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The Therapeutic Alliance, Dropout from Psychotherapy and the role of Formal Feedback in Repairing Alliance Ruptures

Alexander Neil Harvey

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Contents

Abstract

The therapeutic or ‘working’ alliance in psychotherapy has consistently been shown to be an important factor in patient outcome from psychotherapy. Poor alliance has been suggested to be a factor in patients dropping out or prematurely terminating therapy. Developing a strong alliance and identifying and resolving any tension or difficulties between therapist and patient, described as therapeutic alliance ‘ruptures’, has been suggested as a means of retaining patients in therapy so that they can derive a benefit from it and as a potential mechanism of change.

The systematic review evaluates the links between the strength of the therapeutic alliance and dropout from individual psychotherapy for adults. A moderate link was found between with stronger alliance being associated with a reduction in the risk of dropout from psychotherapy.

The empirical paper used a Task Analytic design to validate a previously developed model of repairing ruptures in the therapeutic alliance using a ‘formal feedback’ tool to aid patients in giving feedback on the alliance to their therapists and to provide a basis for the dyad to identify, discuss and attempt to resolve ruptures. Dyads were observed to complete the model stages and more model stages being completed was linked to greater observed resolution of ruptures. However, rupture resolution did not appear to link to the session being found more helpful for the patient from either the patient or therapist perspective. Rupture resolution was also not found to link to the overall clinical outcome for patients. The limitations of the study, possible implications for clinical practice and further research are discussed.

Paper A: A Systematic Review of the link between the Therapeutic Alliance and Premature Termination in Psychotherapy

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Paper A Abstract

Objective: The current study systematically reviews evidence for the link between the therapeutic alliance (between patient and therapist) and dropout from individual adult psychotherapy. Method: Literature searches were conducted to identify studies where the therapeutic alliance and dropout rate were measured and analysed. Results: Seventeen studies met inclusion criteria. The results suggest that there is a link between therapeutic alliance and the rate of dropout from psychotherapy interventions.

Conclusions: While the results support the existence of a therapeutic alliance-outcome link in group interventions, further research in this area is needed. Particularly the development and validation of a specific tool to assess therapeutic alliance in a group setting.

Keywords: Therapeutic Alliance; Working Alliance; Helping Alliance; Premature Termination; Dropout.

1 Introduction

Psychotherapy is both efficacious (meaning that the treatment works when tested in randomised controlled trials), and effective when translated to 'real world' clinical treatment of mental health difficulties. Lambert's (2013) review of the literature on the efficacy and effectiveness of psychotherapy shows that even though meta-analyses have varied in their estimates of the effect size, even the smaller effects demonstrate improved outcomes compared to those who do not receive treatment. Lipsey and Wilson (1993) conducted a wide-ranging meta-analysis of 302 previous meta-analyses conducted across psychological, educational, and behavioural treatment, finding an estimated effect size of .47 for psychological treatments (k = 156)[1]. Analyses of the psychological treatment of depression have examined how the estimate of effect size varies with study quality, finding that in high quality studies (n = 8) the effect size was d = .22, whereas in the remainder of the dataset (n = 104) the estimate was d = .74 (Cuijpers et al., 2010). Meta-analyses have also shown psychotherapy to be effective for other presenting problems for example, treatment resistant depression (Ijaz et al., 2018), anxiety disorders (Hofmann & Smits, 2008), obsessive compulsive disorder (OCD) (Rosa-Alcázar et al., 2008), panic disorder (Pompoli et al., 2016) and psychosis (Turner et al., 2014), amongst others.

However, Lambert and Ogles (2004) estimated that 5-10% of patients leave psychotherapy treatment worse off than when they began. Swift and Greenberg (2012) found that across 669 psychotherapy studies approximately 1 in every 5 patients drops out of therapy, with likelihood of dropout moderated by diagnosis, patient age, therapist experience, setting and study design variables. Interestingly, the different therapy approaches used, group or individual format, and other patient demographic variables apart from age were not

[1] Where k is the number of objects (previous meta-analyses) analysed for this estimate.

moderators of dropout.

Dropout, or premature termination, has been defined in several ways, for example the patient stopping therapy before they have achieved adequate treatment and recovery from the difficulties they sought treatment for (Garfield, 1994). It has been identified as a key target for improvement for mental health treatment in general and for psychotherapy in particular (Wells et al., 2013). Analysis of the World Health Organisation's World Mental Health Survey Initiative (Wells et al., 2013) showed that dropout from mental health treatment in general (i.e., not only in psychotherapy) occurred at similar rates across the 24 countries surveyed (ranging from low/middle to high income), with an overall rate of 31.7% (SE = 0.7) of patients surveyed reporting dropping out over the previous 12 months (Wells et al., 2013). According to the dose-response model of psychotherapy (Howard et al., 1986) which suggests that patients must receive a sufficient 'dose' or number of sessions of psychotherapy to have a treatment response, reducing dropout could improve outcomes for patients who discontinue treatment early by ensuring they receive sufficient treatment to facilitate change (Hansen et al., 2002). Reducing dropout would improve the use of healthcare resources and reduce service costs by reducing the amount of unused therapist time in missed appointments which could be used by other patients. It could also reduce the negative impacts on therapists' wellbeing by reducing their exposure to unexplained dropout and provide a basis for developing strategies to prevent dropout or mitigate the impact (Barrett et al., 2008).

1.1 Therapeutic Alliance

The therapeutic alliance (TA) is a construct which has been developed as a means of conceptualising the working relationship that is formed between the therapist and patient, with both parties contributing to its strength (Bordin, 1979). Bordin (1979) translated the concept, which had originated in the psychoanalytic literature (Sterba, 1934), suggesting that

TA could be applied more broadly to understand the importance of the relationship in other psychotherapeutic models. Bordin (1979) defined TA as having three elements; agreement on the goal of therapy, agreement on the task or approach to achieving the goal, and the development of a bond between the therapist and patient.

Although Bordin's conception has been widely utilised, others have sought to represent the changes in TA over time. Luborsky (1976) separated the concept of alliance into two phases, an early phase where the basis was primarily the patient's perception of the therapist as supportive, whereas later the alliance was a collaborative relationship between therapist and patient.

Rogers (1951) described three elements he believed a therapist must offer the patient in order to create an effective therapeutic relationship: empathy, congruence and unconditional positive regard. In this conception, the therapist communicates their understanding of the patient's feelings, is authentic in their interactions, and always values the patient positively despite a negative view of some of the patient's actions.

The TA has been found to be a moderate predictor of psychotherapy outcome, and this has been demonstrated consistently. In a comprehensive meta-analysis Horvath, Del Re, Fluckiger and Symonds (2011), calculated the estimated effect size to be r = .275, approaching a moderate effect (moderate effects for correlations being around r = .3 (Cohen, 1988)) with TA predicting 7.5% of the variance in treatment outcomes. More recently, Flückiger, Del Re, Wampold, and Horvath (2018) provide an updated estimate for the outcome: TA relationship of r = .278 based on 295 studies. The rest of the variance in outcomes (92.5%) is suggested by some researchers to be due to patient, therapist and extra-therapeutic factors (Lambert & Ogles, 2004). In contrast to this, some studies have found that neither therapist adherence to treatment protocols (r = .02) nor competence (r = .07) are predictive of outcome, although the findings these mean estimates are based on

varied widely (Webb et al., 2010). Further, correlations have been found between lower ratings of TA and both poorer outcomes and treatment dropout (Samstag et al., 1998). Therefore, identification and improvement of a poor TA could potentially improve outcomes and reduce the number of patients who terminate therapy before achieving a therapeutic effect.

1.2 Dropout from Psychotherapy

The difficulty of defining dropout from psychotherapy has been an ongoing problem in this area of research. The calculated dropout rate has been shown to vary, depending on how 'dropout' is defined, with a range of 17.6 - 53.1% depending on definition, shown in one sample in a university counselling centre (Hatchett & Park, 2003).

Several means of operationalising the concept of dropout have been used in the literature to date. These have been grouped into 5 definitions (Swift & Greenberg, 2012):

1. Attending fewer than the specified number of sessions

Patients who do not attend a predetermined number of sessions are defined as having dropped out.

2. Failure to complete the treatment protocol

Patients who do not complete the pre-specified treatment protocol.

3. Failure to attend a further scheduled session

Patients who do not attend a session that they have scheduled, and do not reschedule

4. Therapist judgment

Therapists determine whether patients have completed treatment or dropped out early, according to their view of the patient's progress.

5. Terminating before achieving clinically significant change

Patients are classified as having terminated prematurely if they stop attending before they have obtained an outcome or symptom rating which would indicate significant or reliable change (Jacobson & Truax, 1991), which is to say that the change in the symptom measure is greater than the measurement error of the rating tool.

Swift and Greenberg point out that each method has advantages and disadvantages. For example, definitions 1 and 2 fail to take account of the possibility of mutually agreed early termination or rapid improvement, whereas 4 relies on the therapists' judgement, which may be biased. Definition 5 may fail to take account of mutually agreed termination where the patient's improvement remains below the reliable or clinically significant level on the outcome measure but the dyad mutually agree to stop. It would also potentially define a lack of response to treatment as 'dropout' rather than treatment failure. As well as these definitional issues, the term dropout is potentially stigmatising and could be seen as locating the responsibility for the 'failure' of the therapy in the patient rather than viewing the treatment as having been unsuccessful, or the therapist having made errors in delivering the treatment.

It should also not be assumed that 'early' termination always represents a poor outcome, particularly from the patient's perspective. It has been reported that some patients report satisfaction following a single session of therapy (Simon et al., 2012). In this study a third of patients who attended only one session gave the highest possible satisfaction rating, 60% gave the highest rating for TA and 40% rated their symptoms or problems as much better. However, Simon et al. (2012) found that single session attenders were dichotomised into those who had good outcomes and a group who had much poorer outcomes when compared to patients who continued to attend therapy. The patients in this study were members of a group health plan who could refer themselves for therapy and may therefore have presented with less severe difficulties than patients who have been referred by a

clinician for treatment.

From the therapist's perspective, early dropout is generally interpreted as a negative outcome and may also have a negative impact on therapist wellbeing (Guy, 1987). Piselli, Halgin, & MacEwan (2011) examined therapists' perspectives and explanations of patient dropout, finding that they attributed failure to external or patient factors, such as family problems, unwillingness or unreadiness for change, and emotional reactions such as being overwhelmed. Therapists typically reported that they had not anticipated early termination and that they were left feeling sad, angry, regretful and ashamed (Piselli et al., 2011).

In the most comprehensive meta-analysis to date, including 669 studies, Swift and Greenberg (2012) found the reported dropout rate was similar (19.7% (CI 18.7-20.7%)) across psychotherapy treatment types (cognitive-behavioural, integrative, psychodynamic, solution-focused, supportive/patient-centred, or other). This analysis also found that trainee therapists had higher rates of dropout than experienced therapists, that dropout was more frequent in university-based treatment centres, and that manualised treatments had lower dropout rates (Swift & Greenberg, 2012).

1.3 Rationale

An early review highlighted that the majority of studies of dropout at that time reported patient factors such as age, gender or socioeconomic status (SES) to be explanations of dropout, although some studies also considered clinic/service, therapist and patient-therapist or extra-therapeutic factors (Baekeland & Lundwall, 1975). However, there are some methodological issues with the review. It predated the introduction of meta-analytic techniques and simply reported the number of published studies for and against each factor. The focus on patient factors reflects the psychotherapy literature at the time, which focused on these as an explanation of outcome with much less consideration being given to therapist and psychotherapy process factors as possible causes of dropout (Bischoff & Sprenkle,

1993).

Later reviews and meta-analyses have moved towards the aim of identifying therapist and process variables. However, because a relatively small number of common patient demographic variables (age, gender, etc) are frequently reported and analysed in most included studies to describe the sample, they continue to be the variables most easily compared across studies whereas a large number of different process variables are reported in different studies making investigation of these more difficult. Wierzbicki and Pekarik (1993) conducted an early meta-analysis of dropout in both child and adult psychotherapy. Although Wierzbicki and Pekarik planned to investigate patient, therapist and process variables, their dataset and method only permitted analysis of six patient demographic factors (sex, race, age, education, socio-economic status (SES), marital status) and of these, minority race (i.e. African-American or other minority), low education and low SES were significantly related to dropout, with moderate effect sizes of .23 - .37 (Cohen, 1988). Child, adult and mixed age studies were analysed separately, and this reinforced previous findings that both the rate and reasons for dropout differed between child and adult patients (Pekarik, 1991) and which has been confirmed more recently (de Haan et al., 2013). In addition to identifying the importance of the dropout definition, the authors suggested that future research should focus on more complex variables related to the patient's expectations and the therapeutic process and relationship variables.

Roos and Werbart (2013) conducted a qualitative review of 44 studies on the effect of therapist and relationship factors on dropout in adult psychotherapy. Fewer than half the studies directly examined the link between dropout and TA. They identified that therapist experience, training and skills have all been reported as influencing dropout, as has the quality of TA, patient dissatisfaction and pre-therapy preparation for patients. They recommended that therapists be given enhanced training in building and repairing the

therapeutic relationship in order to reduce dropout rates.

Sharf, Diener and Primavera (2010) conducted a meta-analysis of the impact of the TA on dropout. Sharf et al (2010) included 11 studies of individual psychotherapy outcomes published between 1990 and 2006. They found a moderately strong relationship (Cohen, 1988) between TA and dropout (d = .55). Swift and Greenberg (2012) conducted a comprehensive meta-analysis of 669 studies reporting dropout rates and outcomes in adult psychotherapy, published between 1990 and 2010. They used meta-analytic techniques and a search strategy which combined electronic searches and hand searches of the references of other reviews and meta-analyses of psychotherapy outcome in general as well as studies of dropout specifically. However, Swift and Greenberg did not include the influence of TA on dropout in their analysis. Given that it has now been over ten years since Sharf's meta-analysis, during which time dropout and TA have continued to be active areas of research, a further analysis of the link between TA and dropout is warranted. Importantly, in 2008 the American Psychological Association (APA) recommended that dropout should be reported routinely in all outcome studies of psychotherapy, increasing the likelihood that an increased sample of studies could be found to review and learn from.

1.4 Review question(s)

1. How strong is the TA-dropout relationship in psychotherapy with adults?
2. Does the source of the TA rating (patient, therapist or observer) affect the strength of the relationship between dropout and TA reported?
3. What is the average dropout rate reported in studies which also measured TA?

1.5 Aim of current review

This review aims to provide an update to previous estimates of the link between the TA and dropout rates in individual psychotherapy with adult patients. The identified studies will be critically appraised using the Quality Assessment Tool for Quantitative Studies (National Collaborating Centre for Methods and Tools, 2008).

2 Method

Electronic searches were conducted on four databases, Medline, HMIC, PsycINFO and CINAHL using the Health Databases Advanced Search system (National Institute for Health and Care Excellence,)

2.1 Search Criteria

A search term (see Appendix A) was designed to identify studies which reported TA and dropout. Synonyms for dropout used were premature termination, early termination, unilateral termination, attrition, drop out, drop-out and dropout. The terms alliance and therapeutic or therapy relationship were used to identify TA. Publications prior to 2006 were excluded to prevent overlap with Sharf et al's (2010) review. The searches for this review covered studies published from January 2007 to December 2019.

2.2 Inclusion Criteria

1. Empirical studies of individual, face-to-face psychotherapy with adults diagnosed with, or treated for any mental health condition, in both controlled trials reporting dropout rates and naturalistic/observational reports of dropout rates in routine clinical practice.
2. Psychotherapy interventions can be of any modality, rather than analogue studies (i.e. those using students or community samples without presenting problems rather than patients presenting and/or referred for treatment).
3. Studies published from December 2006 onwards in peer reviewed journals.
4. Studies published in English.
5. Studies which report a measure of therapeutic, working or helping alliance and dropout rate and that link TA and dropout, or allow this to be calculated.
6. Studies that report the definition of dropout used, as dropout rate varies based on definition (Swift & Greenberg, 2012)

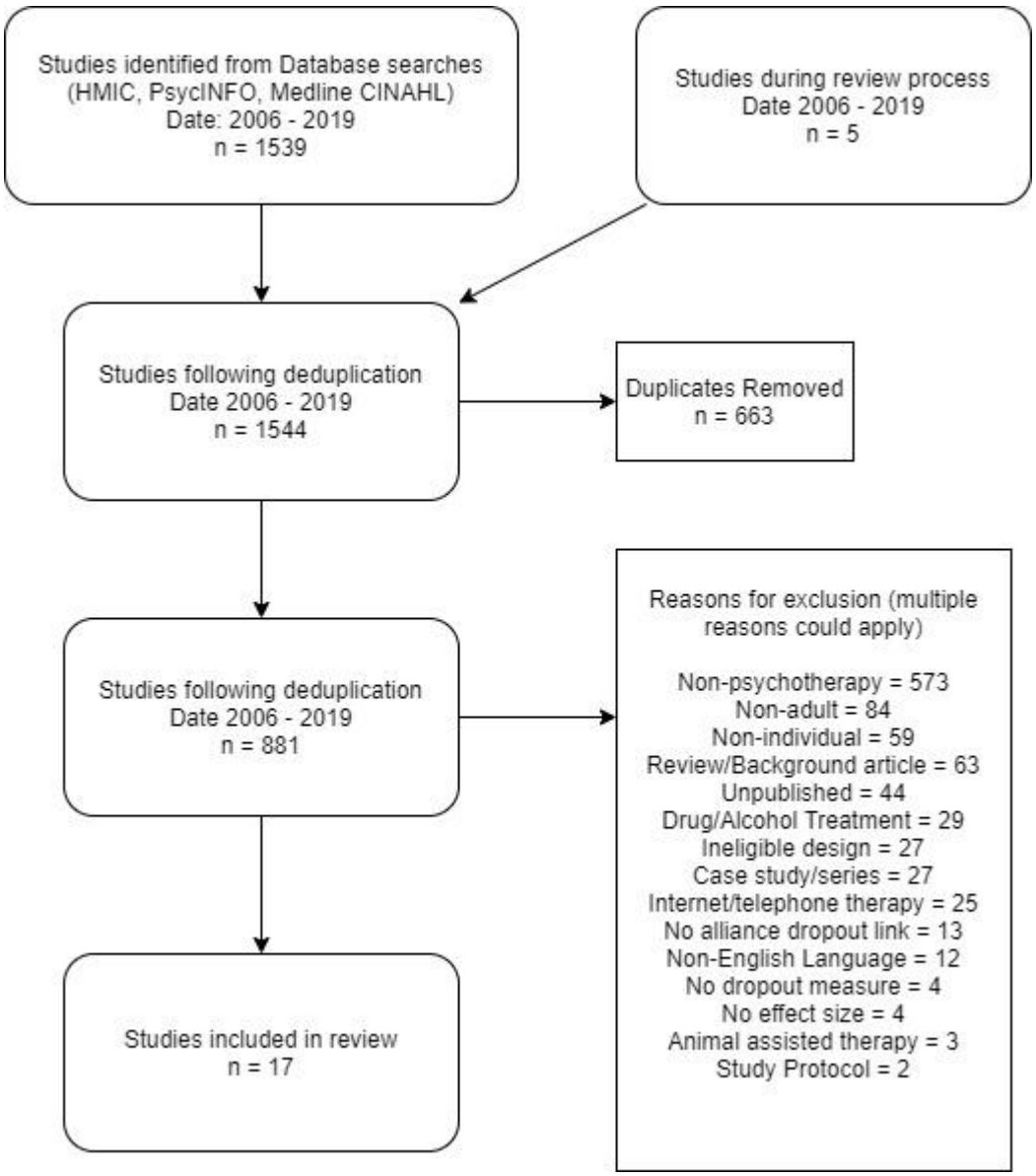
2.3 Procedure

The results of the four electronic searches were transferred to the review management software, Rayyan (Ouzzani et al., 2016) with a total of 1544 articles found. Duplicates were removed and the articles' titles and abstracts were reviewed for eligibility. Where eligibility could not be determined from the abstract the full text article was reviewed. Reasons for exclusion were recorded in Rayyan and are shown in Figure 1. This led to a final sample of 17 articles eligible to be included in the review.

