SUPPLEMENTARY MATERIAL

Supplementary Table 1. Characteristics of the included studies.

Authors, year and country	Definition of therapist responsiveness	Associated constructs	Objectives	Design	Sample	Instrument used for TR	Other instruments	Results	Conclusions
Richards D., Timulak L., Hevey D. (2013) - Ireland	The relational and technical skills regarding the appropriateness of the match between the issues that participants disclosed in their free-text and the therapists' response to that material	Outcome	To compare the efficacy of eight weekly sessions of a self-administered online CBT treatment to a therapist-assisted email CBT treatment for university students	Randomised Parallel Group Trial	101 students	Responsivenes Adherence Measure (RAM)	Clinical Outcomes in Routine Evaluation - Outcome Measure 10 (CORE-OM 10)	There were no significant differences between the two online treatments, both reduced depressive symptoms and improved general functioning	The possibility for cCBT and its cost-effectiveness as a self-administered treatment in a university mental health setting has important clinical benefits and may contribute to addressing the shortcomings in meeting increasing demands that services presently face
Elkin I., Nier F. L., Smith Y., Canada K. E., Henderson E., Brown E. R., Mckay B. M. (2014) - United States	The degree to which the therapist is attentive to the patient's current concerns and he responds to the patient's communication, both in terms of content and feelings.	Early Patient Engagement	To test the hypothesis that therapist responsiveness in the first two sessions relates to early patient engagement in treatment	Correlational Study	72 patients and 17 fully-trained therapists	Therapist Responsiveness Scale (TRS)	BLRI - Barrett-Lennard Relationship Inventory; VTAS - Modified Vanderbilt Therapeutic Alliance Scale	The global item of therapist responsiveness, predicted both the patient's positive perception of the therapeutic relationship after the second session	Therapist behaviors in early sessions may have different impacts on how the patient feels about the therapy and therapist, and on the extent to which the patient is seen as

								and the patient's remaining in therapy for more than four sessions	contributing to the therapeutic alliance
Kramer U., Fluckiger C., Kolly S., Caspar F., Marquet P., Despland J. N., De Roten Y. (2014) - Switzerland	A pivotal concept contributing to therapeutic outcome and denoting the mutual influence of emerging context characteristics on the interaction partners - the therapist and the patient.	Outcome	To test the hypothesis that, compared to General Psychiatric, the Motive Oriented Therapeutic Relationship approach produced more positive in-session experiences and significant links between patient's in-session experience, the therapeutic alliance and outcome	Randomized Controlled Trial	60 patients	Motive-Oriented Therapeutic Relationship (MOTR)Scores	Berna Post-Session Report 2000	MOTR seems to have had a specific impact on the therapist's awareness and interaction style, which produces in the patient an additional symptom relief	Appropriate therapist responsiveness, as introduced in the form of MOTR, may pose supplementary challenges to the therapist and at the same time facilitates several productive change processes
Meystre C., Kramer U., De Roten Y., Despland J., Stiles W. B. (2014) - United States	Therapists' behaviors that are affected by emerging context, including emerging perceptions of others' characteristics and behaviour	Assimilation of problematic experiences	To investigate links between therapist intervention choice and	Case study	30 years old patient	Comprehensive Psychotherapeutic Interventions Rating Scale (C-PIRS) Assimilation of Problematic		Interventions, appropriately responsive to the problem's current APES level, help the patient move	Specific therapist interventions may facilitate assimilation and underline the dialogical

Author	Concept	Focus	Aim	Design	Sample	Measure 1	Measure 2	Results	Conclusions
			progress across APES levels			Experiences Scale (APES)		from the current level to the next	dimension of the therapy process
Snyder J., Aafjes-van Doorn K. (2016) - United States	The therapist's ability to achieve optimal benefit for the client by adjusting responses to the current state of the client and the interaction	Patient feedback	To explore how measure-based feedback can be used to identify and address a clinical error	Case study	30 years old patient	Patient's Experience of Attunement and Responsiveness Scale (PEAR)	The Outcome Questionnaire OQ-45.2	Patient feedback allowed a clinical error to be identified thus allowing for clinically significant repair within the relationship	Providing therapists with feedback regarding their patients' experience of attunement and responsiveness might be particularly helpful and could be used to guide therapists to make adjustments in subsequent sessions
Snyder J., Silberschatz G. (2016) - United States	The therapist's ability to achieve optimal benefit for the client by adjusting responses to the current state of the client and the interaction	Outcome	To test the correlation between the patient's experience of attunement and responsiveness, and treatment outcome	Correlational Study	38 patients and 16 trainee therapists	Patient's Experience of Attunement and Responsiveness Scale (PEAR)	Outcome Questionnaire – 45 (OQ-45)	Patient ratings on the PEAR Scale were significantly correlated with OQ-45	These findings suggest that attunement and responsiveness during a therapy session may be important predictors of concurrent session outcome
Kramer U., Pascual-Leone A., Rohde B. K. e Sachse R. (2016) – Germany	Therapists' actions that are influenced by the emerging context	Outcome	To investigate those mechanisms underlying the processes of change	Case Series	39 patients and 27 trainee psychotherapists	Processing-Content-Relationship Scale (BIBS)	Classification of Affective-Meaning States (CAMS)	The good outcome cases showed higher quality of therapist-patient interaction, compared to	Outcome is the product of complex moment-by-moment adjustments in the dialogue between a

