published and included (YDS)

First Author (Date)	DOI / Reference	Reason for exclusion
Boritz (2017)	https://dx.doi.org/10.1080/10503307.2016.1152410	Not HEP specific (results combined)
Boschloo (2014)	https://dx.doi.org/10.1016/j.jad.2014.01.019	Not depression specific No therapy
Bosco Guerreiro da Silva (2007)	https://doi-org.sheffield.idm.oclc.org/10.1136/aim.25.3.65	Not depression specific Not HEP
Boswell (2012)	https://dx.doi.org/10.1037/a0028078	Counselling approach not specified
Boyer (2006)	https://dx.doi.org/10.1300/J010v42n03_10	Not depression Not HEP
Boylan (2006)	Boylan, B. (2006). *Psychological mindedness as a predictor of treatment outcome with depressed adolescents.*[Doctoral thesis, University of Pittsburgh, Doctor of Philosophy]. Scholarship. http://d-scholarship.pitt.edu/6812/1/MMBoylanETD.pdf	Adolescents
Braga (2018)†	https://dx.doi.org/10.1002/cpp.2169	Therapy groups combined; No factors that impact HEP response
Brent (1999)	https://doi.org/10.1097/00004583-199903000-00012	Adolescents
Brimaher (2000)	https://doi.org/10.1001/archpsyc.57.1.29	Adolescents
Brinegar (1992)†	Brinegar, J. L. (1992). *Predictive validity of the Myers-Briggs Type Indicator composite preference score to estimate counseling difficulty and counseling outcome* (Order No. 9235367). Available from ProQuest Dissertations & Theses A&I. (303967188). https://www.proquest.com/dissertations-theses/predictive-validity-myers-briggs-type-indicator/docview/303967188/se-2	Can't access full text
Broglia (2019)	https://dx.doi.org/10.2196/14318	Not depression specific

First Author (Date)	DOI / Reference	Reason for exclusion
Brooks (2003)	Brooks, H. S. (2002). *Depression in a preventive group intervention for couples: Individual and group level effects* (Order No. 3063303). Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (251689896). https://www.proquest.com/dissertations-theses/depression-preventive-group-intervention-couples/docview/251689896/se-2	Couples therapy
Brown (1995)†	Brown, M. J. (1995). *The relationship of personality type to counselor effectiveness with emotionally distressed college students* (Order No. 9542097). Available from ProQuest Dissertations & Theses A&I. (304247543). https://www.proquest.com/dissertations-theses/relationship-personality-type-counselor/docview/304247543/se-2	Not depression specific
Brown (2010)	https://dx.doi.org/10.1016/j.jad.2009.06.004	Supportive care
Carlin (2010)†	Carlin, E. (2010*). The effect of a motivational interviewing style in cognitive therapy for depression* (Order No. 3453319). Available from ProQuest Dissertations & Theses A&I. (867665534). https://www.proquest.com/dissertations-theses/effect-motivational-interviewing-style-cognitive/docview/867665534/se-2	Not HEP
Chambers (2015)	https://dx.doi.org/10.1007/s12671-014-0284-4	Youth Not HEP
Chen (2015)	https://dx.doi.org/10.1016/j.jad.2015.06.022	Not HEP
Chesney (2006)	https://dx.doi.org/10.1348/135910705X53155	Not HEP Pts w/ HIV
Chilvers (2001)	https://dx.doi.org/10.1136/bmj.322.7289.772	Not HEP specific
Chua (2017)	https://dx.doi.org/10.11622/smedj.2016100	Not HEP Multi-component treatment
Chui (2016)	https://dx.doi.org/10.1037/cou0000142	Not HEP - Supportive-expressive therapy

First Author (Date)	DOI / Reference	Reason for exclusion
Cohen (2009)	Cohen, S. (2007). *Development of a Brief Couples Therapy for Depression: Targeting Illness-Related Attitudes and Behaviors, Empathy, and Support.* [Doctoral Thesis, Stony Brook University, Doctor of Philosophy in Clinical Psychology]. https://ir.stonybrook.edu/xmlui/handle/11401/72300	Couples therapy
Collado (2016)†	https://doi.org/10.13016/M2XD05	Therapy groups combined
Contractor (2017)	https://dx.doi.org/10.1016/j.jad.2017.01.029	Not depression specific No HEP
Cooper (2003)	https://doi.org/10.1192/bjp.182.5.412	No factors that impact HEP response
Costa (2006)	https://doi.org/10.1590/S1516-44462006000100009	No factors that impact HEP response (psychodrama)
Coudray (2019)	https://dx.doi.org/10.1037/cou0000340	Not HEP specific Not depression specific
Crits-Christoph (2008)	https://dx.doi.org/10.1037/a0014340	Not depression specific Not HEP specific
Crits-Christoph (2011)	https://dx.doi.org/10.1037/a0023668	Not HEP Interpersonal psych0dynamic
de Jonghe (2004)	https://doi.org/10.1192/bjp.185.1.37	Not HEP
deJong-Meyer (1996)	DeJong-Meyer, R., Hautzinger, M., Rudolf, G. A. E., Strauss, W., & Frick, U. (1996). Outcome prediction and longitudinal analyses of endogenously depressed patients treated with combined psychological and antidepressant therapies. *Zeitschrift Fur Klinische Psychologie-Forschung Und Praxis, 25* (2), 110-129.	Multicomponent intervention
Delgadillo (2022)	https://dx.doi.org/10.1001/jamapsychiatry.2021.3539	Not depression specific Not HEP specific

First Author (Date)	DOI / Reference	Reason for exclusion
Denton (2012)	https://dx.doi.org/10.1111/j.1752-0606.2012.00291.x	Multicomponent intervention – with pharmacotherapy Couples therapy comorbid relationship difficulties
Deres-Cohen (2022)	https://dx.doi.org/10.1080/10503307.2021.1966542	Therapy groups combined No factors that impact HEP response specifically
DiBernardo (2018)	https://dx.doi.org/10.1186/s12888-018-1920-7	Not HEP
Dickinson (2008)	https://dx.doi.org/10.1007/s11606-008-0738-2	Not HEP specific
Duncan (2014)†	Duncan, K. D. (2014). *Process group vs. skills group modalities in the treatment of individuals diagnosed with major depressive disorder* (Order No. 3641377). Available from ProQuest Dissertations & Theses A&I. (1627179468). https://www.proquest.com/dissertations-theses/process-group-vs-skills-modalities-treatment/docview/1627179468/se-2	No factors related to HEP response specifically
Duong (2016)	https://dx.doi.org/10.1007/s10608-016-9780-2	Youths
Ekeblad (2016)	https://dx.doi.org/10.1037/ccp0000055	Not HEP
Ekers (2013)	https://dx.doi.org/10.1177/1744987112466254	Review
Erekson (2015)	https://dx.doi.org/10.1037/a0039774	Not depression specific
Farrer (2012)	https://dx.doi.org/10.2196/jmir.1859	Not HEP
Farrer (2014)	https://dx.doi.org/10.1007/s10608-013-9589-1	Not HEP
Fawcett (2020)	https://dx.doi.org/10.1080/07448481.2019.1577862	Mixed anxiety and/or depression No information related to mode of counselling intervention

First Author (Date)	DOI / Reference	Reason for exclusion
Fehler (2015)†	https://dx.doi.org/10.1024/1661-4747/a000245	Not written in English
Fernández-Navarro(2017)†	Fernández-Navarro, P. (2017). *Reconceptualizing the Self in Psychotherapy for Depression: Latest Findings and Future Directions* (Order No. 27783895). Available from ProQuest Dissertations & Theses A&I. (2371093122). https://www.proquest.com/dissertations-theses/reconceptualizing-self-psychotherapy-depression/docview/2371093122/se-2	Therapy groups combined
Feurer (2022)	https://dx.doi.org/10.1038/s41386-021-01211-2	Not depression specific No factors that impact HEP response
Geller (2010)†	https://dx.doi.org/10.1080/10503307.2010.495957	Therapy groups combined
Gibbard (2008)	https://dx.doi.org/10.1080/14733140802305440	Not depression specific
Gibbons (2012)	https://dx.doi.org/10.1037/a0027694	Not HEP
Gibson (2019)†	Gibson, A. (2019). *Shared Decision-Making in Counselling and Psychotherapy* (Order No. 28130490). Available from ProQuest Dissertations & Theses A&I. (2430821408). https://www.proquest.com/dissertations-theses/shared-decision-making-counselling-psychotherapy/docview/2430821408/se-2	Not HEP
Goldman (1997)†	Goldman, R. N. (1997). *Change in thematic depth of experiencing and outcome in experiential psychotherapy* (Order No. NQ22908). Available from ProQuest Dissertations & Theses A&I. (304399095). https://www.proquest.com/dissertations-theses/change-thematic-depth-experiencing-outcome/docview/304399095/se-2	Findings and data source published and included (YDS)
Gureje (2019)	https://dx.doi.org/10.1016/S2214-109X(19)30148-2	Not HEP
Gyani (2013)	https://dx.doi.org/10.1016/j.brat.2013.06.004	Not depression specific Not HEP specific

First Author (Date)	DOI / Reference	Reason for exclusion
Hallgren (2016)	https://dx.doi.org/10.1016/j.ypmed.2016.03.021	Supportive counselling combined with CBT in TAU group; No factors that impact HEP response specifically
Hallgren (2017)	https://dx.doi.org/10.1016/j.psychres.2016.12.060	Not HEP
Hamblin (1993)	https://dx.doi.org/10.1080/10503309312331333649	Not HEP
Hardy (1985)†	https://doi.org/10.1111/j.2044-8260.1985.tb00656.x	Not depression specific
Harris (2011)†	Harris, L. A. (2011). *Therapeutic alliance factors in a sample of depressed Latinos receiving brief motivational interviewing* (Order No. 3443379). Available from ProQuest Dissertations & Theses A&I. (855628298). https://www.proquest.com/dissertations-theses/therapeutic-alliance-factors-sample-depressed/docview/855628298/se-2	Not HEP specific
Harrison (2018)†	Harrison, P. (2018). *Expected engagement with psychological therapy: the development of a measure and implementation as a predictor of therapy outcome* (Order No. 13833112). Available from ProQuest Dissertations & Theses A&I. (2164579495). https://www.proquest.com/dissertations-theses/expected-engagement-with-psychological-therapy/docview/2164579495/se-2	Findings and data source published and included
Hatchett (2001)†	Hatchett, G. T. (2001). *The validity of the Butcher Treatment Planning Inventory for predicting counseling outcome and premature termination* (Order No. 3039247). Available from ProQuest Dissertations & Theses A&I. (251645818). https://www.proquest.com/dissertations-theses/validity-butcher-treatment-planning-inventory/docview/251645818/se-2	Not HEP specific Not depression specific
Hauser (2009)	Hauser, M. A. (2009). *The role of optimism and working alliance and its utility in predicting therapeutic outcomes in counseling relationships* (Order No. 3391655). Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (305070503). https://www.proquest.com/dissertations-theses/role-optimism-working-alliance-utility-predicting/docview/305070503/se-2	No therapy – survey to counsellors

First Author (Date)	DOI / Reference	Reason for exclusion
Helmich (2022)	https://dx.doi.org/10.1080/02699931.2022.2129593	Not HEP specific Multi-component intervention
Hollis-Walker (2005)†	Hollis-Walker, L. (2005). *Emotional arousal and autobiographical memory specificity within emotion episodes in brief psychotherapy for depression* (Order No. MR19652). Available from ProQuest Dissertations & Theses A&I. (305395534). https://www.proquest.com/dissertations-theses/emotional-arousal-autobiographical-memory/docview/305395534/se-2	Can't access full text
Holmes (1995)	https://dx.doi.org/10.1177/104973159500500303	Not HEP specific Not depression specific
Holmqvist (2014)	https://dx.doi.org/10.3109/08039488.2013.797023	Not depression specific
Holt (2017)	https://dx.doi.org/10.1007/s00737-017-0767-0	Not HEP treatment for depression
Holtforth (2012)	https://dx.doi.org/10.1159/000336813	Not HEP
Holtforth (2014)†	https://dx.doi.org/10.1055/s-0038-1633391	Not written in English
Hopton (2014)†	https://dx.doi.org/10.1136/bmjopen-2014-004964	Therapy groups combined
Horowitz (2013)	https://dx.doi.org/10.1111/1552-6909.12038	Not HEP Not depression
Hou (2014)	https://dx.doi.org/10.1590/1516-4446-2013-1170	Not HEP
Iacoviello (2007)	https://dx.doi.org/10.1037/0022-006X.75.1.194	Not HEP
Jackon (2012)†	Jackson, S. L. (2012). *Change Processes in Emotion-Focused and Interpersonal Psychotherapies for Depression: A Comparative Study* (Order No. NR88705). Available from ProQuest Dissertations & Theses A&I. (1114893968). https://www.proquest.com/dissertations-theses/change-processes-emotion-focused-interpersonal/docview/1114893968/se-2	Findings and data source published and included (YDS)
Jannazzo (2010)	https://repositories.lib.utexas.edu/bitstream/handle/2152/6679/jannazzoe38173.pdf?sequence=2&isAllowed=y	Not depression specific

First Author (Date)	DOI / Reference	Reason for exclusion
Jimenez-Arista (2018)	https://dx.doi.org/10.1037/cap0000160	Not HEP Not depression specific
Jimenez-Arista (2018)	Jimenez-Arista, L. E. (2018). *Patterns of Symptomology over Time and their Relation to Outcome.* [Doctoral Dissertation, Arizona State University, Doctor of Philosophy]. https://core.ac.uk/download/pdf/158457216.pdf	Not HEP Not depression specific
Johnson (2006)	https://dx.doi.org/10.1016/j.genhosppsych.2006.07.006	Counselling approach not specified
Kalogerakos (2009)†	Kalogerakos, A. F. (2009). *An examination of therapeutic alliance patterns, client attachment, client interpersonal problems, and therapy outcome in process-experiential and cognitive-behavioural treatment for depression* (Order No. NR60988). Available from ProQuest Dissertations & Theses A&I. (576995493). https://www.proquest.com/dissertations-theses/examination-therapeutic-alliance-patterns-client/docview/576995493/se-2	Therapy groups combined
Karatzias (2011)	https://dx.doi.org/10.1080/03069885.2011.552599	Not depression
Karver (2008)	https://dx.doi.org/10.1177/1063426607312536	Adolescents
Kawano (2021)	https://dx.doi.org/10.1186/s40359-021-00521-w	Not HEP specific Multi-component intervention Not depression specific Non-clinical pts
Keeley (2016)†	https://doi.org/10.1037/ccp0000124	Combination therapy
Kelders (2015)	https://dx.doi.org/10.1016/j.brat.2015.06.014	Not HEP
Kellam (2013)†	Kellam, M. D. (2013). *The therapeutic alliance as a mediator between attachment and symptom distress: Comparing women with and without a history of child sexual abuse* (Order No. 3577987). Available from ProQuest Dissertations & Theses A&I. (1477863974). https://www.proquest.com/dissertations-theses/therapeutic-alliance-as-mediator-between/docview/1477863974/se-2	Not depression specific

First Author (Date)	DOI / Reference	Reason for exclusion
Kemp (2020)	https://dx.doi.org/10.1017/gmh.2020.11	Not HEP specific Multi-component intervention
Kharas (2015)	Kharas, K. E. (2014). *College counseling center treatment outcomes: Examining the relationship between clinical improvement and academic function* (Order No. 3662149). Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (1648390227). https://www.proquest.com/dissertations-theses/college-counseling-center-treatment-outcomes/docview/1648390227/se-2	Not depression specific
Kim (2020)	https://dx.doi.org/10.1177/0011000020946799	Not depression specific Not HEP
Klein (2011)	https://dx.doi.org/10.1037/a0023208	Multicomponemnt intervention (with pharmacotherapy)
Kloppe (2020)	https://doi.org/10.3389/fpsyt.2020.565929	Not HEP
Korman (1998)†	Korman, L. M. (1998). *Changes in clients' emotion episodes in therapy* (Order No. NQ27300). Available from ProQuest Dissertations & Theses A&I. (304468881). http://www.proquest.com/dissertations-theses/changes-clients-emotion-episodes-therapy/docview/304468881/se-2	Findings and data source published and included (YDS)
Koszycki (2012)†	https://dx.doi.org/10.1007/s00737-012-0277-z	Patients with fertility difficulties
Kraatz (2003)†	Kraatz, R. A. (2003). *Clients' perception of therapeutic alliance as a predictor of increased hope and decreased negative affect and symptoms* (Order No. 3096527). Available from ProQuest Dissertations & Theses A&I. (305309789). https://www.proquest.com/dissertations-theses/clients-perception-therapeutic-alliance-as/docview/305309789/se-2	Not depression specific
Krogel (2009)	https://dx.doi.org/10.1521/ijgp.2009.59.4.529	Not depression specific Not HEP specific
Kumar (2015)	https://dx.doi.org/10.3316/informit.062573647900767	Counselling approach not specified