2.4 Calculation of effect sizes

Where necessary, effect sizes were calculated using the Cochrane Collaboration's Effect size calculator (Wilson, n.d.).

Figure 1: Study Selection Process



3 Results

Table 1: Characteristics of Included Studies

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
Arnow et al. (2007)	USA	CBASP (D,M)	RCT	Chronic Depression	451 (CBASP & Combined (CBASP & pharmacotherapy)	12 weeks	Did not complete 12-week programme (2)	23% CBASP, 21% Combined	WAI-S (s3-4)	P	Drop-outs had lower TA than completers. No difference in early treatment response between drop-outs and completers.	d = -.2474 (calculated)

[2] Number of people who completed and dropped out of treatment, excluding those who had missing data, dropped out of the study or did not begin treatment.
[3] Swift and Greenberg (2010) definition number

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
Saatsi et al. (2007)	UK	CBT (D-CP)	Naturalistic prospective	MDD	97	12-20s	Failed to complete agreed length of treatment (1)	24.7%	CALPAS (every session) or ARM (1-3, 7 & 12)	P	Overall TA was significantly higher in the completer group whilst early alliance didn't differ between completion status. Higher TA was associated with better clinical outcome for completers but not dropouts.	d = -0.5203 (calculated)

Westmacott et al. (2010)	Canada	CBT 69.9%, Experiential (15.7%), Interpersonal 14.5% (D - TCPs)	Naturalistic prospective	Anxiety (36%), Depression (31%), Relationships problems (29%), Sexual Abuse (11%), Anger Management (10%)	83	9.7s, 20.8s completers	Unilateral by patient [based on dyad opinion, disagreeing dyads excluded] (other)	37.3%	WAI-S (session 3)	P, T	Unilateral terminating patients (UTC) rated alliance lower than mutual terminators (MTC). Therapist of UTCs only partially aware of patient dissatisfaction. MTCs more likely to rate that they had accomplished what they wanted to (Goals). ‘‘Felt therapy was going nowhere so ended therapy,’’ was rated more highly by UTCs than by their therapists.	d = -.53 (calculated based on patient’s rating of alliance)

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Owen et al. (2012a)	USA	Integrative – psychodynamic/CBT/Relational/Systemic/Cultural (D & T-D)	Naturalistic, retrospective	Mixed – not specified	332	5 (median)	Patient initiated unilateral (3)	30.4%	WAI-SR (no timepoint stated) (H&G 2006)	P	UTCs reported lower alliances than MTCs and also lower well-being). Therapists varied on the overall rate of UTCs and also the proportion of racial and ethnic minority REM to white majority patients but not in any consistent way. REM patients were more likely to rate themselves as UTCs.	d = -.46

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
Wnuk et al. (2013)	Canada	DBT, Genera Psychiatric Management	RCT (further analysis article)	BPD	180	1 year (mean 31s DBT, 32s GPM)	Four consecutive missed sessions (2)	38.3%	WAI-S (session preceding drop-out) (T&K)	P	Regression showed dropouts had lower therapeutic alliance than completers. They did not differ on age, gender, treatment condition, substance abuse, anger or impulsivity.	d = -.12.
Prom et al. (2014)	Peru	Cognitive, systemic, behavioural, interpersonal, CBT &	Naturalistic	Mixed, unspecified	60	Not given	Not attending second sessions within 3 months (3)	41.6%	WAI (s1) (Spanish translation) (Santibáñe	P	Clinician ratings of TA differed between dropouts and completers on all subscales. Patient rating of TA did not differ	Overall d= -.60 (Tasks d = -.55, Goals d

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
		Gestalt (average 5.8 years active delivery of therapy, 6 CP, 4 MD)							z, 2003)		between those who returned for a second session and those who did not.	= -0.62, Bond d = -.62) (calculated)
McEvoy et al. (2014)	Australia	Non-manualised CBT (M/D level - CP & TCP)	Non-Randomised trial	(Unipolar) Anxiety (54%) or Depression (46%)	84	11.1(6.9)	Non-mutually agreed termination (3)	35.5%	HAq-II (2, final)	P	Completers had higher alliance scores at session 2 than dropouts. Those with higher early TA did not have better improvement on anxiety	d = -.55 {session 2} (reported)

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
											and depression measures than completers with lower TA.	
Lopes et al, (2014)	Portugal	CBT, Narrative Therapy (NT)	Controlled Trial (alternate allocation to treatments)	Depression	63	20 sessions	Unilateral termination (3)	36.5%	WAI (s4)	P	TA did not differ between completers and dropouts. Dropout was higher in the NT group. Pharmacotherapy and absence of co-morbid anxiety symptoms decreased the risk of drop-out.	d = 0.019.

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
Kegel & Fluckiger (2015)	Switzerland	Integrative CBT (M)	Naturalistic	Mixed, specified (36.1% Anxiety, 23.8% Mood, 19.7 Other diagnoses)	296	Mean 20.2	Non-completion of post therapy assessment battery (other)	57.1%	BPSR-P	P	Lower levels of therapeutic alliance in the dropout group compared to completers.	d= -.31 (intercept) (reported)
Haug et	Norway	CBT	RT	Anxiety (Social	82	12	Non-completion of post treatment	20.7%	WAI-S (s3	O	Lower TA scores late in treatment was	s3, r =

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al. (2016)				Anxiety and Panic Disorder)			assessments (other) [first session dropouts and those who never started were excluded]		& 8)		significantly correlated with dropout (r = -.35, p= .02). High TA was predictive of better self-reported outcomes. TA was not correlated with prior symptom improvement. Low early TA was only weakly correlated to dropout (r =.03) in the opposite direction.	.03 s8, r = -.35 (reported)
Cooper et al.	USA	CT in combination	RT	Depression	178	Up to 42	Left study after being randomised	11.9%	WAI-S (s1-3)	O	Higher TA predicted a reduced risk of dropout.	d = 1.01 (d

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(2016)		with pharmacotherapy (1 MD, 1 NP, 7 D-CP)				months	and before meeting remission criteria but not including those withdrawn (5)		(T&K1989)		Use of behavioural methods and homework also reduced the risk of drop-out whilst negotiating and structuring techniques increased the risk. Older patients and those on higher doses of ADM were less likely to drop-out	reported by Flückiger et al., 2018)
Jordan et al. (2017)	UK	SSCM, IPT, CBT (D –	RT	Anorexia Nervosa	56	20s	Premature termination	37.5%	VTAS-R (s1-5)	O	Low TA in sessions 1-5 was associated with dropout. High TA was	d = -.67 (reporte

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
		CP)					[<15/20s] (1)				significantly correlated with high therapy process rating totals.	d)
Gibbons et al. (2019)	USA	Cognitive Therapy (CT), Supportive Expressive Dynamic Psychotherapy (DT), M or higher degree.	Secondary Analysis of Effectiveness Trial (in community MH setting)	MDD	237	CT 6s (mean), DT 7s (mean)	Very Early Termination [VET] 1s, Premature [P1] 2-6s, Premature [P2] 7-11s, Treatment Completions [TC] 12-16s (2)	Overall 79%. VET = 27%, P1 = 29%, P2= 23. TC = 21%, (17% for CT, 25%	WAI (s2)	P	Agreement on Tasks was the strongest predictor of drop-out amongst both Premature Termination groups (P1 & P2). Other domains (goals and bond) were not reported as predictive of drop-out in this model. Subthreshold psychotic symptoms, lower rated	P1, d = -.112 P2 d = -.279 (Odds Ratio converted to d, (Borenst

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
								for DT)			physical health, and low ratings of 'treatment sensibility' were also predictors of drop-out. Trauma history was associated with higher drop-out in CT.	ein et al, 2009)
Busmann et al. (2019)	Swizerland	Inpatient Treatment for Personality Disorders	Naturalistic	Personality Disorders	132	80 days	Leaving hospital before 80th day (2)	28%	STAR (4 time points - day 7–15, 25–35, 50–60, 80–90)	P, T	Therapist rating of global alliance and all the sub-scales were statistically significant predictors of dropout. Low therapist rating of 'self-functioning'	HR = 0.31 (reported)

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
											was also predictive of drop-out. Patient rated TA was not predictive, nor were subtype of PD, symptom severity or demographic variables.	

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
Anderson et al. (2019)	USA	Outpatient Psychological Therapy	Epidemiological Survey	Mixed (anxiety (28.1%), depression (32.0%), relationship problems (12.4%), “other” (27.5%))	278	Not given	Unilateral termination by patient without discussion (3)	55%	WAI-SR (retrospective)	P	Higher TA and therapist being rated as more ‘culturally competent’ both led to a lower likelihood of premature termination. The termination reason ‘Dissatisfaction with therapy’ was associated with lower TA than other reasons such as problem improvement or lack of motivation.	r = -.35 (reported)

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
Al-Jabari et al. (2019)	USA	Psychotherapy (D-TCP)	Naturalistic	Mixed, unspecified	524	24.04s (Mutual terminators), 8.23 (Premature terminators)	Objective; patient remained above clinical cut-off on outcome measure. (5) Subjective; therapist determined as premature. (4)	Objective 69.9%, Subjective 63.2%	WAI-SR (first score used if administered multiple times))	P	TA distinguished between mutual and premature terminators (subjective) but was not predictive of objective classification.	Wald statistic – 7.35, p .01, (B) – 0.05, SE 0.02, Exp(B) — 1.05,
Eubanks et al. (2019)	USA	CBT	Rating Scale Validatio	Mixed, unspecified	42	30	Unilateral termination (3)	Not applicable (selected	WAI-SR (s6)	P, T	Therapist ratings of TA for completers were higher than for dropouts and this was statistically	d = -.76

Study	Origin	Therapy (Therapist Training Level)	Design	Presenting Problem/ Diagnosis	Number of Participants[2]	Time in Treatment/ Number of Sessions (s)	Dropout definition (S&G, 2012 definition number)[3]	Dropout Rate	Alliance Measure (Timepoint)	Alliance Rater	Alliance-Dropout finding(s)	Effect size estimate alliance-dropout
			n Study					sample)			significant. Patient ratings of TA were higher for completers than dropouts and approached significance (p = .052). Therapist rated TA was also correlated with confrontation ruptures.	

Key: M = Masters, D = Doctorate, T.. = Trainee, CP Clinical Psychologist, MD = Medical Doctor, NP = Nurse Practitioner, s = sessions, , SSCM = Specialist Supportive Clinical Management, IPT = Interpersonal Psychotherapy, PP = Psychodynamic Psychotherapy, SFT= Schema Focused Therapy, TFP = Transference Focused Psychotherapy, pharma = pharmacotherapy (psychotropic medication), CBASP = Cognitive Behavioural Analysis System of Psychotherapy, CBT = Cognitive Behavioural Therapy, CT = Cognitive Therapy, DBT = Dialectical Behavioural Therapy, DT= Dynamic Psychotherapy, MDD = Major Depressive Disorder, WAI = Working Alliance Inventory, WAI-S = WAI Short form, WAI-SR = WAI Short Revised, CALPAS = California Psychotherapy Alliance Scale, ARM = Agnew Relationship Measure, HAq-II = Helping Alliance Questionnaire, VTAS-R = Vanderbilt Therapeutic Alliance Scale, BPSR-P = Bern Post-Session Report for Patients, STAR-P Scale to Assess the Therapeutic Relationships, Patient versions (STAR-P), P = Patient, T = Therapist, O = Observer, HR = Hazard Ratio

3.1 Characteristics of studies

3.1.1 Interventions

The studies reported that the patients were treated with the Cognitive Behavioural Analysis System of Psychotherapy (CBASP), Cognitive Behavioural Therapy (CBT), Experiential Psychotherapy, Interpersonal Psychotherapy, Integrative Psychotherapy, Dialectical Behaviour Therapy, Systemic Therapy, Integrative CBT, Cognitive Therapy (CT), CT combined with pharmacotherapy and Specialist Supportive Clinical Management (SSCM) for Anorexia Nervosa (see Table 1: Characteristics of Included Studies).

3.1.2 Participant Demographics

Sixteen of the seventeen studies were conducted in the USA and Western European countries, with the remining study being conducted in South America (Prom et al., 2014)

3.1.3 Therapeutic Alliance measures

The most common TA measure was the Working Alliance Inventory ((Horvath et al., 2011), its Spanish translation (Santibáñez, 2003) and its short versions, the Working Alliance Inventory – Short (WAI-S (Tracey & Kokotovic, 1989) and the Working Alliance Inventory – Short Revised (WAI – SR (Hatcher & Gillaspy, 2006)) which were used in three and nine studies respectively. The California Psychotherapy Alliance Scale (CALPAS (Gaston & Marmar, 1994)), and the Agnew Relationship Measure (ARM (Agnew-Davies et al., 1998) were both used in the same study (Saatsi et al., 2007). The Helping Alliance Questionnaire (HAq-II (Luborsky et al., 1996), the revised Vanderbilt Therapeutic Alliance Scale (VTAS-R (Diamond et al., 1996)), the Bern Post-Session Report for Patients Short Form 2000 (BPSR-P, (Flückiger et al., 2010)) and the German language translation of the Scale to Assess the Therapeutic Relationships, Patient and Clinician versions (STAR-P & C (McGuire-Snieckus et al., 2007; Gairing et al., 2011) were all used in a single study as shown in table 3. The characteristics of the measures are described below.

3.1.4 Working Alliance Inventory (WAI)

The Working Alliance Inventory (Horvath & Greenberg, 1989) follows Bordin's three-part definition of the alliance with subscales for strength of the bond between therapist and patient, agreement on the goals of therapy and agreement on the tasks of therapy. The 36-item version has 12 questions on each domain while the short versions both have 4 items on each. Along with the short forms it has previously been reported to be the most widely adopted tool for assessing TA (Ardito & Rabellino, 2011; Elvins & Green, 2008), as was the case in this review.

1.1.1 California Psychotherapy Alliance Scale (CALPAS)

The CALPAS (Marmar et al., 1989) has 24 items in four subscales based on Gaston's conceptualisation of the alliance. The scale separates therapeutic alliance and working alliance. Therapeutic alliance (scale named 'Patient Commitment') is based on the patient's emotional attachment to the therapist whereas working alliance ('Patient Working Capacity') captures collaboration between the therapist and patient. The other dimensions are 'therapist's understanding and involvement' and 'patient-therapist agreement on goals and strategies. It has been suggested that the first two dimensions of the CALPAS are based on the psychodynamic concepts which were the origin of the alliance concept while the latter two align with Bordin's (1979) later pan-theoretical conceptualisation (Ardito & Rabellino, 2011).

3.1.5 Penn Helping Alliance Questionnaire Revised (HAq-II)

The Penn Helping Alliance Questionnaire (revised) (Luborsky et al., 1996) is a 19-item patient self-report measure based on Luborsky's two types of alliance sign. Type 1 signs are indications of the patient experiencing the therapist as helpful and type 2 signs are those of collaborative treatment process. Luborsky et al (1996) reported convergent validity with the CALPAS with correlations of between r = .59 and .69 (patient version) and r = .75 to .79 for the therapist versions.

3.1.6 Vanderbilt Therapeutic Alliance Scale – Revised (VTAS-R)

The VTAS-R (Diamond et al., 1996) is an observer-rated scale with 24-items drawn from the 44 used in the original VTAS (Hartley & Strupp, 1983) which was in turn based on Orlinsky and Howard's (1975) psychodynamic conceptualisation of the alliance. Elvins and Green (2008) suggest that the VTAS is focused more on the patient's contribution to the alliance. The developers report the scale to have good internal consistency (Cronbach's alpha = .93 to .96) and inter-rater reliability (Intra-Class Correlation (ICC) = .80 to .93) in a sample of adolescents with substance misuse difficulties and their families. Patient alliance rating has been reported to be more predictive of outcome than the therapist's rating (Krupnick et al., 1996).

3.1.7 Agnew Relationship Measure (ARM)

The ARM (Agnew-Davies et al., 1998) has therapist and patient versions, each with 28 questions and covers bond (6 items), partnership – joint working on therapeutic tasks (4 items), confidence (7 items), openness (5 items) and patient initiative (4 items) with the two remaining items not included in any of the scales. In this sense it attempts to cover dimensions that span across the various conceptualisations of the alliance while removing items relating to early change and specific therapeutic techniques. The developers selected items from earlier scales (CALPAS, HAq-II & WAI) but excluded items which referred to therapeutic techniques or which addressed early therapeutic change.

1.1.2 Bern Post Session Report - Patient Version

TA, termed 'Global Alliance' forms a small part of the patient version of the BPSR (BPSR-P) with three questions forming the subscale within a more general 'post-session' report. The developers of the tool report validity and reliability of the measure and correlations between the patient and therapist perspectives (Flückiger et al., 2010). However, elements of the other experiential subscales in the BPSR-P (self-esteem, mastery and clarification experiences) could potentially map on to the agreement on to other dimensions of the

alliance conceptualisations in other scales.

3.1.8 The Scale to Assess Therapeutic Relationships in Community Mental Health (STAR)

The STAR (McGuire-Snieckus et al., 2007) was designed to measure the strength of the therapeutic relationship in community psychiatric treatment rather than in psychotherapy specifically, drawing on items used in nine earlier scales (including the WAI, CALPAS) as well as adding new items. The patient and clinician versions have 12 questions each. Both versions share two subscales, 'Positive Collaboration' (7 items for clinician, 6 for patient) and 'Positive Clinician Input' (3 items) and the clinician version's third scale is 'Emotional Difficulties' (3 items) while the patient version has 'Non-Supportive Clinician Input' which includes items consistent with clinician input which the patient finds unhelpful. The authors of the German translation (Gairing et al., 2011) used by the study in this review noted that although the validity of the translation was confirmed they did not find the same factor structure reported by the original authors. Instead, all items were highly intercorrelated on a single component.