								poorer outcome cases	therapist's interventions and the patient's emotional processes, and not the simple ballistic consequences of therapist interventions
			involved in psychotherapies for patients with Personality Disorders						
Kivlighan D. M., Kline K., Gelso C. J., Hill C. E. (2017) - United States	Therapists' actions that are influenced by the emerging context	Quality Session Evaluation	To examine how congruence and discrepancy in clients' and therapists' ratings of the working alliance (WA) and real relationship (RR) were related to client-rated session quality	Correlational study	23 trainee therapists and 144 patients	Working Alliance Inventory – Short Form (WAI-SR), Real Relationship Inventory (RRI)	Session Evaluation Scale (SES)	Some clients perceived greater session quality when, across all sessions, WA was stronger than RR and other clients perceived greater session quality when RR was stronger than WA	Therapists should emphasize different aspects of the therapeutic relationship in different sessions with the same client, and with different clients
Zalaznik D., Strauss A. Y., Halaj A., Barzilay S., Fradkin I., Katz B.A., Ganor T., Ebert D.D., Anderson G., Huppert J. D. (2021) – Sweden	The therapist's ability to achieve optimal benefit for the client by adjusting responses to the current state of the client and the interaction	Outcome and adherence	To examine relationships among different aspects of therapeutic alliance with treatment outcome, adherence and attrition	Case Series	74 patients and 8 trainee therapists	Patient's Experience of Attunement and Responsiveness Scale (PEAR)	Working Alliance Index-6 items Working Alliance Index - Therapist Short Form	Higher ratings of I-PEARp were associated with subsequent lower symptoms and lower symptoms were associated with higher	Results indicate that the patient experience of the alliance in ICBT includes two aspects, each of which uniquely contributes to outcomes: patient connection to the program (related

Authors	Definition	Construct	Aim	Design	Sample	Instrument	Instrument 2	Results	Conclusions
			in internet delivered cognitive behavioral therapy (ICBT) for panic disorder					subsequent alliance. In contrast, I-PEARt predicted adherence, but not symptoms	to symptom outcomes) and dyadic relationship with the therapist (a glue allowing the treatment to hold)
Culina I., Fiscalini E., Martin-Soelch, C., Kramer U. (2022) - Switzerland	The degree to which the therapist is attentive to the patient's current concerns and he responds to the patient's communication, both in terms of content and feelings.	Working Alliance	To investigate the impact of therapist responsiveness at first session on the evaluation of therapeutic alliance from the therapist's perspective and from patient's perspective	Correlational and longitudinal design applied to a 10-session therapy in a naturalistic setting	13 trainee therapists and 47 patients	Therapist Responsiveness Scale (TRS)	The Working Alliance Inventory – Short Form	The global evaluation of responsiveness revealed a significant relationship with the temporal evolution of the alliance rated from the therapists' perspective.	There is the necessity to further explore therapist appropriate responsiveness which could potentially explain several psychotherapy research results.
Spagnuolo Lobb M., Sciacca F., Iacono S. I., Di Nuovo S. (2022) - Italy	Therapists' behaviors that are influenced by the emerging context	Therapist expertise in training	To explore how aesthetic relational knowing is present in students and psychotherapist and which dimensions significantly differentiate levels of	Cross-Sectional	128 therapists: 42 fully-trained and 86 trainee therapists	Aesthetic Relational Knowledge Scale (ARKS)		Significant differences between the two groups were found in body awareness and resonance	The study shows the importance of training for the development of the therapist's responsiveness, especially in the factors of body awareness and resonance

			expertise in psychotherapy						

PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	

PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	
Study characteristics	17	Cite each included study and present its characteristics.	
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	
	23b	Discuss any limitations of the evidence included in the review.	
	23c	Discuss any limitations of the review processes used.	
	23d	Discuss implications of the results for practice, policy, and future research.	
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	
Competing interests	26	Declare any competing interests of review authors.	
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	

Supplementary Figure 1. PRISMA 2020 checklist.