First Author (Date)	DOI / Reference	Reason for exclusion
Laber (2015)	https://dx.doi.org/10.1093/biomet/asv028	Not HEP
Leibert (2005)†	Leibert, T. W. (2005). *Relationship between client factors and symptom levels for clients in ongoing mental health treatment* (Order No. 3192423). Available from ProQuest Dissertations & Theses A&I. (304996550). https://www.proquest.com/dissertations-theses/relationship-between-client-factors-symptom/docview/304996550/se-2	Not HEP
Leibert (2010)	https://dx.doi.org/10.1177/2150137810373612	Not depression specific
Leibovich (2020)	https://dx.doi.org/10.1037/pst0000253	Not HEP
Lenglet (2018)	https://dx.doi.org/10.1136/bmjopen-2017-019794	Not HEP Community and inpatient sample Not depression specific
Leuchter (2014)	https://dx.doi.org/10.1192/bjp.bp.113.140343	Not HEP – supportive care
Lewin (2010)†	Lewin, J. K. (2010). *The importance of emotional-reflexive patterns for productive therapy: A narrative process analysis of Emotion-Focused and Client-Centred psychotherapy* (Order No. NR71349). Available from ProQuest Dissertations & Theses A&I. (858614134). https://www.proquest.com/dissertations-theses/importance-emotional-reflexive-patterns/docview/858614134/se-2	Findings and data source published and included (YDS)
Liljia (2016)	https://dx.doi.org/10.1111/sjop.12302	Not HEP
Lin (2005)	https://doi.org/10.1207/s15324796abm3002_9	Not HEP
Locke (2017)	https://dx.doi.org/10.1002/jclp.22343	Not HEP
Lutz (2005)	https://dx.doi.org/10.1037/0022-006X.73.5.904	Not HEP specific Not depression specific
Lutz (2007)†	https://dx.doi.org/10.1026/1616-3443.36.2.93	Not written in English
Macaulay (2007)†	Macaulay, H. L., Toukmanian, S. G., & Gordon, K. M. (2007). Attunement as the core of therapist-expressed empathy. *Canadian Journal of Counselling and Psychotherapy*, *41*(4).	No factors that impact HEP response

First Author (Date)	DOI / Reference	Reason for exclusion
Macauley (2010)†	Macaulay, H. L. (2010). *A comparison of narrative process sequences in cognitive behavioural and emotion focused therapies for depression* (Order No. NR68323). Available from ProQuest Dissertations & Theses A&I. (816782982). https://www.proquest.com/dissertations-theses/comparison-narrative-process-sequences-cognitive/docview/816782982/se-2	Findings and data source published and included (YDS)
Magnani (2016)	https://dx.doi.org/10.1016/j.psym.2016.05.004	Not HEP
Mander (2014)	https://dx.doi.org/10.1037/a0036976	Inpatients Not depression
Manus (1992)†	Manus, M. B. (1992). *Predicting response to counseling/psychotherapy using measures of normal and abnormal personality development* (Order No. 9238788). Available from ProQuest Dissertations & Theses A&I. (303991838). https://www.proquest.com/dissertations-theses/predicting-response-counseling-psychotherapy/docview/303991838/se-2	Can't access full text
Manvelian (2022)	Manvelian, A. (2022). *Creating a Safe Haven and Secure Base: A Feasibility and Pilot Study of Emotionally Focused Mentoring to Enhance Attachment Security* [Doctoral dissertation, University of Arizona, Tucson, USA]. https://repository.arizona.edu/bitstream/handle/10150/661535/azu_etd_18627_sip1_m.pdf?sequence=1&isAllowed=y	Not depression specific
Markowitz (2000)	Markowitz, J. C., Spielman, L. A., Scarvalone, P. A., & Perry, S. W. (2000). Psychotherapy adherence of therapists treating HIV-positive patients with depressive symptoms. *The Journal of Psychotherapy Practice and Research*, 9(2), 75.	Pts w/ HIV
Marti (2021)	https://dx.doi.org/10.1002/gps.5480	Intervention approach not outlined
Martin (2001)†	Martin, B. R., Goodrich, G., Beutler, L. E., & Firestone, L. (2001). Effectiveness of affect-arousal in treatment of depression using "voice technique": Therapist training and client outcome. *International Journal of Clinical and Health Psychology. 1*, 91-107.	Can't access full text

First Author (Date)	DOI / Reference	Reason for exclusion
Martinez Torre (2022)	https://dx.doi.org/10.1186/s13031-022-00473-x	Not depression specific Not HEP specific
McCaffrey (2014)†	McCaffrey, T. (2014). *Spirituality and remission of major depression* (Order No. 3662170). Available from ProQuest Dissertations & Theses A&I. (1646465019). https://www.proquest.com/dissertations-theses/spirituality-remission-major-depression/docview/1646465019/se-2	Not HEP
McCarthy (2010)	McCarthy, K. S. (2009). *Specific, Common, and Unintended Factors in Psychotherapy: Descriptive and Correlational Approaches to What Creates Change.*[Dissertation, University of Pennsylvania, Doctor of Philosophy] https://repository.upenn.edu/cgi/viewcontent.cgi?article=1075&context=edissertations	Not HEP
McClintock (2017)	https://dx.doi.org/10.1037/cou0000188	Not HEP
McClintock (2018)	https://dx.doi.org/10.1002/jclp.22568	Not HEP specific
McHugh (2016)	https://dx.doi.org/10.1017/ipm.2015.51	Not HEP specific Not depression specific
Mellado (2017)	https://dx.doi.org/10.1080/10503307.2016.1147657	Not depression Not HEP specific
Miller (2003)	https://doi.org/10.1017/S0266462303000084	Not HEP specific
Missirlian (2002)†	Missirlian, T. M. (2002). *Depressed clients' perceptual processing during emotion episodes: How does processing relate to outcome?*(Order No. MQ71608). Available from ProQuest Dissertations & Theses A&I. (305464280). https://www.proquest.com/dissertations-theses/depressed-clients-perceptual-processing-during/docview/305464280/se-2	Can’t access full text

First Author (Date)	DOI / Reference	Reason for exclusion
Missirlian (2011)†	Missirlian, T. M. (2011). A comparative study of the nature of change processes in Emotion Focused and Cognitive-Behavioural psychotherapies for depression (Order No. NR75673). Available from ProQuest Dissertations & Theses A&I. (879637736). https://www.proquest.com/dissertations-theses/comparative-study-nature-change-processes-emotion/docview/879637736/se-2	Can't access full text
Mohr (2001)	https://dx.doi.org/10.1037//0022-006X.69.6.942	Not HEP
Moody (1984)†	Moody, A. J. (1984). *The Effect Of Clients' Choice Of Therapist And Pre-therapy Training On Outcome In Psychotherapy* (Order No. 8421582). Available from ProQuest Dissertations & Theses A&I. (303336145). https://www.proquest.com/dissertations-theses/effect-clients-choice-therapist-pre-therapy/docview/303336145/se-2	Not depression specific
Morrell (2009)	https://dx.doi.org/10.1136/bmj.a3045	Multi-component intervention
Murray (2016)	https://dx.doi.org/10.1080/03069885.2015.1017804	Not HEP Not depression specific
Naumova (2022)	https://dx.doi.org/0.19090/pp.v15i1.2361	Not depression specific
Newman (2019)	https://dx.doi.org/10.1037/ccp0000385	Not depression specific (GAD)
Nof (2021)†	Nof, A. (2021). *The Therapeutic Alliance: Prediction, Detection, and Treatment Considerations* (Order No. 28747509). Available from ProQuest Dissertations & Theses A&I. (2587647891). https://www.proquest.com/dissertations-theses/therapeutic-alliance-prediction-detection/docview/2587647891/se-2	Not HEP
Ogrodniczuk (2004)	https://dx.doi.org/10.1093/ptr/kph019	Complicated grief
Okiishi (2003)	https://dx.doi.org/10.1002/cpp.383	Not depression specific
Okiishi (2006)	https://dx.doi.org/10.1002/jclp.20272	Not depression specific

First Author (Date)	DOI / Reference	Reason for exclusion
Pan (2011)	Pan, D. (2011). *Directive and non-directive therapist styles: Brief intervention for subsyndromal depression for Asian and European Americans* (Order No. 3487939). Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (913564937). https://www.proquest.com/dissertations-theses/directive-non-therapist-styles-brief-intervention/docview/913564937/se-2	Subsyndromal depression
Pan (2019)	https://dx.doi.org/10.1080/10503307.2017.1325023	Subsyndromal depression
Parker (2016)	https://dx.doi.org/10.1016/j.jad.2016.02.043	Mean pt age under 18 Supportive counselling with psychoeducation
Pascual-Leone (2007)	https://dx.doi.org/10.1037/0022-006X.75.6.875	Not depression specific
Peeters (2010)	https://dx.doi.org/10.1016/j.brat.2010.04.008	Multicomponent intervention
Penedo (2019)	https://dx.doi.org/10.1037/ccp0000417	Not HEP Not depression specific
Petersen (2021)	https://dx.doi.org/10.1016/j.jad.2020.12.123	Not HEP Pts with hypertension
Phimarn (2015)	https://dx.doi.org/10.1186/s40064-015-1259-1	Not HEP
Phybis (2017)†	https://dx.doi.org/10.1186/s12888-017-1370-7	Therapy approach not specified
Pinheiro (2020)†	https://dx.doi.org/10.1080/10503307.2020.1781951	Therapy groups combined
Piper (2004)	https://dx.doi.org/10.1207/s15327752jpa8303_15	Not depression specific
Pos (2006)†	Pos, A. E. (2006). *Experiential treatment for depression: A test of the experiential theory of change, differential effectiveness, and predictors of maintenance of gains* (Order No. NR19820). Available from ProQuest Dissertations & Theses A&I. (304984208). Retrieved from https://www.proquest.com/dissertations-theses/experiential-treatment-depression-test-theory/docview/304984208/se-2	Findings and data source published and included (YDS)

First Author (Date)	DOI / Reference	Reason for exclusion
Prosser (2007)†	Prosser, M. C. (2007). *Beyond rapport: How therapist empathy contributes to outcome in the treatment of depression* (Order No. NR27873). Available from ProQuest Dissertations & Theses A&I. (304755623). https://www.proquest.com/dissertations-theses/beyond-rapport-how-therapist-empathy-contributes/docview/304755623/se-2	Therapy groups combined
Pynnonen (2018)	https://dx.doi.org/10.1080/13607863.2016.1232367	Not HEP Not depression specific
Rahmadiana (2021)	https://dx.doi.org/10.2196/20036	Not HEP specific Not depression specific
Rayner (2022)	https://dx.doi.org/10.1186/s12888-022-04275-6	Not depression specific Not HEP specific
Richardson (2018)	https://dx.doi.org/10.1016/j.jsat.2018.04.007	Pts w/ comorbid alcohol misuse
Richmond (2015)	https://dx.doi.org/10.1186/s12888-015-0456-3	No factors that impact HEP response
Rocha (2018)	https://dx.doi.org/10.1016/j.invent.2018.03.003	Not HEP specific
Ronalds (1997)	https://dx.doi.org/10.1192/bjp.171.5.427	Not depression specific
Rosner (1999)†	https://dx.doi.org/10.1026//0084-5345.28.2.112	Not written in English
Rucci (2011)	Rucci, P., Gallo, E., Ferriani, E., Neri, C., Oppo, A., & Berti Ceroni, G. (2011). The impact of common'specific'therapeutic factors on treatment outcomes of mood and anxiety disorders. *Journal of Psychopathology*, *17*, 234-244.	Not depression specific
Sabes-Figuera (2013)	https://dx.doi.org/10.3109/09638237.2012.745186	Not HEP – supportive care
Sachs (1983)	https://dx.doi.org/10.1037/0022-006X.51.4.557	Not depression specific

First Author (Date)	DOI / Reference	Reason for exclusion
Sanchez (2012)	https://dx.doi.org/10.4088/PCC.12m01385	Multi-component intervention Not HEP specific
Sauer (2010)	https://dx.doi.org/10.1080/10503307.2010.518635	Not depression specific Not HEP specific
Saunders (2020)	https://dx.doi.org/10.1016/j.brat.2019.103505	Not depression specific
Saxon (2008)†	https://dx.doi.org/10.1080/14733140802163872	Not depression specific
Saxon (2012)	https://dx.doi.org/10.1037/a0028898	Not depression specific Unclear what 'counselling' approach
Saxon (2017)	https://dx.doi.org/10.1186/s13063-017-1834-6	Protocol
Schramm (2017)	https://dx.doi.org/10.1001/jamapsychiatry.2016.3880	No factors that impact HEP response
Schuling (2020)	https://dx.doi.org/10.1016/j.jad.2020.03.182	Not HEP
Schuster (2020)	https://dx.doi.org/10.1016/j.jad.2020.05.122	Not HEP
Scott (1992)	https://dx.doi.org/10.1136/bmj.304.6831.883	Multi-component intervention (social work case management)
Seeley (2019)	https://dx.doi.org/10.1080/16506073.2018.1513554	Multi-component intervention Not HEP
Selohilwe (2019)	https://dx.doi.org/10.1186/s13033-019-0299-2	Not HEP specific
Serretti (2013)	https://dx.doi.org/10.4306/pi.2013.10.2.180	Not HEP
Sexton (2005)	https://dx.doi.org/10.1080/10503300512331327083	Not depression specific Not HEP specific
Shahar (2012)†	https://dx.doi.org/10.1002/cpp.762	Not depression specific

First Author (Date)	DOI / Reference	Reason for exclusion
Sharp (2010)	https://dx.doi.org/10.3310/hta14430	No factors that impact HEP response Multimodal component
Shayanfar (2022)†	Shayanfar, S. (2022). *An Examination of Changes in Therapist Expressed Empathy and Therapist-Client Interpersonal Patterns during and After Alliance Rupture, and Their Contributions to Outcome in the Treatment of Depression* (Order No. 29391282). Available from ProQuest Dissertations & Theses A&I. (2736885538). https://www.proquest.com/dissertations-theses/examination-changes-therapist-expressed-empathy/docview/2736885538/se-2	Therapy groups combined
Simpson (2000)	https://doi.org/ 10.3310/hta4360 PMID: 11134918	Not HEP
Singla (2020)	https://dx.doi.org/10.1017/S0033291718003963	Counselling for alcohol problems
Sinh (2012)	https://doi.org/10.7916/D88P66WT	Adolescents
Sinyor (2020)	https://dx.doi.org/10.1016/j.jad.2020.01.178	Adolescents Not depression specific Not HEP
Skelton (2022)	https://dx.doi.org/10.1017/S0033291722003403	Not depression specific Not HEP specific
Smith (2000)	https://dx.doi.org/10.1111/j.1748-0361.2000.tb00482.x	Not HEP
Snell (2001)	https://dx.doi.org/10.1037/0022-0167.48.4.463	Intervention approach not outlined Not depression specific
Solomonov (2021)	https://dx.doi.org/10.1038/s41380-020-0836-z	Pts with cognitive difficulties
Steckley (2006)†	Steckley, P. L. (2006). *An examination of the relationship between clients' attachment experiences, their internal working models of self and others, and therapists' empathy in the outcome of process -experiential*	Therapy groups combined