3.2 Consistency and reliability

All the rating scales were tested for consistency and inter-rater reliability. Some of the later scales (ARM, STAR) included items from earlier scales. Earlier scales were also used as a comparison to test whether the same concept was being measured. Although all the scales are divided into subscales based on theoretical conceptualisations of the TA, these subscales have not been consistently demonstrated to be distinct concepts.

3.3 Direction and strength of the link between Therapeutic Alliance and dropout

Sixteen of the seventeen studies found that the TA was lower for those who dropped out of therapy (including unilateral terminators) or that lower TA was either predictive of, associated with or correlated with an increased risk of dropout. The remaining study which was with people treated for major depressive disorder, (Lopes et al., 2015) reported that TA was not

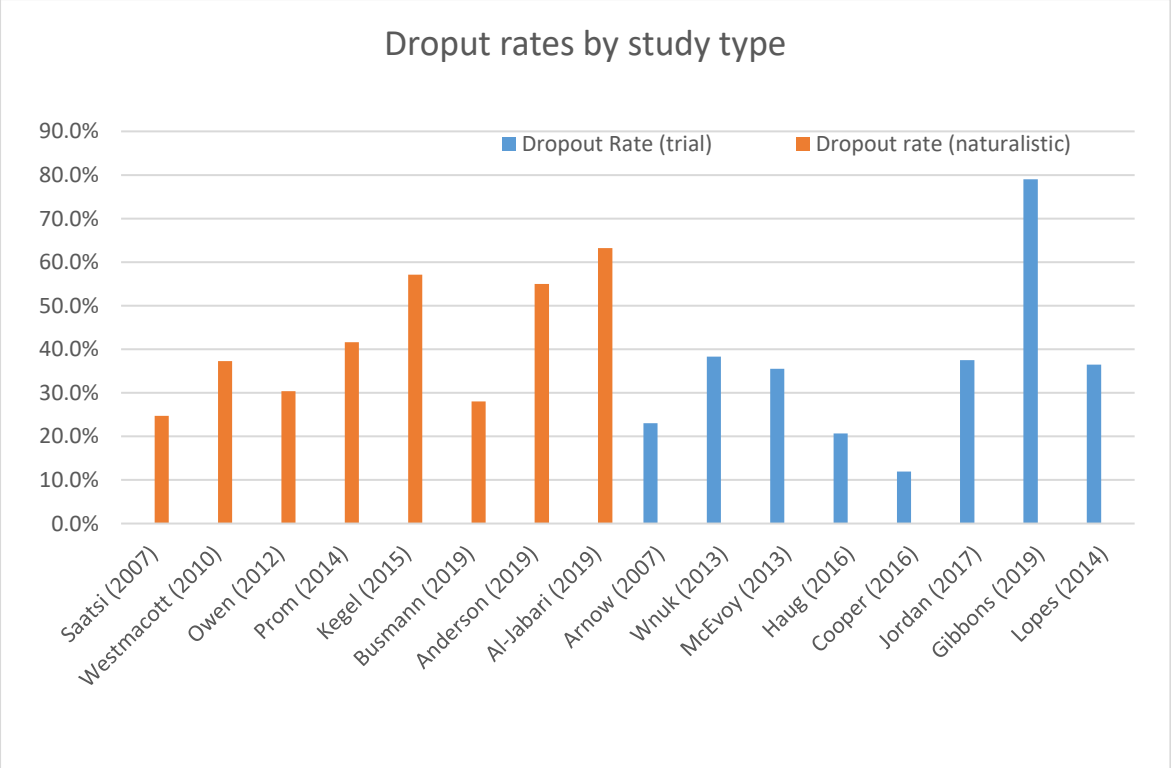
higher in those who mutually terminated therapy than in those who unilaterally terminated, with slightly higher ratings of TA early in therapy (session 4/20) for unilateral terminators although this difference was not significant. In addition, several other factors previously associated with an increased risk of dropout were also not predictive in their sample (i.e. low socioeconomic status, less education, female patient).

The estimated effect size for the TA:dropout relationship ranged from d = 0.019 (Lopes et al., 2014), a very small effect (Cohen, 1988) with higher TA increasing the risk of drop out, to d= -1.01 (higher TA decreased the risk of dropout), a large effect according to Cohen's criteria (1988). Busmann et al. (2019) reported the association as a Cox's proportional hazard ratio (HR) of 0.3, where values of less than one indicate that higher TA protects against dropout.

3.4 Rate of Dropout

Sixteen studies reported dropout, premature or unilateral termination rates ranging from 11.9% to 79% as shown in Figure 2.

Figure 2: Dropout rates in Naturalistic and Clinical Trial Studies



The highest rate (79.00%) was reported by Gibbons et al. (2019) in a study in which patients with depression were randomized to treatment groups (Cognitive Therapy and Psychodynamic Therapy) and the therapy was conducted in community mental health clinics. The lowest rate (11.90%) was reported by Cooper et al. (2016) in a trial conducted in university clinics and university hospital sites, and also examining treatment of depression. Studies categorised as naturalistic had a slightly higher average rate (42.16%) compared to those described as clinical trials (35.30%). The average overall dropout rate was 38.73%, similar to the rate reported by Sharf (2008) of 35.26% (k = 110 studies). Both these figures are substantially higher than the 19.7% rate calculated by Swift and Greenberg (2012) for 669 studies although the overall range of rates was similarly heterogeneous with a rate of 0% - 74.23%. Eubanks, Lubitz, Muran and Safran (2019) selected a sample to have equal numbers of dropout and completers which meant that dropout rate could not be meaningfully compared with the other studies.

1.2 Dropout definitions

Fourteen studies used dropout definitions similar to those identified by Swift and Greenberg (2012) (see *Table 2*) and three studies used different definitions. Two of these defined drop-out as failure to complete the post-treatment measurement battery (Haug et al., 2016; Kegel & Flückiger, 2015) and one used a patient-initiated dropout definition but only including those dyads which agreed that this had been the case (Westmacott et al., 2010). Al-Jabari et al (2019) compared an objective definition of dropout based on clinical improvement (69.9%), and a subjective measure based on therapists' judgment (63.2%), finding that despite these apparently similar overall rates only around a third of patients had dropped out according to both definitions, adding to Hatchett and Park's (2003) findings on how the dropout rate varies depending on definition.

Table 2: Dropout Definitions

Dropout Definition (Swift & Greenberg, 2012)	Number of studies adopting
Attending fewer than the specified number of sessions	2
Failure to complete the treatment protocol	4
Failure to attend a further scheduled session	6
Therapist judgment	1*
Terminating before achieving reliable change	2*
Other definitions	3 (2 Failure to complete Post-treatment battery, 1 dyad agreed UTC)

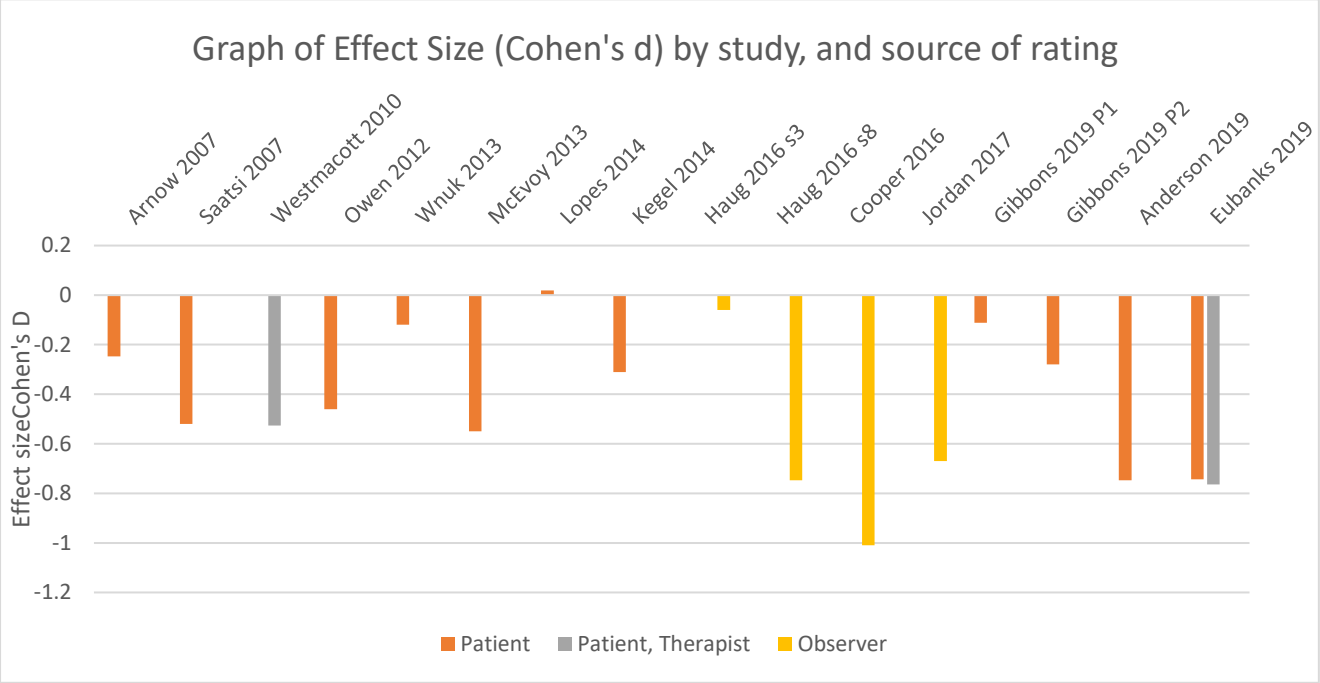
* Al-Jabari et al. (2019) reported definitions 4 and 5.

3.5 Source of rating and strength of Therapeutic Alliance to Dropout link

Ten studies reported the strength of TA based on patient ratings only. Four studies used

patient and therapist ratings, and the remaining three used observer ratings only. Of the four studies which analysed both therapist and patient ratings, three found a relationship between the lower therapist ratings of the alliance and dropout but no relationship for patient ratings (Busmann et al., 2019; Prom et al., 2014; Eubanks, Catherine F. et al., 2019). The other study (Westmacott et al., 2010) found that both therapists and patients rated TA higher in mutual termination dyads than in unilateral termination dyads.

Figure 3: Graph showing estimated effect sizes (d or r converted to d) by study and source of rating



In fourteen studies reporting effect size in a comparable manner (Cohen's *d* or correlations, *r,* converted to *d*), those using observer ratings of TA reported higher estimated effect sizes than patient and/or therapist rated studies for the relationship between TA and dropout. In this subset of studies, observer rated studies had a mean effect size of d = -.81 (Haug et al., 2016 (s8), Cooper et al., (2016), Jordan et al., 2017) whereas those using patient and therapist ratings had an average effect size of d = - .38. Busmann et al., (2019) reported the link between TA and dropout as a Hazard Ratio (HR) of 0.31, with an HR < 1 indicating a reduction in risk of dropout with increased TA.

3.6 Target problem

Target problems included; depression, described as unipolar depression, major depressive disorder or chronic depression; anxiety, described as unipolar anxiety or anxiety; borderline personality disorder (2); Anorexia Nervosa, relationship problems; sexual abuse; anger management; or mixed problems. Mixed problems could denote either that patients experienced multiple problems or that the sample comprised patients experiencing different difficulties. In some studies, multiple psychiatric diagnoses were provided to indicate target or primary problems (mixed, specified) and any co-morbid problems whilst in others formal diagnoses were not given (mixed, unspecified).

3.7 Timing of Therapeutic Alliance Measurement

Studies varied in the frequency of TA measurement from measuring after every session to only measuring at one time point. Seven studies measured the therapeutic alliance once, three studies measured it twice, four studies measured TA from 3-5 times and three studies used ratings taken every session. Two studies did not make clear when the TA was measured but one of these stated that the earliest available rating was used.

3.8 Quality of Included Studies

The quality assessment tool for quantitative studies (National Collaborating Centre for Methods and Tools, 2008) was used to assess the quality of the studies due to the flexibility it allowed to consider both clinical trials and naturalistic studies. The rating guidance was adapted to take account of the interventions and this review's aims whereas the original guidance was primarily for permitting comparisons of interventions. In particular, studies were not marked as weak on (F) Withdrawals and Dropouts purely for having a high dropout rate and greater weight was instead given to whether reasons for dropout were also reported. The quality ratings are summarised in Table 3.

Table 3: Summary of Quality Assessment Tool Results

First Author (Date)	Selection Bias	Study Design	Confound Control	Blinding	Data Collection Method	Withdrawals and dropouts	Intervention Integrity	Intervention Consistency measured	Statistical Methods	Intention to Treat Analysis?	**Global Rating**
Arnow (2007)	mod	mod	strong	weak	strong	mod	>80%	no	yes	yes	**mod**
Saatsi (2007)	mod	mod	strong	mod	strong	mod	>80%	no	yes	yes	**strong**
Westmacott (2010)	mod	mod	strong	weak	strong	mod	>80%	no	yes	yes	**mod**
Owen (2012)	mod	mod	mod	weak	strong	mod	>80%	no	yes	yes	**mod**

First Author (Date)	Selection Bias	Study Design	Confound Control	Blinding	Data Collection Method	Withdrawals and dropouts	Intervention Integrity	Intervention Consistency measured	Statistical Methods	Intention to Treat Analysis?	**Global Rating**
Wnuk (2013)	strong	strong	strong	weak	strong	mod	>80%	yes	yes	yes	**mod**
McEvoy (2013)	strong	weak	strong	mod	strong	mod	>80%	no	yes	can't tell	**mod**
Lopes (2014)	mod	strong	strong	strong	strong	mod	>80%	yes	yes	yes	**strong**
Prom (2014)	strong	mod	strong	mod	strong	weak	>80%	no	yes	can't tell	**mod**
Kegel (2014)	mod	mod	strong	strong	strong	weak	>80%	no	yes	can't tell	**mod**

First Author (Date)	Selection Bias	Study Design	Confound Control	Blinding	Data Collection Method	Withdrawals and dropouts	Intervention Integrity	Intervention Consistency measured	Statistical Methods	Intention to Treat Analysis?	**Global Rating**
Haug (2016)	mod	strong	mod	weak	strong	mod	>80%	yes	yes	yes	**mod**
Cooper (2016)	mod	mod	strong	mod	strong	strong	>80%	yes	yes	can't tell	**mod**
Jordan (2017)	mod	strong	weak	weak	strong	mod	>60%	yes	yes	yes	**mod**
Gibbons (2019)	mod	mod	strong	strong	strong	weak	>80%	yes	yes	yes	**mod**
Anderson (2019)	weak	mod	NA	mod	weak	mod	>80%	no	yes	NA	**weak**

First Author (Date)	Selection Bias	Study Design	Confound Control	Blinding	Data Collection Method	Withdrawals and dropouts	Intervention Integrity	Intervention Consistency measured	Statistical Methods	Intention to Treat Analysis?	**Global Rating**
Eubanks (2019)	mod	mod	strong	strong	strong	NA	>80%	yes	yes	NA	**strong**
Busmann (2019)	mod	mod	NA	weak	strong	mod	>80%	can't tell	yes	yes	**mod**
Al-Jabari (2019)	mod	mod	strong	mod	strong	strong	>80%	no	yes	NA	**strong**

Only three of the studies recorded the reasons for patients dropping out, potentially conflating different reasons for patients discontinuing, for example ‘moving area’ with ‘dissatisfaction with therapy’ or ‘clinical deterioration’. Frequently this design decision was pragmatic: those who do not return are either unable or less likely to complete further questionnaires. Further, resources to pursue completion of questionnaires may not be available and patients who have left or completed therapy may be unwilling.

4 Discussion

Sixteen of the seventeen studies included in this review found that TA as rated by a trained observer or the patient and/or the therapist is linked with premature or unilateral termination or an increased risk of the same, while one study (Lopes et al., 2015) reported slightly higher TA in those who did not complete therapy and this difference was not statistically significant. The studies included covered a range of presenting problems and psychological treatments in clinical trials and ‘routine’ psychotherapy practice. The effect size for the link between TA and dropout ranged from very small to large (d = -1.01, Cohen 1988). As in previous reviews, dropout rates varied widely.

The majority of studies only measured the alliance early in therapy meaning that changes in the strength of the alliance over time could not be examined, and few studies could compare ‘early’ and ‘late’ TA with respect to dropout. Nonetheless, this review further demonstrated the link between TA and dropout, as well as the high variability between the rates and effect sizes that have characterised previous reviews. Only three studies used observer rated measures of the alliance and these all demonstrated moderate effect sizes It has been noted that observer ratings require a much greater commitment of research time and expenditure for training and analysis than therapist and patient post session ratings. On the other hand, patient ratings have been suggested to be more stable and therefore possibly less sensitive to changes and may partially represent patient characteristics or traits rather than TA.

Many of the studies were ‘secondary analyses’ further to primary articles examining the effectiveness of interventions. Without these analyses the literature on dropout would be reduced but nonetheless there is a downside in that they may be more likely to infer dropout from other data or lack thereof (e.g. due to failure to complete final questionnaires) and be unable to distinguish between different reasons for dropping out. It could be that inferring dropout from lack of data overestimates the dropout rate by including people who completed therapy but did not complete these measures. Similarly, design decisions in the ‘primary’ studies, particularly frequency and sources of measurement of outcome and TA significantly impact on the ability to determine if patients who dropped out had improved, remained the same or deteriorated and whether the TA was strengthening, weakening or if a sudden change had occurred during session. Routine monitoring of TA at regular points throughout treatment could increase the likelihood that deteriorations in TA are captured. Other methods of increasing the sensitivity of TA ratings by patients and therapists could be explored, as well as a hybrid system, using patient and therapist ratings as a basis for observer ratings thereby focusing the analysis and reducing the amount of observers time required. Although TA has been shown to not simply be an epiphenomenon of overall outcome, the links between the two remain complex, particularly given that patients and therapists are often the source of ratings for both measures. Alliance observer ratings introduce a degree of independence, being less likely to be influenced by other factors, particularly when blinded to eventual dropout and overall outcome. Measuring outcome at a follow-up time point after the end of therapy or using assessments by third parties (such as researchers, friends and family or other clinicians, e.g. care coordinators or GPs) could also provide context or a second rating for this measurement.

Monitoring patients’ progress throughout therapy with routine outcome monitoring provides one measure that can be used to operationalise termination. Patient who have recovered or are improving can be distinguished from those who do not improve or deteriorate and stop attending. Adopting these modifications in studies has the potential to deepen our

understanding of discontinuation and to inform approaches to provide early detection of the risk of discontinuation and, where possible and appropriate, address it.