First Author (Date)	DOI / Reference	Reason for exclusion
	and cognitive-behavioural therapies (Order No. NR15730). Available from ProQuest Dissertations & Theses A&I. (304931193). https://www.proquest.com/dissertations-theses/examination-relationship-between-clients/docview/304931193/se-2	
Steffens (2006)	https://doi.org/10.1097/01.JGP.0000194646.65031.3f	Not HEP
Steidtmann (2012)	https://dx.doi.org/10.1002/da.21977	Multicomponemnt intervention – with pharmacotherapy
Steinmetz (1983)	https://dx.doi.org/10.1037/0022-006X.51.3.331	Not HEP
Stiegler (2017)	https://doi.org/10.1002/cpp.2144	Not depression specific (depression or anxiety) Intervention targeted self-criticism
Stiles (1997)	https://dx.doi.org/10.1037/0022-006X.65.5.889	Not HEP -PIT therapy
Strawbridge (2020)	https://dx.doi.org/10.3390/jcm9123918	Not HEP
Sugg (2020)	https://dx.doi.org/10.1186/s13063-019-3788-3	Not HEP
Surette (2017)	https://dx.doi.org/10.1080/87568225.2016.1248233	Not HEP
Surkan (2012)	https://dx.doi.org/10.1007/s10995-010-0729-x	Not HEP
Szapocznik (1981)	https://dx.doi.org/10.1037/0022-006X.49.5.752	Not HEP
Szapocznik (1982)	https://dx.doi.org/10.1177/07399863820044005	Not HEP
Tatum (2020)	https://dx.doi.org/10.1002/jocc.12154	Not HEP Not depression specific

First Author (Date)	DOI / Reference	Reason for exclusion
Teusch (2003)	https://dx.doi.org/10.1093/ptr/kpg029	Not depression specific Inpatient treatment Multicomponent therapy
Thase (2000)	https://dx.doi.org/10.1016/S0165-0327(99)00066-X	Not HEP – supportive care not counselling
Thibodeau (2015)	https://dx.doi.org/10.1002/da.22293	Multicomponent intervention – Supportive therapy with pharmacotherapy
Tschuschke (2015)†	https://dx.doi.org/10.1080/10503307.2014.896055	Not depression specific
Tseng (2022)	Tseng, C. (2022). *Emotionally Focused Therapy for Couples in Taiwan* (Order No. 29322106). Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (2702165775). https://www.proquest.com/dissertations-theses/emotionally-focused-therapy-couples-taiwan/docview/2702165775/se-2	Not depression specific Couples therapy
Tucker (2020)	https://dx.doi.org/10.1037/cou0000403	Not HEP Not depression specific
Tyson (1987)†	https://dx.doi.org/10.1002/1097-4679(198703)43:2<227::aid-jclp2270430210>3.0.co;2-m.	Not depression specific
Valpied (2020)	https://dx.doi.org/10.1093/fampra/cmz067	Main presenting problem not depression
van Bronswijk (2021)	https://dx.doi.org/10.1176/appi.psychotherapy.20200046	Not HEP specific
van der Weele (2012)	https://dx.doi.org/10.1093/ageing/afs027	Not HEP

First Author (Date)	DOI / Reference	Reason for exclusion
Varma (2017)	https://dx.doi.org/10.5505/kpd.2017.86158	Non-English Language
Warwar (1996)†	Warwar, N. (1996). *The relationship between level of experiencing and session outcome in client-centered and process-experiential therapies* (Order No. MM10333). Available from ProQuest Dissertations & Theses A&I. (89235902). https://www.proquest.com/dissertations-theses/relationship-between-level-experiencing-session/docview/89235902/se-2	Can't access full text
Warwar (2004)†	Warwar, S. H. (2004). *Relating emotional processes to outcome in experiential psychotherapy of depression* (Order No. NQ99258). Available from ProQuest Dissertations & Theses A&I. (305112184). https://www.proquest.com/dissertations-theses/relating-emotional-processes-outcome-experiential/docview/305112184/se-2	Can't access full text
Waston (2005)†	https://dx.doi.org/10.1080/10503300512331327010	Therapy groups combined
Waston (2011)†	https://dx.doi.org/10.1080/10503307.2010.518637	Therapy groups combined
Waston (2014)†	https://dx.doi.org/10.1080/10503307.2013.802823	Therapy groups combined
Watson (2007)†	https://dx.doi.org/10.1037/11586-006	Book chapter
Watson (2010)†	https://dx.doi.org/10.1080/10503300903311285	Therapy groups combined
Watson (2020)†	https://dx.doi.org/10.1080/10503307.2019.1658912	Therapy groups combined
Watson-Gaze (2011)†	Watson-Gaze, J. (2011). *The therapeutic alliance and autobiographical memory specificity in emotion-focused and client-centred treatments for depression: A process-outcome analysis* (Order No. MR75578). Available from ProQuest Dissertations & Theses A&I. (884354141). https://www.proquest.com/dissertations-theses/therapeutic-alliance-autobiographical-memory/docview/884354141/se-2	Can't access full text
Weston (2011)†	Weston, T. (2011). *The clinical effectiveness of the person-centred psychotherapies: the impact of the therapeutic relationship* (Order No. 10082332). Available from ProQuest Dissertations & Theses A&I. (1779538868). https://www.proquest.com/dissertations-theses/clinical-effectiveness-person-centred/docview/1779538868/se-2	Not depression specific

First Author (Date)	DOI / Reference	Reason for exclusion
Whipple (2003)	https://dx.doi.org/10.1037/0022-0167.50.1.59	Not depression specific
Wong (2014)†	https://dx.doi.org/10.1080/10503307.2012.708794	No factors that impact treatment response
Wongpakaran (2015)	https://dx.doi.org/10.2147/NDT.S80636	Not HEP
Woods (2015)	https://doi.org/10.1080/01926187.2014.935689	Not HEP specific Multi-component intervention
Woods (2021)	https://dx.doi.org/10.1016/j.jagp.2020.12.021	Not HEP
Yakuwa (2011)	Yakuwa, M., & Mizuno, H. (2011). Relationships between college students' emotional competences, negative cognition of mental disorders, and treatment fearfulness towards counselors. *Japanese Journal of Counseling Science*, *44*(2), 148–157.	Not written in English
Yang (2019)	https://dx.doi.org/10.1080/10826084.2019.1586949	Drug treatment program Not depression specific
Yoo (2014)	https://dx.doi.org/10.1007/s12564-014-9320-2	Not depression specific Counselling approach not specified
Young (2010)	https://dx.doi.org/10.1002/da.20664	Adoelescents
Young (2012)	https://dx.doi.org/10.1080/15374416.2012.704843	Mean pt under 18
Young (2012)	https://dx.doi.org/10.1007/s12310-012-9078-9	Mean pt under 18
Zagorscak (2018)	https://dx.doi.org/10.1159/000481515	Not HEP
Zhang (2013)	https://dx.doi.org/10.1007/s10880-013-9373-0	Not HEP Not depression specific

First Author (Date)	DOI / Reference	Reason for exclusion
Zilcha-Mano (2016)	https://dx.doi.org/10.4088/JCP.15m10081	Not HEP
Zilcha-Mano (2016)	https://dx.doi.org/10.1016/j.jad.2015.12.073	Not HEP - Supportive-expressive therapy
Zilcha-Mano (2021)	https://dx.doi.org/10.1037/ccp0000696	No factors that impact HEP response specifically
Zink (1990)†	Zink, D. (1990). *Change in anxiety in the context of perceptual-processing experiential therapy: Process and outcome research* (Order No. MM60927). Available from ProQuest Dissertations & Theses A&I. (89117399). https://www.proquest.com/dissertations-theses/change-anxiety-context-perceptual-processing/docview/89117399/se-2	Not depression specific
Zuroff (2016)	https://dx.doi.org/10.1037/cou0000139	Not HEP

† Independently reviewed

Appendix B

Table B1. Key Findings from Individual Sources (York Depression Studies)

	York Depression Studies
First Author (Year)	**Key Findings specific to HEP treatment**
Auszra (2013)	When compared with and controlling for working alliance and high expressed emotional arousal, working phase client emotional productivity independently predicted outcome on the BDI and GSI, explaining 34.2% and 18.9% of the variance respectively.
Boritz (2013)	There was a significant stage x outcome x treatment effect for 'completing plotlines storytelling' – a narrative emotional processing change (versus problem) marker. Within CCT, recovered clients evidenced significantly higher proportions of competing plotlines storytelling at the early and middle stages of therapy than unchanged clients; Within EFT, recovered clients evidenced significantly higher proportions of competing plotlines storytelling at the middle stage of therapy than unchanged clients.
Boritz (2011)	Findings suggest that narrative or emotional processes were not individual predictors of therapeutic outcome. Instead, the relationship between expressed emotional arousal and autobiographical memory (ABM) specificity were associated with successful therapeutic outcome. For clients who were non longer depressed at termination, higher proportions of single events ABMs were significantly related to higher levels of peak arousal, across all stages of therapy.
Boritz (2008)	ABM specificity increased over the course of therapy, however there were no significant difference in ABM specificity between recovered and unchanged clients.
Carryer (2010)	Expressed emotional arousal predicted outcome significantly above the alliance. An optimal frequency (25%) of highly aroused emotional expression was found to related to outcome, with too much or too little emotion predicting poorer outcomes. Working alliance predicted change scores in depression, but not on the other outcome measures.

York Depression Studies

First Author (Year)	Key Findings specific to HEP treatment
Goldman (2005)	Clients early-session experiencing was predictive in symptom reduction. Moreover, increase in depth of experiencing across therapy was found to significantly predict change on depression, overall symptom and self-esteem measures above alliance contributions. The alliance at session 4, and late alliance, made a significant additional contribution to change on the depression/overall symptom composite score, but not to change on the self-esteem scales. No significant correlation was found between any of the process variables and the IIP.
Herrmann (2016)	Working alliance at session 3 or 4 did not significantly related to symptom reduction on the BDI. In the working phases of therapy, more primary adaptive and less secondary emotions were found to significantly predict outcome. In the middle working session, primary maladaptive emotions were associated with outcome and the frequency of transition from primary maladaptive to primary adaptive emotions in this session predicted outcome.
Malin (2015)	There was no significant direct relationship between first-session therapist expressed empathy and outcome, though indirect effects were noted. Findings from the path analysis found a significant indirect effect for therapist expressed empathy on BDI outcome *through* session one WAI ratings. Furthermore, a significant indirect effect of therapist empathy on BDI outcome *through* working phase emotional processing scores.
Missirlian (2005)	Findings suggests that process-outcome relations depend on phases of treatment and measures involved. Mid-therapy arousal predicted improvements in self-esteem, whereas perceptual processing during mid and late treatment sessions predicted reductions in client interpersonal problems. Emotional arousal alongside perceptual processing mid-therapy were predictors of reduction in depressive and psychopathological symptoms. When analysed alongside arousal and processing, alliance only predicted improvement on the depression measure.
Piccirilli (2020)	Analyses provided evidence for differential emotional processing between good versus poor outcome cases. Good outcome cases expressed more adaptive emotion sequences; poor outcome cases expressed more emotion sequences containing secondary or self-protective emotions.

York Depression Studies

First Author (Year)	Key Findings specific to HEP treatment
Pos (2009)	Clients' emotional processing became significantly, consistently (across therapy stages), and substantially (effect sizes) deeper. Working phase emotional processing was the strongest predictor of symptom improvement, and the majority (70%) of emotional processing was not explained by entry-level emotional processing. For reductions in depressive and general symptomology and gains in self-esteem, early emotional processing skill did not directly predict outcome but was mediated by the increased emotional processing clients attained later in therapy. An exception to this was for reductions of interpersonal problems. Clients who came into therapy with early emotional processing capacity had better outcomes on this measure. Higher alliance after session 1 predicted better outcomes, the small but significant indirect effect of working phase alliance on outcome was mediated by emotional processing.
Pos (2003)	After controlling for both early working alliance and early emotional processing, late emotional processing added 21% to the explanation of symptomology outcome; this was over and above the 17% explained by early emotional processing. Late emotional processing independently predicted 14% of changes reported on the self-esteem measures, approximately the same amount of variance was explained by early emotional processing. Early alliance explained 20% of BDI/SCL-90-R symptom improvement, whereas late alliance – when controlling for late emotional processing – independently explained 8% of the variance, much less than the independent contribution of late emotional processing.
Pos (2017)	Expressed emotional arousal significantly indirectly predicted positive outcomes by positively impacting experiencing; this was particularly the case during the middle phases of therapy. Emotional processing (experiencing) was a sole significant predictor of outcome during middle and late phases of therapy. The role of expressed emotional arousal in predicting experiencing appeared to be dependent on the stage of therapy, with the middle stage being the 'tightest'.
Singh (2021)	The session preceding the sudden gain accounted for the bulk of total mean symptom reduction (75%). During this critical session clients were more likely to display deepened experiencing and primary adaptive emotions. Therapists were more likely to focus on unmet client needs.

York Depression Studies

First Author (Year)	Key Findings specific to HEP treatment
Weerea-sekera (2001)	Alliance predicted outcome independent of early mood change, and independent of late mood change. Baseline depression scores did not affect alliance formation. The size of the alliance-outcome relation was dependent on the alliance dimension (goal, task, or bond) and outcome (symptom improvement, self-esteem, or relational problems), as well as time in treatment. Specifically, alliance was more consistently related to depression outcomes than self-esteem, particularly early in treatment. Bond and goal (relative to task) dimensions of alliance were more strongly related with interpersonal relations and self-esteem.

Table B2. Key Findings from Individual Sources (Non-York Depression Studies)

Other (non-YDS) Studies	
First Author (Year)	**Key Findings specific to HEP treatment**
Barbosa (2017)	For the good outcome cases, distancing increased and immersion decreased during the course of therapy; this remained stable in the poor-outcome cases. Changes in depressive symptoms was negatively correlated to change in distance speech. These difference between good versus poor outcome groups distancing were not related to depression scores at the start of therapy.
Beutler (1991)	S/SD therapy was more effective than the comparator therapy for internalising clients. When comparing HEP treatment groups, internalising clients in supportive self-directed (S/SD) treatment had the most change score on the HRSD and GSI; in FEP, treatment benefit was not strongly associated with externalisation. High defensive (resistant) patients had a greater change score on the HRSD in the S/SD, compared with FEP. Conversely, HRSD change scores were greater in FEP than S/SD treatments for patients with low resistance potential.
Cooper (2018)	Patients who showed a stronger preference for the PCC treatment, or those with a lack of preference for the alternative treatment, achieved better outcomes in PCC. In PCC, quality-of-life scores at 6 months were better if Pro-PCC scores were higher. PCC-assigned patients who scored highly on preference of the alternative therapy had worse functional impairment and depression scores at three months.
Delgadillo (2020)	Within PCET, baseline prognostic values of RCSI at the end of treatment were higher age, being employed, having a disability, higher anxiety, longer chronicity, more deprived, lower outcome expectancy, lower PHQ-9, and patient not taking antidepressant medication. Patients living in poverty, and with disabilities tended to have better outcomes in CfD compared with comparator therapy. Baseline functional impairment (WSAS) was the most important predictor for PCET treatment outcomes. Machine Learning Methods identified a subgroup of patients with a differential response (~30%) to treatments; these patients were 2 times more likely to attain RCSI at the end of treatment if they were assigned their optimal treatment, versus sub-optimal treatment.

Table B2. Key Findings from Individual Sources (Non-York Depression Studies)

Other (non-YDS) Studies	
First Author (Year)	**Key Findings specific to HEP treatment**
Duffy (2022)	Early response, baseline depression severity, and therapist effects are significant predictors of treatment outcome. After controlling for baseline depression severity and therapist effects, patients with an early response were six times more likely to attain RCSI at the end of treatment. Eventual responders, those who achieved over 80% of their gains after session 4, accounted for approximately a quarter of patients. Eventual responders (relative to early responders) were more likely, at baseline, to be taking medication, have higher impaired functioning, and have lower depression severity.
Harrison (2019)	Expected engagement did not significantly predict symptomatic improvement for those who received PCET, regardless of credibility ratings.
Serbanescu (2020a)	Patients classified as having recurrent major depressive episodes without complete remission had significantly lower post-treatment depression scores in SP group relative to the comparator therapy.
Serbanescu (2020b)	Two subgroups were identified, one subgroup being patients who responded favourably to SP (41% of the whole sample) over the comparator therapy. Patients responding favourably to SP tended, at baseline, to have higher general and social functioning, quality of life was less effected by persistent depressive disorder, they were more likely to have MDD without complete remission between episodes and have at least one Axis II disorder.
Zilcha-Mano (2022)	Increases in within-patient (state-like) alliance predicted lower of subsequent depression symptoms in ST, which was not significant in the comparator therapy. Findings suggest that within-patient changes in the alliance (relative to its mean) result in better treatment outcomes in treatment approaches that focus on the alliance as the main mechanism (i.e. ST), versus treatments that do not.

Section Two: Empirical Study

Early and Later Change in Person-Centered Experiential Therapy (PCET) and Cognitive Behavioural Therapy (CBT) for Depression

Abstract

Objectives: To investigate the effect of early and later session scores on end-of-treatment outcome in person-centred experiential therapy (PCET) compared to cognitive behavioural therapy (CBT) for the treatment of moderate-severe depression. A secondary analysis investigated predictors of early response.

Design: A secondary data analysis using data from a single pragmatic randomised controlled trial.

Methods: To investigate the association(s) between early (session four) and later (session eight) session scores, treatment type, and treatment outcomes, hierarchical regression methods were conducted on patients who received ≥ five (n = 288) and ≥ nine (n = 189) sessions of PCET or CBT. The primary outcome was reliable and clinically significant improvement (RCSI) at the end of treatment. Subsequent t-tests investigated between-therapy differences in earlier (sessions one to four) and later (sessions five to eight) change scores. A secondary regression analysis explored predictors of early response at session four.

Results: Early and later depression scores were significantly associated with treatment outcomes. The effect of session four depression scores on RCSI significantly differed depending on the treatment received (p =.001). End-of-treatment RCSI was estimated to be higher in PCET when session four depression scores were mild, and higher in CBT when scores were more severe. Between-therapy differences in change scores were non-significant (p = .087), though average change scores showed a trend of greater early-session gains in PCET and greater later-session gains in CBT. Females were more likely to be early responders; however, this analysis was considerably underpowered.

Conclusion: Findings suggest that early and later session scores are associated with depression outcomes, though the effect of early session depression scores on treatment outcomes may depend on the therapy modality received.

Practitioner Points:

- Lower depression scores during early and later therapy sessions were associated with reliable and clinically significant improvement at the end of treatment.
- The association between session four depression scores and treatment outcome differed in PCET compared with CBT.
- Sessional outcome monitoring may support decision-making in clinical practice.

Keywords: depression; psychotherapy; treatment outcomes; change patterns; early response

Over recent decades, support for and access to psychological treatments has grown exponentially (Thornicroft, 2018). With a surge in evidence for telephone (Coughtrey & Pistrang, 2018), group (Huntley et al., 2012), and computer-based (Richards & Richardson, 2021) therapies, substantial progress has been made in relation to 'how' psychological treatments are delivered. These modalities are now available in English primary care mental health services, namely the national Improving Access to Psychological Therapies (IAPT) programme (recently renamed NHS Talking Therapies for Anxiety and Depression but referred to as IAPT here on forward to reflect its name at respective dates).

Whilst delivery methods of psychological treatment have rapidly diversified, the range of therapeutic orientations readily available falls short of the ideal (Renouf, 2020; Roth & Fonagy, 2006). Cognitive behavioural therapy (CBT) holds the most robust evidence base to date (Butler et al., 2006; López-López et al., 2019; Twomey et al., 2015) and, aligned with the National Institute for Health and Care Excellence guidance (NICE, 2011), long remains the primary psychological approach in the treatment common mental health problems. Indeed, 72.7% of all courses of therapy provided within IAPT comprise CBTs (NHS Digital, 2022). Whilst CBT is a clinically and cost-effective treatment (Wiles et al., 2016), with moderate-to-large post-treatment effect sizes (Hans & Hiller, 2013), approximately half of the people completing treatment do not reach recovery (NHS Digital, 2022).

Sub-optimal psychotherapy completion rates (Leichsenring et al., 2019), inequitable effectiveness (Finegan et al., 2018; Naeem et al., 2019), and the drive for more patient choice (McPherson & Beresford et al., 2019) in psychological provision, have promoted the availability of additional evidence-based therapies (Cook et al., 2017; NHS Long Term Plan, 2019). In IAPT, person-centred experiential therapy (PCET) is the second most delivered evidence-based high-intensity treatment after CBT. PCET, formerly termed Counselling for Depression, differs from generic counselling in that the therapists work more actively with

the client's emotions (Sanders & Hill, 2014), and this active component is considered paramount for its effectiveness (Bohart & Watson., 2011). Pertinently, the latest NHS digital data (2022) found PCET rates of reliable improvement (55.5%) and recovery (47.7%) to be higher than CBT rates of reliable improvement (51.6%) and recovery (40.7%). Further, the average number of sessions was lower in PCET (M = 7.0) compared to CBT (M = 8.4). When considering these outcomes, questions arise as to why and how PCET is still viewed as a second-tier therapy option (Elliott et al., 2021).

A recent pragmatic randomised control trial (RCT) assessed the non-inferiority of PCET versus CBT for the treatment of moderate or severe depression (PRaCTICED; Barkham et al., 2021). PCET was non-inferior to CBT at six months, though findings suggested that PCET was less effective at 12 months. While this is one of, if not, the largest RCTs to compare the effectiveness of these two therapies, factors associated with differential outcomes were not considered within the primary analysis. More so, in the humanistic-experiential therapies literature, the focus has been on treatment effectiveness comparable to more-dominant approaches rather than factors associated with differential responses (Elliott et al., 2021); predictive models using limited and readily available measurements may prove valuable for investigating differential psychotherapeutic outcomes (Bone et al., 2021a).

Subgroups of patients have been reported to respond differently to PCET versus CBT. Using machine learning methods, Delgadillo and Gonzalez Salas Duhne (2020) found six shared baseline prognostic values within PCET and CBT: age, employment status, disability, deprivation, depression scores and functioning. However, patients with disabilities and those who were more deprived had better outcomes in PCET compared to CBT. Still, research comparing predictors of response to PCET versus CBT is lacking; instead, cognitive-behavioural-based approaches are typically compared to generic counselling approaches (e.g., Beutler et al., 1991; Cooper et al., 2022).

Baseline characteristics have been combined in an attempt to disentangle differential responses to supportive psychotherapy versus cognitive-behavioural orientated therapy (Serbanescu et al., 2020). Patients who responded favourably to cognitive-behavioural orientated treatment were, at baseline, more severely depressed and more likely affected by childhood trauma. In contrast, patients who responded favourably to supportive therapy were more likely to have recurrent depression without complete remission, an axis II disorder, and higher quality of life, global, and social functioning scores. Whilst most (yet still limited) studies focus on baseline client characteristics, early findings have linked 'within-treatment' sessional data to differential outcomes.

A well-powered secondary analysis of 33,243 patients across 103 IAPT services found the overall effectiveness of generic counselling and CBT to be comparable, though earlier versus later outcomes highlighted nuances in differential treatment response (Pybis et al., 2017). Conceptually, counselling appeared to have greater gains up to session seven, at which point a cross-over effect appeared. After session seven, CBT appeared to have greater gains. For patients who had (a total of) two sessions, counselling was significantly more effective; this accounted for 12.9% of patients in the sample. Conversely, for patients who had (a total of) 18 or 20 sessions, CBT was significantly more effective; this accounted for 3.2% of patients in the sample. From these data, counselling seemed to have an early springboard effect, whereas CBT patients showed a slower, more gradual improvement. Thus, differential outcomes between therapies may relate to session-specific data, which warrants further investigation. As proposed by the "good-enough level" literature (see Bone et al., 2021b), people respond differentially to psychological treatment, and a person's responsivity to therapy may better determine their improvement than treatment duration.

Concerning change patterns, most improvements in symptomology tend to happen in the earlier stages of psychological treatment (Barkham et al., 2006; Rubel et al., 2015a), with

early responses (ER) being significantly associated with better treatment outcomes (Stulz et al., 2007). A recent systematic review and meta-analysis found patients with an ER to be four times more likely to have a positive treatment outcome (Beard & Delgadillo, 2019); these findings were consistent in all included studies that defined early response at or after session four. Recent evidence related to PCET specifically found patients with an ER, defined by a Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001) change score of ≥ 6 from session one to session four, to be six times more likely to achieve reliable and clinically significant improvement at the end of treatment (Duffy et al., 2022). That said, 25% of patients without an ER still ultimately recovered. So, a better understanding of early versus later responses to treatment may prove fruitful during clinical decision-making.

It seems feasible that predictors of ER are related to predictors of treatment outcomes; however, most research has focused on the latter, where baseline assessments of symptoms, functioning, and well-being have been found to predict individual differences in change (Lutz et al., 1999). Further, a recent meta-review synthesised well-documented associations between psychological treatment outcomes and symptom severity, functioning, deprivation, and gender (Tanguay-Sela et al., 2022). However, whether these variables predict early response, specifically, is unclear.

Given that client change is not always linear (Hayes et al., 2007), other research has focused on change trajectories over therapy (Stulz et al., 2010). Echoing Duffy et al. (2022) findings, growth mixture modelling techniques adopted by Rubel et al. (2015a) found change patterns to be more diverse and pronounced in the early stages of treatment (between session one and six), yet for a subgroup of patients who showed little progress initially, a pattern of large improvements was found in the second stages of treatment (sessions seven to twelve). Though intriguing, what constitutes these differential ‘early versus later’ responses remains

unclear and, as previously described, little attention has been paid to the potential role of therapeutic modalities.

All considered, there is a need to better understand differential treatment responses concerning treatment modality and outcomes, as this has important clinical implications (Delgadillo et al., 2022). However, clinicians have been critical of research that is often difficult to translate into practice (Goldfried, 2000; Tasca et al., 2015). Therefore, this study used routine (but randomised) IAPT data (see Barkham et al., 2021) so that the findings are digestible and applicable.

This study primarily aimed to investigate the (differential) effect of treatment mode when assessing the association between early and later sessional depression scores and treatment outcomes. The study was based on findings from the Pybis et al. (2017) audit, which reported early session gains in favour of counselling, and later session gains in favour of CBT. However, unlike the observational design this study was based upon (Pybis et al., 2017), the present study used randomised data to control for the potential influences of non-randomised treatment allocation (e.g., selective assignment).

Thus, by investigating the relationship between early session scores (session four) and treatment outcomes, the aim was to establish if associations significantly differed between PCET and CBT. Additionally, given that most of the literature has focused on early response as a predictor of outcome, a secondary analysis investigated predictors of early response. Session four was considered pertinent for these analyses as session four has been reported to be the minimally accepted dose of treatment in psychotherapy (Robinson et al., 2020), and it is the most frequently reported session within the early response literature (Beard & Delgadillo, 2019; Duffy et al., 2022).

Further, since most literature has focused on early session scores, this study also aimed to understand the relationship between later session scores (session eight) and treatment outcomes in PCET and CBT. Session eight was chosen as the later session score because, in the audit by Pybis et al. (2017), CBT had greater gains after session seven. For transparency, even later session scores were considered (i.e. after session eight), as the previous statistically significant differences in outcome, in favour of CBT, occurred at sessions 18 and 20 (again, Pybis et al., 2017). However, using the present data, there would have been considerable power issues if later sessions were used. Further, the average number of PCET and CBT sessions within IAPT is 7.0 and 8.4, respectively (NHS Digital, 2022). All considered, using randomised but routine data was a strength of this study which would have been impinged upon if (underpowered) later session scores were analysed – a session number that does not reflect 'typical' practice.

Research Questions and Hypotheses

Research questions are numbered, with corresponding hypotheses denoted alphabetically.

(1) Are depression scores at session four associated with treatment outcome and is there a differential effect between CBT and PCET?

1a. Session four depression scores will be significantly associated with treatment outcome

1b. There will be a significant interaction between treatment mode and session four depression scores

(2) What predicts early response at session four?

2a. Symptom severity, deprivation, functioning and gender will predict reliable change at session four

(3) Are depression scores at session eight associated with treatment outcome and is there a differential effect between PCET and CBT?

3a. Session eight depression scores will be significantly associated with treatment outcome

3b. There will be a significant interaction between treatment mode and session eight depression scores

Methods

The current study utilised existing data from a recent pragmatic randomised non-inferiority trial which compared person-centred experiential therapy (PCET) and cognitive behavioural therapy (CBT) for the treatment of moderate or severe depression (PRaCTICED; see Barkham et al., 2021). Ethical approval for the PRaCTICED was granted by the Health Research Authority (Research Ethics Committee 14/YH/001; Barkham et al., 2021), and for these secondary data analyses, ethical approval was granted from The University of Sheffield Research Ethics Committee (27/10/2021; Ref 043527, Appendix A).

PRaCTICED Overview

PRaCTICED Design and Participants

The PRaCTICED trial was embedded within a local primary care IAPT service situated in South Yorkshire, UK. The IAPT programme, which runs nationally, was initiated in Sheffield in 2009 as part of a national rollout. Underpinned by the stepped-care approach, the service offered a range of low-intensity and high-intensity evidence-based psychological therapies for the treatment of common mental health difficulties (Clark, 2011). In Sheffield, IAPT predominately operated from within local general practitioner (GP) services and, to increase access for those without (or unwilling to access through) a GP, was complimented

by a city centre IAPT base. The service covered a population of approximately 560,000 people, and the two main high-intensity psychological therapies offered were CBT and PCET.

The PRaCTICED trial followed a two-stage recruitment process. In line with usual practice, all patients were initially assessed by a low-intensity Psychological Wellbeing Practitioner (PWP). Patients were informed of the trial if (1) their main presenting problem was depression, (2) they had a PHQ-9 score of ≥ 12, and (3) they had no strong preference for CBT or PCET. If patients were interested, they were provided with an information sheet and initial-stage consent-to-contact form. Upon receipt of this form, patients were contacted by a research team member and invited to the second-stage screening interview, where they completed the Clinical Interview Schedule-Revised (CIS-R; Lewis et al., 1992).

Participants were eligible if they were aged 18 and over, met the criteria for moderate to severe depression on the CIS-R, were deemed appropriate for high-intensity treatment within IAPT, and were willing to be allocated to and had no strong preference for either treatment such that they would decline treatment following randomisation. Participants where moderate-severe depression was not their primary diagnosis, or with previous diagnoses of personality disorder, schizophrenia, or bipolar were excluded. Further, those with long-term health conditions, elevated risk, or dependence on alcohol or drugs were excluded. Eligible participants signed a second-stage consent form before being randomised to treatment, and ineligible participants were offered alternative treatment as usual within IAPT. A total of 761 participants were assessed between November 2014 and August 2018, of which 510 were randomly assigned to either PCET (n = 254) or CBT (n = 256).

PRaCTICED Procedures

Procedures and measures are outlined in Figure 1. At the screening interview, patients completed a battery of baseline measures. After randomisation to treatment, participants received up to 20 sessions of individual therapy within the IAPT service, as usual. At each therapy session, participants completed routinely collected IAPT measures which included the Patient Health Questionnaire (PHQ-9; Kroenke, 2001), the Generalised Anxiety Disorder measure (GAD-7; Spitzer et al., 2006) and the Work and Social Adjustment Scale (WSAS; Mundt et al., 2002). In addition, follow-up measures, repeating the measures completed at baseline, were collected 6 months and 12 months post-randomisation.

Therapists. All participating IAPT high-intensity practitioners were trained to meet their professional bodies and IAPT standards. Therapists received individual and group supervision, equating to 4.5 hours of supervision per month. For the counsellors, supervisors were PCET-qualified, and the CBT therapists received supervision from trained senior CBT supervisors.