The appropriate interventions might depend on the patient's progress during therapy, the strength of the TA and identification of events which may have damaged it and any other reasons for wanting to leave therapy. Although each individual's reasons for terminating therapy may be multifaceted (Westmacott & Hunsley, 2010), a primary reason for termination of dissatisfaction with treatment is likely to lead to different conclusions than 'feeling better', and yet the two will be grouped together by some definitions of dropout, particularly if outcome monitoring is not available to contextualise. 'Feeling better' was the most frequently reported reason for terminating therapy while 'dissatisfaction with services' was associated with lower TA (Westmacott et al., 2010).

4.1 Implications for Future Research and Clinical Practice

Examining the reasons for dropout was not included in the aims of this review. However, it is evident from the studies that did consider termination reasons that they provide important context for interpreting dropout rates. Understanding the patient's reasons for ending therapy provides some context for investigating the link between TA and dropout and begins to move beyond the limitation of the definitions used to date which potentially conflate different reasons for terminating therapy, or rely on the therapist's judgement which is potentially biased. Research that combined an objective measure of patient progress through routine outcome monitoring, regular monitoring of TA and collection of patients' reasons for termination would offer the potential to more clearly understand termination and links to TA. An increase in the audio and video recording of sessions for research and in routine practice for supervision would provide the opportunity for retrospective assessment of TA using adapted measures, and examination of any events which may have affected TA. Similarly, routine outcome assessment at every session provides data on the improvement or deterioration in symptoms which can contextualise decisions not to return to therapy.

Patients who terminate prior to the end of a specified treatment or before reaching a defined level of improvement but consider themselves to be improved or report being satisfied could be distinguished from those who have not improved, deteriorated or who report dissatisfaction with therapy. Patients who reported a strong TA but who have objectively not improved or deteriorated could also be identified and compared to those who improved.

Greater use of observers to rate the alliance and clinical improvement and who are blinded to other variables such as the patient's self-report of clinical improvement or intervention would also strengthen research designs. It is likely that therapists differ in their ability to foster TA across patients and/or with specific patients based on a variety of demographic and interpersonal factors (Baldwin & Imel, 2013).

Using strategies to improve TA and training therapists in these has been recommended as a means of improving retention and patient outcomes for many years (Safran, Jeremy & Segal, 1996). Future research into 'alliance focused therapy' and similar approaches could explore whether these approaches improve the retention of patients in therapy, with some initial evidence suggesting a reduction in dropout (Muran et al., 2005).

4.2 Limitations of the review

The quality of the included studies was mixed with the majority being assessed to have strong to moderate quality. Examining the link between dropout and TA was often a secondary aim of the studies and in many cases details of this and consideration of other factors affecting dropout were not considered. Study selection, data extraction and quality assessment were all conducted by a single rater. Using a second rater for these steps could reduce the possibility of extraction errors and increase confidence in the selection of studies and the quality ratings.

The review used a systematic approach without meta-analysis of the effect sizes due to the small number of studies in each group (rating source and alliance measure). If a larger

number of studies had been identified a meta-analytic estimate of effect size across studies would have provided a useful statistic to summarise the relationship between TA and dropout.

The majority of studies were from the UK, Europe, and the USA, and this was potentially influenced due to reviewing publications in English. It was not possible to differentiate between therapy services which were paid for privately by the individual or insurance policies and those which were provided free at the point of service in national health systems or as part of the research endeavour itself.

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Paper B: Validation of a Model for using Formal Feedback to Repair Ruptures in the Therapeutic Alliance using the Task Analytic Method

Alexander Neil Harvey

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Paper B Abstract

Objective: This study aimed to validate a previously developed model of using session-by-session feedback to facilitate the identification of ruptures in the therapeutic alliance and assist the process of rupture resolution.

Method: The validation phase of a task-analytic design was employed. Participants were therapist patient dyads in community psychotherapy services in the UK.

Results: Dyads completed the model stages previously identified and model stage completion was linked to resolution of in-session ruptures. Resolution of ruptures was not found to link to session evaluations or to overall therapeutic outcome for patients.

Conclusions: Results suggest that session-by-session feedback can be used by dyads to identify ruptures and resolve ruptures. However, no links were found between rupture resolution and patient or therapist session evaluations or overall patient outcomes. The limitations of this study, clinical implications and ideas for future research are discussed.

Keywords: Task analysis; session-by-session feedback; therapeutic alliance, ruptures.

Clinical or Methodological Significance of this Article

This study demonstrates that therapists and patients can use a brief formal feedback tool to help them identify and attempt to resolve ruptures in the Therapeutic Alliance. Therapists and patients completed the same steps as identified in a model previously developed and completion of more model stages was linked to higher ratings of rupture resolution. However, rupture resolution did not link to the ‘helpfulness’ of the session or overall patient outcomes. The model could provide a useful tool for training therapists in eliciting feedback with patients and resolving any strains or ruptures identified. This method could be used to determine whether the model stages are also found in psychotherapy feedback procedures and to examine whether further training and experience in the feedback and repair process improves patient outcomes.

1 Introduction

1.1 Psychotherapy Process Research

Psychotherapy process research approaches have been suggested as a means of identifying the processes ongoing within treatment in order to understand the relationship between the elements of psychotherapeutic interventions and the outcomes for patients which result from them. Llewelyn and Hardy (2001) suggested there are three types of psychotherapy process research, (1) exploratory studies which describe processes, (2) hypothesis testing studies which examine the links between processes and outcome, and (3) theory development which links processes to theories of therapeutic change. One particularly important aspect of the psychotherapeutic process (and its research) is the relationship between the therapist and patient. Each of the three approaches identified by Llewelyn & Hardy (2001) can be used to describe, conceptualise and examine the importance of the relationship for patient outcomes. The focus of this piece of psychotherapy process research will be on unpacking exactly how the therapeutic relationship is linked to patient outcome.

1.2 The Therapeutic Alliance

The relationship between the therapist and patient was identified as an important element of psychotherapy early in the development of psychoanalysis by Freud (Ardito & Rabellino, 2011). The concept of the therapeutic alliance (TA) was developed by Sterba (1934), and later Zetzel (1956), within the psychoanalytic tradition. Bordin (1979) later extended the concept to other therapeutic models. He defined the alliance as having three elements; agreement on the goals of therapy, agreement on the task or approach to achieving the goals, and the development of a bond between the therapist and patient.(Duncan et al., 2003)

1.2.1 Therapeutic Alliance and Outcome

TA has been found to be a moderate predictor of psychotherapy outcome, and this has been demonstrated consistently. In a meta-analysis of 295 studies, Flückiger, Del Re, Wampold, and Horvath (2018) calculated the estimated effect size to be r = 0.278 (≈ d = .579), a moderate effect (Cohen, 1988), with alliance predicting 8% of the variance in treatment outcome. Importantly, this link was demonstrated across psychotherapy approaches and most presenting problems, with smaller effects noted for substance use (r = .14) and eating disorders (r = .15) and high variability in studies of treatment for Emotionally Unstable Personality Disorder (r = .32, ranging from r = .00 to r = .78). In contrast to this, neither therapist adherence to treatment protocols nor competence have been found to be predictive of outcome (Webb et al., 2010). Despite this modest effect size, because much of the variance in therapeutic outcomes appears to be due to patient and extra-therapeutic factors, which are outside the therapist's control),, the alliance has become an important target for efforts to improve the effectiveness of psychotherapy.

One concern has been whether the alliance-outcome correlation is an epiphenomenon or by-product of other processes. For example, it could be a result of patient factors or change early in treatment, rather than a potentially causal link. Analysis of studies which measure alliance longitudinally suggest that the correlation remains moderate (r = .22 - .25) after controlling for potential confounds (Flückiger et al., 2018), supporting the idea that the association is not an epiphenomenon.

1.2.2 Measurement of the Therapeutic Alliance

Several instruments have been developed to rate the strength of the alliance. It can be monitored via the reports of the patient and/or therapist, or by using external observers. However, given the interpersonal and subjective nature of alliance, evaluations often vary between raters with therapist and patient ratings showing only low to moderate correlations (Hersoug et al., 2001). On the other hand, Martin, Garske, and Davis (2000) found that the strength of the alliance predicted therapeutic outcome and this was not dependent on the

measure used, the rater (i.e. therapist, patient or external observer), time of assessment, or treatment type. Fenton, Cecero, Nich, Frankforter, and Carroll (2001) compared six measures of the therapeutic alliance (California Psychotherapy Alliance Scale (Gaston & Marmar, 1994), Penn Helping Alliance Rating Scale (Alexander & Luborsky, 1986), Vanderbilt Therapeutic Alliance Scale (Hartley & Strupp, 1983), and the Working Alliance Inventory (Observer, Therapist, and Patient versions (Horvath & Greenberg, 1989))) and found that all ratings by external observers were good predictors of outcome. However, this was not the case for patient and therapist's ratings. Horvath et al. (2011) found that patients' and observers' ratings of the therapeutic alliance were better predictors of outcome than therapists' ratings although the difference between the evaluations was not statistically significant.

1.2.3 Negative Impact of Poor Therapeutic Alliance

Poor therapeutic alliance has been linked to patient dropout from therapy. Patients who dropped out rated the therapeutic alliance as being significantly worse than patients who stayed in therapy (Samstag et al., 1998). Alliance is thus important in relation to outcome but the picture regarding whose evaluation of the alliance provides the best prediction of outcome is less clear.

1.3 Ruptures in the Therapeutic Alliance

Safran, Muran and Eubanks-Carter (2011) defined a rupture in the therapeutic alliance as a tension or breakdown in the collaborative relationship between patient and therapist. These events may range in severity and intensity, from a minor tension of which one or both participants may be aware, to major breakdowns in the relationship and the degree of collaboration and communication between the therapeutic dyad (therapist-patient). The related concepts of empathic failure (Kohut, 1984), therapeutic impasse (Whitaker et al., 1950) and misunderstanding events (Hill & Knox, 2009) also describe difficulties in the therapeutic relationship or process. Ruptures are believed to be common in psychotherapy, with clients reporting ruptures in 19-42% of sessions, therapists reporting them in 43-56% of

sessions and trained observers reporting them in 41-100% (Safran et al., 2011). It has thus been suggested rather than being seen as therapeutic or therapist failures, ruptures can be viewed not only as common or even ubiquitous occurrences and that the processes by which they are repaired or resolved may provide important opportunities for change (Kohut, 1984). Therapists may recognise that a rupture has occurred based on various in session phenomena, for example a patient's 'overt expression of negative sentiments' (Safran et al., 1990) or because they have noticed the client is not engaging with a task of therapy, and then take action designed to address and resolve the rupture (Safran et al., 2011).

When patients and their therapists were interviewed about their experience of an unresolved rupture, they agreed that these frequently followed the introduction of a new perspective on the patient's problems and both felt lost and confused during the event (Coutinho et al., 2009). Therapists had feelings related to their professional roles (of incompetence or not knowing what to do), whereas clients reported personal feelings of sadness or difficulty exploring deep and painful topics (Coutinho et al., 2011). This suggests that ruptures may be most likely to occur at key points in the therapeutic process when difficult topics are being addressed, and new ways of thinking about them may be introduced. Therapists often struggle to identify ruptures (Eames & Roth, 2000) and patients report finding it difficult to provide negative feedback and being afraid of criticising the therapist (Rennie, 1994). Regan and Hill (1992) found that the majority of things left 'unsaid' during sessions were negative and that therapists guessed only 17% of what patients had not communicated. Further, and for related reasons, addressing and repairing ruptures may not be straightforward. In one early study, training therapists in an approach which specifically attended to difficulties in the relationship led to an increase in instances where the therapist reacted in an unhelpful way towards the client, termed 'negative complementarity' (Strupp, 1993). If, on the other hand, the therapist can identify that a maladaptive interpersonal cycle is being enacted with the client and instead facilitate an alternative experience for the patient, this may strengthen the therapeutic alliance and provide a corrective emotional experience. Rupture repair has been

found to improve patient outcomes (Strauss et al., 2006), whilst unrepaired ruptures have been shown to lead to poorer outcomes (McLaughlin et al., 2014).

1.4 Routine Outcome Monitoring and Feedback Systems

Routine Outcome Monitoring in mental health treatment is the regular monitoring of patient's response to treatment. It has been suggested as a way of improving the quality and effectiveness of treatment. Amongst the systems that have been designed for monitoring patient outcomes during psychotherapy are the Outcome Questionnaire System (OQ, (Lambert et al., 2004)) and the Partners for Change Outcome Monitoring System (PCOMS, (Miller et al., 2005)). Both systems incorporate monitoring of the therapeutic alliance. In the OQ system the 'Assessment for Signal Clients' is triggered when patients are not progressing as expected and includes assessment of TA as one of the potential barriers to progress. In the PCOMS system two complementary measures comprising 4 items rated on visual analogue scales are used in every session. At the beginning of each session the patient completes the Outcome Rating Scale, rating their wellbeing on four domains (personal, close interpersonal relationships, broader social functioning and overall). At the end of each session the patient rates the session on four domains which are based on Bordin's conception of the alliance (relationship, goals and topics, approach and overall). The therapist then explores these ratings through discussion with the patient to check for any issues in the alliance and to encourage the patient to provide further feedback on these. This has been termed 'formal feedback' because it formalises the process of eliciting feedback from patients during therapy. The feedback can then be used to respond to the patient's queries, modify the therapeutic approach or address difficulties in the bond.

Hannan et al. (2005) showed that formal feedback systems allowed the identification of 85% of patients who were deteriorating (i.e. symptoms worsening rather than improving) by the third session of psychotherapy, whereas therapists rarely predicted patient symptom deterioration (only 0.01% of predictions were for deterioration for 550 patients), despite

being informed that the historical ‘case-failure’ rate at the clinic was 8%. Only one of the patients identified as likely to deteriorate by a therapist in fact later did so, whereas in the full sample, 7.3% of patients identified using formal feedback had deteriorated at the end of treatment.

1.5 Task Analysis of Psychotherapy Processes

Task analysis is a research approach that seeks to understand how psychotherapy leads to change by examining, describing processes and then constructing models of how the therapist-patient dyad performs tasks successfully in therapy (Greenberg & Foerster, 1996; Greenberg, 2007). The task analytic approach developed within the change events paradigm (Elliott, 1983), which focuses on the most helpful and hindering change events in psychotherapy as clinically practiced (Safran et al., 1988). Safran, Crocker, McMain and Murray (1990) suggested ruptures in the therapeutic alliance are potent change events because if unresolved they may confirm maladaptive behaviours and beliefs whereas if addressed and resolved they may disconfirm those beliefs. Ruptures may therefore be critical change events due to their potential to be either helpful or hindering depending on how they are responded to by the therapist.

1.6 Rupture Identification and Resolution

A number of models of rupture resolution have been developed through task analyses covering a variety of therapeutic approaches including Integrative Psychotherapy (Safran & Muran, 1996), Cognitive Behavioural Therapy (Aspland et al., 2008), Cognitive Analytic Therapy (Bennett et al., 2006), and Emotion Focused Therapy for Couples (Swank & Wittenborn, 2013). Each of these models has an explicit first stage involving the therapist noticing a rupture marker as the trigger for the tasks’ beginning (e.g. stage 1. Noticing/Registering (Aspland et al., 2008), or this noticing stage is implicit, where a rupture marker leads either to the therapist’s acknowledgement of the patient’s feelings or the rupture marker (Bennett et al., 2006; Swank & Wittenborn, 2013) or the therapist focusses

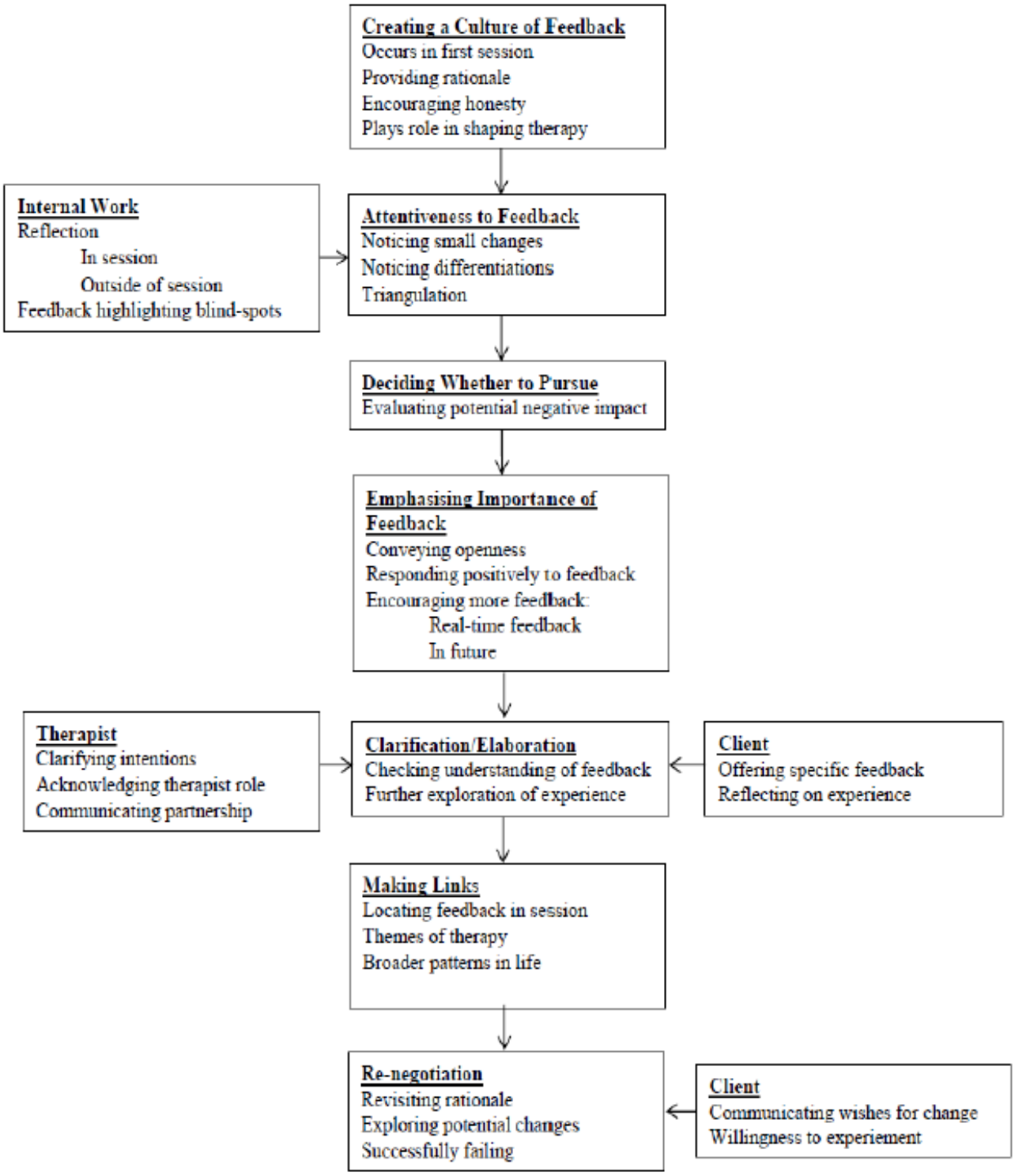
the patient's attention on their experience of the marker event (Safran & Muran, 1996). In their review of repairing alliance ruptures, Safran, Muran and Eubanks-Carter (2011) note that patient and clinician rated measures can be used as a means of identifying TA ruptures.