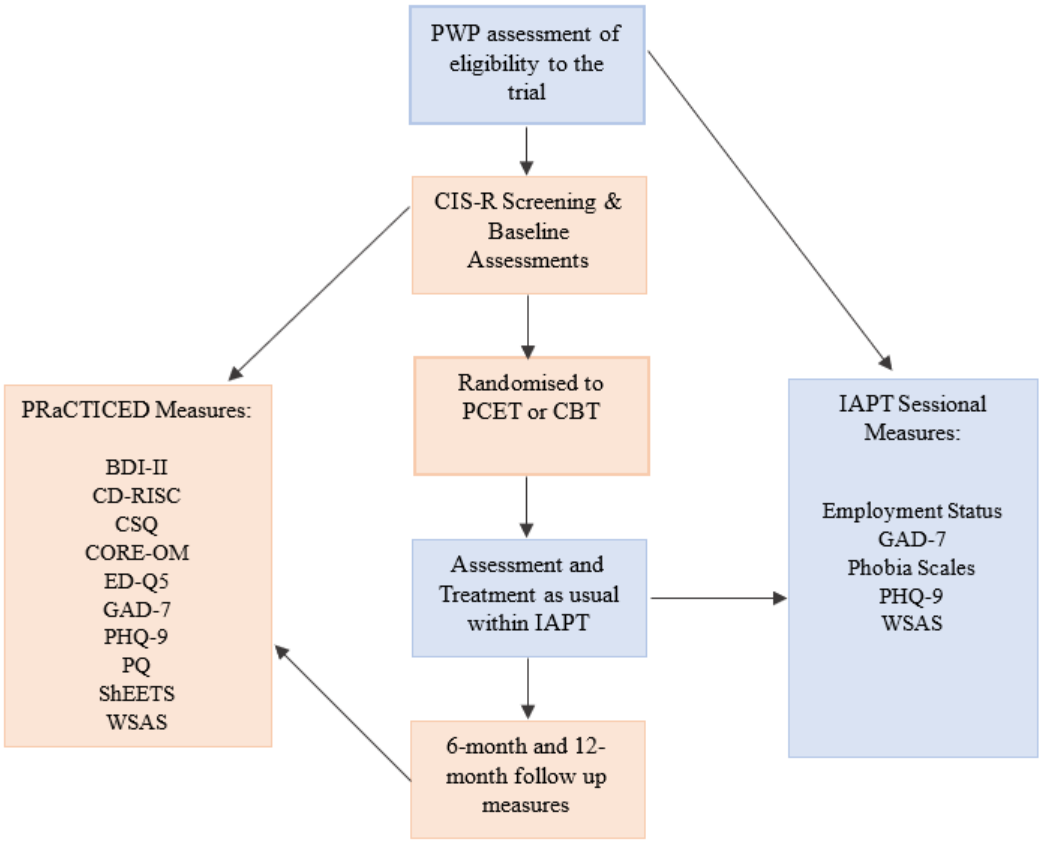
PCET. PCET was delivered by 18 PCET-trained counsellors: 16 females and two males. All counsellors were accredited by a recognised counselling body. On average, they had been working in their current role for 9.6 years (*SD* = 5.5) and had 4.6 years (*SD* = 2.3) of experience as a trained PCET counsellor. Counsellors completed recordings of 80 sessions, of which four were randomly assessed for adherence by expert trainers using the Person-Centred Experiential Psychotherapy Scale (Freire et al., 2014). Only counsellors who completed training and whose sessions passed adherence checks were included in the trial.

CBT. Beckian CBT was delivered by 32 CBT therapists: 25 females and seven males. All CBT therapists were accredited by the British Association for Behavioural and Cognitive Psychotherapy. On average, they had been working in their current role for 7.6 years (*SD* =

2.9). In addition, all CBT therapists received Beckian CBT refresher training from the research team before participating in the trial.

Figure 1

PRaCTICED Patient Recruitment and Treatment Flow Diagram Presenting Outcome Assessments at Varying Stages



Abbreviations. BDI-II = Beck Depression Inventory-II (Beck et al., 1996); CBT = Cognitive Behavioural Therapy; CSQ = Client Satisfaction Questionnaire (Attkisson & Zwick, 1982) CIS-R = Clinical Interview Scale-Revised (Lewis et al., 1992); CD-RISC = Connor Davidson resilience Scale (Connor & Davidson, 2003); CORE-OM = Clinical Outcomes in Routine Evaluation (Evans et al., 2000); ED-5D-5L = EuroQoL Quality of Life Measure (Herdman et al., 2011); GAD-7 = Generalised Anxiety Disorder Measure (Spitzer et al., 2006); IAPT = Improving Access to Psychological Therapies; PHQ-9 = Patient Health Questionnaire (Kroenke et al., 2001); PCET = Person Centred Experiential Therapy; PQ = Preference Questionnaire (Leykin et al., 2007); PWP = Psychological Wellbeing Practitioner; ShEETS = Sheffield Expected Engagement with Therapy Scale (Harrison et al., 2017); WSAS = Work and Social Adjustment Scale (Mundt et al., 2002)

The Present Study: PRaCTICED Subsample

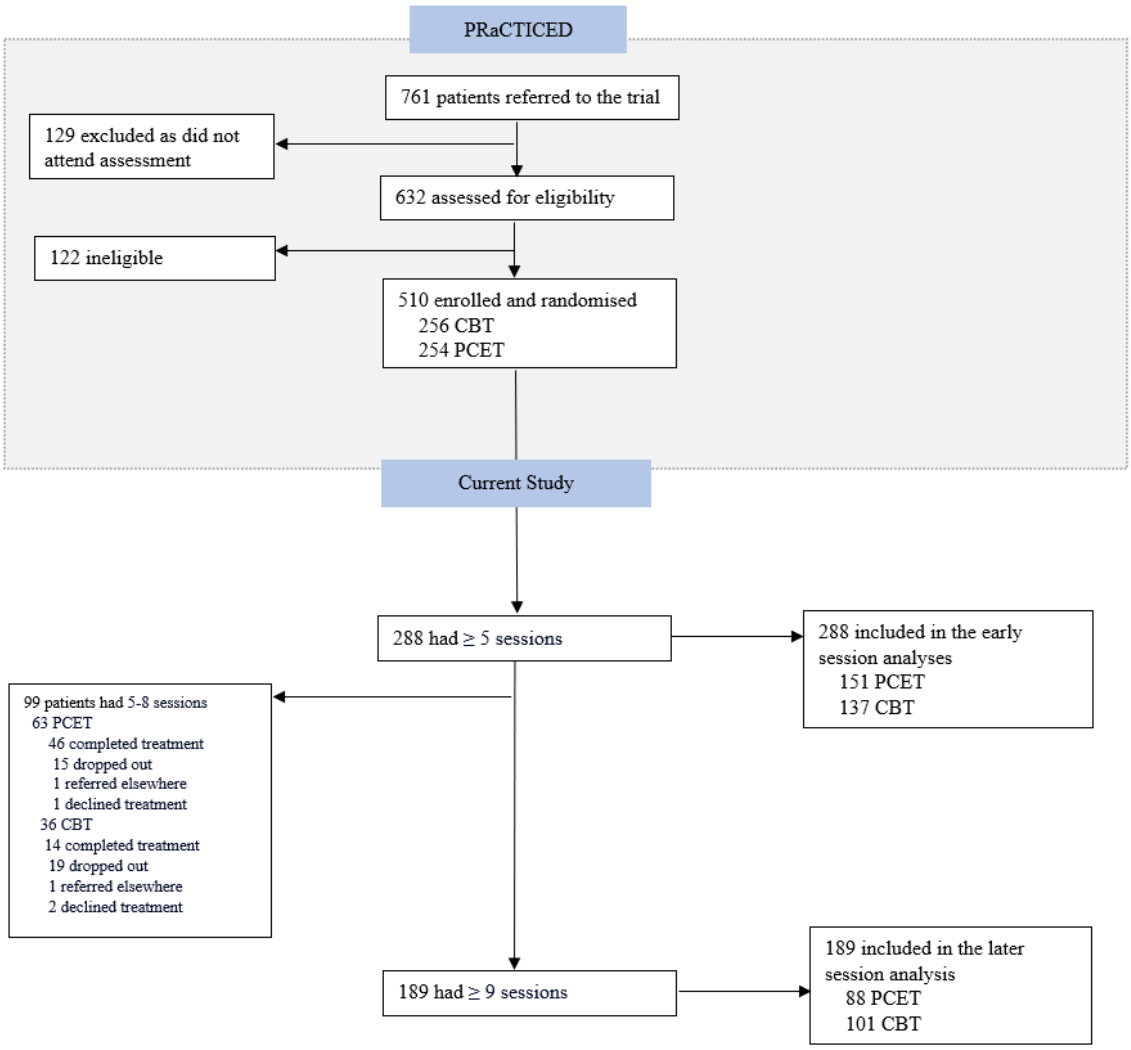
Subsample Eligibility

In order to investigate how early and later session scores were associated with outcome, participants were required to have received a dose of treatment that was necessary for the respective analyses. For the early session analyses, eligible participants were required to have attended at least five sessions (which, for those who received five sessions, the fifth measure was the outcome variable). For the later session analysis, eligible participants were required to have attended at least nine sessions (which, for those who received nine sessions, the ninth measure was the outcome variable). Of the 510 participants randomised into the trial, 356 had at least two sessions and were classified as receiving a course of treatment, as defined by the national IAPT criteria (National Collaborating Centre for Mental Health, 2021). Of those who received a course of treatment, 68 participants (19.1%) had ≤ four sessions and were therefore excluded from this study. Thus, 288 participants (80.9%) had ≥ five sessions and were included in the early session analyses. Of these participants, 189 participants had ≥ nine sessions and were included in the later change analysis; see Figure 2.

To consider the impact of differential drop-out rates, and the subsequent possibility of survival bias, coded reasons for therapeutic endings were analysed. Most participants (63.6%) who had less than nine sessions (thus excluded from the later session analysis) received PCET. Comparing reasons for attrition regarding those clients receiving between five and eight sessions, in PCET, a majority (73.0%) completed treatment, whereas a majority (52.8%) of participants in the CBT arm dropped out. Differences in attrition between therapy modalities were statistically significant ($\chi^2(3) = 11.32$, $p = .010$).

Figure 2

Participant Eligibility Flow Diagram



Participants

Demographic details for both analyses are presented in Table 1. Participants were mostly White-British, middle-aged and employed, and there were more females than males. For the later session analysis, participants within the PCET group were significantly older than participants within the CBT group ($t(187) = -2.05$, $p = .042$). Differences between treatment groups for all other demographic variables were non-significant.

Measures

Baseline and sessional measures collected during the PRaCTICED trial are reported in Figure 1. Measures used within the present study are described below and can be found in Appendix B.

Patient Health Questionnaire 9 (PHQ-9; Kroenke et al., 2001). The PHQ-9 is a 9-item self-report, psychological screening instrument measuring symptoms of depression. Each item is scored between 0 (not at all) and 3 (every day), with scores ranging from 0-27. PHQ-9 scores above 10 have a sensitivity and specificity of 88% for Major Depressive Disorder, with high internal and test-retest reliability. Within IAPT, a score of ≥ 10 is classified as clinical, with increasing scores suggesting increasing severity.

Generalised Anxiety Disorder 7 (GAD-7; Spitzer et al., 2006): The GAD-7 is a 7-item self-report questionnaire that measures generalised anxiety symptoms. Each item is scored between 0 (not at all) and 3 (nearly every day), with scores ranging from 0-21. GAD-7 scores above 10 have a sensitivity and specificity above 80%. Within IAPT, a score of ≥ 8 is classified as clinical, with increasing scores suggesting increasing severity.

Work and Social Adjustment Scale (WSAS; Mundt et al., 2002): The WSAS is a 5-item self-report Likert scale measuring impairment of functioning. Each item is scored between 0 (not at all) and 8 (very severely), with higher scores indicating a higher impact on functioning. The WSAS is a reliable and valid tool with good internal consistency and test-retest reliability.

Table 1

Demographic Information for Both Analyses for Participants within PCET and CBT

	Early Session Analyses					Later Session Analysis				
Demographics	Full Sample (n = 288)	PCET (n= 151)	CBT (n=137)	Test Statistic	p	Full Sample (n = 189)	PCET (n = 88)	CBT (n = 101)	Test Statistic	p
Age (M, SD)	39.14 (12.63)	40.01 (13.23)	38.18 (11.91)	$t(286) = -1.23$	.220	40.39 (12.70)	42.40 (13.06)	38.63 (12.17)	$t(187) = -2.05$	**.042**
Gender (%)										
Female	56.6	54.3	59.1	$\chi^2(1) = 0.68$	.410	58.7	52.3	64.4	$\chi^2(1) = 2.83$	.092
Male	43.4	45.7	40.9			41.3	47.7	35.6		
Ethnicity (%)										
White British	86.5	83.4	89.8	$\chi^2(6) = 9.95$	.127	86.8	84.1	89.1	$\chi^2(6) = 9.55$	.145
Asian/ Asian British	1.4	1.3	1.5			1.6	1.1	2.0		
Black/ Black British	1.4	2.6	-			1.6	3.4	-		
Mixed Ethnicity	2.8	2.0	3.6			4.2	3.4	5.0		
White Other	2.8	3.3	2.2			3.2	3.4	3.0		
Not asked	4.9	7.3	2.2			2.1	4.5	-		
Unable to answer	0.3	-	0.7			0.5	-	1.0		
IMD (M, SD)	5.48 (3.26)	5.37 (3.28)	5.59 (3.26)	$t(286) = 0.56$	.574	5.83 (3.26)	5.74 (3.24)	5.90 (3.30)	$t(187) = 0.34$	.734
Employment Status (%)										
Employed	57.6	57.6	57.7	$\chi^2(7) = 1.45$	.984	59.8	60.2	59.4	$\chi^2(7) = 5.58$	.589
Unemployed Seeking Work	8.0	7.9	8.0			7.9	10.2	5.9		
Homemaker	2.1	2.6	1.5			2.6	4.5	1.0		
Sick or Disabled	9.7	9.9	9.5			6.9	4.5	8.9		
Student	5.6	5.3	5.8			6.3	5.7	6.9		
Retired	2.1	1.3	2.9			2.1	1.1	3.0		
Not seeking work	0.7	0.7	0.7			1.1	1.1	1.0		
Missing	14.2	14.6	13.9			13.2	12.5	13.9		
Psychotropic Status (%)										
Prescribed and taking	56.3	52.3	60.6	$\chi^2(3) = 5.00$	.172	55.6	50.0	60.4	$\chi^2(3) = 5.41$	.144
Not prescribed	34.4	35.1	33.6			36.5	37.5	35.6		
Prescribed, not taking	3.5	5.3	1.5			2.6	4.5	1.0		
Patient Unsure	5.9	7.3	4.4			5.3	8.0	3.0		

Abbreviations. CBT = Cognitive Behavioural Therapy; IMD = Index of Multiple Deprivation; PCET = Person Centred Experiential Therapy

EuroQoL Health Rating Score (EQ-VAS; Herdman et al., 2011): The health rating score is a vertical visual analogue scale which forms part of the EQ-5D-5L questionnaire, a 5-item, 5-level standardised measure of health-related quality of life. Patients self-rated their health on a scale of 0 (worst imaginable state of health) to 100 (best imaginable state of health).

Indices of Multiple Deprivation (IMD; Ministry of Housing, Communities & Local Government, 2019): The IMD is a UK measure of deprivation based on small geographical areas. An IMD score is one deprivation score compiled from seven (weighted) domains of deprivation: income, employment, education, health, crime, barriers to housing and services, and living environment. Scores range from 1 (most deprived) to 10 (least deprived).

Sample Size Calculation

Post hoc power calculations were computed for each regression using G*Power 3.1 (Faul et al., 2009). The recommended test procedure (Demidenko, 2007), with variance correction, was used. The Expected R-squared between the main predictor variable and other covariates were estimated. Covariates were found to have low-moderate associations with the main predictor variable(s); thus, the R-squared was set modestly at 0.25.

The primary analyses were sufficiently powered. For the regression that investigated associations between early (session four) depression scores and RCSI, power was estimated at 80.7%. For the regression that investigated associations between later (session eight) depression scores and RCSI, power was estimated at 99.8%. However, the secondary analysis that investigated associations between baseline variables and early response was considerably underpowered. Power was estimated at 42.1%; thus, subsequent results for the ‘predictors of early response’ analysis should be interpreted cautiously. All power calculations can be found in Appendix C.

Data Analyses

Baseline demographics, clinical characteristics, and sessional outcome scores were extracted from the full sample PRaCTICED data file for (1) all patients who had ≥ five sessions and (2) all patients who had ≥ nine sessions. Missing data was assessed using Little's Missing Completely at Random Test (MCAR; Little, 1988). Missing data for each variable included within the analysis accounted for less than 5% and was considered missing completely at random. Missing data were handled with mean imputation; complete-case sensitivity analyses were run to stress-test findings and reduce the risk of bias reporting.

Preliminary analyses (*t*-tests and Chi-squared tests (χ^2)) were conducted to test for differences between treatment groups (PCET or CBT) and outcome groups (RCSI or not) on demographics and clinical variables. End-of-treatment (final) PHQ-9 scores were binary coded into non-reliable and clinically significant improvement (coded 0) and reliable and clinically significant improvement (coded 1). In line with the IAPT national data and guidance, reliable and clinically significant change (RCSI) was operationalised as a PHQ-9 of ≤ nine at the end of treatment with a change score ≥ six, compared to the first session PHQ-9 score. The mode of treatment was binary coded, with CBT as the reference category (PCET = 1, CBT = 0).

Three regression analyses were run. Firstly, a hierarchical logistic regression investigated associations between early (session four) depression scores and treatment outcomes (RCSI at the end of treatment). A hierarchical approach was adopted: mode of therapy (CBT, PCET) was added in step one, step two introduced the session four PHQ-9 score, and step three added the interaction between session four PHQ-9 score and the mode of therapy. To investigate associations between later (session eight) depression scores and treatment outcome, this hierarchical logistic regression procedure was repeated, with all steps and variables remaining the same besides session four PHQ-9 score, which was replaced with session eight PHQ-9 score.

Lastly, a logistic regression investigated variables associated with early response. Session four PHQ-9 score became the binary early response outcome variable (0 = non-early responder, 1 = early responder). Early response was operationalised as a PHQ-9 change score of ≥ 6 from sessions one to four. As there was no a priori hypothesis to test variables, six baseline variables were entered together in the regression: IMD, PHQ-9, GAD-7, WSAS, EQ-VAS health rating score, and gender.

In the hierarchical regressions, continuous variables were mean centred to reduce multi-collinearity issues when investigating interactions (Iacobucci et al., 2017). Assumptions for all logistic regressions were tested and met. Notably, the multi-collinearity Variance Inflation Factor statistics were below 10 (Bowerman & O'Connell, 1990), and Tolerance was above 0.2 (Menard, 1995). Linearity was checked by assessing (non-significant) interaction terms between predictors and their log transformation (Hosmer & Lemeshow, 1989). Standardised residuals were inspected for outliers, defined by a value of ≥3.0 (Field, 2019); no outliers were found. During analyses, Cook's distance and DFBeta values were checked to assess the influence of each case in the regression models. No values were greater than one, which reliably suggested that the regressions had not been unduly influenced by a subset of cases (Field, 2019). Post-hoc *t*-tests were conducted on significant findings, and post-hoc estimations were run to investigate significant findings further. Post-hoc estimations were calculated on Stata 17.0 (StataCorp., 2021), and all other analyses were run on SPSS 28 (IBM Corp., 2021).

Results

Early Session Effects on Treatment Outcome

Table 2 outlines the demographics of patients (n = 288) within the early session effects on treatment outcome regression. There were significant differences in gender, employment, and medication status between those who reached reliable and clinically significant improvement (RCSI) or not by the end of treatment. Those who reached RCSI were more likely to be female, less

likely to be unemployed and seeking work or sick/disabled, and less likely to be taking medication. All other demographic variables were non-significant.

Table 3 outlines the clinical characteristics of patients within the early session analyses. There were no significant differences in RCSI between therapy groups (PCET or CBT) or based on the number of sessions attended. Further, PHQ-9, GAD-7 and WSAS scores at session one did not significantly differ between those who did and did not achieve RCSI at the end of treatment. However, there were significant differences between session four PHQ-9 scores and session one to four PHQ-9 change scores. Those clients who recovered were significantly more likely to have lower PHQ-9 scores at session four (p <.001) and more change in PHQ-9 score from session one to four (p <.001). Additionally, those clients who recovered were significantly less likely to have dropped out or declined treatment (p <.001).

Table 2

Demographic Differences between Treatment Outcome Groups for Both Analyses

	Early Session Analyses					Later Session Analysis				
Demographics	Full Sample (*n* = 288)	RCSI (*n*= 158)	NonRCSI (*n*=130)	Test Statistic	*p*	Full Sample (*n* = 189)	RCSI (*n* = 107)	NonRCSI (*n* = 82)	Test Statistic	*p*
Age (M, SD)	39.14 (12.63)	39.73 (12.69)	38.43 (12.58)	$t(286) = -.87$	.387	40.39 (21.70)	40.63 (12.57)	40.07 (12.94)	$t(187) = -.30$	.768
Gender (%)										
Female	55.8	64.6	46.9	$\chi^2(1) = 9.03$	**.003**	57.2	68.2	46.3	$\chi^2(1) = 9.17$	**.002**
Male	44.2	35.4	53.1			42.8	31.8	53.7		
Ethnicity (%)										
White British	86.5	84.2	89.2	$\chi^2(6) = 6.28$	.392	86.8	85.0	89.0	$\chi^2(6) = 6.79$	.341
Asian/ Asian British	1.4	1.3	1.5			1.6	1.9	1.2		
Black/ Black British	1.4	2.5	-			1.6	2.8	-		
Mixed Ethnicity	2.8	3.8	1.5			4.2	5.6	2.4		
White Other	2.8	3.2	2.3			3.2	3.7	2.4		
Not asked	4.9	5.1	4.6			2.1	0.9	3.7		
Unable to answer	.3	-	.8			0.5	-	1.2		
IMD (M, SD)	5.48 (3.27)	5.75 (3.32)	5.14 (3.18)	$t(286) = -1.59$	.114	5.83 (3.26)	6.12 (3.26)	5.44 (3.23)	$t(187) = -1.43$	.154
Employment Status (%)										
Employed	57.6	59.5	55.4	$\chi^2(7) = 17.63$	**.014**	59.8	59.8	59.8	$\chi^2(7) = 11.07$	.136
Unemployed Seeking Work	8.0	5.7	10.8			7.9	6.5	9.8		
Homemaker	2.1	1.9	2.3			2.6	1.9	3.7		
Sick or Disabled	9.7	5.7	14.6			6.9	3.7	11.0		
Student	5.6	7.6	3.1			6.3	8.4	3.7		
Retired	2.1	3.8	-			2.1	3.7	-		
Not seeking work	.6	1.2	-			1.0	1.8	-		
Missing	14.2	14.6	13.8			13.2	14.0	12.2		
Psychotropic Status (%)										
Prescribed and taking	56.3	53.2	60	$\chi^2(3) = 8.38$	**.039**	55.6	53.3	59.8	$\chi^2(3) = 5.90$	.117
Not prescribed	34.4	39.2	28.5			36.5	41.1	30.5		
Prescribed, not taking	3.5	4.4	2.3			2.6	3.7	1.2		
Patient Unsure	5.9	3.2	9.2			5.3	2.8	8.5		

Abbreviations. IMD = Index of Multiple Deprivation; RCSI = Reliable and Clinically Significant Improvement

Table 3

Clinical Characteristics for Patients Included within the Early Session Analyses

Clinical Characteristics	Descriptive Statistics: Early Session Analysis				
	All cases *(n = 288)*	RCSI end-of-treatment (*n* = 158)	NonRCSI end-of-treatment (*n* = 130)	Test Statistic	*p*
Treatment Type (*n*)					
PCET	151	78	73	$\chi^2(1) = 1.32$	.251
CBT	137	80	57		
Session 1, PHQ-9 (M,SD)	17.43 (4.65)	17.67 (3.90)	17.14 (5.42)	$t(228)^{\dagger} = -0.94$	.347
Session 1, GAD-7 (M, SD)	13.24 (4.52)	13.24 (4.34)	13.23 (4.86)	$t(286) = -0.21$	.984
Session 1, WSAS (M, SD)	23.78 (6.94)	23.20 (6.71)	24.48 (7.18)	$t(286) = 1.56$	.119
Session 4, PHQ-9 (M,SD)	14.70 (5.47)	13.57 (5.15)	16.07 (5.54)	$t(286) = 3.97$	**<.001**
Change Score Session 1-4, PHQ-9 (M, SD)	2.70 (5.12)	4.08 (5.07)	1.03 (4.68)	$t(286) = 5.24$	**<.001**
Number of Sessions (M,SD)	12.07 (5.29)	11.91 (4.91)	12.25 (5.74)	$t(286) = 0.54$	.591
Attrition (%)					
Dropped out/ declined	18.9	7.0	33.3	$\chi^2(1) = 32.05$	**<.001**
Did not drop out/ decline	81.1	93.0	66.7		

Abbreviations. CBT = Cognitive Behavioural Therapy; PCET = Person Centred Experiential Therapy; GAD-7 = Generalised Anxiety Disorder Measure; PHQ-9 = Patient Health Questionnaire; RCSI = Reliable and Clinically Significant Improvement; WSAS = Work and Social Adjustment Scale

† Statistics for session one PHQ-9 scores are reported with equal variance not assumed

A hierarchical logistic regression evaluated the contribution of therapy mode (model one), session four depression score (model two) and the interaction between therapy mode and session four depression score (model three), in association with RCSI at the end of therapy. Table 4 outlines the results from each model.

Therapy mode (PCET versus CBT) did not significantly explain the variance in RCSI outcomes (χ^2 (1) = 1.32, p = .251). Results from the tests of model coefficients found that model two significantly explained 7.6% of the variance in RCSI (χ^2 (2) = 16.87, p = <.001). Specifically, when controlling for therapy groups, for every unit increase in session four PHQ-9 score, from the mean (*M* = 14.70), patients were 8% less likely to achieve RCSI at the end of treatment (OR = 0.92, CI = 0.87 – 0.96, *p* <.001). However, model three was a significant improvement in fit and accounted for 12.4% of the variance (χ^2 (3) = 27.94, *p* =.001). The main effect of session four PHQ-

9 score became non-significant when adding the interaction with treatment mode. The association between session four PHQ-9 score and RCSI significantly differed between PCET/CBT therapy groups (OR = 0.85, CI = 0.78 – 0.94, p =.001). A complete-case (n = 267; 93.0% of patients) sensitivity analysis resulted in congruent regression findings (see Table D1).

Table 4

Hierarchical Logistic Regression of Associations between Early Session Scores and RCSI at the End of Treatment

		Early Session – Treatment Outcome Associations					
Model (Model Statistics)	Variable	B	SE B	Wald X^2	p	OR	95% CI OR
Model 1							
(χ^2 (1) = 1.32, p = .251)							
	Constant	0.34	0.17	3.83	.051	1.40	
	Treatment (PCET)	-0.27	0.24	1.32	.251	0.76	0.48 – 1.21
Model 2							
(χ^2 (2) = 16.87, p <.001)							
	Constant	0.36	0.18	4.14	.042	1.44	
	Treatment (PCET)	-0.30	0.25	1.48	.225	0.74	0.46 – 1.20
	Session 4 PHQ Score	-0.09	0.02	14.53	**<.001**	0.92	0.87 – 0.96
Model 3[†]							
(χ^2 (3) = 27.94, p <.001)							
	Constant	0.34	0.17	3.84	.050	1.41	
	Treatment (PCET)	-0.27	0.25	1.20	.274	0.76	0.47 – 1.24
	Session 4 PHQ Score	-0.13	0.03	0.18	.671	0.99	0.93 – 1.05
	Treatment (PCET)* Session 4 PHQ Score	-0.16	0.05	10.50	**.001**	0.85	0.78 – 0.94

Abbreviations. PHQ = Patient Health Questionnaire 9; PCET = Person Centred Experiential Therapy; SE B = standard error of B; OR = odds ratio; 95% CI OR = 95% confidence interval for odd ratio

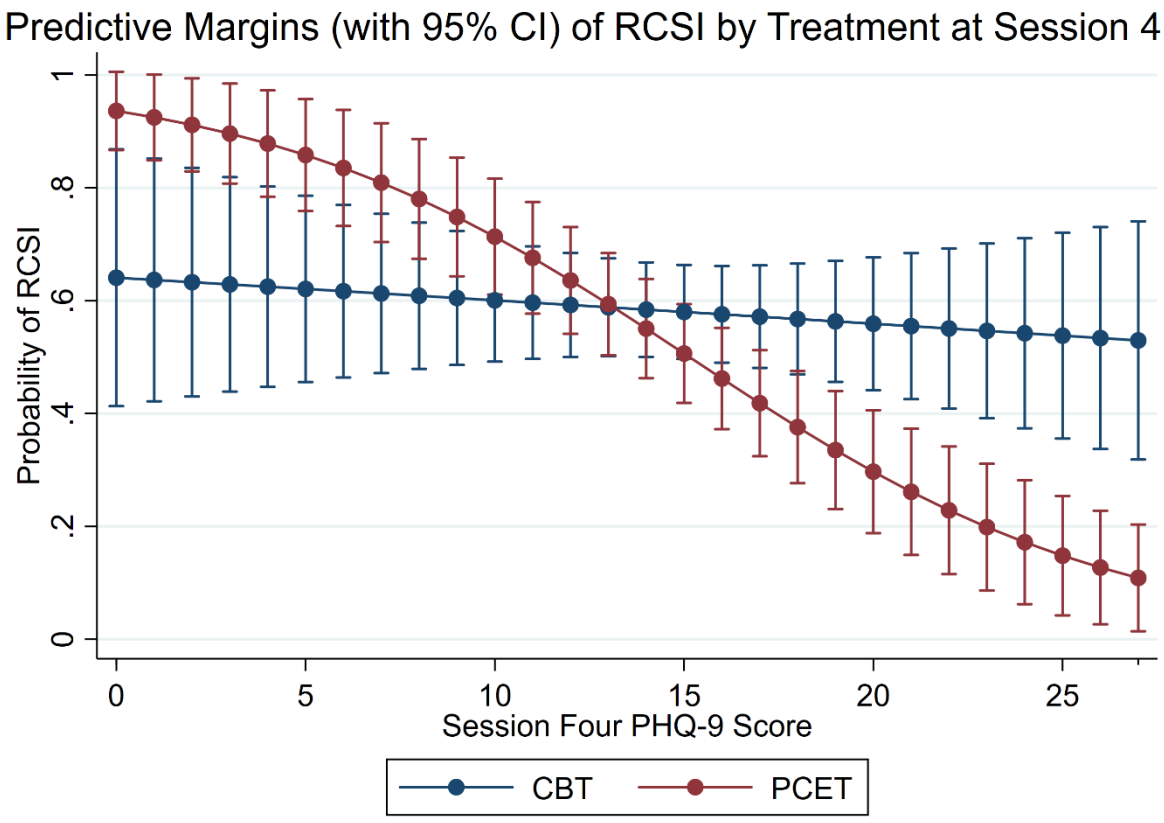
[†] Pseudo R^2 for Model 3 = .12; Pseudo R^2 statistic used was Nagelkerke R Square

Post-hoc Tests

The significant interaction between therapy mode and session four PHQ-9 score was further investigated using post-estimation interaction plots. Marginal means of RCSI were predicted for PCET and CBT based on session four PHQ-9 depression scores. Figure 3 presents a profile plot of the marginal means analysis; this shows the significant interaction of the differing effect of session four depression score on RCSI at the end of treatment, dependent on the therapy received.