Laraway (2015) suggested that formal feedback on the TA, based on the Session Rating Scale (Duncan et al., 2003) and subsequent discussion, might provide a means of therapist-patient dyads bringing any ruptures in the TA into their mutual awareness, rather than relying on the therapist to notice and raise the issue in response to the rupture marker. Laraway (2015) developed a model of using patient feedback as a basis for identifying and repairing TA ruptures using the Task Analysis method. This model was based on the theoretical conceptions of the task described by five experts on TA, rupture repair and formal feedback, and refined using examples of one therapist performing the task with five patients (5 dyads).

1.7 The Rational-Empirical Model

The Rational Empirical (R-E) model previously developed by Laraway (2015) is shown in Figure 1. Further detail on the model stages is given in Appendix B.

Figure 1: Rational-Empirical Model of Formal Feedback



Given that ruptures occur frequently in psychotherapy and have negative impacts on outcomes for patients, therapists and the wider health system, tools which could support the identification and resolution of TA ruptures could have significant benefits of psychotherapy

outcomes and provision. Therefore, the aim of the current study is to validate the R-E model (Laraway, 2015) by applying it to a more larger set of clinical performances of the task to determine whether other dyads follow the model stages during formal feedback and whether completion of model stages is linked to successful performance of the task. The study will also examine whether successfully resolving ruptures through the formal feedback process is linked to better patient outcome.

1.8 Major Research Questions

1. Do dyads follow the components of the R-E Model to repair ruptures when using a formal session feedback tool?

2. Does completion of the components of the R-E Model by a dyad discriminate between resolved and unresolved ruptures?

3. Does the degree to which the components of the R-E model are completed correlate with the perceived helpfulness of sessions and the overall outcome of therapy (as measured by formal outcome measures and participant self-report)?

1.9 Hypotheses

1. Rupture and resolution events (RRE) containing a greater number of completed model steps will be more likely to be rated as resolved by independent raters.

2. RREs containing fewer completed model steps will be more likely to be rated as partially resolved or unresolved.

3. Therapeutic dyads whose sessions are rated as containing resolved ruptures will have better patient outcomes (measured on the primary outcome measure for that dyad and the participants' report of progress) compared to dyads whose sessions are rated as containing unrepaired ruptures.

2 Method

2.1 Design

The study used a Task Analytic design (Greenberg, 2007) to examine the process of rupture identification and repair using formal feedback. The Task Analytic procedure can be separated into two main phases, a discovery phase and a validation phase. In the discovery phase the task is analysed from theoretical and empirical perspectives. In the theoretical or rational analysis, experts in the task describe the elements of the task. In the empirical analysis, the task is observed in practice. The two analyses are then iteratively combined and synthesised to produce a final model of the task based on both the rational analysis and empirical analysis of observations. This results in a 'Rational-Empirical' (R-E) model of the task.

The current study aims to undertake the second phase of the Task Analytic process, that is, validation, in which the model is tested on a new sample of clinical task performances. The presence or absence of the stages of the model will be determined and the link between completion of the model of the task and its successful outcome will be tested. Finally, performances of the task (successful/unsuccessful) will be linked to (or associated with) overall clinical outcome.

2.2 Participants

Therapeutic dyads (clinicians and their patients) were recruited from two United Kingdom National Health Service (NHS) organisations (Foundation Trusts).

2.2.1 Inclusion Criteria

To be included in the study therapists had to give their informed consent and participate in training using the SRS and other study procedures. They had to have completed masters or doctoral level training in counselling or psychotherapy or be trainees completing these

qualifications. Trainee therapists were required to have their clinical supervisor's permission to participate.

Patients had to be 18 years old or older, have been accepted for treatment in the participating services (IAPT or CMHT) and able to give their informed consent for participation in the study.

2.2.2 Exclusion Criteria

Dyads with more than 50% missing questionnaire data or incomplete or inaudible session recordings were excluded.

2.3 Measures

Two measures were completed by the participating dyads during and immediately after therapy sessions.

2.3.1 **Session Rating Scale** (Duncan et al., 2003)

The SRS was developed to be a brief, user-friendly tool allowing patients to feedback to therapists about each session of treatment. The scale takes approximately one minute to rate and score. It is comprised of four visual analogue scales, each 10cm long, measuring a different aspect of the therapeutic alliance (Relationship, Goals, Approach/Method and an Overall rating). The patient indicates their rating by marking the scale and this is scored by measuring the distance from the negative end (left) in centimetres, rounded to the nearest centimetre. Duncan et al. (2003) recommend that any individual scale score below nine or a total score below 36 should be followed up with further enquiry by the therapist. Scores below 34 represent a poor alliance, 35-38 a fair alliance and 39-40 a good alliance. Duncan et al (2003) report similar test-retest reliability, and internal consistency as found for other validated measures of the TA (e.g. Helping Alliance Questionnaire II, HAq-II (Luborsky et al., 1996) and the Working Alliance Inventory (WAI) (Horvath & Greenberg, 1989)). An example of a completed SRS is included as Appendix C.

2.3.2 Post Session Questionnaire

The Post Session Questionnaires (PSQ) (Muran et al., 1991) are research tools designed to capture any tension or difficulty during psychotherapy sessions. For this study two sections (A & D) of the original PSQ were used, the first comprising two questions, a rating of how helpful or hindering the session was on a 9-point scale, and secondly the degree to which the rater thinks the presenting problems are resolved. The second section ("D" in the original PSQ) probes for tension or difficulty during the session or a sense that the dyad was avoiding difficulties and the degree of discomfort this distress caused. There is also a free text section for a description of the difficulty and questions on whether the problem was addressed and resolved in the session. The full psychometric properties of the PSQ sections used in this study have not been reported, although it has been used frequently as a means of identifying tension in sessions in alliance rupture studies (Muran et al., 2009; Samstag et al., 1998; Samstag et al., 2008). A completed PSQ is shown in Appendix D.

2.3.3 Rupture Resolution Rating System (Eubanks et al., 2015)

The Rupture Resolution Rating System (3RS (Eubanks et al., 2015; Eubanks et al., 2019)) was used to determine the presence of ruptures in sessions. High inter-rater reliability has been demonstrated for the frequency of withdrawal and confrontation ruptures, and resolution strategies (Intra-class correlations (ICC) = .85 to .98) and ratings of therapists' contribution to the ruptures and overall resolution (ICC = .92) using the 3RS. Analysis of the validity of the 3RS for predicting dropout from therapy showed moderate to large effect sizes for confrontation rupture markers (d = .74) successful resolution (d = .67) and therapist contribution to ruptures (d= .61) (Eubanks et al., 2019). `

In the current study, as in other recent studies using the 3RS (Boritz et al., 2018; Eubanks et al., 2019; Zilcha-Mano et al., 2020), sessions were analysed in five-minute segments with the category of rupture (withdrawal, confrontation or both) and the specific rupture marker type rated according to the 3RS system. The standard 3RS coding procedure does not differentiate between repaired and unrepaired ruptures as events but rates severity of

rupture markers and the success of resolution strategies over the whole session. Therefore, for the current study, because the task being analysed is the resolution of ruptures using the SRS, the degree of rupture resolution (i.e. 1/5 – poor resolution/worse alliance to 5/5 - very good resolution/improved alliance) achieved during the SRS feedback discussion in the final five to ten minutes of the session was made rather than a 'global' rating of resolution achieved during session overall. This adaptation to the procedure enabled the study to use the existing 3RS coding guidance for resolution. The 3RS resolution scale can be seen in Appendix F.

2.3.4 Outcome Measures

Therapist-Patient Dyads used a variety of outcome measures to monitor patient progress, either following the programme specification in IAPT services or according to their own practice in CMHTs. In IAPT services the Patient Health Questionnaire 9-item (PHQ-9) (Kroenke et al., 2001) and the General Anxiety Disorder (GAD-7) (Löwe et al., 2008) are routinely used as outcome measures with patients. CMHT therapists also used the PHQ- 9 and GAD-7. Further details on the outcomes measures is given in Appendix E.

2.4 Therapist Briefing

Therapists were recruited via presentations to their clinical teams in which the researcher outlined the hypotheses and rationale for examining links between formal feedback using the SRS and the identification and repair of TA ruptures. Therapists were provided with the Participant Information Sheet to consider at these initial briefings. Those therapists who expressed interest in participating were invited to meet with the researcher individually or in small groups (in person or via telephone/videocall) and the study procedures, administration of the SRS and elicitation of feedback were discussed and described in more detail. Therapists then provided informed consent to participate in the study.

Patients were recruited by the participating therapists who explained the study rationale. They were also invited to contact the researcher to discuss the study if they wished however

none did. Patients were asked to consider the study information sheet for one week prior to giving consent to participate.

2.5 Ethical Considerations

The research was approved by the Oxford Doctoral Course in Clinical Psychology Research Subcommittee the NHS Research Ethics Committee and the NHS Health Research Authority (see appendices I, J and K).

Recordings of therapy sessions were stored on an encrypted device and transferred to the researcher using a secure electronic file transfer service. All participants and therapists were assigned random identity numbers for use on forms and naming files. All identifying information was redacted during transcription. Paper copies of consent forms were retained in a locked filing cabinet. All data will be destroyed after a period of five years.

2.6 Procedure

Therapists were briefed to administer the SRS in the final five to ten minutes of sessions by providing a paper copy for patients to complete and then discuss the responses with the patient to elicit feedback from them and respond to this feedback if possible. Patients and therapists were asked to complete the PSQ separately following the session. It was apparent in some recordings that the PSQ was completed after the SRS discussion and on one occasion the patient provided further feedback to their therapist based on the PSQ. Given that it was not necessary for the therapist to remain blinded to the patient's feedback on the PSQ then if the patient chose to disclose this information as further feedback this did not affect any subsequent analysis. There was no indication that the patient thought they were required to give this feedback if they did not wish to do so and therefore these sessions were retained in the sample.

All therapists reported that they had not used the SRS previously in their clinical practice, nor were they using other formal feedback systems.

Therapists were not given training in strategies to detect or repair ruptures and were asked to apply their existing skills to elicit and respond to patient feedback. The Outcome Rating Scale (Miller et al., 2003) which is typically used at the beginning of sessions in the Partners for Change Outcome Monitoring System (PCOMS), and which often forms a complementary outcome measure to the SRS, was not used in this study because the therapists were typically using other routine outcome measures already following either the service's protocol (IAPT) or their own clinical practice (CMHT).

2.7 Session Sample Selection

Sessions were selected for analysis based on the availability of the audio recording and on the patient and therapist ratings of tension and difficulty on the Post Session Questionnaire (PSQ (Muran et al., 1991)). The latter were used to identify those sessions likely to contain ruptures. Ruptures were defined as scores above baseline on the PSQ questions probing difficulty, avoidant compliance or an explicit report of a rupture and/or resolution attempt.

The last ten minutes of these identified sessions were checked for the presence of SRS administration and feedback discussion, scanning forward or back to identify that it was correctly completed and there was a discussion. Those sessions found to contain feedback discussion were analysed for the presence of alliance ruptures using the 3RS. SRS administration and any subsequent feedback discussion was then analysed for the presence of R-E model stages and the repair of any rupture, or further ruptures. This led to a final sample of fifteen sessions.

2.8 Blinding and Validation of Ruptures, Resolution Ratings and Model Stages

All outcome measures (PHQ-9, GAD-7) and the patients' and therapists' PSQ ratings of how helpful or hindering the session was for the patient and the degree to which the patient's presenting problems were resolved were separated from the reports of tension and rupture resolution prior to selection of the sample for analysis and during rupture and resolution

analysis.

Two raters' (B & C) independent ratings were used to validate the primary rater's (A) decisions about the presence of a rupture using the 3RS, the presence of R-E model stages and the degree of resolution achieved during the feedback discussion.

Raters A & B were trained in using the 3RS to identify ruptures using training materials provided by one of the developers (Eubanks, personal communication). Rater B rated the presence or absence of ruptures in a sub-sample of sessions from the full sample. Rater C was familiar with the model stages and assessing rupture resolution. Raters B & C were kept blind to Rater A's decisions whilst conducting their analyses. Raters B & C were both qualified clinical psychologists who had previously conducted their doctoral research projects on ruptures within the same research group.

Disagreements between the raters were resolved through discussion. This process was audited by the research supervisor.

2.9 Session Evaluation and Outcome Ratings

After completion of rupture presence, resolution and model stages, participants' ratings of progress on presenting problems and how helpful or hindering the sessions had been for the patient were revealed. Any other outcome measures that were available were also collated. The degree to which patients rated the analysed sessions as helpful or hindering were analysed with respect to rupture resolution status and number of model stages identified.

Formal outcome measures, patient, or therapist PSQ ratings were compiled and analysed to determine whether each patient had made a clinical improvement during therapy.

3 Results

The Task Analytic method involves both quantitative and qualitative procedures. The quantitative elements were the ratings provided by the participants and codes derived from the session recording using the 3RS to detect the presence and severity of ruptures and the coding of the R-E model stages during the formal feedback process.

The statistical program “R” (R Core Team, 2021) was used to complete all statistical tests.

Table 1: Summary of Therapist Characteristics

Therapist number	Main therapeutic approach (therapist’s description)	Qualification and level	Setting	Years of Experience	Previous SRS user	Number of patients (number included in analysis)
9	“Third-wave” CBT	D, Clinical Psychology	CMHT	25 years	No	1(1)
41	Humanistic/Person Centred	M, Humanistic Psychotherapy	IAPT	Not reported	No	4 (4)
22	CBT, integrative/relational	D, Counselling psychology	IAPT	8 years	No	1(1)
47	CBT, Self-Regulation CBT, DBT and CFT	D, Clinical Psychology	CMHT	8 years	No	1(1)
29	CBT for psychosis, ACT, CFT and Schema Therapy	D, Clinical Psychology	CMHT	3 years	No	1 (0 – no reported tensions)
40	CBT	M, Counselling Psychology, CBT, IPT	IAPT	16 years	No	1 (0, no recordings available)
11	Integrative	M – T, Integrative Psychotherapy	IAPT	3 years	No	2 (0, SRS not discussed within session)
17	Psychodynamic (dynamic Interpersonal Therapy)	M – Dynamic	IAPT	2 years	No	1 (0 – no reported tensions)

Key: D – Doctorate level qualification, M – Masters qualification, T Trainee Therapist, CBT – Cognitive Behavioural Therapy/ies, DBT – Dialectical Behaviour Therapy, CFT, Compassion Focused Therapy, ACT – Acceptance and Commitment Therapy, IAPT – Improving Access to Psychological Therapies, CMHT – Community Mental Health Team, SRS – Session Rating Scale

All patients were treated as outpatients voluntarily seeking treatment for their difficulties, see table 2 for a summary of patient characteristics. The trainee participant was nearing completion of their course and was accruing the clinical experience required for professional registration. In total, the dyads completed 143 study therapy sessions which had PSQ ratings provided by at least one participant.

Table 2: Patient Participant Demographics

Patient Code	Sex/Gender	Age	Ethnicity	Setting	Presenting Problem(s)
48	Male	62+	White British	IAPT	Depression
24	Female	62+	White British	IAPT	Anxiety
30	Female	51-61	White British	IAPT	Depression
28	Male	40-50	White British	IAPT	Not reported
1	Female	29-39	White British	CMHT	Bipolar Affective Disorder
42	Female	40-50	White European	CMHT	Emotionally Unstable Personality Disorder, Chronic Fatigue Syndrome
27	Female	18-29	White British	CMHT	Psychosis

Key: IAPT – Improving Access to Psychological Therapies, CMHT, Community Mental Health Team

3.1.1 Attrition

No patients dropped out of psychotherapy or withdrew from the study. One therapist reported that their audio recordings had been lost (one dyad). One therapist gave patients the SRS to complete after the session thus did not discuss these in the session as instructed and therefore could not resolve any ruptures using the SRS (two dyads). Two dyads did not report any tension or difficulty in their sessions on the PSQ.

3.2 Inter-Rater Reliability for Quantitative analyses

To judge the consistency of the ratings between raters A and C Cohen's kappa (Cohen, 1960) was calculated to ascertain the degree of agreement. Prior to consensus discussion, for the presence or absence of model stages Cohen's kappa was $\kappa = .631$, a substantial agreement according to Cohen (1960). Ratings of the degree of rupture resolution were also compared with agreement on 6/9 sessions obtained prior to consensus discussion. Cohen's kappa was calculated using equal weighting to account for the degree of disagreement between ratings, with $\kappa = .526$, a moderate agreement (Cohen, 1960). For two ratings the raters disagreed by one point and for the third by two points. These disagreements were resolved through discussion.

For ratings of ruptures using the 3RS, rater A & B's decisions on the presence of a rupture in sessions identified agreement in all sessions and on all individual rupture sequences. There was also total agreement on the overall type of rupture, that is whether they were primarily confrontation or withdrawal ruptures. For significance ratings of the severity of ruptures there were some differences between raters, with full agreement on severity in 7 out of 10 sequences. In the remaining three, the raters disagreed by one rating point (rater A rating higher rupture severity on 2 out of 3 sequences). Cohen's kappa was calculated, again using equal weighting to account for the degree of disagreement between ratings, with $\kappa = .526$ (moderate according to Cohen (1960)).

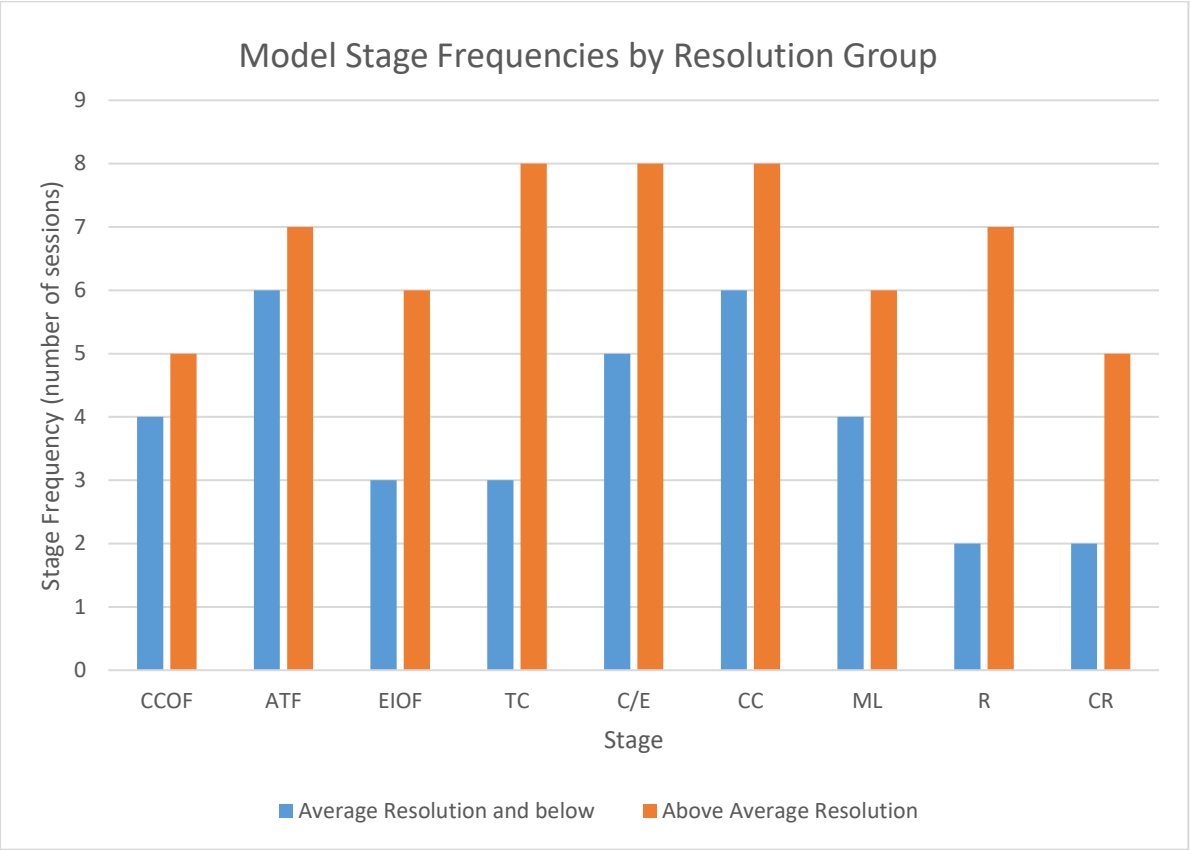
3.3 Rational-Empirical Model Stage Completion and Rupture Resolution

In the majority of sessions, dyads completed R-E model stages during the formal feedback process, ranging from one session where the SRS was completed but neither introduced nor discussed (no stages observable) to the maximum of nine observable[i] stages[4] completed. To assess the strength of the link between model stage completion and the degree of rupture resolution, Spearman's rank order correlation was calculated, showing a significant positive correlation between the two, $\rho = .768$, $p < .001$, $N = 15$. This suggests that an increase in the number of model stages completed was associated with a greater degree of observed rupture resolution during the formal feedback process. A scatterplot graph showing the number of stages completed and the degree of resolution is shown in Appendix G.

Notably, not all individual model stages were completed in all feedback sequences which were rated as achieving high degrees of resolution, with one session where two stages were not identified still being rated as achieving the maximum degree of resolution and several feedback discussions rated as good/above average resolution (4/5) having five to eight model stages completed. Figure 2 shows the number of sessions which each model stage was observed in.

[4] Excluding 'Internal work' and 'Deciding whether to pursue' which are typically intrapsychic therapist processes and therefore not evident in session recordings

Figure 2: Graph showing the frequencies of each model stage in the sample



Key: CCOF – Creating A Culture Of Feedback, ATF – Attending To feedback, EIOF – Emphasising Importance Of Feedback, TC - Therapist Contribution To Clarification/Elaboration, C/E - Clarification/Elaboration Of Feedback, CC - Client Contribution to C/E, ML – Making Links, R – Renegotiation, CR – Client contribution to Renegotiation.

One stage was identified in all bar one of the feedback sequences (client contribution to clarification or elaboration of feedback – TC) suggesting that the patients were able to engage in the process of giving feedback and discussing it, possibly fostered by the use of the SRS. “Clarification and/or Elaboration” (C/E) and “Attentiveness to Feedback” (ATF) was also present in the majority of sessions (14/15). Interestingly, therapist contribution to clarification (TC) (defined as the therapist clarifying their intentions, acknowledging their role in ruptures, or communicating partnership) was less common than CC or C/E, although therapists participated in the C/E stage even when if this did not meet the specific criteria for

the TC stage (11/15).

Sessions were ranked in terms of the resolution rating and the presence of the model stages was examined. This suggested that three stages of the R-E model (Therapist Contribution to Clarification/Elaboration (TC), Renegotiation (R) and Client Contribution to Renegotiation (CR)) were those that differed most between sessions with high and low resolution ratings. with at least two of these stages were present in all the sessions rated as having above average (4/5) or very good resolution (5/5). None of these stages were present in the two sessions with the lowest resolution.

3.3.1 Qualitative Exploration of Rupture Resolution Using Formal Feedback

A coded transcript of the formal feedback discussion which contains all nine model stages and which was rated as achieving a high degree of resolution is provided inAppendix Ias an illustration of the way in which therapists and patients used the formal feedback process to identify and resolve a difficulty. The session contained primarily withdrawal rupture markers along with some confrontation markers (3RS code ‘complaint or concern about progress in therapy’) which were unresolved prior to the feedback measure and discussion. This was also the dyad’s first use of the SRS. The therapist creates a culture of feedback by encouraging honesty and emphasising the importance of feedback as the patient completes the SRS. The therapist responds positively to the patient’s feedback and encourages more feedback from them and the client responds to this and to the therapist’s questions (‘clarification/elaboration’) by further reflecting on their experience and providing further feedback (client contribution to C/E’). The patent discloses a sense that there are issues with the goals and topics of therapy and the approach or method which they link to not making progress in therapy. The therapist explores this issue with the patient (‘clarification/elaboration’) and acknowledges the role they have played and appears to use their own internal sense of doing most of the talking to validate the patient’s report of this

issue before ‘making links’ between this and the broader patterns and themes of the therapy and a preceding ‘lower intensity’ intervention.The dyad consider ways they might go about altering the therapy in response to these issues (‘renegotiation – exploring potential changes’ and ‘patient contribution to renegotiation’). The patient responds positively to these suggestions giving a sense that there has been some resolution of the strain in the TA and the therapist thanks them for the feedback and encourages them to provide more in the future.

3.3.2 Feedback Discussion with Low Resolution Rating

An example of a session coded as having below average resolution (2/5) is included to illustrate fewer model stages completed and little resolution achieved (Appendix H). The therapist introduces the SRS without referring to the rationale for feedback to help create a culture and context for providing it. However, this may be due to discussing this previously having used the SRS it in several prior sessions. The therapist briefly encourages honesty (‘creating a culture of feedback’- encouraging honesty) and in response to the patient’s feedback notes that there has been an issue (“there’s something here that you’re not sure about’) leading to the patient clarifying and elaborating on the issue (“I still feel like we haven’t started yet”). The therapist was only able to briefly clarify and explore the reasons for this and so could not respond in depth to what appears to be a potentially significant ‘confrontation’ rupture (3RS code ‘complaint/concerns about progress in therapy’) regarding the patient’s progress towards their goals and about the therapy overall. There are no further speech turn cycles of the therapist ‘clarifying/elaborating’ and the patient responding to these (‘client contribution to C/E’) in which the issue could be more clearly identified and no therapist contributions that might acknowledge their role, clarify their intentions or outline the plan for therapy are made. Similarly, there appear to be no links made (‘making links’) between the feedback and the patterns in therapy or any broader patterns in life. Finally, the stages ‘renegotiation’ and ‘client contribution to renegotiation’ were not identified in the session. The therapist suggests that they discuss this issue in the following session and,

while the patient agrees to this, there is no sign of an affective shift from the patient that would give a sense that there has been a resolution in this session. Overall, although some feedback is provided there does not appear to be sufficient exploration and renegotiation to resolve the rupture.

3.4 Rupture Resolution During Feedback and Session Evaluation Ratings

The degree to which each member of the dyad thought the session was helpful or hindering was rated immediately after each session using the PSQ on a nine-point scale (1 = extremely hindering, 5 = neutral, 9 = extremely helpful). The patient and therapist ratings are summarised in Table 3.

Table 3: showing the number of R-E model stages present, the resolution rating and Patient and Therapist's evaluations of whether the session helped or hindered the patient

Session code	Stages present (of 9)	Resolution Rating (1-5)	Therapist Rating of session, Hindering (1) - Helpful (9)	Patient Rating of session Hindering (1) - Helpful(9)
41-30-10	0	1	8	NA
9-42-2	3	2	5	4
9-42-5	5	2	6	4
9-42-10	8	3	8	6
41-24-15	6	3	6	5
41-28-3	7	3	8	8
41-45-3	6	3	6	NA
41-24-9	6	4	6	4
41-28-9	5	4	7	9
41-30-2	7	4	7	NA
47-1-14	8	4	7	9
9-42-1	9	5	5	7
22-48-1	9	5	7	6
41-24-10	9	5	5	5

47-1-17	7	5	7	6

Key: NA = data not available

Therapists rated all sessions as either neutral or helpful to their patients. Patients, on the other hand, rated some sessions as slightly hindering (4/9, where 1/9 is extremely hindering, 5 is neutral and 9 is extremely helpful). Therapist and patients' evaluations of session helpfulness are shown in Figure 3 and 4

Figure 3: Scatterplot showing Therapists' Ratings of Session Helpfulness and the Observed Degree of Resolution

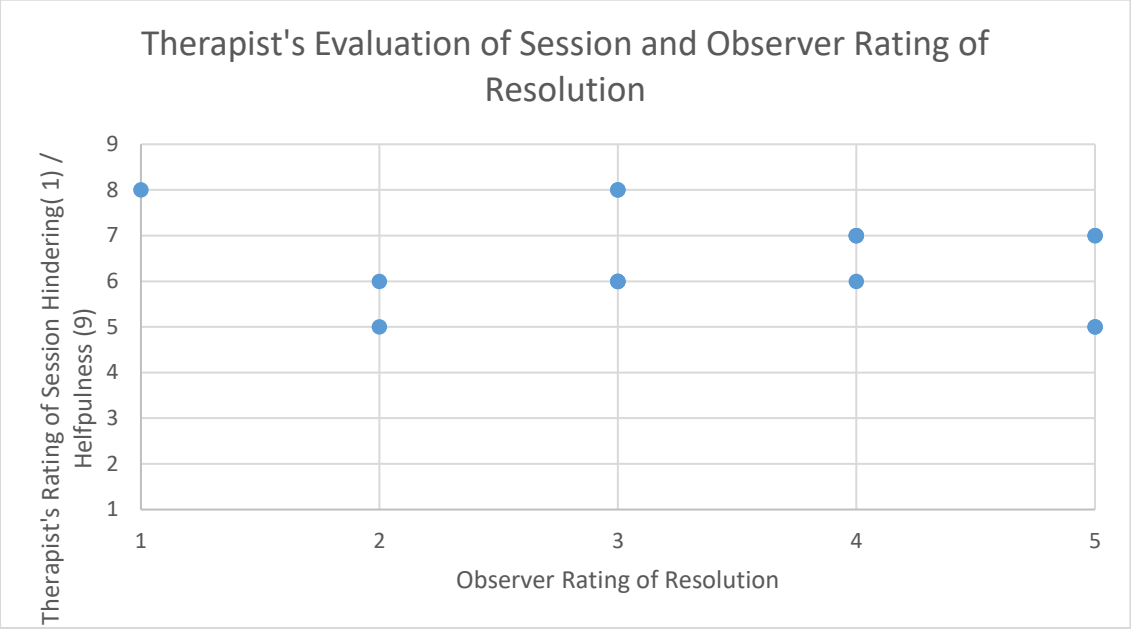
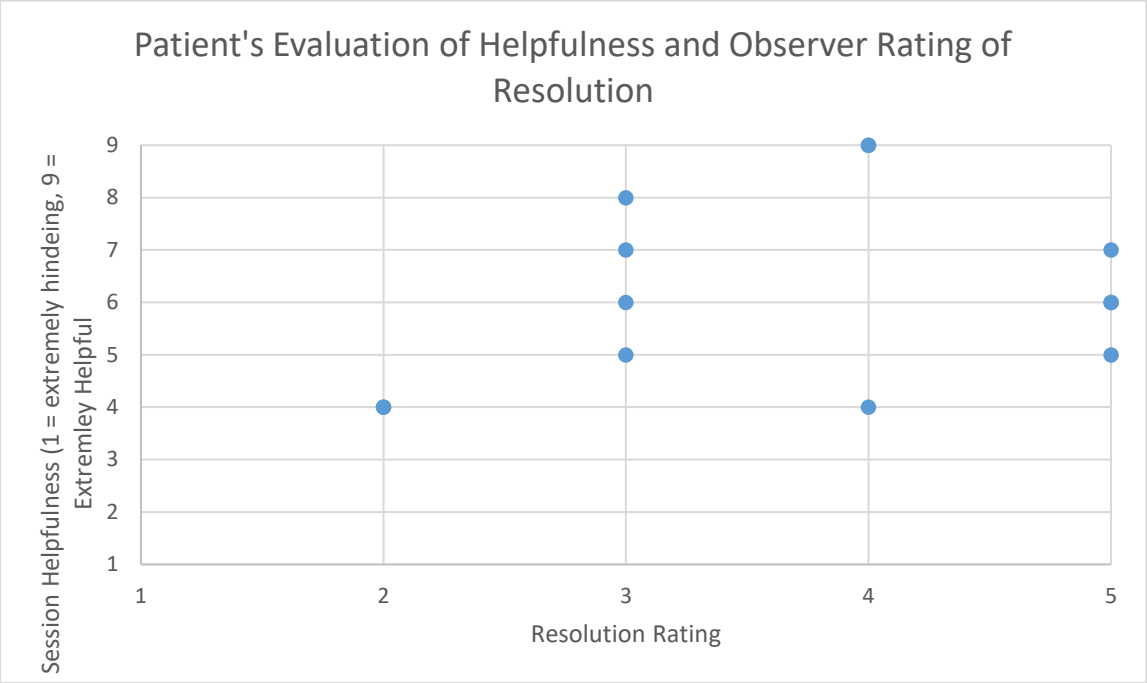


Figure 4: Scatterplot showing Patients' Ratings of Session Helpfulness and the Observed Degree of Resolution



Spearman's rank order correlations were again calculated to assess the links between the observers' (Raters A & C) resolution ratings and the participants' evaluations of session helpfulness. For therapists' ratings, ρ = -.146, p = .589, N = 15, indicating that there was not a significant correlation between the therapists' ratings of sessions and the resolution status.

For patients' ratings ρ = .295, p = .328, N = 13, again indicating that there was not a significant correlation between their session evaluations and the observed resolution status during feedback.

Neither patients' nor therapists' ratings of how helpful or hindering the session had been for the patient were linked to the degree of resolution observed during the formal feedback process.

3.5 Rupture Resolution During Feedback and Overall Therapeutic Outcomes

The final stage of the task analytic procedure was examining the association between completion of the task and the overall therapeutic outcomes for the patients. There were two

sources of data relating to the patients' outcomes, the routine outcome measures completed by patients during therapy and the patients' and therapists' ratings of progress in therapy on the PSQ.

The degree of resolution observed was used to categorise sessions into two groups. Those dyads with observers' consensus ratings of 3 or below were classified as unresolved or only partially resolved whilst those rated as 4-5 were rated as resolved. The routine outcome measures (ROMs) were examined and those with improvement above the 'minimal clinically important difference' (MCID - Jaeschke et al., 1989; Kroenke et al., 2016) were classified as improved, those with improvements below MCID were classified as slight improvement and those with any deterioration on the measures were classified as deteriorated. PSQ Outcome was determined based on the patient and therapist ratings of progress on the PSQ (Question A-2, "to what degree are your/your patient's presenting problems resolved"). These data are summarised in Table 4. Where the patient and therapist differed on whether the difficulties were resolved the patient's rating was taken. Patient 42, for whom there were no routine outcome measures available was assigned to the 'did not improve' group based on their rating that their presenting problems were not at all resolved in the final session. Patient 1, who reported an improvement on the PSQ and provided a subjective report of improvement to their therapist at follow-up but who did not show improvement above the MCID on the outcome measure was also assigned to 'did not improve' so as to be conservative with regard to determining improvement.

Table 4: Total resolutions per dyad and change in outcome measures and participants' evaluations of improvement

Dyad Code	Session Resolutions[a] during Formal Feedback	Final Patient rating of Presenting Problem Improvement (PPI) (1 (Not at all) - 9 (Completely resolved))	Final Therapist rating of PPI	Change in Patient rating of PPI	Change in Therapist rating of PPI	Pooled Outcome Measures[b]
9-42	1/4	1	3	0	3	NA
41-24	1/2	5	3	3	2	deteriorated
41-28	1/2	8	6	3	3	deteriorated
41-30	1/1	NA	5	NA	1	improved
41-45	0/1	NA	5	NA	0	improved
47-1	2/2	5	5	0	-1	slight improvement*
22-48	1/1	6	5	3	0	improved

Key: PPI Presenting Problem Improvement, NA – data not available, * change is less than MCID, a – resolutions rated as ≥4/5 classified as resolved, b – outcome measures were pooled based on whether deterioration or improvement was shown on the majority of measures used by the dyad.

Fisher's exact test was used to test whether there was a statistically significant difference between the resolved versus unresolved sessions and overall therapeutic improvement (improved versus slightly improved & deteriorated. The result was $p = 1$, indicating that there was not a significant relationship between rupture resolution during feedback and the therapeutic outcome for the patient.

4 Discussion

This study suggests that the R-E model stages are identifiable in psychotherapy sessions with therapists using differing approaches and with clients with different presenting problems. Dyads who completed more stages of the model were significantly more likely to be rated as having resolved a rupture during the formal feedback process. When dyads completed fewer model stages they were less likely to resolve ruptures. However, rupture resolution during the feedback process did not appear to be associated with participants' perception of how helpful or hindering the session had been, or with the patients' overall outcome from therapy.

Although the therapists were not experienced in using a formal feedback measure, all those who used the SRS and discussed it with the patient were able to engage in the task of eliciting and responding to feedback provided by patients in sessions. Similarly, patients were also able to engage with this task, giving feedback to therapists and in many cases exploring this further with the therapist and then renegotiating therapeutic tasks. Notably, the therapist performing the task in Laraway's model development study (2015) was an experienced user of the SRS and the degree to which therapists in this study (who were not experienced in using it) completed similar stages is a striking finding, suggesting that therapists who are experienced and inexperienced in using formal feedback may proceed with the task by completing similar steps. This provides some initial validation for the model developed by Laraway (2005).

As noted above, while dyads identified and discussed tensions there was a wide range in the number of stages identified, with few stages identified in some sessions, and in one case no, stages and one exhibiting all nine. It also appeared that some stages were more important in terms of achieving resolution of a specific session rupture (Therapist Contribution to Clarification/Elaboration (TC), Renegotiation (R) and Client Contribution to Renegotiation (CR)) while others may be more important in enabling the dyad to attempt this task. Other rupture repair models have often identified dyads cycling between stages during rupture repair (Aspland et al., 2008; Bennett et al., 2006).