Figure 3

Profile Plot of the Marginal Means Analysis Estimating the Probability of RCSI at the End of Treatment from Session Four PHQ-9 Score and Treatment Mode

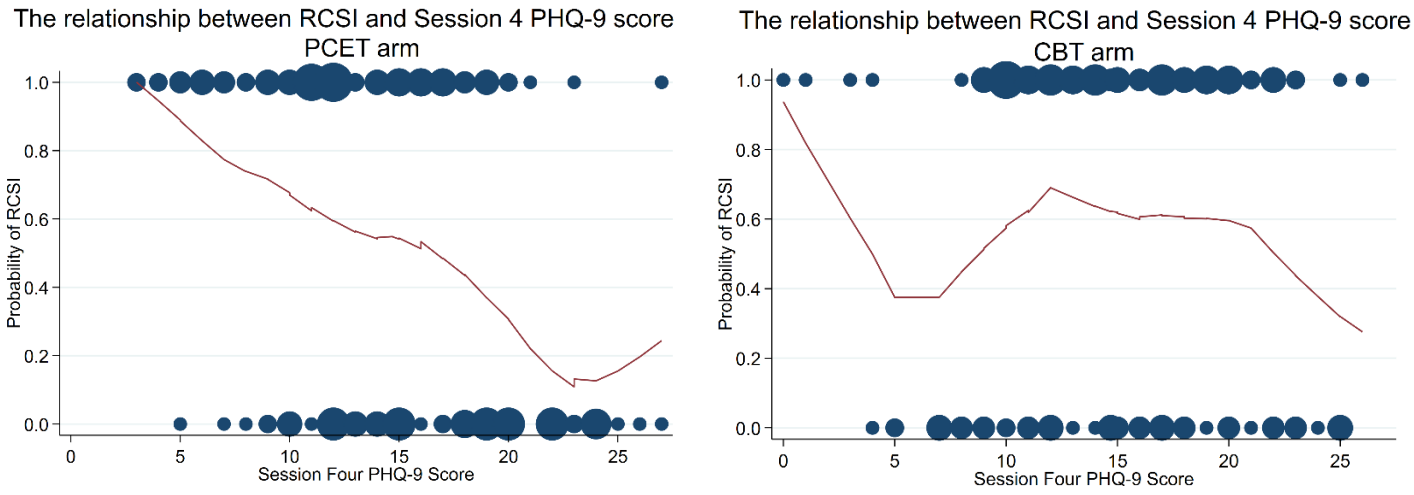


Concerning between-therapy differences, the marginal means analysis suggests that patients responded favourably to PCET, when compared to CBT, if they scored below 13 on the PHQ-9 at

session four. Inversely, patients responded favourably to CBT, when compared to PCET, if they scored above 13 on the PHQ-9 at session four. Given that most estimates of between-therapy differences resulted in overlapping confidence intervals, Lowess plots were created to inspect differential treatment outcomes further (see Figure 4). The circumference of the blue circles, on either end of the binary outcome, denotes the concentration of patients with RCSI (or not) at the end of treatment, when considering their PHQ-9 score at session four. A smooth line is fitted to the data accordingly.

Figure 4

Lowess Plots of the Relationship Between Session Four PHQ-9 Score and RCSI at the End of Treatment for PCET and CBT groups



The scatter and smooth lines for CBT and PCET groups are visibly distinctive. In the PCET group, findings suggest that the probability of RCSI steadily decreased as session four PHQ-9 score increased. In contrast, for the CBT group, the probability of RCSI was largely in the region of 40-60%, regardless of session four PHQ-9 score.

Early Change Scores

Subsequent post-hoc analyses tested for between-therapy differences in depression scores in the early stages of therapy. On average, patients scored 14.70 (*SD* = 5.47) on the PHQ-9 at session four; this did not significantly differ between treatment arms ($t(286) = 0.14$, $p = .892$). Further, there was no significant difference between therapies when comparing PHQ-9 change scores from session one to session four; however, trends suggested that PCET patients had greater early session gains ($t(286) = -1.74$, $p = .084$). Patients who received PCET had an average PHQ-9 early-change score of 3.20 (*SD* = 4.93), whereas patients who received CBT had a change score of 2.15 (*SD* = 5.92).

Later Session Effects on Treatment Outcome

Demographic and clinical characteristics for patients ($n = 189$) within the later session effects on treatment outcome regression are presented in Table 2. Those who had ≥ nine sessions and reached RCSI were significantly more likely to be female ($p = .002$). All other demographic variables were non-significant.

Table 5 outlines the clinical characteristics of patients within the later session analysis. There were no significant differences in RCSI between therapy groups (PCET or CBT), or based on the number of sessions attended, or drop-out. Further, PHQ-9, GAD-7 and WSAS scores at session one, and session five to eight PHQ-9 change score, did not significantly differ between therapy outcome groups. However, there was a significant difference between session eight depression scores; those clients who recovered were significantly more likely to have lower PHQ-9 scores at session eight ($p < .001$)

A hierarchical logistic regression evaluated the contribution of therapy mode (model one), session eight depression score (model two) and the interaction between therapy mode and session

eight depression score (model three), in association with RCSI at the end of therapy. Table 6 outlines the results from each model.

Table 5

Descriptive Statistics for Patients Included within the Later Session Analysis

	Descriptive Statistics: Later Session Analysis				
Clinical Characteristics	All Cases (n = 189)	RCSI end-of-treatment (n = 107)	NonRCSI end-of-treatment (n = 82)	Test Statistic	p
Treatment Type (n)					
PCET	88	44	44	$\chi^2(1) = 2.93$	.087
CBT	101	63	38		
Session 1, PHQ-9 (M, SD)	17.62 (4.71)	18.05 (3.74)	17.06 (5.72)	$t(132)^{\dagger} = -1.34$	.176
Session 1, GAD-7 (M, SD)	13.36 (4.61)	13.47 (4.43)	13.21 (4.87)	$t(187) = -0.38$	.702
Session 1, WSAS (M, SD)	23.82 (7.11)	23.42 (6.76)	24.34 (7.55)	$t(187) = 0.88$	.378
Session 8, PHQ-9 (M, SD)	13.52 (6.18)	11.55 (5.78)	16.08 (4.72)	$t(187) = 5.35$	**<.001**
Change Score Session 5-8, PHQ-9 (M, SD)	2.07 (4.82)	2.34 (4.90)	1.71 (4.72)	$t(187) = -0.90$	.370
Number of Sessions (M, SD)	14.99 (4.13)	14.49 (3.80)	15.56 (4.48)	$t(158)^{\dagger} = 1.89$	.061
Attrition (%)					
Dropped out/ declined	9.1	5.7	13.6	$\chi^2(1) = 3.49$	.062
Did not drop out/ decline	90.9	94.3	86.4		

Abbreviations. CBT = Cognitive Behavioural Therapy; PCET = Person Centred Experiential Therapy; GAD-7 = Generalised Anxiety Disorder Measure; PHQ-9 = Patient Health Questionnaire; RCSI = Reliable and Clinically Significant Improvement; WSAS = Work and Social Adjustment Scale.

† Statistics are reported with equal variance not assumed

Therapy mode (PCET versus CBT) did not significantly explain the variance in RCSI outcomes (χ^2 (1) = 2.94, p = .087). Results from the tests of model coefficients found that model two significantly explained 18.5% of the variance in RCSI (χ^2 (2) = 28.03, p <.001). Specifically, when controlling for therapy groups, for every unit increase in session eight PHQ-9 score, from the mean (M = 13.52), patients were 12% less likely to achieve RCSI at the end of treatment (OR = 0.88, CI = 0.83 -0.93, p <.001). Model three, where the interaction between treatment mode and session eight PHQ-9 score was added, did not significantly improve the variance already explained by model two (χ^2 (1) = 0.30, p = .582). The association between session eight PHQ-9 score and

RCSI did not significantly differ between PCET/CBT therapy groups (OR 0.97, CI 0.87 – 1.08, p = .584). Based on this comparison, model two was the best fit. A complete-case (n = 175; 92.6% of patients) sensitivity analysis resulted in congruent regression findings (Table D2).

Table 6

Hierarchical Logistic Regression of Associations between Later Session Scores and RCSI at the End of Treatment

		Later Session – Treatment Outcome Associations					
Model (Model Statistics)	Variable	B	SE B	Wald X^2	p	OR	95% CI OR
Model 1 (χ^2 (1) = 2.94, p = .087)							
	Constant	0.51	0.21	6.06	.014	1.66	
	Treatment (PCET)	-0.51	0.30	2.92	.088	0.60	0.34 – 1.08
Model 2[†] (χ^2 (2) = 28.03, p <.001)							
	Constant	0.49	0.22	4.98	.026	1.63	
	Treatment (PCET)	-0.38	0.32	1.46	.227	0.68	0.37 – 1.27
	Session 8 PHQ Score	-0.13	0.03	21.29	**<.001**	0.88	0.83 – 0.93
Model 3 (χ^2 (3) = 28.33, p <.001)							
	Constant	0.49	0.22	5.01	.025	1.63	
	Treatment (PCET)	-0.36	0.32	1.29	.256	0.70	0.37 – 1.30
	Session 8 PHQ Score	-0.12	0.04	9.22	**.002**	0.89	0.83 – 1.00
	Treatment (PCET)* Session 8 PHQ Score	-0.03	0.06	0.30	.584	0.97	0.87 -1.08

Abbreviations. PHQ = Patient Health Questionnaire 9; PCET = Person-Centred Experiential Therapy; SE B = standard error of B; OR = odds ratio; 95% CI OR = 95% confidence interval for odd ratio

[†] Pseudo R^2 for Model 2 = .19; Pseudo R^2 statistic used was Nagelkerke R Square

Later Change Scores

On average, patients scored 13.52 (SD = 6.18) on the PHQ-9 at session eight; this did not significantly differ treatment arms (t(187)= 0.89, p = .116). Further, there was no significant

difference between therapies when comparing PHQ-9 change scores from session five to eight; however, trends suggest that CBT patients had greater later session gains ($t(187)= - 1.72$, $p = .087$). Patients who received CBT had a PHQ-9 later-change score of 2.63 ($SD = 4.94$), whereas patients who received PCET had a change score of 1.42 ($SD = 4.63$).

Predictors of Early Response

Demographics and clinical characteristics comparing early responders and nonearly responders are reported in Table 7.

Table 7

Demographic and Clinical Characteristics for Early Responders and Nonearly Responders

	Descriptive Statistics: Early Response Analysis				
Variable	All Cases (n = 288)	Early Responder (n = 81)	Non-early Responder (n = 207)	Test Statistic	p
Demographics					
Gender (%)					
Female	56.6	33.1	66.9	$\chi^2(1)= 4.65$	**.031**
Male	43.4	21.6	78.4		
White British (%)	86.5	88.9	85.5	$\chi^2(1)= 0.57$	.451
Age	39.14 (12.63)	38.81 (12.67)	39.27 (12.65)	$t(286) = 0.28$	.784
IMD (M, SD)	5.47 (3.26)	5.48 (3.41)	5.48 (3.22)	$t(286) = -0.01$	.989
Clinical Characteristic					
Baseline PHQ-9	18.85 (4.15)	18.62 (3.94)	18.94 (4.23)	$t(286) = 0.60$	.551
Baseline GAD-7	13.20 (4.39)	13.47 (4.07)	13.10 (4.51)	$t(286) = -0.64$	.524
Baseline WSAS	25.70 (7.25)	25.94 (7.12)	25.61 (7.32)	$t(286) = -0.35$	.727
Baseline EQ-Health Rating	37.45 (14.69)	39.50 (14.59)	36.65 (14.68)	$t(286) = -1.48$	.140

Abbreviations. EQ-Health Rating = EuroQol Visual Analogue Health Rating Score from the EQ-5D-5L Measure (Herdman et al., 2011); GAD-7 = Generalised Anxiety Disorder Measure; IMD = Index of Multiple Deprivation; PHQ = Patient Health Questionnaire 9; WSAS = Work and Social Adjustment Scale

Significantly more females were early responders, approximately 11.5% more than the percentage of males who achieved an early response. There were no significant differences in ethnicity, age, IMD and baseline PHQ-9, GAD-7, WSAS and EQ-VAS health rating scores between early responders and non-early responders.

Six baseline variables were entered into a logistic regression: PHQ-9, GAD-7, WSAS, the EQ-VAS health rating score, IMD, and gender; findings are presented in Table 8.

Table 8

Logistic Regression of Associations between Baseline Predictors and Early Response at Session Four

			Pseudo R^2 = .05[†]			
Variable	B	SE B	Wald X^2	*p*	OR	95% CI OR
Constant	-2.41	1.01	5.62	.018	.090	
Baseline PHQ-9	-0.05	0.04	1.14	.287	0.96	0.89 – 1.04
Baseline GAD-7	0.04	0.04	1.38	.240	1.04	0.97 – 1.12
Baseline WSAS	0.03	0.02	1.38	.240	1.03	0.98 – 1.07
IMD score	0.01	0.04	0.09	.764	1.01	0.93 – 1.10
EQ- Health Rating	0.02	0.01	2.69	.101	1.02	1.00 – 1.04
Gender (Female)	0.60	0.28	4.68	**.031**	1.83	1.06 – 3.16

Abbreviations. EQ-Health Rating = Health rating score from the EQ-5D-5L measure (Herdman et al., 2011); GAD-7 = Generalised Anxiety Disorder Measure; IMD = Index of Multiple Deprivation ; PHQ = Patient Health Questionnaire 9; WSAS = Work and Social Adjustment Scale

[†] Pseudo R^2 statistic used was Nagelkerke R Square

The model accounted for 4.8% of the variance in early response at session four. When holding all other covariates constant, gender was the only significant variable associated with early response. Females were more likely to be early responder compared to males (OR = 1.83, CI = 1.06 – 3.16, p = .031).

A complete-case (n = 274; 95.2% of patients) sensitivity analysis was run, and regression findings for the EQ-VAS Health Rating score became significant (p =.016). Yet, the odds ratios for this variable in the complete-cases analysis closely resembled the imputed data, and the effect remained marginal (B = 0.03, Wald x^2 = 5.78, p = .016, OR = 1.03, CI = 1.01 – 1.05). Regression findings from the early response complete case sensitivity analysis can be found in Table D3. Statistical significance did not change for any other variables; gender remained a significant predictor of early response in the complete-cases analysis with an odd ratio of 1.85 (CI 1.04 – 3.30, p = .035).

Discussion

This study primarily investigated the prognostic value of early and later session scores, comparing person-centred experiential therapy (PCET) and cognitive behavioural therapy (CBT) for the treatment of depression. Results indicated that early (session four) and later (session eight) depression scores were significantly associated with reliable and clinically significant improvement (RCSI) at the end of treatment, with lower scores increasing the odds of RCSI.

There was no significant difference in RCSI between PCET and CBT, yet treatment mode significantly moderated the association between session four depression scores and treatment outcomes. Comparing treatments, findings suggest that those with mild-moderate depression symptoms at session four had an increased probability of RCSI in PCET. Conversely, those with more severe depression scores at session four had an increased probability of RCSI in CBT. Treatment mode did not differentially affect the significant association between later change (session eight) scores and treatment outcome.

Further, between-therapy differences in early versus later change scores were non-significant. However, trends suggested that PCET patients tended to have greater gains early on in therapy (sessions one to four), whereas CBT patients tended to have greater gains later in therapy

(sessions five to eight). Overall, the primary findings suggest that the degree and effect of early versus later change scores may be related to the therapy modality received.

A secondary analysis found females (compared to males) to be 1.83 times more likely to achieve an early response by session four. Whilst the literature on predictors of early response is limited, this finding is in line with previous counselling-specific research (Saxon et al., 2008) and meta-review findings (Tanguagy-Sela et al., 2022), where being female has been reported to be a predictor of better psychotherapeutic outcomes. That said, baseline scores for depression, generalised anxiety, functioning, and deprivation were not significantly associated with an early response; this contrasts previous meta-review findings, which generally found these variables to be related to better psychotherapeutic outcomes (Tanguagy-Sela et al., 2022). Results from the complete-case sensitivity analyses found that, as overall (baseline) health ratings increased, patients were more likely to achieve an early response; this association was non-significant in the primary mean-inputted data and, due to considerable power issues, should be interpreted cautiously.