It is unclear to what degree the process might change with more intensive training in the use of the SRS and rupture repair strategies, or further experience and ongoing supervision for therapists from supervisors familiar with the model. Inspection fo the data suggestedthat there may be some qualitative differences in the depth and specificity of discussions between performances of model stages, both between sessions in this study and compared to the original development sample (Laraway, 2015) which were not captured by the dichotomous classification of stages into ‘present’ and ‘not present’.

Contrary to our hypotheses, rupture resolution using formal feedback did not link to the participants’ ratings of the helpfulness of the session for the patient, nor did rupture resolution link to the patient outcomes. To understand this finding we can look to the alternative conceptualisations of TA as being either a central component of therapy (Safran & Muran, 2000) or a factor supporting and allowing therapeutic tasks to be completed (Hatcher & Barends, 2006). Our session-based analysis method and conception of ruptures as within-session events identified by markers, along with missing recordings in the dataset, meant that analysis of the subsequent session for potential completion of resolution tasks was not possible. In some sessions this was agreed as a next step by the dyad. The within session-based design analysis also meant we were not able to track changes in TA over multiple sessions to determine whether the SRS had an incremental longitudinal effect on TA

when ruptures were not clearly repaired as specific in-session events. This may relate to the task analytic process being focused on significant events as part of the ‘events paradigm’ rather than more gradual changes.

Time allotted to completion of the measure varied from approximately two minutes to over ten minutes. Although greater amounts of time allowed a more detailed exploration of the issue, even one very brief discussion (approximately two minutes long) appeared to allow the client to provide feedback and the therapist to respond to it in a way that was rated as achieving substantial repair.

Given that no patients unilaterally terminated therapy, it may be that the feedback process was helpful in retaining patients in therapy but is not sufficiently therapeutic in itself to affect outcome, with therapeutic change depending on the outcome of the other tasks completed in therapy. On the other hand, it may be that the significance of repairs to the renegotiation of therapeutic tasks or to linking to broader problematic interpersonal patterns differed, something that our analysis did not assess.

4.1 Limitations

The study had a number of limitations which may have affected the findings observed here. While we were able to broaden the sample of clinical performances beyond the single therapist in the model development study (Laraway, 2015), the relatively small number of dyads providing sessions for analysis and missing session recordings limited the analyses possible and reduced the power of the study to detect an effect for some hypothesses. There were also disparities between dyads in terms of the number of sessions reported to contain tension, with dyads who reported tension in many sessions being represented more frequently in the sample (maximum of four from one dyad) whilst those who reported no tension were not analysed (two dyads). This increases the likelihood that a subset of dyads with more frequent ruptures could affect the overall findings.

It was only possible to provide brief training to therapists and ongoing additional supervision was not provided. This may have contributed to one therapist apparently not asking patients to complete the SRS in session and so being unable to elicit feedback or attempt to resolve ruptures using the feedback.

Patient and therapist participants were all white British or European and it may be that patients from racial and ethnic minority backgrounds respond differently to providing feedback and rupture repair strategies, particularly where the therapist and client are not matched on race or ethnicity or where the rupture is connected to issues of racial and ethnic difference (Chang & Berk, 2009; Owen et al., 2012).

Several patients appeared to misunderstand questions in the second section of the PSQ which referred to 'this problem', and which was intended to refer to any alliance difficulties they had rated in the preceding question, instead they interpreted this as referring to their presenting problem. Therapists were generally kept blind to the PSQ forms and so could not identify and address this misunderstanding. This prevented comparisons between the participants' subjective report of resolution and that observed by the independent raters.

Although the licensing permits the use of the PCOMS measures (ORS and SRS) for individual clinicians (Better Outcomes Now!,) implementation of the PCOMS and much of the associated research base has been conducted at a clinic or service level by the developers themselves or with organisations who have purchased the system from the developers (Brattland et al., 2019). In these services, all therapists and supervisors are offered training in routine outcome monitoring including the use of the SRS and receive ongoing supervision. A randomised controlled trial of PCOMS over a four-year implementation process showed that whilst the effect size for PCOMS over treatment as usual (TAU) was small. Patients in the PCOMS group treated later in the implementation process appeared to benefit more than those treated earlier (Brattland et al., 2019). This suggests that therapists may improve in their skill in eliciting and responding to formal

feedback over time. On reflection it was perhaps notable how well some therapists were able to elicit and respond to feedback given their limited experience of using the tool, and without an organisational culture or specialist support available to them.

Caution should perhaps be exercised in considering this group of therapists and patients as representative of the 'general population' of therapists and patients. It appeared that of the therapists who volunteered to participate in this study many were particularly familiar with the concepts of TA or relational perspectives on psychotherapy. This may have meant their knowledge and confidence in eliciting and responding to feedback, and particularly to therapeutic relationship issues and TA ruptures, was higher than average. This might account in part for the replication found here of the stages of the model and also, in part, the association between rupture resolution and number of model stages completed. Similarly, patients who agreed to participate may be more likely than is usual in clinical practice to provide feedback to therapists or may have had previous experiences of ruptures in therapy or other interpersonal relationships, thus prompting them to show an interest in the study.

4.2 Ideas for Future Research

All therapists in this study were new to using the SRS and received only brief training in its use. It would be particularly useful to investigate the use of the SRS by therapists who had received training and ongoing supervision in a setting where there was an organisational culture of providing feedback informed therapy, as has been the case of much existing research in this area (Brattland et al., 2019) or with therapists who had greater experience of using it clinically with clients. In this respect, a longitudinal investigation of implementation and changes in therapists' success in eliciting and responding to formal feedback as they gain experience would be useful and the degree to which these changes can be identified by analysis using the R-E model could also be considered. Measurement of TA using one of the validated measures ((e.g. WAI, CALPAS, VTAS-R, ARM amonst others Elvins & Green, 2008)) could allow tracking of TA over the course of therapy. This could allow the

significance of any resolutions identified to be more fully understood in context and further the existing understanding of the links between rupture repairs, patterns of TA development and therapy outcomes (Stiles et al., 2004)

Future studies might investigate feedback systems other than the SRS, for example the OQ-45 (Lambert et al., 2004), to see if the R-E model is generalisable to these methods. Similarly, given that many therapists report obtaining informal feedback routinely from their patients these therapists could be recruited to examine whether informal feedback discussion leads to completion of any stages of the R-E model and if this is linked to rupture resolution or therapeutic outcomes

This study focused only on rupture resolution attempts that occurred within the formal feedback process. The connection between any other resolution strategies employed by therapists in response to rupture events earlier in sessions and any associations with and interactions between these and the formal feedback discussions and repairs might usefully be examined.

Given the suggested links between dropout and therapeutic alliance ruptures (Muran et al., 2009) the fact that no patients dropped out of treatment during this study may be notable. However, this could be also be due to the small sample size. A larger, routinely collected psychotherapy dataset could allow the identification of patients who dropped out or who deteriorated during treatment and examine the impact of feedback and resolution of ruptures on these issues. Sessions immediately preceding dropout and those which the patient or therapist rated as hindering or reported a deterioration in resolution could be sampled.

Given that the R-E model was based on five dyads from one therapist, it could be useful to revise the model based on the additional task performances analysed here by continuing the iterative synthesis process of Task Analysis (Greenberg, 2007) For example, some therapists explored patients' positive feedback in such a way as to elicit more honest

feedback and identify a rupture that suggests a stage from the Rational Model, “Enabling/Empowering Negative Feedback", and this could be incorporated in a Revised R-E model. The model stages ‘Creating a Culture of Feedback’ and ‘Emphasising the Importance of Feedback’ were also noted to frequently overlap (i.e. a single speech turn could meet criteria for both) or be difficult to distinguish in the current set of task performances. Further consideration of the components of each stage might help to distinguish these stages, or it may be that combining the two into a single component is pragmatic.

Some model steps (Therapist Internal Work, Deciding Whether to Pursue) were not accessible through analysis of clinical performances in the current study but could be examined through recall-based research approaches in which therapists and clients are interviewed about the processes in session.

Future research could examine differences in the frequency of withdrawal and confrontation markers and whether different resolution strategies were employed in response to these. Currently, task analytic models have been specific to different therapies (Aspland et al., 2008; Bennett et al., 2006; Swank & Wittenborn, 2013), and it could be useful to further examine where there is overlap and where there are differences between them. This could be pursued at rational/theoretic and empirical levels by interviewing experts in different therapeutic models on the conception of feedback and rupture repair in these approaches and by applying the current RE model or an alternative model to other clinical performances, either within one modality or between different therapies.

4.3 Conclusion

This study demonstrates that with brief training therapists can use a brief formal feedback tool to identify and attempt to resolve ruptures in the TA. It also suggests that the R-E model provides a useful basis for understanding the process by which feedback is elicited and

responded to. The model might therefore provide a useful tool for training therapists in eliciting and responding to feedback and providing a model of good practice. However, the findings that repairs did not link to sessions being found to be more helpful or to overall patient outcomes perhaps suggests that while the therapeutic alliance may be necessary, it is not sufficient in itself to promote the patient's desired change.

For some therapists, more intensive training and supervision may be required to use the SRS as intended or more generally to extend their practice of eliciting and responding to feedback. For example, therapists could be supported in responding to repeated positive feedback or further exploring and making links between specific in-session rupture events and wider relationship themes or patterns of behaviour.

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6 Appendices

Appendix A Search Strategy

(((premature OR Early OR unilateral) ADJ2 termination) OR attrition OR Drop?out OR discontinuation) AND (Alliance OR therap* relationship)).ti,ab [DT FROM 2006]

Appendix B Description of Rational-Empirical Model Stages (Laraway, 2015)

Laraway's (2015) description of the R-E model stages along with examples are reproduced below.

Creating a Culture of Feedback

The creation of a culture of feedback occurred in the first session, either at the start of the session when the feedback measure is being introduced, or at the end of the first session when it is administered for the first time. The rationale for completing the measure was explained by the therapist:

"T: Yeah, so, erm, it's based on a lot of research showing that this is like a safety net, that can help us get back on track if things aren't working… It's about your experience of the session, so again we know that how you feel about the session, whether you feel understood, whether you feel we worked on the right things… Whether you feel that we worked in a useful way… This is really critical to the success of therapy" [Participant 1, session 1, line 18]1

The feedback is framed as an opportunity for reflection:

"T: That gives you a chance to take a bit of a step back, break eye-contact with me as it were, just think about 'how was it for me', this session, and then we can have a a bit of a conversation about that" [Participant 5, session 1, line 5]

Honesty is encouraged, and the potential for the feedback to shape the future of therapy is highlighted:

"T: Then really hopefully be absolutely as honest as you can about that experience, and then we can have a little conversation about you know, what I can learn from that… and then where we might go next" [Participant 3, session 1, line 12]

Attentiveness to Feedback

The next step in the model is therapist attentiveness to the feedback that is provided by the client. This includes comparison with previous feedback offered by the client, and noticing any changes:

"T: Kind of less sure about today's session than you were about last time?" [Participant 3,

session 2, line 20]

Another step in this process is noticing whether there are any differentiations between the various subscales on the alliance measure:

“T: Yep, erm, a little bit less for the goals and topics, was there anything in that was er, that you were kind of picking up?” [Participant 1, session 5, line 10]

Emphasising Importance of Feedback

Once the feedback has been raised with the client, the first step is to emphasise its importance. This is done in a number of ways by the therapist, firstly by conveying openness to the feedback, and responding positively:

“T: Well thank you so much, you’ve given me a lot of really helpful sort of feedback and pointers, and understanding to feel what it’s been like in this conversation” [Participant 3, session 2, line 344]

The therapist can then take this opportunity to reinforce the feedback process, encouraging both future feedback at the end of each session, and also ‘real-time’ feedback during the session itself:

“T: So if I kind of paraphrase something in a way that doesn’t feel right, just, you know, please let me know” [Participant 3, session 8, line 193]

Clarification/Elaboration

Once the importance of feedback has been emphasised, and reinforced, the specific feedback offered can be clarified and elaborated upon. The therapist should first check that they have correctly understood the feedback offered:

“T: So it felt a little bit like erm, being under pressure to do something that you weren’t sure it was there, anyway?” [Participant 3, session 2, line 215]

Once understanding has been established, feedback can be further explored:

“T: What might have helped pull that back further across to the right, erm, what could I have done that would have helped us, help you, focus more on what you wanted, or do it in a way that felt better for you?” [Participant 3, session 2, line 32]

Therapist Contribution to Clarification/Elaboration

During the process of clarification and elaboration, it is important that the therapist is aware of their own role in the experience of the client. It may be necessary for the therapist to clarify his/her own intentions:

“T: So not that I’m thinking I’m definitely right when I’m saying it’s something, but I’m saying it

seems like this…" [Participant 3, session 8, line 83]

It is also important that the therapist acknowledges the role that they may have played in a rupture:

"T: Ok, so when I'm asking about feelings it feels a bit like a test, or a, or a hoop that you've got to jump through or something like that?" [Participant 3, session 2, line 198]

Acknowledging their role allows the therapist to help communicate to the client that they are in a partnership, working collaboratively towards the goals of therapy:

"T: Because obviously we're both responsible for this" [Participant 3, session 2, line 54]

Client Contribution

In order for clarification and elaboration of the rupture experience to take place, it is necessary for the client to offer specific feedback on their experience to alert the therapist to aspects of their experience that they may not have been aware of:

"P: I think I'm finding the paraphrasing a bit hard… Because I am very keen to, I'm always at great pains to work out what I'm saying, whether I'm being understood or misunderstood, and when somebody paraphrases it back even slightly differently to me, how I think about it… I start wondering if I've said the right thing" [Participant 3, session 8, line 56]

Once the more specific feedback has been given the client is enabled through further discussion to reflect on their experience in more detail:

"P: Being able to, being able to feel things is something that will come… It's just that it… This week isn't a good week to be trying to concentrate too much on feeling… It is, I have replaced feeling with things a huge amount… I feel the step we're trying to make… With me being able to feel things in my body… Is sort of actually, I need to engage with that I think" [Participant 3, session 2, line 105]

Making Links

Through the process of clarification, the therapist is able to contextualise the feedback offered. This involves the therapist locating the feedback in specific moments within the session:

"T: And you know, we kind of focussed on your feelings, particularly anger today, and how was that for you? Cause I'm kind of thinking, you know, you noticed the connection with your headache getting bigger… As we went more and more into it, and it kind of felt like stickier and stickier, because sort of, er… Like very hard for you to accept… Having really angry feelings, or thoughts" [Participant 1, session 5, line 38]

The feedback can also be linked to the general themes of the therapy, or to broader themes in the client's life and experience:

“T: Right, right, so there’s something about how easy it is to be over-accommodating… And you’re noticing that outside here, and also in here” [Participant 3, session 8, line 153]

Re-negotiation

The culmination of the feedback process is negotiation of how to incorporate the client’s feedback into the therapy as it progresses. This displays responsiveness to feedback, and ensures the client remains engaged in the therapeutic process. It may be necessary to revisit the rationale for the task or goals of therapy:

“T: OK, so I was seeing us like we’re in a workshop together, and kind of like working towards what might be emerging and what might be important” [Participant 3, session 8, line 80]

An important final step is exploring potential changes that might be made within the therapy, directly as a result of the feedback from the client:

“T: So would it be helpful for us to make more space to go, to work through that… That’s something we can definitely play with here if you want to” [Participant 3, session 2, line 261]

It is crucial that this is a collaborative process, during which the client is able to communicate their wishes for change, or demonstrate a commitment to experimenting with suggestions:

“T: Just maybe something to

P: Yeah,

T: Play with a little bit in your mind, and see if anything comes up

P: Will do

T: And perhaps talk to other people about it and see what they think

P: OK, yeah” [Participant 1, session 5, line 80]

Appendix C Example of completed SRS

Therapist ID # 41 Session # ____ Date_

Session Rating Scale (SRS V.3.0)

Service user ID# 24
Date: _____

Please rate today's session by placing a mark on the line nearest to the description that best fits your experience.

Relationship

I did not feel heard, understood, and respected. I----------I I felt heard, understood, and respected.

Goals and Topics

We did *not* work on or talk about what I wanted to work on and talk about. I----------I We worked on and talked about what I wanted to work on and talk about.

Approach or Method

The therapist's approach is *not* a good fit for me. I----------I The therapist's approach is a good fit for me.

Overall

There was something missing in the session today. I----------I Overall, today's session was right for me.

The Heart and Soul of Change Project

https://heartandsoulofchange.com

Validation of a model for using formal feedback to repair ruptures in the therapeutic alliance during psychotherapy using the task analytic method	IRAS Ref: 231420
	REC Ref:

Appendix D Example of Completed PSQ

The Post Session Questionnaire (Therapist) (Version 1.1)
Therapist Code : **41** Participant Number: **45** Date:

SECTION A: Please circle the appropriate number.

1. How helpful or hindering to your client was this session overall?

1 2 3 4 5 6 (7) 8 9

Extremely Hindering — Neutral — Extremely Helpful

2. To what extent are your client's presenting problems resolved?

1 2 3 4 (5) 6 7 8 9

Not at all — Moderately — Completely

SECTION B: Please circle the appropriate number.

1 a) Did you experience any tension or problem, any misunderstanding, conflict or disagreement, in your relationship with your client during the session?

1 2 3 (4) 5

Not at all — Occasionally — All the time

b) If yes, please rate how tense or upset you felt about this during the session.

1 2 (3) 4 5

Mildly — Moderately — Extremely

2 a) To what extent did you find yourself and your client overly accommodating or overly protective of each other? Or to what extent did you feel you were making nice or smoothing things over? Or to what extent did you feel you were holding back or avoiding something?