Current findings run parallel with the early response literature (Beard & Delgadillo, 2019; Duffy et al., 2022) in that lower depression scores at session four were significantly associated with RCSI at the end of treatment. Moreover, lower depression scores at session eight were significantly associated with RCSI. Previous research has recognised that a subgroup of people have greater gains later on in therapy (Duffy et al., 2022; Rubel et al., 2015a); therefore, further investigations concerning the potential effect of ‘later responders’ is required.

To the author’s knowledge, this study is the first to specifically investigate if the effect of early/later session scores on outcome significantly differed between PCET and CBT during treatment for moderate-severe depression. While comparisons with previous research are therefore tentative, the present findings, from randomised routine data, show some early support for observational findings. In support of the audit upon which this study was based (Pybis et al., 2017),

there was no main effect of therapy type on treatment outcomes, yet the association between early session depression scores and treatment outcome depended on the therapy received.

The finding that individuals with more severe depression at session four may respond favourably to CBT is consistent with previous literature, which found that patients with more severe (baseline) depression respond favourably to a CBT-based treatment (Serbanescu et al., 2020). However, the present study highlighted that those with subclinical or mild clinical depression scores by session four might, on the contrary, respond favourably to PCET. Possibly, clients with more severe depression may have lower levels of adaptive coping skills (Thompson et al., 2010); therefore, a skills-focused CBT treatment may better support individuals in learning and implementing helpful coping strategies (Hundt et al., 2013).

On the contrary, when depression scores are less severe at session four, these patients may already have knowledge of and access to helpful resources (Thompson et al., 2010). For some clients, CBT may seem patronising and simplistic (Omylinska-Thurston et al., 2019), possibly for those who ‘know what to do’, even if they struggle to implement helpful strategies. A prescriptive skills-focused approach may feel restrictive for those who could benefit from exploring, more deeply, their emotions (Omylinska-Thurston et al., 2019). Presently it is unknown what constitutes these differential responses. The PRaCTICED trial (Barkham et al., 2021) collected qualitative feedback from patients; this offers a rare opportunity to explore the present quantitative findings, from a qualitative perspective.

Understanding how treatment mode affects the relationship between early session scores and treatment outcome is paramount for future investigations. More so, given that recent primary research found early responders in PCET to be six times more likely to achieve RCSI (Duffy et al., 2022), which is above and beyond the odd-ratio of 4.84 reported within an early response systematic review of largely CBT-based therapies (Beard & Delgadillo, 2019). Between-therapy

differences in early session change are even more important to understand when realising that the mean number of sessions attended in IAPT services is, on average, lower in PCET comparable to CBT (NHS Digital, 2022).

Yet, the limited research that directly compares predictors of outcome, specifically between cognitive-behavioural and HEP (Delgadillo & Gonzalez Salas Duhne, 2020) or supportive therapy (Serbanescu et al., 2020) concerns baseline prognostic values, not sessional data. Given that the present findings, whilst not statistically significant, suggested greater early gains in favour of PCET and greater later gains in favour of CBT, the moderating role of therapeutic intervention on treatment response, *during* therapy, requires attention. Although concerns have been raised about the over-interpreting 'approaching significant' findings (Gibbs & Gibbs, 2015), the p-value cut-off of .05 is somewhat arbitrary and can be misleading (Alderson & Chalmers, 2003). Thus, these observed differences between therapies – though not significant – are worthy of investigation in future highly powered studies, especially considering similar previous findings (i.e. Pybis et al., 2017).

Common factors are known to influence therapeutic outcomes (Imel & Wamplod, 2008; Lambert, 2005) and debate around their effect above and beyond specific therapeutic technique(s) long remain a contentious subject (see Lambert, 1992; Lambert & Bergin, 1994). Qualitative findings from patients in person-centred therapy have described how clients have felt empowered and able to use the therapeutic space as they wished (Cook & Monk, 2020; Timulák & Elliott, 2003; Timulák & Lietaer, 2001). Qualitative findings from patients in CBT-based therapies suggest that patients had inaccurately expected to 'off-load' to a therapist and thus initially lacked knowledge on the active participation required which ultimately helped them to benefit from treatment (Rushton et al., 2020). Further, a conversational analysis of CBT-based treatments found that person-centred care was compromised during early sessions, as patients struggled to share their account of their

own experiences before that of routine outcome measures and proforma-based closed questions (Drew et al., 2021).

Whilst common factors and techniques are considered important in both therapies, PCET places more value on the client's narration of their own experiences (Angus, 2012), whereas CBT focuses on symptom reduction and behavioural change (Tolin, 2010). With the assimilation (of problematic experiences) model in mind (see Stiles et al., 2001), it may be that the emphasis on relational factors in PCET is associated with greater gains during the earlier stages of assimilation, whereas the emphasis on change mechanisms in CBT may be associated with greater gains once an individual reaches the later stages of assimilation. Possibly, where there is too much emphasis on technique too soon, and not enough emphasis on change mechanisms, alongside or after alliance building, sub-optimal responses may occur.

Implications

Clinical supervision may support clinicians to reflect on common (e.g., alliance building) and specific factors (e.g., therapeutic technique), to improve a practice-based understanding of 'what works for whom'. Sessional outcome monitoring and subsequent progress feedback may facilitate (practitioner and client) understanding and improve retention and therapeutic outcomes (de Jong et al., 2021). Possibly, more attention should be paid to providing the therapist, not just the patient, with feedback (Lambert et al., 2001; Lambert et al., 2005). Further, idiographic patient-reported outcome measures (I-PROMS) may help clients to 'tell their story' (Greenhalgh et al., 2018). Pertinent to the present study, I-PROMS may be particularly fruitful, clinically and in research, for assessing personal indices of change whilst promoting person-centred care; after all, differential fluctuations in individual well-being are, indeed, personal (Sales et al., 2022).

It may be that stratified care improves treatment outcomes (Delgadillo et al., 2022). In line with the present findings, subgroups of patients have previously been reported to respond

favourably to PCET versus CBT, though more evidence is required to validate early findings (Delgadillo & Gonzalez Salas Duhne, 2020). Matching patients with treatments may soon prove fruitful, yet uncertainties remain around what works who whom (Nye, 2023). Therefore, at this time, follow-up assessments and responsive treatment adaptations may be more salient (Simon & Perlis, 2010).

Strengths and limitations

Randomised data reduces the bias that may present when clients are selectively assigned to treatments; however, these data often lack 'real world' applicability (Carey & Stiles., 2016). Therefore, using routine but randomised practice data was a strength of the present study. While this study is the first, to the author's knowledge, to compare differential session-specific outcomes in PCET and CBT, excluding patients with ≤ four sessions was a limitation of the study design – especially considering the finding that early session effects on outcome were moderated by treatment modality. Future research may wish to shed light on (differential) change patterns, within and between PCET and CBT, during early sessions. Multilevel modelling with big data could further account for patient, therapist and higher-level variance, which, due to the small sample size and negligible therapist effects in the PRaCTICED data (Barkham et al., 2021), were not controlled for within the present study.

Given that (differential) drop-out rates in therapy are problematic (Bados et al., 2007), the consideration of attrition was a strength of the study. However, as there were significant between-therapy differences in the reasons for therapeutic endings by session eight, survival bias limits any conclusions drawn from the later session analysis. By session eight, significantly more PCET patients were described as 'therapy completers', whereas most CBT patients were described as having 'dropped out' of therapy. While the reason for differential drop-out between therapies is unknown, the higher rate of PCET therapy completers possibly suggests a successful outcome,

whereas the higher rate of CBT drop-out may suggest an unsuccessful outcome. Regardless, these differences in attrition confound the findings from the later session analysis, as these patients who had ended therapy – for different reasons – were not included. Reasons for therapeutic endings should be considered and accounted for in future research, arguably as a requirement, when comparing psychological treatments.

In the present study, the primary analyses included only two variables: session score(s) and treatment mode. Parsimonious regression models are encouraged in research so that variance can be explained with as few covariates as possible (Field, 2021). However, these regressions did not control for other possible confounds; including variables in the regression models which showed statistically significant differences in treatment outcome, like gender and attrition, could have reduced the likelihood of biased estimations (Kahan et al., 2014; McNamee, 2005). Furthermore, mean imputation was used in the present study, which can exacerbate biased estimations (Donders et al., 2006). However, the limitations brought about by the imputation method adopted were mitigated by the assessment of missing data, and the conduction of complete-case sensitivity analyses – a strength of the present study.

Regardless, although the primary analyses were sufficiently powered, the analysis investigating predictors of early response was considerably underpowered. Future research should pay more attention to predictors and moderators of early versus later responses to therapy. Machine learning techniques may enable a better understanding of prognostic values, though these methods have mainly been used with baseline (not sessional) data for those accessing CBT (not PCET) treatments. Latent growth modelling approaches may support the identification of differential patterns of change (Rubel et al., 2015b) – within, but also between, treatment modalities.

Conclusions

The present study investigated if the association between early and later session scores significantly differed between PCET and CBT. Further, the study investigated predictors of early response and found females to be significantly more likely to be an early responder. However, these findings should be interpreted cautiously due to considerable power issues.

Results from the primary (and sufficiently powered) analyses found early and later session scores to be associated with treatment outcomes, yet the effect of early session depression scores on treatment outcomes depended on the therapy received. The present findings suggest that patients with subclinical or mild depression respond favourably to PCET compared to patients with milder symptoms in CBT. Conversely, findings suggest that those with more severe depression symptoms at session four respond favourably to CBT compared to PCET. Though nonsignificant, the differences between therapies suggest that PCET patients had greater early session gains, and CBT patients had greater later session gains. Future research using big data may wish to consider differential early versus later treatment responses, within and between PCET and CBT, to investigate these early findings further.

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Appendices

Appendix A

Ethical Approval Letter

The University Of Sheffield.

Downloaded: 15/02/2022
Approved: 27/10/2021

Kerry Ardern
Registration number: 200183792
Psychology
Programme: Doctorate in Clinical Psychology

Dear Kerry

PROJECT TITLE: Change patterns in Person-Centred Experiential Therapy and Cognitive Behavioural Therapy: a quantitative secondary analysis of the PRaCTICED data
APPLICATION: Reference Number 043527

This letter confirms that you have signed a University Research Ethics Committee-approved self-declaration to confirm that your research will involve only existing research, clinical or other data that has been robustly anonymised. You have judged it to be unlikely that this project would cause offence to those who originally provided the data, should they become aware of it.

As such, on behalf of the University Research Ethics Committee, I can confirm that your project can go ahead on the basis of this self-declaration.

If during the course of the project you need to deviate significantly from the above-approved documentation please inform me since full ethical review may be required.

Yours sincerely

Department Of Psychology Research Ethics Committee
Departmental Ethics Administrator

Appendix B

[Outcome Measures Redacted]

Outcome measures redacted:

The Patient Health Questionnaire 9 (PHQ-9; Kroenke et al., 2001)

The Generalised Anxiety Disorder 7 (GAD-7 ; Spitzer et al., 2006)

The Work and Social Adjustment Scale (WSAS; Mundt et al., 2002)

EuroQol Health Rating Visual Analogue Scale (EQ-VAS; 2009)

Appendix C

Power Calculations

	Input Parameters					Output Parameters	
Main predictor (outcome variable)	Prob (Y=1 | X=1) H1	Prob (Y=1 | X=1) H0	α err prob	Sample Size	R^2	Critical Z	Power (%)
Session 4 PHQ-9 (RCSI)	.44	.54	0.05	288	0.25	-1.96	80.7
Session 8 PHQ-9 (RCSI)	.36	.59	0.05	189	0.25	-1.96	99.8
Gender (Early Response)	.33	.22	0.05	288	0.25	1.96	42.1

Appendix D

Complete Case Sensitivity Analyses

Table D1. Hierarchical Regression Sensitivity Analysis: Early Session – Treatment Outcome Associations

		Early Session – Treatment Outcome Associations Sensitivity Analysis (n = 267)					
Model (Model Statistics)	Variable	B	SE B	Wald X^2	p	OR	95% CI OR
Model 1							
(χ^2 (1) = 1.65, p = .199)							
	Constant	0.33	0.18	3.25	.071	1.39	
	Treatment (PCET)	-0.32	0.25	1.64	.200	0.73	0.45 – 1.18
Model 2							
(χ^2 (2) = 20.43, p <.001)							
	Constant	0.36	0.19	3.58	0.06	1.43	
	Treatment (PCET)	-0.35	0.25	1.86	.172	0.70	0.43 – 1.17
	Session 4 PHQ Score	-0.10	0.02	17.28	**<.001**	0.91	0.86 – 0.95
Model 3[a]							
(χ^2 (3) = 29.40, p <.001)							
	Constant	0.33	0.18	3.29	.070		
	Treatment (PCET)	-0.33	0.26	1.60	.205	0.72	0.43 – 1.20
	Session 4 PHQ Score	-0.03	0.03	0.78	.378	0.97	0.91 – 1.04
	Treatment (PCET)* Session 4 PHQ Score	-0.15	0.05	8.58	**.003**	0.86	0.78 – 0.95

Abbreviations. PHQ = Patient Health Questionnaire 9; PCET = Person-Centred Experiential Therapy; SE B = standard error of B; OR = odds ratio; 95% CI OR = 95% confidence interval for odd ratio

[†] Pseudo R^2 for Model 3 = .14; Pseudo R^2 statistic used was Nagelkerke R Square

Table D2. Hierarchical Regression Sensitivity Analysis: Later Session – Treatment Outcome Associations

		Later Session – Treatment Outcome Associations Sensitivity Analysis (n = 175)					
Model (Model Statistics)	Variable	B	SE B	Wald X^2	p	OR	95% CI OR
Model 1							
(χ^2 (1) = 2.87, p = .090)							
	Constant	0.47	0.22	4.76	.029	1.60	
	Treatment (PCET)	-0.52	0.31	2.85	.091	0.60	0.33 – 1.09
Model 2[a]							
(χ^2 (2) = 29.89, p <.001)							
	Constant	0.43	0.23	3.45	.063	1.54	
	Treatment (PCET)	-0.36	0.33	1.15	.284	0.70	0.37 – 1.34
	Session 8 PHQ Score	-0.14	0.03	22.49	**<.001**	0.87	0.82 – 0.92
Model 3							
(χ^2 (3) = 30.11, p <.001)							
	Constant	0.43	0.23	3.51	.061	1.54	
	Treatment (PCET)	-0.34	0.34	1.03	.310	0.71	0.37 – 1.37
	Session 8 PHQ Score	-0.13	0.04	10.02	**.002**	0.88	0.82 – 0.95
	Treatment (PCET)* Session 8 PHQ Score	-0.03	0.06	0.22	.637	0.97	0.87 – 1.09

Abbreviations. PHQ = Patient Health Questionnaire 9; PCET = Person-Centred Experiential Therapy; SE B = standard error of B; OR = odds ratio; 95% CI OR = 95% confidence interval for odd ratio

[†] Pseudo R^2 for Model 2 = .21; Pseudo R^2 statistic used was Nagelkerke R Square

Table D3. Hierarchical Regression Sensitivity Analysis: Later Session – Treatment Outcome Associations

	Pseudo R^2 = .07[†]					
Variable	B	SE B	Wald X^2	*p*	OR	95% CI OR
Constant	-3.01	1.06	8.00	.005	0.05	
Baseline PHQ-9	-0.05	0.04	1.07	.302	0.96	0.88 – 1.04
Baseline GAD-7	0.04	0.04	0.98	.323	1.04	0.96 -1.12
Baseline WSAS	0.03	0.02	2.09	.149	1.04	0.99 – 1.08
IMD score	0.03	0.04	0.32	.572	1.03	0.94 – 1.12
EQ-VAS Health Rating	0.03	0.01	5.78	**.016**	1.03	1.01 – 1.05
Gender (Female)	0.62	0.29	4.43	**.035**	1.85	1.04 – 3.30

Abbreviations. EQ-VAS Health Rating = Health rating score from the EQ-5D-5L measure (Herdman et al., 2011); GAD-7 = Generalised Anxiety Disorder Measure; IMD = Index Measure of Deprivation; PHQ = Patient Health Questionnaire 9; WSAS = Work and Social Adjustment Scale

[†] Pseudo R^2 statistic used was Nagelkerke R Square