1 2 (3) 4 5

Not at all — Somewhat — Very much

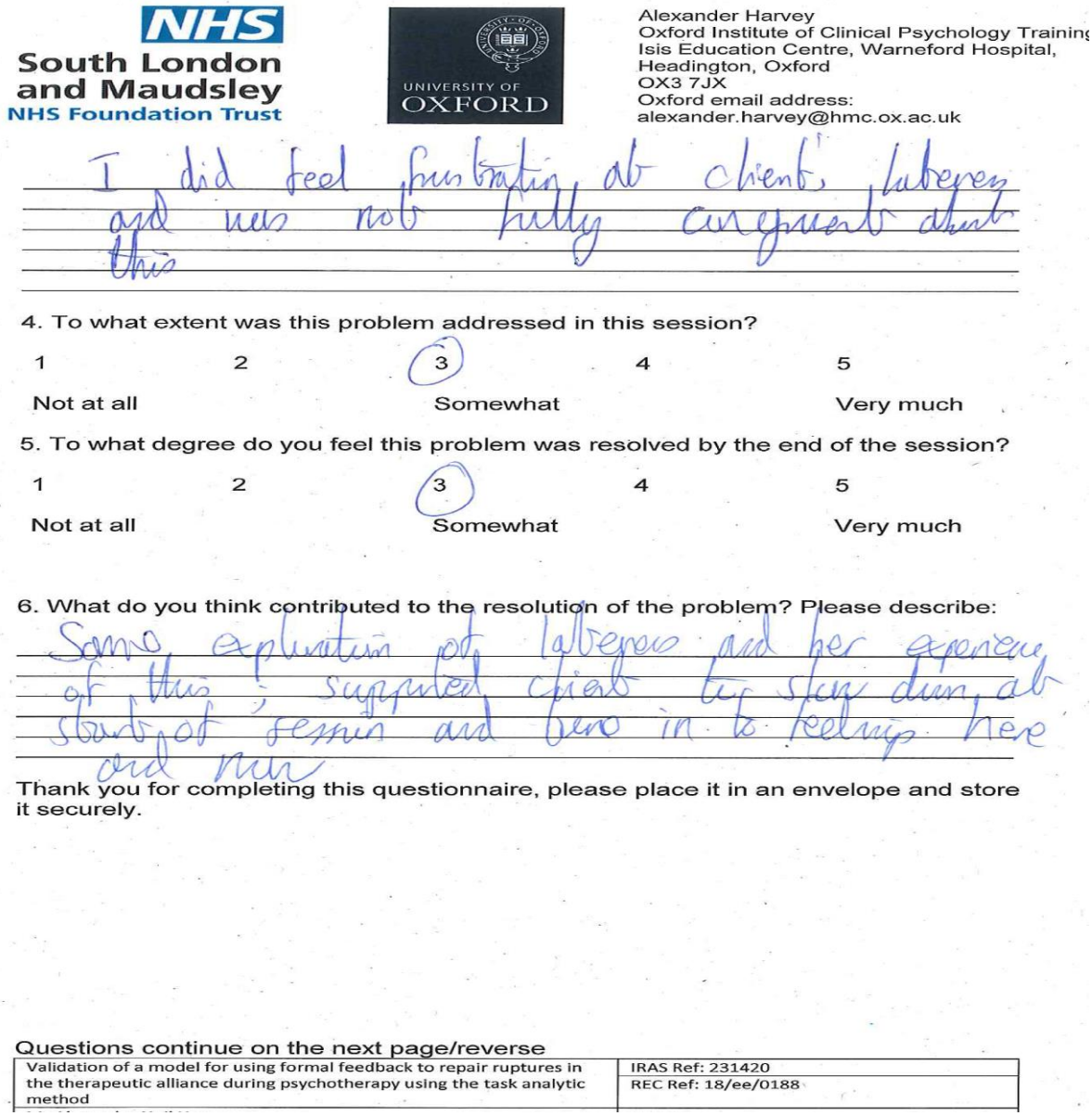
b) If yes, please rate how tense or upset you felt about this during the session.

1 2 (3) 4 5

Mildly — Moderately — Extremely

Questions continue on page 2 (on the reverse side or second page)

3. Please describe the problem:



South London and Maudsley NHS Foundation Trust

UNIVERSITY OF OXFORD

Alexander Harvey
Oxford Institute of Clinical Psychology Training
Isis Education Centre, Warneford Hospital,
Headington, Oxford
OX3 7JX
Oxford email address:
alexander.harvey@hmc.ox.ac.uk

I did feel frustration at client's lateness and was not fully congruent about this

4. To what extent was this problem addressed in this session?

1	2	3	4	5
Not at all		Somewhat		Very much

5. To what degree do you feel this problem was resolved by the end of the session?

1	2	3	4	5
Not at all		Somewhat		Very much

6. What do you think contributed to the resolution of the problem? Please describe:

Some exploration of lateness and her experience of this; supported client to stay down at start of session and time in to keep here and now

Thank you for completing this questionnaire, please place it in an envelope and store it securely.

Questions continue on the next page/reverse

Validation of a model for using formal feedback to repair ruptures in the therapeutic alliance during psychotherapy using the task analytic method	IRAS Ref: 231420 REC Ref: 18/ee/0188

Appendix E Outcome Measures

Two outcome measures, the Patient Health Questionnaire - 9 item (PHQ-9 (Kroenke et al., 2001)) and the Generalised Anxiety Disorder Questionnaire – 7 item (GAD-7 (Spitzer et al., 2006)) are used to routinely monitor and demonstrate the initial severity of symptoms for eligibility, to monitor progress during treatment and recovery from common mental health disorders (such as anxiety and depression) in IAPT services (Gyani et al., 2013).

The Patient Health Questionnaire – 9 (PHQ-9 (Kroenke et al., 2001)) is a brief (9-item) questionnaire for assessing the severity of depression. It is routinely used as a measure of

symptom severity and recovery within IAPT services. The patient is asked to rate the frequency they experience each of the nine DSM-IV (American Psychiatric Association, 2000) diagnostic criteria for depression on a scale of 0 (not at all) to 3 (every day). The PHQ-9 has been shown to have good sensitivity and specificity for detecting symptoms of depression. 88% of patients with scores greater than 10 met diagnostic criteria for Major Depressive Disorder, whilst 93% of those with scores lower than 10 did not meet criteria (Kroenke et al., 2001).

The Generalised Anxiety Disorder Questionnaire – 7 (GAD-7 (Spitzer et al., 2006)) is a brief (7-item) questionnaire for assessing the presence and severity of anxiety symptoms. It has good sensitivity (89%) and specificity (82%) for Generalised Anxiety Disorder and moderate sensitivity for other anxiety disorders including panic, social anxiety and post-traumatic stress disorders (Spitzer et al., 2006). The GAD-7 has been shown to be a valid and reliable measure of anxiety in the general population (Löwe et al., 2008).

Appendix F 3RS Resolution Scale

Rating - Degree to which ruptures were resolved.

1 Poor resolution/worse alliance. Major ruptures were not resolved. Either the ruptures were not addressed, so they continued, or attempts to resolve ruptures were unsuccessful. If attempts to resolve ruptures of any kind—major or minor—made the alliance worse, then code that here.

2 Below average resolution/no improvement in alliance Minor ruptures were not resolved, or major ruptures were only slightly resolved. Resolution strategies neither improved nor harmed the alliance.

3 OK/average resolution/OK alliance. Ruptures were at least partly addressed and resolved.

By the end of the session, patient and therapist have some bond and are generally able to collaborate on most therapy tasks and goals. Sessions with no ruptures or only very minor ruptures that have no significant impact on the work of therapy should be coded here.

4 Good, above average resolution/somewhat improved alliance. Ruptures were generally

resolved well. Some ruptures may have been resolved very well and others only moderately well, but overall, problems with the bond and/or collaboration on tasks and goals were addressed with some success. If very minor ruptures were resolved very well, code that here.

5 Very good resolution/improved alliance Ruptures were more than minor, and they were resolved very well. The resolution process seems to have improved the alliance—strengthened the bond between patient and therapist, and/or facilitated greater collaboration between patient and therapist on the tasks and goals of therapy.

Appendix G High Resolution in Feedback discussion (Dyad 22-48, session 1, 43:31)

T: So I'm mindful that it might be helpful at this point for us to have a chat about this (paper rustles) ummm

P: yes

T: And this is kind of ongoing because this is y'know this is us speaking about our session really

P: mmm

T: So it might be reviewing what we've spoken about or how you've found it and please just.. want to sort of encourage you to say whatever you feel and not feel inhibited in any way so the scale is relationships just how you feel I am with you and we are together

P: Yes

T: Goals and topics, what you want to speak about.

P: So what, do I, do just put an X?

T: So yeah you put an X where you think things are ehhh … so working on, working on and speaking about the things that you wanted to.. I'll let you read it, it explains it … so yes, so this is a scale of like 'this is nowhere near where I want to be' and this is … so wherever you think that is .. General approach..

P: Mmm mmm yeah

T: And overall, if that's any different

P: …..

T: Emmm, is that more difficult that one

Commented [A1]: Creating Culture of feedback (CCOF)

Commented [A2]: CCOF

Commented [A3]: CCOF

Commented [A4]: Emphasising Importance of Feedback (EIOF)

Commented [A5]: EIOF - encouraging honesty

Commented [A6]: Therapist contribution to clarification/Elaboration (Therapist C/E) - communicating partnership

Commented [A7]: Attentiveness to Feedback (ATF), noticing small changes

Appendix H Low Resolution in Feedback Discussion (Dyad 9-42, session 5)

Dyad 9-42, session 5, 54:00

T: We need to do our form

P: Ok

T: do you want to use this one [pen/pencil] so the thing here is to be kind of as honest as possible.

Commented [A1]: CCOF - Encouraging Honesty / EIOF Conveying Openness

[pause]

P: I don't know yet

T: So there was something in here that you're not sure about

Commented [A2]: C/E

P: Umm.. yeah I dunno I still feel like like we haven't started yet (laughs nervously) maybe

Commented [A3]: Client contribution C/E

T: Hmmm hmmm hmmm

P: If that makes sense. I mean I know I talked to you a lot about the problems that I have ... yeah but I'm not sure if therapy has happened yet if that makes sense

Commented [A4]: Client contribution

T: Mmhmm mmhmm mmhmm yeah yeah so maybe we

P: I want a quick fix and the NHS, there's a panic because we only have four months

Commented [A5]: 3RS Complaint Parameter

T: And y'know there aren't quick fixes

P: No

T: If there were quick fixes it would've happened. Yeah, Ok, maybe we come back to that next time?

P: Yeah ok

T: Kind of how we work

P: That's your one [copy of form]

Appendix I Scatterplot showing Model Stage Completion and Resolution Ratings

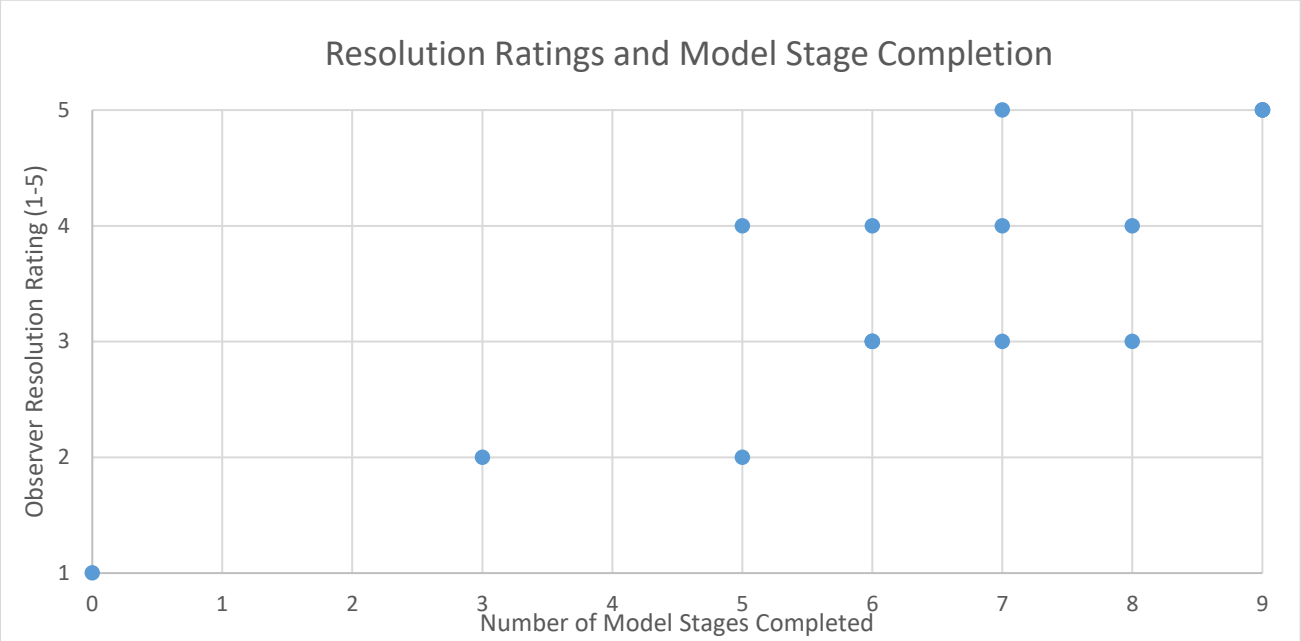


Figure 5: Scatterplot showing number of stages completed (max = 9) and degree of resolution during feedback (max = 5)

Appendix J Example of 3RS scoring table

Pt ID/acronym: 22-48	Session 1	**3RS Score Sheet**												Coder: ah
	Time stamp:													
		0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	SRS	SIGNIF
Withdrawal Markers	Denial													
	Min Response													
	Abstr Comm													
	AvStory/Shift													
	Deferential													
	Cont/Aff Split													
	S-crit/hopeless	236			16:04, 16:30									
	TOTAL WD													
Confrontation Markers	C. Therapist													
	Reject interven													
	C. Activity												x	
	C. Parameter													
	C. Progress	100			15,36									
	Pt def. self	228												
	Control/press													
	TOTAL CF													
Resolution Strategies	Clarify misund													
	Change task/g	150											x, x	
	Ill. task/ration	203												
	Invite thts/feel													
	Ackn contrib												x, x	
	Discl int exp												x	
	Link btw p/t													
	Link other rel												x	
	Validate def													
	Redirect													
Resolution outcome														
To what degree were ruptures **resolved** over the course of the session?	1 Poor	2 Below avg	3 OK/avg	4, Good, above avg	**5 Very good**									

Appendix K Oxford Doctoral Course in Clinical Psychology Research Sub-Committee Approval

Oxford Health NHS
NHS Foundation Trust

The Oxford Institute of Clinical Psychology Training

UNIVERSITY OF OXFORD

Oxford Doctoral Course in Clinical Psychology
An NHS Course validated by the University of Oxford

Isis Education Centre, Warneford Hospital, Oxford OX3 7JX
Tel: +44(0)1865 226431
Website: www.oxicpl.co.uk

26th October, 2017

Alex Harvey
Trainee Clinical Psychologist
Oxford Doctoral Course in Clinical Psychology
Isis Education Centre
Warneford Hospital

Dear Alex,

Thank you for responding to the queries that the RSC had about your Dissertation. I am pleased to say that you now have full approval for this piece of work.

Please make sure you keep in mind issues of clarity, particularly about the detail in the Procedure and Analysis sections of your proposal, and particularly when you come to write the final paper B..

With best wishes.

Yours sincerely,

Dr Myra Cooper
Chair, Research Sub-Committee

c.c. James Macdonald

Senior Research / Academic Tutor and Acting Deputy Programme Director:
Dr Myra Cooper, M.A. (Hons), M.Phil., D.Phil., C.Psychol.
Tel: (01865) 226375 myra.cooper@hmc.ox.ac.uk

aharveydissacp

Appendix L NHS Research Ethics Committee Approval

Health Research Authority

East of England - Cambridgeshire and Hertfordshire Research Ethics Committee
The Old Chapel
Royal Standard Place
Nottingham
NG1 6FS

Please note: This is the favourable opinion of the REC only and does not allow you to start your study at NHS sites in England until you receive HRA Approval

26 July 2018

Mr Alexander Harvey
Trainee Clinical Psychologist
Oxford Health NHS Foundation Trust
13 St Andrew's Way
Impington
CAMBRIDGE
CB24 9NQ

Dear Mr Harvey

Study title:	**Validation of a model for using formal feedback to repair ruptures in the therapeutic alliance during psychotherapy using the task analytic method**
REC reference:	**18/EE/0188**
Protocol number:	**13347**
IRAS project ID:	**231420**

Thank you for your letter, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this opinion letter. Should you wish to provide a substitute contact point, require further information, or wish to make a request to postpone publication, please contact hra.studyregistration@nhs.net outlining the reasons for your request.

Appendix M NHS Health Research Authority Approval

Ymchwil Iechyd a Gofal Cymru
Health and Care Research Wales

NHS
Health Research Authority

Mr Alexander Harvey
Trainee Clinical Psychologist
Oxford Health NHS Foundation Trust
13 St Andrew's Way
Impington
CAMBRIDGE
CB24 9NQ

Email: hra.approval@nhs.net

30 July 2018

Dear Mr Harvey

HRA and Health and Care Research Wales (HCRW) Approval Letter

Study title:	**Validation of a model for using formal feedback to repair ruptures in the therapeutic alliance during psychotherapy using the task analytic method**
IRAS project ID:	**231420**
Protocol number:	**13347**
REC reference:	**18/EE/0188**
Sponsor	**University of Oxford**

I am pleased to confirm that **HRA and Health and Care Research Wales (HCRW) Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further relating to this application.

How should I continue to work with participating NHS organisations in England and Wales?
You should now provide a copy of this letter to all participating NHS organisations in England and Wales*, as well as any documentation that has been updated as a result of the assessment.

Following the arranging of capacity and capability, participating NHS organisations should **formally confirm** their capacity and capability to undertake the study. How this will be confirmed is detailed in the "*summary of assessment*" section towards the end of this letter.

You should provide, if you have not already done so, detailed instructions to each organisation as to how you will notify them that research activities may commence at site following their confirmation of capacity and capability (e.g. provision by you of a 'green light' email, formal notification following a site initiation visit, activities may commence immediately following confirmation by participating organisation, etc.).

Appendix N Paper A Journal Instructions for Authors (Clinical Psychology Review)

Guide for Authors

All journal information and instructions compiled in one document (PDF) in just one mouse-click Download Guide for Authors in PDF

Aims and scope

• Submission checklist

BEFORE YOU BEGIN

• Ethics in publishing

• Declaration of interest

• Submission declaration and verification

• Use of inclusive language

• Author contributions

• Changes to authorship

• Copyright

• Role of the funding source

• Open access

• Submission

PREPARATION

• Peer review

• Article structure

• Essential title page information

• Highlights

• Keywords

• Tables

• Reference style

• Video

• Supplementary material

• Research data

AFTER ACCEPTANCE

• Online proof correction

• Offprints

AUTHOR INQUIRIES

Submission checklist

You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:

• E-mail address

• Full postal address

All necessary files have been uploaded:

Manuscript:

• Include keywords

• All figures (include relevant captions)

• All tables (including titles, description, footnotes)

• Ensure all figure and table citations in the text match the files provided

• Indicate clearly if color should be used for any figures in print

Graphical Abstracts / Highlights files (where applicable)

Supplemental files (where applicable)

Further considerations

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All references mentioned in the Reference List are cited in the text, and vice versa

Permission has been obtained for use of copyrighted material from other sources (including the Internet)

A competing interests statement is provided, even if the authors have no competing interests to declare

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Ensure manuscript is a comprehensive review article (empirical papers fall outside the scope of the journal)

Ensure that reviews are as up to date as possible and at least to 3 months within date of submission

For further information, visit our Support Center.

Ethics in publishing

Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.

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Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service Crossref Similarity Check.

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dominant culture and/or cultural assumptions. We advise to seek gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

Author contributions

For transparency, we encourage authors to submit an author statement file outlining their individual contributions to the paper using the relevant CRediT roles: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Roles/Writing - original draft; Writing - review & editing. Authorship statements should be formatted with the names of authors first and CRediT role(s) following. More details and an example

Changes to authorship

Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the

corresponding author: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed.

Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

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